Teichert Ponds Restoration Project

Mitigated Negative Declaration and Initial Study

Prepared for:

City of Chico
411 Main St
Chico, CA 95927

Prepared by:

Restoration Resources
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April 1, 2009

Preface

This document is an Initial Study (IS) for the Teichert Ponds Restoration Project in the City of Chico, Butte County, California. It has been prepared to assess the potential impacts associated with the construction and maintenance of the proposed enhanced stormwater detention facility and habitat restoration project in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq., and the State CEQA Guidelines Title 14 California Code of Regulations section 15000 et seq. The lead agency for this project is the City of Chico. Responsible agencies include the RWQBC, the Butte County AQMD and CDFG.

An IS is a preliminary analysis, conducted by the lead agency, used to determine whether it is necessary to prepare an Environmental Impact Report (EIR) or Negative Declaration (ND) (CEQA Guidelines Section 15065). In accordance with State CEQA Guidelines Section 15064(a), an EIR must be prepared if substantial evidence exists indicating that the project may have a significant effect on the environment. Conversely, it may be determined that the proposed project will either pose no significant damaging effects to the environment, or may potentially have a significant effect that can be reduced to a level of insignificance with the revision or other requirements imposed on the project. In the case of the former, a ND is prepared, while a Mitigated Negative Declaration (MND) must be prepared in the latter (State CEQA Guidelines Section 15070).

The IS provides a description of the project setting and characteristics; includes an environmental evaluation/checklist that identifies the potential environmental impacts associated with implementation of the project and a discussion of checklist responses and findings; and includes references used in the preparation of this report.

The City of Chico proposes to restructure the existing Teichert Ponds site to improve hydrology, water quality, and habitat value. Potentially significant environmental effects have been identified by the IS, however the revisions in the project plans or proposals agreed to by the applicant before release of the proposed IS/MND would avoid or mitigate these effects to a point where clearly no significant effects would occur, and there is no substantial evidence, in light of the whole record presented, that the project as revised may have a significant effect on the environment.

Teichert Ponds Restoration Project

INITIAL STUDY
and
MITIGATED NEGATIVE DECLARATION

City of Chico
Environmental Coordination and Review

ROUTE TO:

[**X**] City of Chico – Building and Development Services , General Services and Planning Services Departments
[X] BCAQMD
[**X**] State Clearinghouse
[**X**] All Trustee and Responsible Agencies

1. PROJECT DESCRIPTION

A. Project Name:

Teichert Ponds Restoration Project

B. Project Location:

The project site is located north of East 20th Street, east of State Route (SR) 99, and south of Little Chico Creek in the City of Chico, Butte County, California **(Figure 1)**

C. Type of Application(s):

Habitat Restoration and enhancement of runoff detention and treatment functions

D. Assessor's Parcel Number(s):

APNs 002-110-033, -083, -064, -095, and -070

E. Current City Zoning:

Primary Open Space (OS1)

F. Environmental Setting:

Surrounding Land Use

The City of Chico is located at the northeast edge of the Sacramento Valley in northern California, with the Sierra Nevada Mountains located to the east of the city limits and the Sacramento River located approximately 10 miles to the west. SR 99 divides the City on an approximate southeast to northwest axis.

The Teichert Ponds site is located immediately adjacent to the highway's right-of-way, which runs along the project's western edge.

SR 99 separates the site from residential development and a community park to the west. Single family residential homes built between 1990 and the present are located to the east and south of the site. Newly developed commercial property is also located to the south. At the southwest corner of the site, behind the Kohl's shopping center, a concrete lined drainage ditch leads into the site. Little Chico Creek, with its associated recreation/nature area, is the north boundary of the proposed project site.

SR 99 is an elevated roadway. As such, it acts as a physical barrier for wildlife, water flow, and views between the site and areas located west of the roadway. Additionally, because the roadway is elevated, it offers a variety of views onto the site for highway travelers (Jones & Stokes 2004).

Current Site Conditions

Most of the land comprising the 40.7 acre area known as Teichert Ponds is owned in fee title by the City of Chico. A small finger of land jutting out from the end of Creek Hollow Drive remains in private ownership, but the City possesses an access easement over this land. The City expects to secure permission to use the privately owned land as a staging and stockpiling area for Phase 1 project construction (Restoration Resources, 2008). Ground elevation at the site is approximately 215 feet above mean sea level, and the topography is mostly flat, with minor variations due to past human activity. The project site supports wildlife and habitat resources and important health and safety functions, such as improving water quality and flood detention within the City of Chico.

There are three ponds onsite, created as a result of past aggregate mining activities. In the eastern portion of the site, a pit was created that is approximately 11 feet deep with sides at a 1:1 (height to volume) slope. This area, identified as Pond 1, was the greatest source of aggregate on the site. Two additional ponds (Pond 2 in the southwest and Pond 3 in the northwest) are three feet deep (Jones & Stokes, 2004).

A chain-link fence is installed around a portion of the perimeter of Pond 1, but the fence has been cut in numerous locations to allow unauthorized users to access the pond. Without restrictive controls, the site is easily accessed for educational and public uses. The maintenance road around the site is heavily used by the public for running, biking, fishing, and dog walking. The site is also popular for birding and fishing (Jones & Stokes, 2004). Abandoned structures (old rock and wooden mining structures located south of the maintenance road near Pond 3) and illegal dumping present safety concerns and are eyesores that encourage continued dumping.

Hydrology and Soils

Water enters the project site through direct precipitation, nuisance flows from the surrounding urban area including landscape and stormwater runoff, groundwater connections in Pond 1, and seepage from Little Chico Creek. A 15-inch pipe, and a 12-inch pipe discharging to Pond 1 drain adjacent residential developments. Twin 54" pipes, draining an area of commercial and residential development, discharge to a concrete lined ditch along the south boundary of Pond 2, and enter that pond at its southwest corner. One 36-inch pipe drains portions of the Chico Mall, located southeast of the site, into pond 2 (Jones & Stokes,

2004). There is no structural outflow connecting Pond 2 to Pond 3. However, a low spot in the berm separating the two ponds is overtopped during elevated water levels. While the direction of flow between the creek and ponds changes seasonally, all water eventually flows through Pond 3, and exits the site by way of a culvert into Little Chico Creek. During periods of high water (exceeding approximately 213 feet), the berm between Ponds 1 and 2 is overtopped, allowing free mixing between the two water bodies which compromises the water quality of Pond 1 since Pond 2 receives significant stormwater discharge flows from the surrounding community. Due to beaver activity and extensive growth of aquatic weeds, the water flow through the ponds has almost ceased entirely except during storm events.

The Teichert Ponds site was historically part of the floodplain of Little Chico Creek. According to the 1992 Geologic Map of the Chico quadrangle produced by the Department of Mines and Geology, the soils present onsite are alluvial deposits of the Quaternary Modesto Formation. The native alluvial material deposited by Little Chico Creek is characterized by a high gravel content and coarse texture throughout the profile.

The Natural Resource Conservation Service classifies site soils as Alemendra loam (0-1% slopes), which covers the majority of the site, and Chico loam (0-1% slopes), which is present at the southern half of Pond 2. Both soils are deep and well drained, providing suitable growing conditions for non-woody wetland plants, riparian vegetation, and valley oak woodlands. Neither soil is listed on the hydric soils list for Butte County (H.T. Harvey, 2006c).

Habitat Resources

Riparian areas of the site are floristically diverse and well developed, supporting a dense riparian overstory and lush understory. Site flora is primarily invasive exotic species, although there are also exotics (such as domesticated fruit and nut trees) that are not invasive growing on the project site. Native plants, including cottonwoods, willows, and valley oaks, are also present.

The project site provides habitat for a variety of wildlife, including many species of fish, most of which are non-native. Despite not being native, these fish are food to a diverse array of bird species that live on and pass through the site. There is suitable habitat for raptors on the site, although none have been observed nesting. Two special status species, the western pond turtle and valley elderberry longhorn beetle (habitat), are known to occur onsite.

G. Project Description:

The City of Chico is proposing to restore and improve the existing Teichert Ponds complex. Restoration efforts will include enhancements to the hydrology of the site that will increase the control of water flows and water quality enhancements to control algal mats and invasive aquatic species, as well as elimination of litter entering Pond 2 through the installation of a trash nuisance rack at the water inlet. Existing site topography will be altered. Berms will be improved and enlarged, and Pond 2 will be converted into a treatment wetland, which will remove a portion of the nutrient load entering the site. Habitat enhancements will remove invasive, exotic vegetation and establish native vegetation. Basking structures and nesting structures have been included in the project design. Goals of the proposed project include improved water quality, improved landscape aesthetics, restoration and enhancement of habitat, establishment of a long term management plan for both drainage and habitat functions, maintenance of stormwater delineation and treatment functions, and retaining future options for public access.

The Conceptual Habitat Designs have been attached for reference and include information detailing the Existing Conditions and Goals, Conceptual Habitat Restoration Plan, Conceptual Habitat Improvements, Habitat Cross-sections, Habitat Details, and Water Control Structure Details. Final Conceptual Habitat Designs will be produced incorporating the mitigation measures identified herein, and other permitting requirements of the local, state, and federal regulatory agencies.

Project Background

Historically, the Teichert Ponds project site was an area of Valley Oak woodland. Little Chico Creek wove through the woodland area, depositing fertile soils in the creek's floodplain. These rich soils were ideal for agriculture. Following settlement of the area, the site's woodlands were cleared, and the site was cultivated with almond orchards until the early 1960's.

In the mid-1960's, Teichert Construction, formerly A. Teichert & Sons, mined gravel for the construction of SR 99 and SR 32. Aggregate extraction and subsequent grading resulted in the creation of three pits. The eastern pit (Pond 1) filled with water after equipment operators irreparably ruptured the shallow aquifer during mining operations in 1966.

Upon the completion of mining activities, the western portion of the site was re-graded to meet the requirements of the use permit, creating what are now referred to as Ponds 2 and 3. Aggregate spoils were placed between Ponds 1 and 3, creating several wide berms and mounds that rise to approximately ten feet in height. Ponds 2 and 3 filled with surface runoff during the winter months, dried almost completely by late spring and early summer, and eventually became de facto basins. Adjacent urban development began in the late 1970's and the Ponds became permanently inundated in the late 1990's resulting from increased urban nuisance and stormwater runoff, as well as beaver activity. Prior to 2000, the berm separating Ponds 1 and 3 only overtopped during extreme storm events. With the permanent presence of water, portions of the site were eventually colonized with riparian and aquatic plant species.

As a result of urban growth in the 1980's and 1990's spreading into the Little Chico Creek watershed, the Teichert Ponds area became valuable for detention and treatment of stormwater runoff. Based upon the functions for storm drainage management of the Teichert Ponds site, the Chico City Council moved to acquire the site in November of 1997. The City of Chico assumed ownership of the site in January of 1999.

The Teichert Ponds have historically provided both passive recreation opportunities and educational resources to the community. It is, however, burdened with lack of control over stormwater flows compromising its natural water quality treatment functions, aggressive growth by exotic species, beaver activity, and unauthorized public uses that have degraded the visual appearance of the site.

Pre-Construction

Pre-construction activities are proposed that will limit impacts to natural resources, limit spread and colonization of invasive plant species, and provide a safe working environment for construction crews.

Dewatering activities will take place prior to construction. The water level of Pond 1 will be lowered several feet to allow installation of the permanent outlet pipe to Little Chico Creek. Dewatering will be carried out by installation of a temporary, above ground pipeline and pump to remove water from the pond and discharge into Little Chico Creek.

Dewatering Ponds 2 and 3 will take several steps. First, a coffer dam will be established at the end of the concrete-lined stormwater ditch to prohibit inflow into Pond 2. A temporary, above ground pipeline will be established from the coffer dam to Little Chico Creek to divert drainage or nuisance waters entering the ditch to the creek during construction. Construction will occur during the summer when storm water is not an issue. Once this system is established, Pond 2 will be dewatered into Pond 3 with a pump and an above ground pipeline. Pond 3 will then be dewatered with a pump and an above ground pipeline that will transfer water from the pond to the creek. All temporary pumps and pipelines will remain in place for the duration of construction to keep the work areas free from water. All water diverted to Little Chico Creek will pass though screens and settling basin structures to avoid transport of debris or sediment into the creek.

Restoration Design

The project proposes alteration of the existing site topography. Depth of the existing ponds will be increased to aid in enhanced water quality, bank slope will be designed to achieve the greatest amount of wetland area while aiding in mosquito control, and berms will be enlarged to reduce mixing between ponds. The Teichert Ponds Restoration Project has been designed to result in no net loss of wetlands and enhancement of wetland values.

In general, Pond 1 is designed to be a permanently inundated feature supplied almost entirely by groundwater and hydraulically disconnected from Ponds 2 and 3. Pond 2 is primarily designed to be a stormwater detention basin with seasonal flows fluctuating according to stormwater discharge. Ponds 2 and 3 will be separated by a berm, which will enable regulation of flow direction and help segregate the water in each pond. Pond 3 will function largely as wildlife habitat and secondarily as stormwater detention for overflow from Pond 2, while also providing additional water quality wetland functions.

Pond 1

One underground pipe (water control structure, WCS) will connect Pond 1 to Little Chico Creek (WCS #1). The pipeline will have a standpipe installed that will allow for the maintenance and management of water levels in the pond. To discourage beavers from constructing a dam to block the flow of water, the inlet pipe will be fitted with a Clemson Beaver Pond Leveler.

The pipeline from Pond 1 will reduce the current water level of the pond by approximately 0.8 feet, returning it to historic levels. This will eliminate most of the shallow water areas that are prime habitat for breeding mosquitoes and facilitate the drainage of small swales located to the east and south of Pond 1, which receive small amounts of runoff from the adjacent residential community. The outlets from these stormwater structures flow into vegetated swales, which will help treat the stormwater before entering Pond 1.

