BUTTE COUNTY ASSOCIATION of GOVERNMENTS
2580 Sierra Sunrise Terrace, Suite 100, Chico, California 95928-8441 • (530) 879-2468 • FAX: (530) 879-2444 • www.bcag.org

August 28, 2009

Ms. Rachel Falsetti
Division of Transportation Programming
Office of Federal Trans. Mgmt. Program
P.O. Box 942874 Mail Station 82
Sacramento, CA 94274-0001

Attention: Mr. Jody Tian

Subject: Transmittal of DRAFT Amendment #08 to the 2009 Federal Transportation Improvement Program (FTIP) for Butte County for Review and Comment

Mr. Tian:

The following **draft** amendment #08 to the 2009 Federal Transportation Improvement Program (FTIP) for Butte County is being transmitted to you for review and comment. The BCAG Board of Directors is scheduled to approve this amendment at its September 24,2009 meeting. BCAG will be requesting state and federal approval for this amendment at that time.

The purpose of this amendment is to:

1. Forest Hwy 119 Project - Program $850,000 in new federal Public Lands Highway (PLH) funding for **pavement and slide repair** needed for the facility. This project was recently completed, however, as a result to damage sustained during the winter, additional work is needed. This project is exempt from a regional emissions analysis per EPA Transportation Conformity Rule Section 93.126 Table 2 indicating that safety projects are exempt.
2. Caltrans SHOPP Collision Reduction Lump Sum - Add two new projects to the lump sum category for state highway projects in Butte County. Adds $1.4 million for various open grade concrete activities to address safety and programs a new traffic signal on SR 162 at Kelly Ridge Road for $2.3 million. The "backup" list is provided at BCAG's FTIP web page. In addition, this lump sum category has been updated to match the 2008 SHOPP for Butte County projects. BCAG discovered an error in the financial summary tables. In addition, a project was being double counted within the Lump Sum category in the SHOPP Collision Reduction and the HSIP Lump Sum categories (SR 162 @ Veatch St project). This error has been corrected. These projects are exempt from a Regional Emissions Analysis per EPA Transportation Conformity Rule Section 63.126 Table 2 indicating that safety projects are exempt.
3. SR 99 Chico Corridor Bikeway Project - Phase 1 – In the City of Chico, programs $1.925 million in new American Recovery and Reinvestment Act (ARRA) Statewide Transportation

Enhancement (State TE) funds for the existing bikeway corridor project currently programmed. The corridor project generally consists of a combination Class 1 & 2 bikeway project along or near the SR 99 Corridor from Southgate Ave. in South Chico to Hicks Lane in the north, thus traversing through the urbanized area of Chico. This project is exempt from a regional emission analysis per EPA Transportation Conformity Rule Section 93.126, Table 2 indicating that Bike and Pedestrian Projects are exempt.

4. SR 99 Chico Corridor Bikeway Project - Phase 2 – In the City of Chico, defines Congestion Mitigation and Air Quality (CMAQ) funding already programmed for a new "Phase 2" project. The purpose of Phase 2 is to address "gap closures" for the corridor bikeway project. Phase 2 was needed as a result of anticipated minor right of way and additional environmental review requirements. Primary improvements will include a Class 2 path from Neighborhood Church to Skyway; Class 1 behind the Walmart store to SR 32 and improvements crossing SR 32 to Bidwell Park. The specific alignment will be delineated during the project development in consultation with the public for the entire corridor project. This project is exempt from a regional emission analysis per EPA Transportation Conformity Rule Section 93.126, Table 2 indicating that Bike and Pedestrian Projects are exempt.

5. SR 70 Ophir Rd Freeway Project - The purpose of this amendment is to program the remaining balance of federal DEMO funds ($3,380,760) for right of way in the 2008/09 federal fiscal year. There is an urgency to obligate these funds by Caltrans before they lapse. While the project is an existing project, right of way was identified before the 2008/09 fiscal year and is required to follow the amendment process to re-program existing funds to the same component. This is an existing project with no change in funding. This project is already included in the current Regional Emissions Analysis for air quality conformity. There is no change in project delivery or funding for this project.

Air Quality Conformity

This amendment does not warrant a new regional emissions analysis. All projects except the SR 70 Ophir Rd Freeway Project are exempt. This project however is already included in the current regional emissions analysis.

Financial Constraint

This amendment meets financial constraint requirements to revenues reasonable expected for the projects. The financial Revenues Vs. Programmed spreadsheets are attached demonstrating financial constraint requirements have been demonstrated. This amendment

_____

brings current the financial constraint demonstration for the 2009 FTIP through September 2009.

In addition, attached are the "Before and After" California Transportation Improvement Program System (CTIPS) data sheets highlighting the changes made.