Besides the outlet to Little Chico Creek, two additional outlet structures will be located along the southwest side of Pond 1 that will allow water to flow into Ponds 2 and 3. The outlet structure to Pond 3 will consist of a pipeline and screw gate (WCS #2a; Restoration Resources 2008). The screw gate will allow management of water levels in Pond 1 and provide a source of water to periodically flush Pond 3. This structure will be kept open during normal operating conditions.

In a similar fashion, the second structure will allow for the periodic flushing of Pond 2, although the pipe diameter will be smaller and the screw gate will be kept closed during normal operating conditions (WCS #3; Restoration Resources 2008). In addition, this pipeline associated with WCS #3 will be used as a source of irrigation for the first three years after construction to facilitate establishment of target wetland vegetation in Pond 2. The inlets to both of these structures will have fencing attached to the headwall to remove debris and deter beaver activity.

In addition to the above described water control structures, an overflow weir will be located along the berm that separates Pond 1 from Pond 3 (WCS #2b; Restoration Resources 2008). The overflow weir will only function during extremely high water events and will enable a controlled release of flood waters into Pond 3.

Pond 2

The primary source of water entering Pond 2 comes from two existing stormwater outflows that discharge into a concrete-lined drainage ditch. Water discharged from the stormwater outlets will pass through a trash rack to remove debris from the water before entering Pond 2. The trash rack will be located adjacent to the access road, providing space for a backhoe and dump truck to remove debris from the rack. The trash rack design will also include a catwalk that will allow access by foot for maintenance personnel. Once past the trash rack, water will move through two pipes that will be located under the maintenance road overpass (WCS #4; Restoration Resources). Both of these pipes will be equipped with screw gates that can be closed to prohibit water from entering Pond 2 during periodic maintenance activities. When these pipes are closed, a third pipe located under the maintenance road (western most pipe) will be opened and will bypass water around Pond 2 and discharge it directly into Pond 3.

Pond 2 receives stormwater from a 370-acre urban watershed. Because of this, Pond 2 has been designed to serve as a water quality Best Management Practice for the urban watershed. It is designed to function as a TC-22 Extended Detention Basin according to the California Stormwater Quality Association development manual and is effective at removing sediment and associated pollutants through settling.

A flow restriction riser will be constructed at the outlet of Pond 2 and will restrict flows so that no more than 50% of the design stormwater quality treatment volume will leave the pond basin within the first 24 hours of an event, while also functioning to release 100% of the treatment volume within 72 hours for vector control purposes (WCS #5; Restoration Resources 2008). The flow restriction riser will have a beaver fence surrounding it, deterring beavers from building dams around the riser.

The TC-22 Extended Detention Basin specifications do not require there to be a sediment detention basin, and due to vector control problems that are usually associated with these structures, there is no sedimentation basin included in the design of Pond 2. Instead there is a low flow channel that will convey lower flows of water from Pond 2 to Pond 3.

Pond 3

Pond 3 will have two pipes connecting it to Little Chico Creek. The two pipes will be set side-by-side within a concrete headwall structure. A trash rack will be installed on the front of the structure to remove debris from the water before entering Little Chico Creek and also deter beavers from damming the structure. The nearby maintenance road, along with two work areas on either side of the headwall, will allow access to clear debris from the trash rack using a backhoe and dump truck.

The existing pipe (eastern pipe) will have a screw gate installed that will be kept open during normal operating conditions, functioning to keep the pond at a constant water level. The newly installed second pipe (western pipe) will have a screw gate attached to the inlet that will be opened in the event that beavers block the primary pipe at or below the outfall within Little Chico Creek. The location of the new pipe outlet will be downstream of the existing pipe outlet to avoid beaver dams that may be built in Little Chico Creek.

Construction

Due to budget constraints and the need to control costs, the proposed plan consists of a two phased approach: Phase 1 – primary project installation by a qualified restoration contractor; and Phase 2 – subsequent habitat enhancements and long-term maintenance that can be carried out by City personnel and community organizations. All mitigation needs arising from project installation will be implemented in the first phase. Invasive exotic vegetation will be removed and native vegetation will be established. Vegetation enhancements will include activities such as the planting of trees, shrubs, vines, and herbaceous species, as well as their maintenance during the period of establishment.

The subsequent habitat enhancements and maintenance include nest box construction and non-native invasive plant removal that will provide natural resource benefits beyond regulatory requirements. These actions are not expected to negatively impact regulated resources or to require permits. They will serve to involve the surrounding community by having them become stakeholders in the process of rehabilitating the wetland habitats and helping to ensure that the pond system will serve as an important community resource (Restoration Resources, 2008).

A small finger of land jutting out from the end of Creek Hollow Drive remains in private ownership, but the City possesses an access easement over this land. The City expects to secure permission to use the privately owned land as a staging and stockpiling area for Phase 1 project construction. However, it is expected that no other project activities (e.g., invasive plant removal, grade changes, planting, and/or trenching) will occur on the privately owned land (Restoration Resources, 2008).

Habitat Enhancing Structures

The wildlife value of the ponds will be greatly enhanced by the addition of simple structures that will serve as refugia for wildlife species, thereby enhancing their potential success on-site. Two of the five habitat structures, basking logs and reptile refugia, require the use of earthmoving equipment and therefore must be installed in Phase 1. The remaining structures – nest boxes, bat boxes, avian perches and floating habitat islands – are appropriate for community volunteers to install.

Reptile Refugia

Aquatic reptiles need places to bask that also allow for immediate escape from predators into deep water or crevices and they also need safe places to hibernate in the winter. Basking logs will be embedded in the banks of Ponds 1, 2 and 3 and extend out into open water. The logs will be located at a variety of elevations, so that basking sites will be available year-round as water levels fluctuate.

Riprap and a wood covering with a soil layer on top to support native plants will provide a quick escape from predators. Large riprap will create a network of crevices that offer many opportunities for escape and hibernation. The wood covering will greatly reduce the sedimentation of these crevices from the overlying soil. The grassy flat top of the structures and the outermost rock surfaces provide basking locations, and their east- or south-facing orientation maximizes solar input.

Avian Perches

Perches will be placed in various places through the project area. They will provide a structure within the landscape that will allow various species of birds to escape from terrestrial predators, roost during the evening hours, and will provide a vantage point for raptors hunting for prey.

Nest Boxes

Bat boxes will provide a home for several species of bats that can be part of an effective mosquito abatement program and will be placed in various locations around the ponds to maximize their effectiveness. Nest boxes can also provide homes for owls, kestrels, wood ducks and various song birds. Some bird species, such as barn owls and American kestrels can be very effective at reducing local rodent populations.

Floating Habitat Islands

Floating islands placed within the open water of Pond 1 will consist of a log frame with wetland sod placed on top of it that are anchored to a concrete deadweight. Once placed in the pond, the wetland sod will support wetland plant species and provide a refuge for waterfowl and other aquatic organisms. These structures will provide areas for various wildlife species to congregate.

Site Access Roads and Maintenance

Short term maintenance activities include several years of irrigation system operations and maintenance, watering basin maintenance, weed control, plant replacement, disturbed area reseeding, litter control, and remedial site repairs and maintenance of site aspects such as signage and fencing.

The City's long term maintenance and monitoring responsibilities and duties are expected to include, but not be limited to:

- Monitoring wetland function and erosion;
- Evaluating the accumulation of dead vegetative matter and sedimentation and removal, if needed;
- Evaluating the presence of non-native plant species and implementation of proper control/eradication methods;
- Assessing beaver activity in the ponds and implement remedial action, if necessary;
- Ensuring that signage and fencing is maintained;

- Coordinating trash removal;
- Assessing whether the natural flow of drainage, landscaping, or stormwater runoff from adjacent properties is adversely affecting the ponds;
- Maintaining records of management activities to help with adaptive management of the site;
- Conducting biological and general inspections by a qualified biologist every year, and implementing remedial actions if necessary;
- Arranging for any corrective action necessary to ensure the performance of the wetland and ponds; and
- Coordinating with the Butte County Mosquito and Vector Control District to maximize the efficacy of vector control practices.

Maintenance roads and access trails have been incorporated into the design to allow personnel from the City of Chico and the Butte County Mosquito and Vector Control District unencumbered, unrestricted, mechanized access to the ponds at any time of the year. The maintenance roads will provide easy access to the pond margins, water control structures, and trash racks.

An existing gravel maintenance road that begins at Creek Hollow Drive and extends west into the project site will be upgraded to be 15 feet wide from its existing width. This road will travel along the northern boundary of Ponds 1 and 3 (**Figure 2**). A gravel road will split from this road and go south along the proposed berm that will separate Ponds 1 and 3. The overflow weir between the two ponds will be constructed with gradual side slopes so that maintenance vehicles could drive over the weir. This road will turn west and travel along the berm that will separate Ponds 2 and 3, finally connecting up with the proposed paved maintenance road located along the western boundary of the site. This road will also be usable as a bike trail when connected to the existing bike trail system on the north side of Little Chico Creek via the proposed bike bridge. An existing paved bike path parallels the east side of the freeway and ends at the southwest corner of the project site.

The paved maintenance road on the western boundary will run from the north end of Pond 3, south along the western boundary of Pond 2. Traveling south the road will turn east crossing over the concrete-lined stormwater ditch via a concrete headwall structure.

The proposed trash rack and catwalk structure will be adjacent to the concrete headwall structure, allowing easy access by maintenance crews. The access road will then continue east, exiting the site through the Kohl's shopping center parking lot. In addition, there will be an access road that runs along the eastern boundary of Pond 2 that will connect to the access road separating Ponds 1 and 3.

H. Public Agency Approvals:

Region Water Quality Control Board	Section 401
US Army Corps of Engineers	Section 404, Letter of Permission
US Fish and Wildlife Service	ESA Section 7 consultation for VELB
California Department of Fish and Game	Section 1601-03 Streambed Alteration Agreement
City of Chico	Mitigated Negative Declaration
Butte County Air Quality Management District	Air Quality Permits

I. Lead Agency:

The lead agency is the public agency with primary responsibility over the proposed project. CEQA Guidelines Section 15051(b)(1) advises that the chosen agency should be one with general governmental powers, rather than one with a limited purpose. The lead agency for the Teichert Ponds Restoration is the City of Chico, 411 Main Street, Chico, CA 95928.