All FTIP amendment material including "backup lists" are available on BCAG's website at: http://www.bcag.org/Planning/2009-FTIP/index.html. Programming information can also be found in CTIPS by selecting Amendment #08 for Butte County. A public notice concerning this amendment has been previously posted. This amendment is consistent with the 2008 Regional Transportation Plan. All projects are specifically identified in the RTP.

Please direct any questions to Mr. Iván García, BCAG Programming Manager by email at igarcia@bcag.org or by phone at 530-879-2468. Thank you all for your assistance concerning this matter.

Sincerely

For:

Jon Clark
Executive Director

Attachments:
CTIPS Printouts for Amendment #08
Financial Revenue Vs. Programmed Spreadsheets

Distribution: Aimee Kratovil, FHWA
Jerome Wiggins, FTA
Maggie Witt, EPA
Gail Williams, Butte County Air Quality Management District
Sue Takhar, Caltrans District 3
Jody Tian, Caltrans Division of Transportation Programming
BCAG Transportation Advisory Committee

Public Notice

The Butte County Association of Governments (BCAG) is designated by the U.S. Department of Transportation (DOT) as the Metropolitan Planning Organization (MPO) for Butte County and its incorporated cities. As the MPO, BCAG is required to prepare a Federal Transportation Improvement Program (FTIP) every two years and a long range Regional Transportation Plan (RTP) every four years. The purpose of the FTIP is to identify all transportation-related projects that require federal funding or other approval by the Federal Highway Administration (FHWA) or the Federal Transit Administration (FTA). The purpose of the RTP is to identify a long range transportation plan for funding programmed by the BCAG Board of Directors. The RTP and FTIP are required to be consistent.

The public is invited to review and comment on:
BCAG's 2009 FTIP Amendment #08. The purpose of this amendment is to**:**

1. Forest Hwy 119 Project - Program $850,000 in federal Public Lands Highway (PLH) funding for pavement and slide repair needed for the facility.
2. Caltrans SHOPP Collision Reduction Lump Sum - Add two new projects to the lump sum category for state highway projects in Butte County. Adds $1.4 million for various open grade concrete activities to address safety and programs a new traffic signal on SR 162 at Kelly Ridge Road for $2.3 million. The "backup" list is provided at BCAG's FTIP web page.
3. SR 99 Chico Corridor Bikeway Project - Phase 1 - Programs $1.925 in new American Recovery and Reinvestment Act (ARRA) Statewide Transportation Enhancement (State TE) funds for the existing bikeway corridor project. The corridor project generally consists of a combination Class 1 & 2 bikeway project along or near SR 99 from Southgate in South Chico to Hicks Lane in the north, thus traversing through the urbanized area of Chico.
4. SR 99 Chico Corridor Bikeway Project - Phase 2 - Defines Congestion Mitigation and Air Quality (CMAQ) funding already programmed for a "Phase 2" project. The purpose of Phase 2 is to address "gap closures" for the corridor bikeway project. Phase 2 was needed as a result of anticipated minor right of way and additional environmental review requirements. Primary improvements will likely include a Class 2 path from Neighborhood Church to Skyway; Class 1 behind the Walmart store to SR 32 and improvements crossing SR 32 to Bidwell Park. The specific alignment will be delineated during the project development in consultation with the public for the entire corridor project.
5. SR 70 Ophir Rd Freeway Project - The purpose of this amendment is to program the remaining balance of federal DEMO funds ($3,380,760) for right of way in the 2008/09 federal fiscal year. While the project is an existing project, right of way was identified before the 2008/09 fiscal year and is required to follow the amendment process to re-program existing funds to the same component. This is an existing project with no change in funding.

BCAG's 2008 Regional Transportation Plan (RTP) Amendment #02 - The purpose of this amendment is to ensure consistency between the long range 2008 RTP and the 2009 FTIP. This amendment updates the RTP for projects amended into the 2009 FTIP through September 2009. The amendment includes the identification of new American Recovery and Reinvestment

Act (ARRA) funded projects, the SR 99 Neal Rd Signalization Project and the Forest Highway 119 Project.
The projects amended in the 2009 FTIP and 2008 RTP do not require a new regional emissions analysis for air quality.

All material concerning the FTIP are posted on-line at http://www.bcag.org/Planning/2009-FTIP/index.html. All material concerning the RTP is posted at: http://www.bcag.org/Planning/2008-RTP/index.html. The BCAG Board of Directors is scheduled to approve this amendment at their regular Board meeting on September 24, 2009 at 9:00 a.m. and take place at 421 Main Street in Chico (City of Chico Council Chambers). Comments and questions can be directed to Mr. Iván García, Programming Manager for the Butte County Association of Governments at 2580 Sierra Sunrise Terrace, Suite 100, Chico CA 95928. Comments may also be phoned in at 530-879-2468, or by e-mail at igarcia@bcag.org. The public is encouraged to ask questions prior to the Board meeting.