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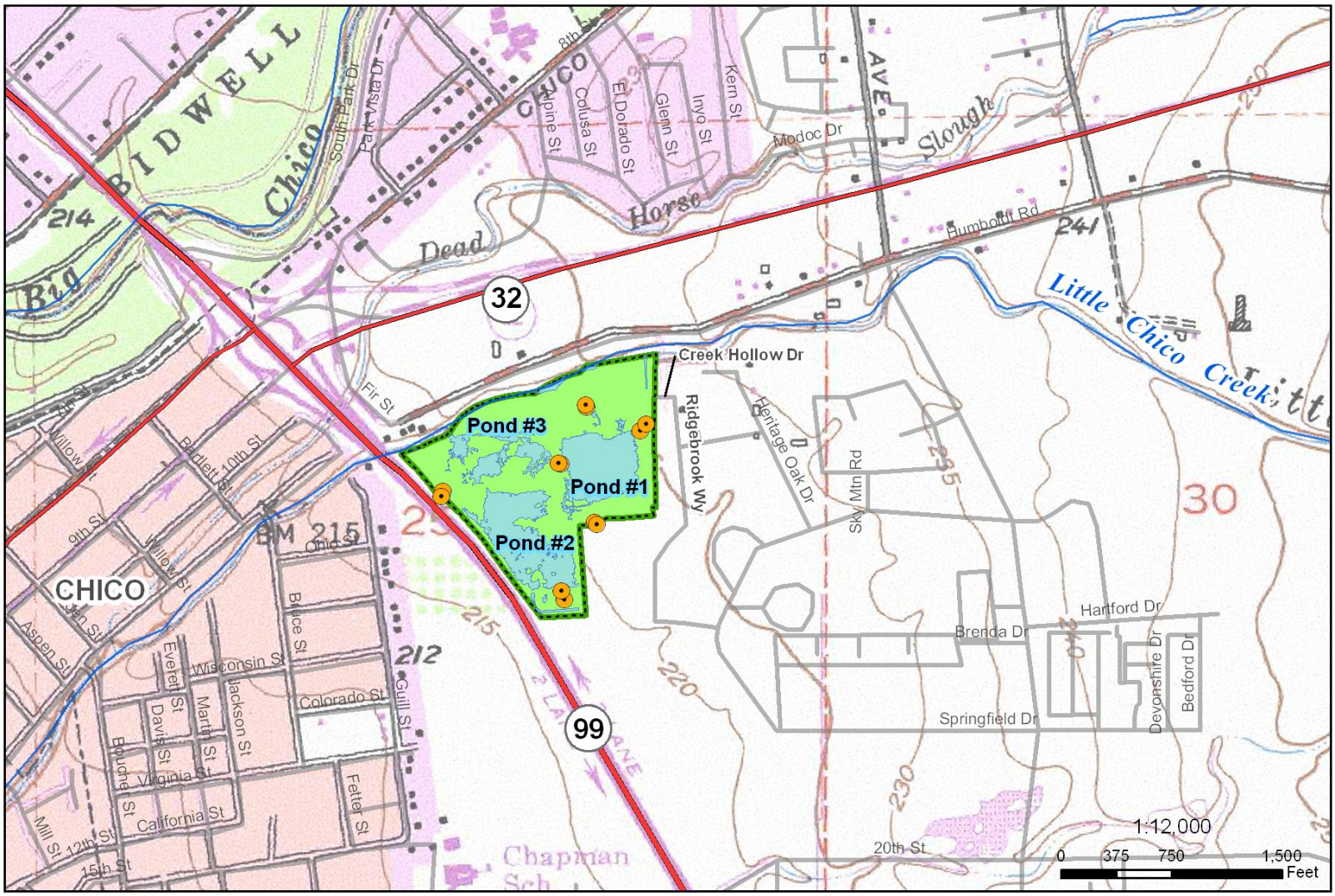
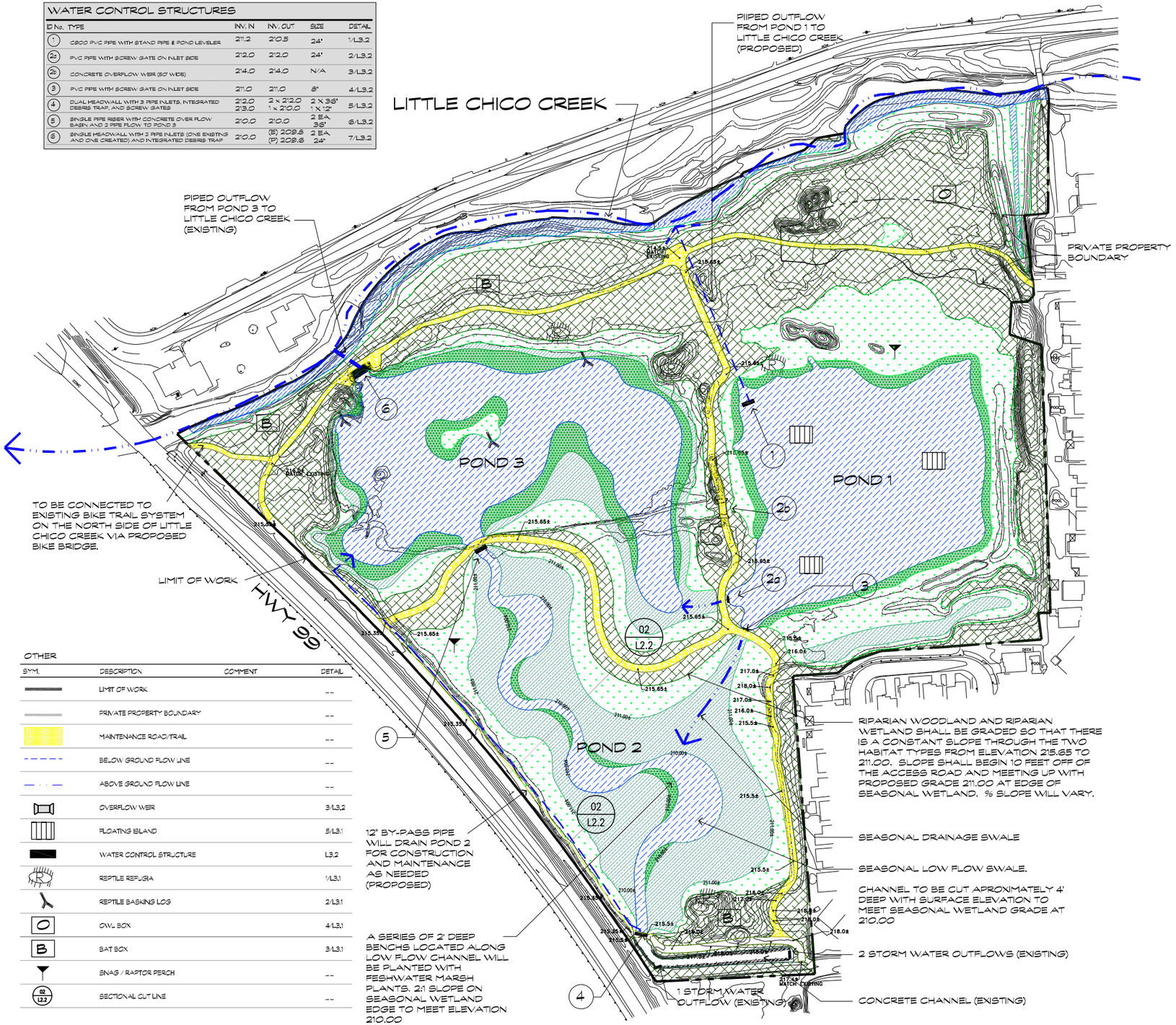
LOCATION MAP



Designed By:	Prepared By:	Teichert Ponds Study Area	**Legend**
Drafted By: B. Edwards	RESTORATION RESOURCES www.restoration-resources.net CA LIC. #429252 HABITAT PLANNING & RESTORATION SERVICES SINCE 1989	USGS 7.5 Minute Chico Quad Map	Soil Pit, Creek, Highway, Teichert Ponds, Local Road, Project Boundary, N
Date: 4-9-08 / Job No.: 25009			

WATER CONTROL STRUCTURES

ID No.	TYPE	INV. IN	INV. OUT	SIZE	DETAIL
1	C900 PVC PIPE WITH STAND PIPE & POND LEVELER	211.2	210.5	24"	1/L3.2
2a	PVC PIPE WITH SCREW GATE ON INLET SIDE	212.0	212.0	24"	2/L3.2
2b	CONCRETE OVERFLOW WEIR (50' WIDE)	214.0	214.0	N/A	3/L3.2
3	PVC PIPE WITH SCREW GATE ON INLET SIDE	211.0	211.0	8"	4/L3.2
4	DUAL HEADWALL WITH 3 PIPE INLETS, INTEGRATED DEBRIS TRAP, AND SCREW GATES	212.0 213.0	2 x 212.0 1 x 210.0	2 x 36" 1 x 12"	5/L3.2
5	SINGLE PIPE RISER WITH CONCRETE OVER FLOW BASIN AND 2 PIPE FLOW TO POND 3	210.0	210.0	2 EA 36"	6/L3.2
6	SINGLE HEADWALL WITH 2 PIPE INLETS (ONE EXISTING AND ONE CREATED) AND INTEGRATED DEBRIS TRAP	210.0	(E) 208.8 (P) 208.6	2 EA 24"	7/L3.2



OTHER

SYM.	DESCRIPTION	COMMENT	DETAIL
	LIMIT OF WORK		--
	PRIVATE PROPERTY BOUNDARY		--
	MAINTENANCE ROAD/TRAIL		--
	BELOW GROUND FLOW LINE		--
	ABOVE GROUND FLOW LINE		--
	OVERFLOW WEIR		3/L3.2
	FLOATING ISLAND		5/L3.1
	WATER CONTROL STRUCTURE		L3.2
R	REPTILE REFUGIA		1/L3.1
	REPTILE BASKING LOG		2/L3.1
O	OWL BOX		4/L3.1
B	BAT BOX		3/L3.1
	SNAG / RAPTOR PERCH		--
02 L2.2	SECTIONAL CUT LINE		--

PLANTING LEGEND

TREE AND SHRUB PLANTING

HABITAT TYPE: RIPARIAN WOODLAND — AREA (acres): 12.01 AC

QTY.	SYM.	BOTANICAL NAME/COMMON NAME	COMMENTS	DETAIL
15		AESCULUS CALIFORNICA / CALIFORNIA BUCKEYE	DP&C	01/L2.1
20		JUGLANS CALIFORNICA VAR. HINDSII / CALIFORNIA BLACK WALNUT	DP&C	01/L2.1
50		QUERCUS LOBATA / VALLEY OAK	DP&C	01/L2.1
30		QUERCUS WISLIZENII / INTERIOR LIVE OAK	DP&C	01/L2.1
20		BACCHARIS PILULARIS / COYOTE BRUSH	DP&C	01/L2.1
15		CEONOTHUS THYRSIFLORUS / CEONOTHUS	DP&C	01/L2.1
10		CERCIS OCCIDENTALIS / WESTERN REDBUD	DP&C	01/L2.1
10		RHAMNUS CALIFORNICA / COFFEEBERRY	DP&C	01/L2.1
15		ROSA CALIFORNICA / CALIFORNIA ROSE	DP&C	01/L2.1

HABITAT TYPE: RIPARIAN WETLAND / ISLAND — AREA (acres): 8.58 AC

QTY.	SYM.	BOTANICAL NAME/COMMON NAME	COMMENTS	DETAIL
20		ALNUS RHOMBIFOLIA / WHITE ALDER	DP&C	01/L2.1
20		FRAXINUS LATIFOLIA / OREGON ASH	DP&C	01/L2.1
30		PLATANUS RACEMOSA / CALIFORNIA SYCAMORE	DP&C	01/L2.1
45		POPULUS FREMONTII / WESTERN COTTONWOOD	DP&C	01/L2.1
20		SALIX GOODINGII / BLACK WILLOW	DP&C	01/L2.1
30		SALIX LAEVIGATA / RED WILLOW	DP&C	01/L2.1
30		BACCHARIS SALICIFOLIA / MULEFAT	DP&C	01/L2.1
30		CEPHALANTHUS OCCIDENTALIS / BUTTONBUSH	DP&C	01/L2.1
10		CLEMANTIS LIGUSTICIFOLIA / VIRGIN'S BOWER	DP&C	01/L2.1
20		VITIS CALIFORNICA / WILD GRAPE	DP&C	01/L2.1

HERBACEOUS SEED AND PLUG PLANTING

HABITAT TYPE: RIPARIAN WOODLAND — AREA (acres): 12.01 AC

BOTANICAL NAME / COMMON NAME	DRILL SEED RATES (LBS/ACRE)	HYDROSEED RATES (LBS/ACRE)
BROMUS CARINATUS / CALIFORNIA BROME	8	8
ELYMUS GLAUCUS / BLUE WILD RYE	4	6
MELICA CALIFORNIA / COUFORNIA MEUC	4	4
NASSELLA PULCHRA / PURPLE NEEDLEGRASS	6	6
VULPIA MICROSTACHYS / THREE WEEK FESCUE	6	6
CLARKIA PURPUREA / PURPLE CARKIA	3	--
ESCHSCHOLTIA CALIFORNICA / CALIFORNIA POPPY	3	--
LUPINUS BICOLOR / PIGMY-LEAF LUPINE	3	--
NEMOPHILA MENZIESII / BABY BLUE EYES	4	--
TRIPHYSARIA ERIANTHA / BUTTER-AND-EGGS	5	--
TRITELEIA HYACINTHINA / WHITE BRODIAEA	4	--
TRITELEIA LAXA / ITHURIEL'S SPEAR	4	--

HABITAT TYPE: RIPARIAN WETLAND / ISLAND — AREA (acres): 8.58 AC

BOTANICAL NAME / COMMON NAME	DRILL SEED RATES (LBS/ACRE)	HYDROSEED RATES (LBS/ACRE)
AGROSTIS EXARATA / BENTGRASS	4	5
ELYMUS GLAUCUS / BLUE WILD RYE	4	6
ELYMUS TRACHYCAULUS / SLENDER WHEATGR.	4	4
HORDEUM BRACHYANTHERUM / MEADOW BARLEY	6	6
LEYMUS TRITICOIDES / CREEPING WILD RYE	8	9
ARTEMISIA DOUGLASIANA / MUGWORT	8	--
ACHILLEA MILLEFOLIUM / YARROW	6	--
EUTHAMIA OCCIDENTALIS / GOLDENROD	6	--
OENETHERA ELATA / EVENING PRIMROSE	6	--

HABITAT TYPE: SEASONAL WETLAND — AREA (acres): 5.01 AC

BOTANICAL NAME / COMMON NAME	DRILL SEED RATES (LBS/ACRE)	HYDROSEED RATES (LBS/ACRE)
AGROSTIS EXARATA / BENTGRASS	4	5
ELEOCHARIS MACROSTACHYA / SPIKE RUSH	4	7
ELYMUS TRACHYCAULUS / SLENDER WHEATGRASS	4	5
HORDEUM BRACHYANTHERUM / MEADOW BARLEY	6	7
LEYMUS TRITICOIDES / CREEPING WILD RYE	8	8
	PLUGS (TREEBAND) PER ACRE	QUANTITY REQ.
CAREX BARBARAE / WHITECOT SEDGE	60	300
CAREX PRAEGRACILIS / SLENDER SEDGE	40	200
DESCHAMPSIA CESPITOSA / TUFTED HAIRGRASS	25	125
ELEOCHARIS MACROSTACHYA / COMMON SPIKERUSH	50	250
JUNCUS BALTICUS / BALTIC RUSH	50	250
JUNCUS BUFONIUS / TOAD RUSH	25	125
MUHLENBERGIA RIGENS / DEERGRASS	50	250

HABITAT TYPE: FRESH WATER MARSH — AREA (acres): 2.01 AC

BOTANICAL NAME / COMMON NAME	PLUGS (TREEBAND) PER ACRE	QUANTITY REQ.
JUNCUS BALTICUS / BALTIC RUSH	60	121
JUNCUS EFFUSUS / COMMON RUSH	90	181
SCIRPUS ACUTUS / COMMON TULE	90	181
SCIRPUS CALIFORNICUS / CALIFORNIA BULRUSH	60	121

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SHEET TITLE:
"TEICHERT PONDS"
City of Chico
Butte County,California
CONCEPTUAL HABITAT RESTORATION PLAN

NORTH — SCALE 1"=100'

0 50 100 200

DRAWN BY: LRP — JOB NUMBER: 25009 — BY: —
CHECKED — DATE: —
ORIGINAL DATE: 06-23-08 — REVISIONS — DATE: —

SHEET NO: L1.1 — 3 OF 7

2. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Hazards and Hazardous Materials	☐ Public Services
☐ Agricultural Resources	☐ Hydrology and Water Quality	☐ Recreation
☐ Air Quality	☐ Land Use and Planning	☐ Transportation and Traffic
☐ Biological Resources	☐ Mineral Resources	☐ Utilities and Service Systems
☐ Cultural Resources	☐ Noise	
☐ Geology and Soils	☐ Population and Housing	

PLANNING DIRECTOR DETERMINATION:

On the basis of this initial evaluation:

I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared. ☐

I find that although the proposed project COULD have a significant effect on the environment, there WILL NOT be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared. ☒

I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required. ☐

I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed. ☐

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. ☐

Signature _____ Date _____

Printed Name _____

3. EVALUATION OF ENVIRONMENTAL IMPACTS

Responses to the following questions and related discussion indicate if the proposed project will have or may potentially have a significant adverse impact on the environment.

- A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

- The explanation of each issue should identify: the significance criteria or threshold, if any, used to evaluate each question; and the mitigation measure identified, if any, to reduce the impact to less than significance.

I. Aesthetics		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a)	Have a substantial adverse effect on a scenic vista, including scenic roadways as defined in the General Plan or a Federal Wild and Scenic River?	☐	☐	☐	☒
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c)	Affect lands under a scenic easement or contract?	☐	☐	☐	☒
d)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
e)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

DISCUSSION

a)

The project construction could temporarily degrade the views from State Routes 32 and 99, and the yards of adjacent properties. However, the habitat enhancement will result in a net beneficial improvement to the appearance of the site due to planting of native species and recontouring of the ponds. Therefore, the project will not result in any potentially significant or less than significant impacts on scenic vistas or roadways.

b)

The project site is not located along a state-designated scenic highway. No historic buildings or visually significant rock outcroppings are located on the site or in the immediate vicinity. The proposed project would not alter scenic resources in the local area but will result in improvements to the overall scenic quality of the site. Therefore, the project will have no impact to scenic resources.

c)

The project site is not subject to any scenic easement or contract. Therefore, the project will have no impact on scenic easements or contracts.

d)

The existing positive visual characteristics of the site will be preserved and enhanced by the proposed project. The existing plant communities will be enhanced through the removal of invasive exotic species and the addition of native inhabitants. Trash racks will be installed to reduce the amount of debris present in the Teichert Ponds area. Therefore, the project will not result in any potentially significant or less than significant impacts on the visual character or quality of the site or its surroundings.

e)

No new lighting features are proposed as part of the project. The only potential sources of glare are the water surfaces of the three ponds, which are not new features to the site. Therefore, the project will have no impact as a result of potential new light or glare.

II. Agricultural Resources	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.				
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment, which, because of their location or nature, could result in conversion of Farmland to non-agricultural use?	☐	☐	☐	☒

DISCUSSION

a)

Prime Farmland designations within the project area were identified through information available from the State of California's Department of Conservation. No Prime Farmland is found within the project site footprint or vicinity. Therefore, the project will not have any potentially significant or less than significant impacts resulting from the conversion of farmlands.

b)

The project site is zoned for use as primary open space. Proposed site operations would be consistent with this zoning designation. Also, the project site is not under a Williamson Act contract and no conflicts with existing agricultural zoning or Williamson Act contracts would occur. Therefore, the project will not result in any potentially significant or less than significant impacts as a result of conflicts with existing agricultural uses or a Williamson Act Contract.

c)

The project site is not farmland because of its site characteristics and location adjacent to commercial and residential development. As such, the proposed project would not individually or cumulatively contribute to the loss of farmland in the project area. Therefore, the project is not anticipated to have potentially significant or less than significant impacts as a result of any proposed changes to the existing environment that could result in the conversion of farmland.

III. Air Quality		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
The significance criteria established by the Butte County Air Quality Management District has been relied on to make the following determinations, as appropriate.					
Would the project:					
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐
d)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
e)	Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

DISCUSSION

a)

The proposed project comprises the restoration and enhancement of the hydrology, water quality, and habitat associated with the Teichert Ponds. The current passive recreation and open space use of the site is not proposed to change and the project will not conflict with or obstruct implementation of any applicable air quality plan. The project is consistent with the allowed uses in the Chico General Plan and Municipal Code and will not substantially increase emissions in the local area. Therefore, the project will have no impact on the implementation of an air quality plan.

b)

Air pollutant emissions would primarily result from temporary construction activities at the project site. Construction-related activities would create a temporary increase in fugitive dust emissions on the project site and the immediate vicinity. Most of the dust generated would be large enough to quickly settle. The City requires the inclusion of dust suppression measures in all grading plans and appropriate measures intended to reduce construction-related exhaust emissions. The City's General Plan EIR, in accordance with applicable regulations, sets forth mitigation measures that are intended to reduce fugitive dust generated by construction activities. During site preparation and grading activities, construction equipment and worker vehicle travel would generate CO, NOx and ROG. Due to the low-intensity nature and limited duration of construction, construction emissions would not be expected to exceed BCAQMD significance thresholds. However, to ensure construction emissions do not exceed applicable thresholds, the following air quality

mitigation measures adopted with General Plan EIR approval and /or recommended by BCAQMD are hereby incorporated into the proposed project (BCAQMD, 2002). Therefore, with the inclusion of these mitigation measures, the project will not have any potentially significant impacts to air quality.

Mitigation Measure AIR-1

The following mitigation measures shall be implemented during project design and construction:

- Submit and receive approval from BCAQMD of a Construction Emission/Dust Control plan prior to groundbreaking.
- Construction equipment exhaust emissions shall not exceed District Rule 201 Visible Emissions.
- Exhaust emissions shall be minimized by maintaining equipment in good repair and proper tune according to the manufacturer's specifications.
- No open burning of removed vegetation shall be allowed.
- Construction contracts shall include language that prohibits the use of all pre-1996 heavy-duty off-road diesel equipment on forecast 'Spare the Air' days.
- Grading operation shall be suspended when wind speeds exceed 20 miles per hour and dust is impacting adjacent properties.
- Water shall be applied as needed to prevent dust impacts off-site.
- Paved streets adjacent to the site where visible silt or mud deposits have been accumulated due to construction activities shall be swept or washed to remove particulate sources that might contribute to air quality degradation at the end of every construction day if necessary.
- Onsite vehicles shall be limited to 15 miles per hour on unpaved roads.
- A publically visible sign with the telephone number of personnel to contact regarding dust complaints shall be posted, and designated contact shall take corrective action within 24 hours. The telephone number of BCAQMD shall also be visible on the sign to ensure compliance with Rule 200 and 205 (Nuisance and Fugitive Dust Emission; CARB, 2007).
- The party that implements the project will also be responsible for monitoring the air quality of the site during construction.

c)

The Teichert Ponds Restoration Project is located in an area classified as non-attainment for the EPA 8-hour and ARB 1-hour ozone standards, as well as the ARB 24-hour average PM10 and the annual average PM2.5 standards (BCAQMD, 2007). The proposed project would be expected to have a negligible effect on vehicle trips to and from the site, and would not be expected to result in substantial onsite emissions associated with short duration, temporary construction activities. The implementation of Mitigation Measure AIR-1 is expected to reduce the anticipated emissions to less than significant levels on regional air quality. Therefore, with the inclusion of Mitigation Measure AIR-1, the project will not result in any potentially significant impacts on air quality.

d)

The proposed project includes activities associated with the restoration and enhancement of the Teichert Ponds. The hydrology, water quality and habitat improvements and continuation of the sites' passive recreation and open space use would not result in exposing any sensitive receptors to substantial concentrations of pollutants. Therefore, the project will not have any potentially significant or less than significant impacts to sensitive receptors.

e)

Implementation of the proposed project does not include any activities that would create objectionable odors. Currently, the Teichert Ponds site suffers a negative perception associated with the odors of the stagnant pond waters in the summer months. The proposed treatment pond would serve to reduce the agents that cause unpleasant odors resulting in a net positive benefit from the reduction of odors emanating from the site. Therefore, the project will not result in any potentially significant or less than significant impacts as a result the creation of objectionable odors affecting a substantial number of people.

IV.	Biological Resources	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (CDFG) or the United States Fish and Wildlife Service (USFWS)?	☐	☒	☐	☐
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFG or the USFWS?	☐	☒	☐	☐
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (CWA; including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e)	Result in the fragmentation of an existing wildlife habitat, such as blue oak woodland or riparian?	☐	☐	☐	☒
f)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

DISCUSSION

a)

Based on the results of the biological resources assessment, the proposed project could have a substantial adverse effect on sensitive or special status species or their habitat. No special-status plant species were observed within the project area during the rare plant survey conducted on July 26, 2006 (H.T. Harvey and Associates, 2006). Elderberry shrubs are known to be present on the project site (Restoration Resources, 2007). The western pond turtle, a special-status wildlife species, was observed on-site in 2006. Additionally, the project site in its current condition provides potential habitat for giant garter snake. Giant garter snake (GGS) has been observed at Bruce Road and Dead Horse Slough, approximately 1.2 miles to the east by northeast. More importantly, Dead Horse Slough is a tributary to Little Chico Creek, entering the creek upstream from the project site. It is possible that GGS migrated easterly along Little Chico Creek (e.g. the northern boundary of the site). More importantly, the habitat present on the site meets all of the requirements to support giant garter snake. The annual grassland, which provides potential winter refugia,

would be partially disturbed and converted to other habitat classifications with project implementation. However, these potential refugia areas will be replaced with six constructed reptile refugia sites.

In addition, the project design includes well distributed open, grassy areas around the pond margins. The majority of these areas would be located on the south sides of the ponds to maximize solar exposure. Finally, emergent wetlands, the most important habitat type for the giant garter snake, would expand slightly as a result of the proposed project. The site currently supports numerous breeding birds, however few are considered wetland or riparian obligates. Enhancement and increases in the extent of the freshwater emergent wetland and upland riparian woodlands may attract additional wetland and riparian obligate species. Removal of Himalayan blackberry brambles may temporarily limit habitat for some bird species, however, native vegetation that would replicate the Himalayan blackberry functions are proposed.

The wetland habitat that currently exist on the project site were formed as a result of aggregate mining activities during the 1960's. The disturbance-oriented history, geographic isolation of the wetlands, and overall rarity of each of the targeted special-status plant species in the area has likely precluded the establishment of native populations of rare plants on the project site. Restoration of a complete plant community will benefit all of the wildlife species that currently inhabit, or potentially could inhabit, the project site. Complications associated with construction include the dewatering and recontouring of Ponds 2 and 3. This process is associated with the construction of structurally sound buttresses for enlarged berms, which will enable several enhancements to water quality, habitat, and mosquito control. Additionally, fallen logs, which are currently present in the ponds, will be removed during construction. These trees are believed to provide habitat value as basking area for turtles, roosting perches for birds, and refuges for small fish while minimizing habitat for mosquito larvae. All fallen trees will initially be removed from the site; however, a subset will be stored for subsequent replacement. Approximately 10 to 15 logs shall be chosen that have several branches at one end and a single trunk on the other. These logs shall be installed such that the branches are underwater, providing refuge habitat for fish, with the single trunk at an angle less than 45 degrees. The following mitigation measures have been identified to reduce the potential impacts to species and habitats to less than significant levels with their implementation.

Mitigation Measure BIO-1

BIO-1a.

Special-Status Birds

The City shall hire a qualified biologist or ornithologist to conduct preconstruction field surveys of mature trees on and adjacent to the project site for nesting special-status birds. The survey(s) will be conducted no more than 15 days prior to the initiation of construction, during the season immediately preceding grading operations when birds are building and defending nests or when the young are still in nests and dependent on the parents (January through August for this area of Butte County). If no nests are found during the survey(s), grading may proceed unconstrained by conflicts with nesting raptors and migratory birds. If raptor/migratory bird nests are found, the City shall consult with the biologist and appropriate agencies. If the nest is greater than half completed, no construction activities will be allowed within 500 feet of the nesting raptors.

BIO-1b.

Western Pond Turtle

To protect any western pond turtles that may occur on-site during Phase 1 implementation, following measures shall be taken:

1) During dewatering of Ponds 2 and 3, all western pond turtles observed in the ponds will be carefully removed by a qualified biologist or the biologist's trained designee and relocated to the eastern side of Pond 1.

2) Any western pond turtles observed during construction in areas where they could be harmed by construction activity will be relocated.

BIO-1c.

Giant Garter Snake

To mitigate potentially significant impacts to giant garter snake, construction shall be implemented during the active period for the species (May 1st to October 1st). A qualified biologist shall conduct a preconstruction survey for giant garter snake 24-hours prior to commencement of construction activities. Surveys shall be repeated if a lapse in construction of two weeks or greater occurs. Any dewatered habitat shall remain dry for at least 15 consecutive days after April 15th and prior to excavating or filling the dewatered habitat.

A qualified biologist will be on-site during all construction activities occurring in wetland and aquatic habitats, including all habitats containing wetland vegetation. If a giant garter snake is encountered during construction, activities shall stop until the snake successfully escapes the project area, or until capture and relocation have been completed by a USFWS approved biologist.

BIO-1d.

Giant Garter Snake

Giant garter snake habitat will be constructed in conjunction with project build out. Habitat enhancements shall consist of basking structures and nest habitat. The current likelihood of giant garter snake inhabiting the site is low due to lack of habitat; however, planned habitat enhancements will provide valuable potential for the snake to utilize the site.

Valley Elderberry Longhorn Beetle

Elderberry shrubs impacted by project construction will be transplanted to another suitable location within the project area using the transplanting procedures outlined in the USFWS Conservation Guidelines for Valley Elderberry Longhorn Beetle (VELB). Those that can be avoided will be fenced with high-visibility orange fencing. Those that cannot be transplanted or avoided shall be mitigated according to the USFWS Conservation Guidelines for VELB.

These procedures and guidelines include:

1) Transplant the directly impacted elderberry shrub to an on-site VELB conservation area,

2) Plant 10 elderberry shrubs (5 shrubs/inch) within an on-site VELB conservation area, and
3) Revegetate with native associate plant species after construction activities are finished.

The work window for this project is summarized in Table 1.

Table 1

Species and Work Tasks	Time Window
Preconstruction Bird Surveys	January 1st-August 1st
Construction Time during GGS Active Period	May 1st-October 1st
Vegetation Clearing Outside of Nesting Season for Migratory Birds	September 1st-January 31st
Overall Construction and Maintenance	May 1st-August 1st, September 1st-January 31st

b)

The project site encompasses approximately 40.7 acres of primarily aquatic habitat that supports several types of wetlands subject to the jurisdiction and permitting authority of the US Army Corps of Engineers (USACOE) and the Regional Water Quality Control Board (RWQCB). The habitats and their acreages that currently occur on-site are listed in Table 2 as well as the proposed habitat acreages.

Table 2

Habitat Type	Acres Present	Acres Proposed
Seasonal Wetland	0.05	5.0
Riparian Wetland	6.03	8.6
Riparian Upland	10.89	12.0
Annual Grassland/Ruderal	1.93	-
Open Water	13.73	11.1
Total	40.7	40.7

Implementation of the proposed project would result in the conversion of some habitat types, the most substantial of which would be the conversion of approximately 6.23 acres of submerged wetland habitat and 1.93 acres of annual grassland to seasonal wetland, riparian wetland and riparian upland. There will be an overall loss of one acre of wetland that will be mitigated for via direct replacement with increased habitat value types resulting in a positive impact to wetland habitats. Thus, this change will not result in a significant impact on the sensitive natural communities of the site with the implementation of the following mitigation measures.

Mitigation Measure BIO-2

Overall, the proposed project is intended to increase the habitat value of the Teichert Ponds site and result in no net loss of wetlands. Pond 1 is designed to be a permanently inundated feature with little change in yearly water levels, and Pond 2 is primarily designed to be a stormwater detention basin with seasonal flows fluctuating according to stormwater and nuisance water discharge. Pond 3 would function largely as wildlife habitat and secondarily as stormwater detention for overflow from Pond 2.

Freshwater marsh habitat would be located along the lower margins of the ponds adjacent to open water. Next to the freshwater marsh habitat, and slightly higher in elevation, would be seasonal wetlands inundated less frequently during the winter. Riparian wetland areas would be located on the seasonally saturated soils adjacent to the seasonal wetlands and would be periodically inundated. Riparian wetlands would be located so that root crowns are in close proximity to the groundwater elevation. Riparian woodland would be located on the dry side slopes and the tops of berms and other areas with drier soil conditions.

The project has been designed to allow the site to fulfill its potential as a high quality natural community. Implementation of the proposed project would result in the conversion of some habitat types, the most substantial of which would be the conversion of approximately 6.23 acres of submerged wetland habitat and 1.93 acres of annual grassland to seasonal wetland, riparian wetland, and riparian upland. These three replacement habitat types provide substantially higher overall habitat values than the lost emergent wetland and annual grassland, and are not considered a significant effect to the sensitive natural communities of the site.

In addition to establishing native vegetation associated with riparian habitat and other sensitive communities, the proposed project will include the following habitat enhancements: removal of invasive exotic terrestrial vegetation, installing basking structures and nest boxes, and re-contouring the existing ponds resulting in an overall benefit to the riparian habitat and sensitive natural communities within the site.

Invasive plant species, including parrot's feather and Brazilian waterweed, are currently found throughout the Teichert Ponds system. Aquatic invasives are highly problematic due to their ability to grow rapidly and form large extensive mats that crowd out native plant species, clog waterways, including inlet and outlet pipes, and create an ideal habitat for mosquitoes. To eliminate these weeds and provide for an increased habitat value, the project proponents propose herbicide application following the recommendations of a state certified Pest Control Advisor during which no water may flow from the ponds into Little Chico Creek for two days following its application. To carry this out, the existing outlet from Pond 3 will be closed using a temporary inlet cover. Water within the ponds will be drawn down to accommodate upstream, spring/summer inflow, after which the herbicide will be applied to all areas supporting parrot's feather. This pond drawdown will provide additional water holding capacity to the ponds as they slowly refill with water thus allowing for the proper residency period for the herbicide to break down to acceptable levels for discharge into Little Chico Creek.

c)

During the wetland delineation conducted by HT Harvey and Associates, 27.78 acres of Section 404 jurisdictional wetlands were identified including 13.56 acres of Waters of the U.S. There will be a conversion of some open water habitat to other wetland habitat types (i.e. from 13.56 acres to 11.10 acres) but the overall result will be a net gain of other wetland and upland habitat types. Impacts to wetlands will be temporary and will be mitigated for by revegetation of the site with California native plant species common to wetland and riparian habitats. The revegetation will increase the habitat functions and values of the site specifically by the removal of non-native plant species that currently provide low-quality wildlife habitats and improving the hydrology of the site which will increase the overall water quality of the Little Chico Creek watershed. The following mitigation measures have been identified to reduce the potential impacts to protected wetlands to less than significant levels with their implementation.

Mitigation Measure BIO-3

The results of the wetland delineation suggest that the bed and bank of Little Chico Creek adjacent to the project site, and other portions of the project site, fall within the jurisdiction of multiple agencies. The proposed project is self-mitigating such that the change and enhancement of wetland and other habitats will result in a net benefit in terms of habitat quality. However, due to temporary effects to these habitats during the restoration implementation, both state and federal regulatory permits are required and will be obtained prior to construction. These permits include the following:

1. Clean Water Act Section 404 Jurisdictional Wetlands and Other Waters of the U.S. permit from the U.S. Army Corps of Engineers (USACE) with a Federal Section 7 consultation for VELB.

2. Clean Water Act Section 401 Water Quality Certification from the California Regional Water Quality Control Board

3. California Department of Fish and Game (CDFG) Code 1602 Streambed Alteration Agreement

Impacts to site wetlands during the construction process will be mitigated by revegetating the site with California native plants common to wetland and riparian habitats. The irrigation and planting plan will ensure revegetation of the project site will continue to improve and provide high quality habitat during the course of the mandatory, 5-year establishment period as required by the USACE' Mitigation and Monitoring Proposal Guidelines (Restoration Resources, 2008).

Short Term Monitoring
Vegetation and hydrology will be monitored for five years (growing seasons) after installation of the native plants. Monitoring will be conducted annually in Years 1 through 5. Monitoring results from Years 1 through 4 will be compared to performance criteria to evaluate progress toward the stated goals and to provide a basis for remedial action. The results of the monitoring in Year 5 will be compared to the final success criteria to determine if these criteria have been met. As is standard in regulatory agency permit requirements, if final success criteria have not been met, remedial actions and monitoring will continue until they have been met. The monitoring protocol as required by the USACE' Mitigation and Monitoring Proposal Guidelines is also used by the California Regional Water Quality Board, the USFWS and the CDFG.

Long Term Monitoring
The goal of the long-term operations and management plan is to ensure that water detention capacity and water quality functions of the ponds do not become degraded over time. Long-term monitoring will include monitoring wetland function and vegetation composition as well as ensuring that all water control structures are functioning properly. In conjunction with those goals, the long-term plan also addresses the natural communities of the pond system, ensuring that the variety of wetlands and other associated riparian communities within the project area are maintained in good condition and will continue to support high quality wildlife habitat.

The proposed monitoring plan follows the guidelines set forth by the USACE in their 2004 Mitigation and Monitoring Proposal Guidelines. These guidelines were developed by the USACE for projects that require compensatory mitigation for unavoidable impacts to wetlands and other jurisdictional waters of the United States. In support of the Teichert Ponds project including the restoration of the wetland complex, a Letter of Permission from the USACE, as well as permits from other agencies based on USACE approval, will be required.

d)
A grate is currently in place over the outlet to Little Chico Creek, which prevents the passage of fish species between the ponds and the creek. A similar grate will remain in place with the proposed habitat enhancements that will not alter existing aquatic access to the site. Overall, the nature of the connection between the project site and Little Chico Creek will remain unchanged, and the variety of breeding avian species supported by the site will benefit from planned habitat enhancements. Temporary impacts to wildlife species could occur during project implementation and establishment but will be reduced to less than significant levels with incorporation of the following mitigation.

Mitigation Measure BIO-4

During the final stages of dewatering, staff biologists will move reptiles and amphibians that would otherwise become stranded to an area of Teichert Ponds capable of supporting them. If any animals are proposed for the relocation to the creek corridor, consultation with CDFG will be sought and a letter of approval obtained.

All trees removed through the process of habitat enhancement will be mitigated for with the addition of native plant species as container stock, pole cuttings, or seeds. All plant material shall be propagated from parent material located onsite, or in the vicinity of the project site, or an area with similar site characteristics or other source of native plants.

Maintenance and Monitoring
To avoid impacting the reproductive success of migratory birds, initial clearing of nonnative woody vegetation shall be conducted annually between September 1 and January 31. After the initial vegetation clearing operations, additional removal efforts, if necessary, shall occur before any regrowth becomes suitable for nesting birds.

In addition to this mitigation, the project has been designed to incorporate nest boxes for use by wood ducks, American kestrels, barn owls, swallows, oak titmice, northern flickers, house wrens, and bats as an added measure further resulting in a net beneficial enhancement to the site.

e)

The project site occurs in an area of previously fragmented habitats. The proposed project is designed to formalize the area as a functioning habitat that can better support the habitat functions of the adjoining Little Chico Creek, thus resulting in an overall net beneficial impact to the site. Therefore, the project will not create potentially significant or less than significant impacts on wildlife habitat.

f)

The Tree Preservation Regulations set forth in Chapter 16.66 of the Chico Municipal Code are applicable only to undeveloped private property of greater than one-half acre (City of Chico, 2007). The Teichert Ponds site is owned by the City of Chico. While the City's Tree Preservation ordinance would not apply in this case, the City's review and approval of the project landscape design will consider preservation of significant trees and ensure consistency with local plans, policies, and ordinances. The project has been designed to avoid unnecessary removal of desirable native tree species while removing non-native and invasive species that conflict with the habitat functions of the site. In addition, the project design includes planting of native riparian woodland species that will result in a net overall enhancement to the site. Therefore, no potential for significant or less than significant impacts will result from conflicts with local policies or ordinances.

V. Cultural Resources		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a)	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☐	☒
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

DISCUSSION

The cultural resources survey was completed by Neal Neuenschwander, Staff Archeologist, Peak and Associates, Inc on 21 September 2008. Due to inundation, the survey was restricted to dry portions of the project area. In the northern and eastern portions of the project site, parallel transects were walked at intervals that did not exceed 15 meters in width. For the southern and western portions and in the area between Ponds 2 and 3, transects were spaced less than 10 meters apart in width. The creek bed of Little Chico Creek was walked with every available cut bank along the South Bank and checked for evidence of cultural resources. On the north, a one meter deep (3.3 feet) lens of prehistoric period cultural material, a remnant portion of CA-BUT-446, was observed within the Project Area located on a narrow strip of intact land. The lens of cultural material is light brown colored, non-midden loam sediment with scattered stone artifacts and fire-affected rock. No bone was observed. This portion of CA-BUT-446 may have served primarily as an area for tool manufacture from cobbles that came from the adjacent creek bed. This remnant portion of CA-BUT-446 identified during the current investigation as shown on the site sketch map in Appendix D (Confidential) will be avoided with any ground disturbing activities. The current project undertaking does not appear to have any elements that would directly impact this area as defined in CFR Section 800.16 (i) thus resulting in no adverse change in the significance of a historical or archeological resource as defined in CEQA Section 15064.5.

To ensure project construction does not adversely affect sensitive cultural resources, mitigation measures CUL-1a – CUL-1d are being incorporated into the proposed project to ensure that any potentially significant impacts are mitigated to less than significant levels as identified in the following analyses.

a)

No historical resources were identified on the project site as defined in CEQA Section 15064.5. Due to prior site excavation and disturbance associated with the site and the lack of resources identified during the site reconnaissance survey, the project will not result in any potentially significant or less than significant impacts on historical resources.

b)

It is unclear from the original cultural resource record, whether or not the excavation of the eastern-most pit, Pond 1, in 1962, removed all of the midden associated with CA-BUT-446. The 10/9/62 record states that the site was "destroyed almost entirely" thus there could be remnants of archeological resources still on site. With the implementation of the following measures, the project would not have potentially significant impacts on the significance of archeological resources on the site as defined in CEQA Section 15064.5.

Mitigation Measure CUL-1a

Prior to any ground disturbing activities, in the area identified on Figure 4 as "reported area of CA-BUT-446," backhoe trenches should be excavated within the Area of Direct Impact (ADI) in order to determine if remnant portions of CA-BUT-446 are present or not. In a 1962 survey, prehistoric period site CA-BUT-446 was recorded in the project area during the excavation of aggregate. Various ground and chipped stone artifacts and an arrow shaft straightener were described to have been uncovered. One burial was discovered and others were said to have been reported, according to the 1962 site record. The site was said to have been "destroyed almost entirely." In 1997, Jensen conducted additional site testing with the excavation of seven backhoe trenches in the area of CA-BUT-446 and HRR-5 just east of the project area. Four of the seven trenches were found to contain cultural material, although no burials were encountered. No subsurface cultural material was identified at site HRR-5, according to Jensen (Jensen 1997a). Monitoring was recommended by Jensen during construction activities around the trenches that had evidence of cultural material. Thus, there is the potential for cultural resources to occur. There is the potential for fragments of CA-BUT-446 to occur in areas other than the aforementioned mapped section of undisturbed prehistoric period cultural material.

Mitigation Measure CUL-1b

A professionally qualified archeologist, archeological technicians, and member of the Mechoopda Indian Tribe should be present to observe and process the excavated sediment.

Mitigation Measure CUL-1c

During site grading activities, if human remains are encountered during the course of project activities, all work in that area shall halt and the County coroner and Native American Heritage Commission shall be notified immediately. In addition, a qualified professional archaeologist shall be notified immediately in order to assess the resource value as soon as possible, and develop measures to avoid, minimize or mitigate adverse effects to such properties.

Mitigation Measure CUL-1d

If archaeological artifacts, exotic rock (non-native), or unusual amounts of shell or bone are uncovered during any on-site construction activities an archeologist should be consulted for an on-the-spot evaluation. If the discovery consists of human remains, the Butte County Coroner and Native American Heritage

Commission must also be contacted. Work in the area may only proceed after authorization is granted by the Butte County Planning Department.

c)

The project site is highly disturbed and has been modified to an unknown extent thus it is highly unlikely for a unique paleontological resource or site or unique geologic feature to have remained intact to be impacted by this project. Therefore, the project will not result in potentially significant or less than significant impacts on paleontological or geologic resources.

d)

No human remains are known to occur within the project site as it is highly disturbed. However, there is the potential that they could be discovered during site grading activities. With implementation of the mitigation measures identified for impact (b) above, the project will not result in potentially significant or less than significant impacts on these features.

VI. Geology and Soils	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project or its related activities:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

DISCUSSION

a)

i)

Based on the available geologic and seismic data, fault rupture is not considered likely in the project area. The California Geological Survey does not identify the City of Chico as being within an Alquist-Priolo Earthquake Fault Zone. Furthermore, the rupture of a known fault in the area would, at most, result in a seismic ground-shaking event on the project site. Therefore, the project will not result in any potentially significant or less than significant impacts.

ii)

The only known active fault in Butte County is the Cleveland Hill fault. No active or potentially active faults are located in the immediate project vicinity. According to the 2007 geotechnical report prepared by Gularte & Associates, Inc., there is a 10 percent probability that the site will experience horizontal ground acceleration due to gravity (g) of 0.1 to 0.2g in the next 50 years (Gularte, 2007a). Generally, the area has a low likelihood of ground acceleration, however, earthquakes generated at the Cleveland Hill or other active faults could result in strong ground shaking at the project site. As proposed, the project does not include any structures designed for human occupancy. Therefore, the project will not expose people or structures to strong seismic ground shaking and will not result in any potentially significant or less than significant impacts.

iii)

The characteristics associated with liquefaction (e.g. loose soils) are likely to be encountered in the vicinity of stream channels. The potential for liquefaction is moderate to high in areas of Chico located along stream channels. Subsurface soil in the project area generally consists of highly permeable gravels and cobbles, allowing the groundwater depth to be at a relative equilibrium with the water level in the ponds. This was confirmed by exploratory borings conducted by Gularte Associates. This potential will not pose a risk to people or structures due to the proposed continued use of the site as open space. Therefore, the project will have no impact to people or structures resulting from seismic related ground failure or liquefaction.

iv)

Because the topography of the site is relatively flat, there is a low probability of landslide, and there are no anticipated impacts associated with the exposure of people or structures to adverse effects. Therefore, the project will have no impact to people or structures resulting from landslides.

b)

The ponds would be partially to completely drained during construction activities, eliminating the potential for hydraulically induced erosion. Further, following construction, areas exhibiting erosion potential during routine monitoring will be addressed through best management practices and/or bioengineering methods (e.g. silt fencing and straw wattles). Over time, the native vegetation will establish and control erosion from overland flow. Therefore, the project will not result in potentially significant impacts or less than significant impacts from soil erosion or topsoil loss.

c)

Direct impacts related to the potential for landslides are addressed in Item VI (a) (iii and iv) above. Based on the available geologic information and the resemblance of the current site conditions to those proposed (i.e, the ponds already exist), no new impacts related to unstable geologic units or soils would be anticipated. Therefore, the project will not have potentially significant or less than significant impacts.

d)

Expansion tests have been performed on soil samples, and the results indicate that the native soils have a low expansion potential (Restoration Resources, 2008). The project site does not contain expansive soils and would not be exposed to the impacts associated with expansive soils. Therefore, no impacts associated with expansive soils will occur.

e)

The proposed project does not include the use of septic tanks or alternative wastewater disposal systems that could be affected by poor soils. Therefore, the project will have no impact.

VII.	Hazards and Hazardous Materials	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?	☐	☐	☐	☒
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h)	Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

DISCUSSION

a)

The proposed project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials because no hazardous waste will be generated. All vehicle maintenance is limited to off-site locations. Therefore, the project will not result in any potentially significant or less than significant impacts from the transport, use, or disposal of hazardous materials.

b)

A Phase 1 Environmental Site Assessment was conducted in February of 2007 by Gularte & Associates, which concluded that there was "no evidence of deleterious environmental conditions affecting the proposed use of the subject property." In general, the water and soil samples contained concentrations of CAM 17 metals lower than the total threshold limit concentration for declaration as a hazardous waste by the State of California, as well as the EPA's Region 9 Preliminary Remediation Goals (PRG) for residential soil and tap water, with the exception of arsenic, which exceeded the PRG.

The Region 9 PRG for arsenic in tap water is considerably more conservative than for non-potable ground water. Also, arsenic was not detected in soil samples. The proposed project includes berm construction for recreational use and stormwater retention. Thus, the potential threat to public health is not a significant concern (Gularte, 2007b).

Aerially deposited lead is known to contaminate the 10 to 20 feet of land directly adjacent to roadways that were operational before the ban of tetra-ethyl lead in 1987. SR 99 was constructed in the 1960's; however the proposed project would not encroach on the highway's current right-of-way, a distance considered sufficient to eliminate the potential for contamination (Gularte, 2007b).

The proposed project would not be expected to create a significant hazard to the public or the environment through upset or accident conditions involving the release of hazardous materials. No evidence of prior hazardous materials use or storage on the site or surrounding area has been observed during site investigations. Therefore, less-than-significant impacts relative to accidental release of hazardous materials would be anticipated with the proposed project.

c)

The proposed project would not emit hazardous emissions or include the handling of significant quantities of hazardous or acutely hazardous materials. Therefore, no potentially significant or less than significant impacts will result from the project.

d)

The project site is not included on lists of hazardous materials sites and its development and operation would not create a significant hazard for the public or the environment. A records search conducted in conjunction with the Phase 1 Environmental Site Assessment did not indicate underground storage tanks or other hazardous materials as having been stored on the site. Sites identified within a ¼ mile radius have either been previously cleaned up or have otherwise obtained the acceptance of the regulatory agencies (Gularte, 2007b). Therefore, no potentially significant or less than significant impacts will result from the project.

e)

The project site is not located within an airport land use plan or within two miles of a public or public-use airport. The proposed project would not result in a safety hazard for people residing or working in the area. Therefore, no potentially significant or less than significant impacts will result from the project.

f)

The proposed project is not located within the vicinity of a private airport. The proposed project would not result in a safety hazard for people residing or working in the area. Therefore, no impact will result from the project.

g)

The proposed project is located on an approximately 41-acre site that has been previously designated and planned for such use. It would not impair implementation or physically interfere with any adopted emergency response plan or emergency evacuation plan. Therefore, no potentially significant or less than significant impacts will result from the project.

h)

The proposed project includes stormwater detention/treatment enhancement and restoration of a wetland area near residential land uses. This site will be focused on wetland and water features not prone to combustion, and will not be large enough in area to significantly fuel any potential wildfire. The proposed project would not expose people or structures to significant wildland fire risks. Therefore, no potentially significant or less than significant impacts will result from the project.

VIII. Hydrology and Water Quality		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a)	Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation?	☐	☒	☐	☐
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding?	☐	☐	☐	☒
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☒
f)	Otherwise substantially degrade water quality?	☐	☐	☐	☒
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h)	Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☒	☐
i)	Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j)	Result in inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

DISCUSSION

a)

This project will not violate any water quality standards or waste discharge requirements with the inclusion of incorporated mitigation. Site construction would include the implementation of Best Management Practices (BMP), consistent with City of Chico standards. In addition, Pond 2 would be converted to a treatment wetland, leading to an overall beneficial increase in the quality of water leaving the site. Other water quality enhancing features of the proposed project include controlling algal mats and invasive aquatic plants, installing trash nuisance racks at water inlets, and establishing biological controls.

The contractor will employ an herbicide as part of the initial restoration activities to eliminate aquatic weeds. A state certified Pest Control Advisor has provided a recommendation for an herbicide mix (Restoration Resources, 2008). This herbicide must be applied during active growth of the plant through the spring and summer months. This is expected to be the best method for reducing the presence of these weeds in the post project scenario. Impacts to water quality associated with the application of this herbicide to the ponds would be reduced to less than significant levels with the implementation of the mitigation measures and procedures detailed below:

Mitigation Measure HYDRO-1

The construction contractor will be responsible for preparing a Storm Water Pollution Prevention Plan (SWPPP) that provides site-specific BMP installation and management during the course of construction and post-construction activities. BMPs that shall be implemented on-site prior to construction include the installation of silt fences and straw wattles in areas that drain into Little Chico Creek and that could potentially contribute sediment and other pollutants to the creek. In addition, the SWPPP shall include information on:

- Implementation schedule
- Pollutant source identification
- Stormwater BMPs
- Erosion control
- Sedimentation control
- Maintenance and Inspections
- Post-construction stormwater management

Due to the potential toxicity of the herbicide proposed for use in control of exotic aquatic plant species, water within the ponds must be prohibited from entering Little Chico Creek during and immediately after application of the herbicide for at least two days. Both herbicides proposed in the mix are categorized as practically non-toxic to humans, aquatic organisms (vertebrates and invertebrates) and animals and have a short persistence period. Thus the danger to organisms within the ponds is limited as well. To carry this out, the existing outlet from Pond 3 shall be closed using a temporary inlet cover for two days after application of the herbicide. Water within the ponds will then be drawn down by 1 to 2 feet to accommodate upstream, spring/summer inflow, after which the herbicide shall be applied to all areas supporting the exotic species parrot's feather.

The dewatering procedure will provide additional water holding capacity to the ponds as they slowly refill with water, allowing for the proper residency period for the herbicide to break down to acceptable levels prior to discharge into Little Chico Creek. This procedure shall be followed prior to the commencement of construction and should also be implemented on a yearly basis to ensure that water control structures are not clogged, allowing proper movement of water through the three pond system. The party that implements the project will also be responsible for monitoring and compliance with applicable state regulations.

b)

The proposed project would not result in the substantial depletion of groundwater resources. No groundwater extraction is proposed with project implementation. Therefore, no potentially significant or less than significant impacts will result from the project.

c)

Prior to construction, the three ponds would be drained to ensure that flooding does not interfere with construction. All temporary pumps and pipelines used in this process remain in place for the duration of construction to keep the work areas free from water. All water diverted to Little Chico Creek would pass though screens and settling basin structures to avoid transport of debris or sediment into the creek.

The proposed project would preserve the basic integrity of the project site by maintaining the existing relationship with Little Chico Creek. Ultimately, water will flow through the existing piped outflow from Pond 3 to Little Chico Creek and through a proposed piped outflow from Pond 1 to Little Chico Creek. The final design would alter the interaction between the three ponds via hydrologic separation and would allow for greater control of flows and pond levels. This element of control would allow operators to check any erosion or siltation problems within Little Chico Creek.

It is possible, however, that construction activities could alter the drainage pattern of the site in a manner sufficient to result in offsite erosion or siltation. Therefore, the following mitigation is incorporated into the project to reduce any potential for impacts to less than significant levels.

Mitigation Measure HYDRO-2

A SWPPP consistent with SWRCB standards shall be prepared for this project that would reduce the potential impact related to construction activities to less than significant levels. In addition, the proposed project specifically provides that all wetland areas shall be protected with temporary construction fencing throughout the construction phase.

d)

Overall substantial increases in the rate or amount of surface runoff in a manner that would result in flooding on or offsite are not anticipated. The net inputs and outputs of the site will not change with project construction. The hydrologic enhancements planned in conjunction with the Teichert Ponds project will result in increased human control of water flows, thus aiding in the prevention of flooding events. Therefore, no potentially significant or less than significant impacts will result from the project.

e)

The proposed project has been designed specifically to enhance water quality. The existing capacity of the site ponds would be roughly maintained, and runoff to Little Chico Creek is not anticipated to be significantly greater after project completion. In addition, sheet flow runoff from SR 99 may be directed into the treatment wetland, which would likely allow for the removal of some of the toxins associated with the roadway before the water enters Little Chico Creek. Therefore, no potentially significant or less than significant impacts will result from the project.

f)

The proposed project has been designed to enhance water quality as a direct net benefit resulting from the project, thus there will be no significant or less than significant impacts to the degradation of water quality.

g)

The proposed project does not include any housing and would, therefore, not place any housing within a 100-year flood hazard area. In fact, the Teichert Ponds area will serve to harbor flood waters, protect the surrounding development to some extent from the flood waters of Little Chico Creek, and thus would have no potentially significant or less than significant impacts.

h)

The proposed project is located in an area of high flood risk. The area is under the Federal Emergency Management Agency (FEMA) flood hazard designation of "Special Flood Hazard Area Inundated by 100 Year Flood" (Butte County, 2005). The proposed project will affect the flow of water from the site to Little Chico Creek in a manner beneficial to the management of flood waters. The drainage will follow the same basic gradient as currently exists and will not be redirected away from Little Chico Creek or be impeded from flowing into it. Therefore, no potentially significant impact is expected to occur.

i)

The project site is not located in an area subject to dam or levee failure. Therefore, no potentially significant or less than significant impacts related to flooding or dam failure will occur with project implementation.

j)

The project site is not located in an area subject to seiche, tsunami or mudflow. Therefore, no potentially significant or less than significant impacts related to these events will occur with project implementation.

	IX. Land Use and Planning	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a)	Be inconsistent with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance)?	☐	☐	☐	☒
b)	Physically divide an established community?	☐	☐	☐	☒
c)	Conflict with any applicable resource management plan or natural community conservation plan?	☐	☐	☐	☒
d)	Result in substantial conflict with the established character, aesthetics or functioning of the surrounding community?	☐	☐	☐	☒
e)	Be a part of a larger project involving a series of cumulative actions?	☐	☐	☐	☒
f)	Result in displacement of people or business activity?	☐	☐	☐	☒

DISCUSSION

a)

This site will continue to be used as open space, consistent with the General Plan designation for the site, and OS-1 Primary Open Space zoning presented in the Municipal Code thus having no conflict with land use policies. Therefore, no impact will result from the project.

b)

The project consists of enhancements to an existing open space area and there will be no divisions of an established community. Therefore, no potentially significant or less than significant impacts will result from the project.

c)

No habitat conservation plan (HCP) or natural communities conservation plan(s) (NCCP) as identified in the Federal Endangered Species Act (FESA) Section 10a and the California Endangered Species Act Section 2081 respectively, are applicable to the project site. Therefore, no potentially significant or less than significant impacts will result from project implementation.

d)

The Teichert Ponds area serves to positively influence the character of the surrounding residential community by providing open space and recreational functions. The proposed project is designed to preserve and enhance these defining characteristics, and would not conflict with the established character of

the surrounding community. Therefore, no potentially significant or less than significant impacts are anticipated to result from the project.

e)

The proposed project is not part of a larger project or series of cumulative actions. Therefore, no impact will result from implementation of the project.

f)

There are currently no structures onsite and there would be no displacement of people or business activity associated with the project. Therefore, the project has no potential to result in significant or less than significant impacts.

X.	Mineral Resources	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

DISCUSSION

a)

The valuable gravel and sands were previously extracted from the project site resulting in the creation of the ponds. There are no other mineral resources available that may be lost due to project implementation. Therefore, no potentially significant or less than significant impacts will result from the loss of availability of a known mineral resource.

b)

The site is not delineated as a mineral resource recovery site in any applicable land use plan. Therefore, implementation of the proposed project would not result in the loss of a mineral resource recovery site and no impact will result.

XI. Noise		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:					
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?	☐	☒	☐	☐
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e)	Exposure of people residing or working in the project area to excessive noise levels, where the project is 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?	☐	☐	☐	☒
f)	Exposure of people residing or working in the project area to excessive noise levels, where the project is located within the vicinity of a private airstrip?	☐	☐	☐	☒

DISCUSSION

a)

The proposed project is not anticipated to create significant new noise sources. Construction would require the use of earth moving equipment and other associated mechanical devices. During construction activities, it is possible that noise levels will exceed the threshold established by the City's General Plan for single family residences (such as those that border the area to the east and south). To reduce potential construction related noise impact to less than significant levels, mitigation measure NOI-1 will be implemented.

In the long term, the site would continue to act as a buffer zone between SR 99 and the residential development to the east of the project site. Preservation of the property as open space will provide a setback that will prevent further development from occurring within this noise impact area.

Mitigation Measure NOI-1

The following measures shall be incorporated during construction activity:

- All heavy construction equipment and all stationary noise sources (such as diesel generators) shall be in good working order and have manufacturer installed mufflers.
- Equipment warm up areas and equipment storage areas shall be located in an area as far away as possible from existing residences as is feasible.
- Construction activities shall be limited to the hours between 7:00 am and 9:00 pm daily, except Sundays and holidays. For Sundays and holidays, construction activities shall be limited to the hours between 10:00 am and 6:00 pm (City Municipal Code 9.38.060).

b)

Temporary increases in noise and groundborne vibration may be produced by construction activities on the project site. All such activities are subject to City regulations (City Municipal Code 9.38.060). Adherence to relevant City guidelines would ensure that groundborne noise and vibration levels and temporary increases in noise levels generated by construction activities would produce impacts at levels that are less than significant.

c)

Because the proposed project involves only hydrologic and habitat enhancements to an area currently preserved in an open state, it would not create a substantial permanent increase in ambient noise levels in the project vicinity. Therefore, no potentially significant or less than significant impacts will occur.

d)

Construction activities such as grading and material delivery may result in a temporary increase in noise levels. Construction activities will be limited as discussed in Mitigation Measure NOI-1. Therefore, these impacts would be mitigated to less than significant levels.

e)

The proposed project is not located within an airport land use plan or within two miles of a public airport. Therefore, no impact will result from implementation of the project.

f)

The proposed project is not located in the vicinity of a private airstrip. Therefore, no impact will result from implementation of the project.

XII. Population and Housing	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

DISCUSSION

a)

The project does not involve the construction of features (i.e., roads, residential homes) that would induce population growth. Therefore, no impacts would result either directly or indirectly from the project.

b)

No housing would be displaced by the proposed project. Therefore, no impact would result from implementation of the project.

c)

No homes or people would be displaced by development of the proposed project. Therefore, housing replacement would not be required and no impact would result from the project.

XIII. Public Services		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a)	Result in substantial adverse physical impacts upon or result in the need for physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
i.	Fire protection?	☐	☐	☐	☒
ii.	Police protection?	☐	☐	☐	☒
iii.	Schools?	☐	☐	☐	☒
iv.	Parks?	☐	☐	☐	☒
v.	Other public facilities?	☐	☐	☐	☒

DISCUSSION

a)

i.

The proposed project would not include any development or improvements prone to combustion. Therefore, the proposed project would not substantially increase the demand for fire protection and emergency response services and no potentially significant or less than significant impacts will occur.

ii.

The proposed project would not increase the demand for police protection services. There would be no development on the property, and the project would not promote regional growth. The potential for the site to attract uses that may require law enforcement service will not be altered by the implementation of this project. Therefore, no potentially significant or less than significant impacts will occur.

iii.

The proposed project would not include any new housing and would not generate any new students. Therefore, the proposed project would have no effect on schools and no potentially significant or less than significant impacts will occur.

iv.

The proposed project would not include any new housing and would not generate any new users of public park facilities. Therefore, the proposed project would have no effect on parks and no impact will occur with the implementation of the project.

v.

The proposed project would not create a demand on or adversely affect any other public facilities. Therefore, no impact to other public facilities will occur with the implementation of the project.

XIV. Recreation		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a)	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?	☐	☐	☐	☒
b)	Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

DISCUSSION

a)

The proposed project will provide a beneficial enhancement to a passive recreational resource for the City of Chico, and will not contribute to the use of any other recreational facilities. Therefore, no potentially significant or less than significant impacts on recreational facilities will occur with the proposed project.

b)

The proposed project would not include any new recreational facilities thus having no potentially significant or less than significant physical impacts on the environment.

XV. Transportation and Traffic		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a)	Result in traffic volumes which exceed established Level of Service (LOS) standards on roadway segments or at intersections, or which do not meet applicable safety standards?	☐	☐	☐	☒
b)	Result in the absence of bikeway facilities in the general locations identified in the General Plan, or failure to meet applicable design requirements and safety standards?	☐	☐	☐	☒
c)	Result in travel characteristics which are not consistent with standards established in the *Butte County Congestion Management Plan* (CMP), or other General Plan policies related to Transportation Systems Management (TSM)?	☐	☐	☐	☒
d)	Substantially impact existing or proposed public transit systems, including rail and air traffic?	☐	☐	☐	☒
e)	Effect existing parking facilities or create demand for new parking not provided for by the project?	☐	☐	☐	☒
f)	Increase traffic hazards to motor vehicles, bicycles, pedestrian or other traffic?	☐	☐	☐	☒
g)	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?	☐	☐	☐	☒

DISCUSSION

a)

Because the proposed project would not increase vehicle trips on the local roadway network, it would not be expected to adversely affect the level of service standards for local roads in the project vicinity and no potentially significant or less than significant impacts will occur.

b)

According to the Transportation Element of the City of Chico's General Plan (1999), there is an existing bike path to the north of the site. In addition, there is a proposed bike path west of the site, bordering SR 99. Both are Class I bike lanes, meaning that they provide exclusive right-of-way for bikes.

The paved maintenance road on the western boundary will run from the north end of Pond 3, south along the western boundary of Pond 2, connecting the two existing bike paths. This will serve as a Class 1 bicycle

trail (paved trail) paralleling SR 99. A proposed bicycle bridge will connect this bike trail to the existing bike trail system on the north side of Little Chico Creek resulting in a net positive benefit to the bikeway facilities. Therefore, no potentially significant or less than significant impacts will occur with the implementation of the project.

c)

Project construction would result in the temporary addition of construction-related vehicle trips, including employee commuter trips and the delivery of construction materials and equipment, which would not be of sufficient volume to significantly affect the area's travel characteristics. Additionally, the completed project would not generate vehicle trips that would affect the capacity of the existing street system. Therefore, the proposed project would not result in inconsistencies with the Butte County CMP and no potentially significant or less than significant impacts will occur.

d)

The project would not result in any features that would affect or alter existing facilities nor interfere with construction of any future planned facilities for alternative modes of transportation. Therefore, no impacts will occur as a result of the implementation of the project.

e)

Parking facilities are not associated with the existing or planned future use of the site. No new parking is necessitated or proposed by the project, therefore no potentially significant or less than significant impacts to parking facilities or demand will result from the project.

f)

The proposed project would not include hazardous design features, such as sharp curves or dangerous intersections, or create hazardous conditions by introducing incompatible uses. Therefore, no design hazards would be anticipated with project implementation and no potentially significant or less than significant impacts will occur.

g)

The proposed project would have no impact on air traffic patterns and would not affect air traffic safety. Therefore, no potentially significant or less than significant impacts will occur as a result of the project.

XVI. Utilities and Service Systems		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a)	Have an effect upon or result in the need for new or altered systems related to water supply for domestic use and fire protection?	☐	☐	☐	☒
b)	Have an effect upon or result in the need for new or altered systems related to natural gas, electricity, telephone, or other communications?	☐	☐	☐	☒
c)	Exceed wastewater treatment requirements of the applicable RWQCB?	☐	☐	☐	☒
d)	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?	☐	☐	☐	☒
e)	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?	☐	☐	☐	☒
f)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
g)	Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	☐	☐	☐	☒
h)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
i)	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

DISCUSSION

a)

The proposed project does not include the development of water sources and would have no impact on the need for water supply related to domestic use or fire suppression needs. Therefore, there will be no impact associated with the project.

b)

The proposed project does not include the need for the development or use of electricity, telephone, or other related services. Therefore, no potentially significant or less than significant impacts are anticipated to occur.

c)

The proposed project would not exceed the wastewater treatment requirements of the Central Valley RWQCB and would not generate any wastewater at the site. Therefore, no potentially significant or less than significant impacts would occur with project implementation.

d)

The proposed project would not require any new water or wastewater treatment facilities as no wastewater is proposed to be generated from the project. Therefore, no potentially significant or less than significant impacts on water or wastewater treatment facilities will occur.

e)

The proposed project would provide beneficial storm water quality enhancements to existing storm water drainage facilities. Therefore, no potentially significant or less than significant impacts are anticipated to occur.

f)

The project, in and of itself, would not increase the demand for water, but would provide for storage and treatment of storm and nuisance water runoff as a direct positive benefit associated with the hydrologic and habitat enhancements. Therefore, the proposed project would have no potentially significant or less than significant impacts on water supply.

g)

The proposed project would not produce or discharge any wastewater. Therefore, the proposed project would have no impact on wastewater treatment capacity or the commitments of providers.

h)

The proposed project is anticipated to generate woody and vegetative debris associated with the restoration and improvement of the three ponds. The majority of this debris will be chipped on-site for use as mulch in the establishment of native vegetation. Logs and other larger material will be utilized on-site and have been incorporated into the design of the project as Basking Logs and Avian Perches. Invasive species, including aquatic weeds, are to be sprayed with an approved herbicide, as described in Section VIII. Hydrology and Water Quality. Successful application of the herbicide will eliminate invasive species without requiring physical removal.

Because little to no solid waste or associated vegetative debris would be generated by the proposed project, it would have little or no effect on the permitted capacity of the landfill that provides solid waste disposal services for the local area. Therefore, no potentially significant or less than significant impacts will result from the implementation of the project.

i)

The proposed project would not be expected to violate any federal, state, or local statutes or regulations related to solid waste acceptance and disposal as no solid waste will be directly generated or disposed of as part of the project. Therefore, no impact will occur as a result of the project.

XVII. Mandatory Findings of Significance		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☐	☒
c)	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

Authority: Public Resources Code Sections 21083 and 21087.
Reference: Public Resources Code Sections 21080(c), 21080.1, 21080.3, 21082.1, 21083, 21083.3, 21093, 21094, 21151; *Sundstrom v. County of Mendocino*, 202 Cal.App.3d 296 (1988); *Leonoff v. Monterey Board of Supervisors*, 222 Cal.App.3d 1337 (1990).

DISCUSSION

a)

Based upon the preceding environmental analysis, it has been determined that the project will not result in the degradation of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory, with the implementation of the mitigation measures identified above.

b)

As discussed in this Initial Study, implementation of the proposed project would result in no significant environmental impacts following implementation of the identified mitigation measures. Based on the small size of the project and its location on a parcel of land currently used for and also planned for such uses, it would not be expected to contribute cumulatively considerable impacts to the local area.

c)

As discussed in this Initial Study, implementation of the proposed project would result in no significant environmental impacts following implementation of the identified mitigation measures. Based on the small size of the project and its location on a parcel of land planned for such uses, it would not be expected to cause substantial adverse effects on human beings, either directly or indirectly.

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Mitigation Monitoring Program

When an agency makes findings on significant effects that are identified in an Initial Study, Mitigated Negative Declaration or an Environmental Impact Report (EIR), the agency must adopt a program for reporting and monitoring mitigation measures that were adopted or made conditions of approval (Public Resources Code Section 21081.6[a], California Environmental Quality Act [CEQA] Guidelines Sections 15091 [d] and 15097). To that end, the City of Chico, as the lead agency under CEQA, must adopt a mitigation monitoring program or plan for Teichert Ponds Project.

This mitigation monitoring plan is designed to ensure that the mitigation measures identified in the Initial Study for the project are implemented. These measures are detailed in the following table, organized by topic in the same order as the contents of the Initial Study. The City is responsible for implementation of the mitigation measures listed in this mitigation monitoring plan.

For each mitigation measure, Table 1 identifies:

- Mitigation measure,
- Timing,
- Implementing party and funding source, and
- Monitoring party.

It should be noted that this mitigation monitoring plan has been prepared prior to receipt of the various permits that are required for the project. Differences, if any, between the mitigation measures included in this report and the requirements of the permitting agencies shall be resolved by the City of Chico in consultation with the responsible agencies and the most stringent requirements shall be met.

Teichert Ponds
Mitigation Monitoring and Reporting Program

Mitigation Measure Contained in the Initial Study	Timing *	Implementing Party and Funding Source	Monitoring Party
Air Quality			
Submit and receive approval from BCAQMD of a Construction Emission/Dust Control plan prior to groundbreaking.	PC	Construction Contractor	City
Construction equipment exhaust emissions shall not exceed District Rule 201 Visible Emissions.	DC	Construction Contractor	City
Exhaust emissions shall be minimized by maintaining equipment in good repair and proper tune according to the manufacturer's specifications.	DC	Construction Contractor	City
No open burning of removed vegetation shall be allowed.	DC/AC	Construction Contractor	City
Construction contracts shall include language that prohibits the use of all pre-1996 heavy-duty off-road diesel equipment on forecast 'Spare the Air' days.	DC	Construction Contractor	City
Grading operation shall be suspended when wind speeds exceed 20 miles per hour and dust is impacting adjacent properties.	DC	Construction Contractor	City
Water shall be applied as needed to prevent dust impacts off-site.	DC	Construction Contractor	City
Paved streets adjacent to the site where visible silt or mud deposits have been accumulated due to construction activities shall be swept or washed to remove particulate sources that might contribute to air quality degradation at the end of each day as necessary.	DC	Construction Contractor	City
Onsite vehicles shall be limited to 15 miles per hour on unpaved roads.	DC	Construction Contractor	City
A publically visible sign with the telephone number of personnel to contact regarding dust complaints shall be posted, and designated contact shall take corrective action within 24 hours. The telephone number of BCAQMD shall also be visible on the sign to ensure compliance with Rule 200 and 205 (Nuisance and Fugitive Dust Emission; CARB, 2007).	DC	Construction Contractor	City
The party that implements the project will also be responsible for monitoring the air quality of the site during construction.	DC	Construction Contractor	City/Butte Co. AQMD

Mitigation Measure Contained in the Initial Study	Timing	Implementing Party and Funding Source	Monitoring Party
Biological Resources			
BIO-1a. Special-Status Birds The city shall hire a qualified biologist or ornithologist to conduct preconstruction field surveys of mature trees on and adjacent to the project site for nesting special-status birds. The survey(s) will be conducted no more than 15 days prior to the initiation of construction, during the season immediately preceding grading operations when birds are building and defending nests or when the young are still in nests and dependent on the parents (January through August for this area of Butte County). If no nests are found during the survey(s), grading may proceed unconstrained by conflicts with nesting raptors and migratory birds. If raptor/migratory bird nests are found, the city shall consult with the biologist and appropriate agencies. If the nest is greater than half completed, no construction activities will be allowed within 500 feet of the nesting raptors.	PC	Contractor	City
BIO-1b Western Pond Turtle To protect any western pond turtles that may occur on-site during Phase 1 implementation, following measures shall be taken: 1) During dewatering of Ponds 2 and 3, all western pond turtles observed in the ponds will be carefully removed by a qualified biologist or the biologist's trained designee and relocated to the eastern side of Pond 1. 2) Any western pond turtles observed during construction in areas where they could be harmed by construction activity will be relocated as well.	PC/DC	Contractor	City
BIO-1c Giant Garter Snake To mitigate potentially significant impacts to giant garter snake, construction shall be implemented during the active period for the species (May 1st to October 1st). A qualified biologist shall conduct a preconstruction survey for giant garter snake 24-hours prior to commencement of construction activities. Surveys shall be repeated if a lapse in construction of two weeks or greater occurs. Any dewatered habitat shall remain dry for at least 15 consecutive days after April 15th and prior to excavating or filling the dewatered habitat.	PC/DC	Contractor	City
A qualified biologist will be on-site during all construction activities occurring in wetland and aquatic habitats, including all habitats containing wetland vegetation. If a giant garter snake is encountered during construction, activities shall stop until the snake successfully escapes the project area, or until capture and relocation have been completed by a USFWS approved biologist.	DC	Contractor And Construction Contractor	City

Mitigation Measure Contained in the Initial Study	Timing	Implementing Party and Funding Source	Monitoring Party
Biological Resources			
Giant garter snake habitat will be constructed in conjunction with project build out. Habitat enhancements shall consist of basking structures and nest habitat. The current likelihood of giant garter snake inhabiting the site is low due to lack of habitat; however, planned habitat enhancements will provide valuable potential for the snake to utilize the site.	DC/AC	Contractor And Construction Contractor	City
BIO-1d Elderberry shrubs impacted by project construction will be transplanted to another suitable location within the project area using the transplanting procedures outlined in the USFWS Conservation Guidelines for Valley Elderberry Longhorn Beetle (VELB). Those that can be avoided will be fenced with high-visibility orange fencing. Those that cannot be transplanted or avoided shall be mitigated according to the USFWS Conservation Guidelines for VELB. These prodecures and guidelines include: 1) Transplant the directly impacted elderberry shrub to an on-site VELB conservation area, 2) Plant 10 elderberry shrubs (5 shrubs/inch) within an on-site VELB conservation area, and 3) Revegetate with native associate plant species after construction activities are finished.	PC	Contractor	City
BIO-3 To complete this work, the project proponent would obtain all necessary permits. The proposed project is self-mitigating such that the change and enhancement of wetland and other habitats will result in a net benefit in terms of habitat quality. However, due to temporary effects to these habitats during the restoration implementation, both federal and state regulatory permits are required and will be obtained prior to construction. These permits include the following: 1. Clean Water Act Section 404 Jurisdictional Wetlands and Other Waters of the U.S. permit from the U.S. Army Corps of Engineers (USACE) with a Federal Section 7 consultation for VELB. 2. Clean Water Act Section 401 Water Quality Certification from the California Regional Water Quality Control Board 3. California Department of Fish and Game (CDFG) Code 1602 Streambed Alteration Agreement	PC	Contractor	City

Mitigation Measure Contained in the Initial Study	Timing	Implementing Party and Funding Source	Monitoring Party
Biological Resources			
BIO-3 Impacts to site wetlands during the construction process will be mitigated by revegetating the site with California native plants common to wetland and riparian habitats. The irrigation and planting plan will ensure revegetation of the project site will continue to improve and provide high quality habitat during the course of the mandatory, 5-year establishment period as required by the USACE' Mitigation and Monitoring Proposal Guidelines (Restoration Resources, 2008).	DC/AC	Contractor	City
BIO-3 Short Term Monitoring Vegetation and hydrology will be monitored for five years (growing seasons) after installation of the native plants. Monitoring will be conducted annually in Years 1 through 5. Monitoring results from Years 1 through 4 will be compared to performance criteria to evaluate progress toward the stated goals and to provide a basis for remedial action. The results of the monitoring in Year 5 will be compared to the final success criteria to determine if these criteria have been met. As is standard in regulatory agency permit requirements, if final success criteria have not been met, remedial actions and monitoring will continue until they have been met. The monitoring protocol as required by the USACE' Mitigation and Monitoring Proposal Guidelines is also used by the California Regional Water Quality Board, the USFWS and the CDFG.	AC	Contractor	City
BIO-3 Long Term Monitoring The goal of the long-term operations and management plan is to ensure that water detention capacity and water quality functions of the ponds do not become degraded over time. Long-term monitoring will include monitoring wetland function and vegetation composition as well as ensuring that all water control structures are functioning properly. In conjunction with those goals, the long-term plan also addresses the natural communities of the pond system, ensuring that the variety of wetlands and other associated riparian communities within the project area are maintained in good condition and will continue to support high quality wildlife habitat.	AC	Contractor	City
BIO-4 During the final stages of dewatering, staff biologists will move reptiles and amphibians that would otherwise become stranded to an area of Teichert Ponds capable of supporting them. If any animals are proposed for the relocation to the creek corridor, consultation with CDFG will be sought and a letter of approval obtained.	PC/DC	Contractor	City
BIO-4 Maintenance and Monitoring Nest boxes shall be installed for use by wood ducks, American kestrels, barn owls, swallows, oak titmice, northern flickers, house wrens, and bats.	AC	City	City

Mitigation Measure Contained in the Initial Study	Timing	Implementing Party and Funding Source	Monitoring Party
Cultural Resources			
CUL-1a Prior to any ground disturbing activities,in the area identified on Figure 4 as "reported area of CA-BUT-446", backhoe trenches should be excavated within the Area of Direct Impact (ADI) in order to determine if remnant portions of CA-BUT-446 are present or not. In a 1962 survey, prehistoric period site CA-BUT-446 was recorded in the Project Area during the excavation of aggregate in 1962. Various ground and chipped stone artifacts and an arrow shaft straightener were described to have been uncovered. One burial was discovered and others were said to have been reported, according to the 1962 site record. The site was said to have been "destroyed almost entirely". In 1997, Jensen conducted additional site testing with the excavation of seven backhoe trenches in the area of CA-BUT-446 and HRR-5 just east of the Project Area. Four of the seven trenches were found to contain cultural material, although no burials were encountered. No subsurface cultural material was identified at site HRR-5, according to Jensen (Jensen 1997a). Monitoring was recommended by Jensen during construction activities around the trenches that had evidence of cultural material. Thus, there is the potential for cultural resources to occur. Thus, there is the potential for fragments of CA-BUT-446 to occur in areas other than the afore-mentioned mapped section of undisturbed prehistoric period cultural material.	PC	Contractor	City
CUL-1b A professionally qualified archeologist, archeological technicians, and member of the Mechoopda Indian Tribe should be present to observe and process the excavated sediment.	PC	Contractor	City
CUL-1c During site grading activities, if human remains are encountered during the course of project activities, all work in that area shall halt and the County coroner and Native American Heritage Commission shall be notified immediately. In addition, a qualified professional archaeologist shall be notified immediately in order to assess the resource value as soon as possible, and develop measures to avoid, minimize or mitigate adverse effects to such properties.	DC	Contractor	City
CUL-1d If archaeological artifacts, exotic rock (non-native), or unusual amounts of shell or bone are uncovered during any on-site construction activities an archeologist should be consulted for on-the-spot evaluation.. If the discovery consists of human remains, the Butte County Coroner and Native American Heritage Commission must also be contacted. Work in the area may only proceed after authorization is granted by the Butte County Planning Department.	DC	Contractor	City

Mitigation Measure Contained in the Initial Study	Timing	Implementing Party and Funding Source	Monitoring Party
Hydrology and Water Quality			
HYDRO-1 The construction contractor will be responsible for preparing a Storm Water Pollution Prevention Plan (SWPPP) that provides site-specific BMP installation and management during the course of construction and post-construction activities. BMPs that shall be implemented on-site prior to construction include the installation of silt fences and straw wattles in areas that drain into Little Chico Creek and that could potentially contribute sediment and other pollutants to the creek. In addition, the SWPPP shall include information on: • Implementation schedule • Pollutant source • Stormwater BMPs • Erosion control • Sedimentation control • Maintenance and Inspections • Post-construction stormwater management	PC/DC /AC	Contractor And Construction Contractor	City
HYDRO-1 Due to the potential toxicity of the herbicide proposed for use in control of exotic aquatic plant species, water within the ponds must be prohibited from entering Little Chico Creek during and immediately after application of the herbicide for up to two days. Both herbicides proposed in the mix are categorized as practically non-toxic to humans, aquatic organisms (vertebrates and invertebrates) and animals and have a short period of persistence thus the danger to organisms within the ponds is limited as well. To carry this out, the existing outlet from Pond 3 shall be closed using a temporary inlet cover for two days after application of the herbicide. Water within the ponds will then be drawn down by 1 to 2 feet to accommodate upstream, spring/summer inflow, after which the herbicide shall be applied to all areas supporting the exotic species parrot's feather.	PC	Contractor	City
HYDRO-1 The dewatering procedure will provide additional water holding capacity to the ponds as they slowly refill with water, allowing for the proper residency period for the herbicide to break down to acceptable levels prior to discharge into Little Chico Creek. This procedure shall be followed prior to the commencement of construction and should also be implemented on a yearly basis to ensure that water control structures are not clogged, allowing proper movement of water through the three pond system. The party that implements the project will also be responsible for monitoring.	PC	Contractor	City

Mitigation Measure Contained in the Initial Study	Timing	Implementing Party and Funding Source	Monitoring Party
Hydrology and Water Quality			
HYDRO-2 A SWPPP consistent with SWRCB standards shall be prepared for this project that would reduce the potential impact related to construction activities to less than significant levels. In addition, the proposed project specifically provides that all wetland areas shall be protected with temporary fencing through the construction phase.	PC/DC	Contractor And Construction Contractor	City

Mitigation Measure Contained in the Initial Study	Timing	Party and Funding Source	Monitoring Party
Noise			
NOI-1 The following measures shall be incorporated during construction activity: • All heavy construction equipment and all stationary noise sources (such as diesel generators) shall be in good working order and have manufacturer installed mufflers. • Equipment warm up areas and equipment storage areas shall be located in an area as far away as possible from existing residences as is feasible. • Construction activities shall be limited to the hours between 7:00 am and 9:00 pm daily, except Sundays and holidays. For Sundays and holidays, construction activities shall be limited to the hours between 10:00 am and 6:00 pm (City Municipal Code 9.38.060).	DC	Construction Contractor	City

*__Timing__
PC=pre-construction
DC=during construction
PC/DC=pre-construction and during construction
AC=after construction