Public Notice

The Butte County Association of Governments (BCAG) is designated by the U.S. Department of Transportation (DOT) as the Metropolitan Planning Organization (MPO) for Butte County and its incorporated cities. As the MPO, BCAG is required to prepare a Federal Transportation Improvement Program (FTIP) every two years and a long range Regional Transportation Plan (RTP) every four years. The purpose of the FTIP is to identify all transportation-related projects that require federal funding or other approval by the Federal Highway Administration (FHWA) or the Federal Transit Administration (FTA). The purpose of the RTP is to identify a long range transportation plan for funding programmed by the BCAG Board of Directors. The RTP and FTIP are required to be consistent.

The public is invited to review and comment on:
BCAG's 2009 FTIP Amendment #08 – Forest Highway 119 (Oro-Quincy Hwy). The purpose of this amendment is to program $850,000 in federal Public Lands Highway funding to address pavement and slide repair requirements in the 2009/10 fiscal year.

BCAG's 2008 Regional Transportation Plan (RTP) Amendment #02 - The purpose of this amendment is to ensure consistency between the long range 2008 RTP and the 2009 FTIP. This amendment updates the RTP for projects amended into the 2009 FTIP (Amendments #07 and #08). The amendment includes the identification of new American Recovery and Reinvestment Act (ARRA) funded projects, the SR 99 Neal Rd Signalization Project and the Forest Highway 119 Project. All projects are exempt from a regional emissions analysis for air quality conformity.

All material concerning the FTIP are posted on-line at http://www.bcag.org/Planning/2009-FTIP/index.html. All material concerning the RTP is posted at: http://www.bcag.org/Planning/2008-RTP/index.html. The BCAG Board of Directors is scheduled to approve this amendment at their regular Board meeting on June 25, 2009 at 9:00 a.m. and take place at 421 Main Street in Chico (City of Chico Council Chambers). Comments and questions can be directed to Mr. Iván García, Programming Manager for the Butte County Association of Governments at 2580 Sierra Sunrise Terrace, Suite 100, Chico CA 95928. Comments may also be phoned in at 530-879-2468, or by e-mail at igarcia@bcag.org.

2008 Federal Transportation Improvement Program

Butte County Association of Governments

Butte County

Document Year 2008

(Dollars in Thousands)

Local Highway System

DIST: 03 COUNTY: Butte County ROUTE: PM: PPNO: KP: EA: MPO ID: 08RTP5-13 CTIPS ID: 202-0000-0064 ELEMENT:	TITLE (DESCRIPTION): SR 99 Corridor Bikeway Project (In the City of Chico thru the urbanized area construct class 1 and class 2 bikeway from south Chico at Southgate Avenue to North Chico at Hicks Lane along SR 99 Corridor including local streets.)	MPO: Butte County Association of Governments MPO Aprv: 7/24/08 State Aprv: 10/29/08 Federal Aprv: EPA TABLE II OR III EXEMPT CATAGORY: Bicycle and pedestrian facilities.

IMPLEMENTING AGENCY: Chico, City of

PRJ MGR: BOB GREENLAW

True

PHONE: (530) 879-6930

PROJECT VERSION HISTORY (*Printed Version is Shaded*) **(Last 9 versions displayed)**

Version	Status	Date	Updated By	Change Reason	Amend No.	Vote	Cum Award	Prog Con	Prog RW	PE
1	Official		IGARCIA	Adoption - New Project	0.00			1,000	150	350

Fund Source 1 of 2
Fund Category:
CMAQ

Fund Type:
Congestion Mitigation

Funding Agency:
Chico, City of

Programmed Dollars in Thousands - Total For Project

	PRIOR	08/09	09/10	10/11	11/12	12/13	13/14	FUTURE	TOTAL
PE									
RW									
CON				1,000					1,000
Total:				1,000					1,000

Fund Source 2 of 2
Fund Category:
Loc Funds

Fund Type:
City Funds

Funding Agency:
Chico, City of

	PRIOR	08/09	09/10	10/11	11/12	12/13	13/14	FUTURE	TOTAL
PE		350							350
RW			150						150
CON									
Total:		350	150						500

Project Total:

	PRIOR	08/09	09/10	10/11	11/12	12/13	13/14	FUTURE	TOTAL
PE		350							350
RW			150						150
CON				1,000					1,000
Total:		350	150	1,000					1,500

Caltrans Comments:

MPO Comments:

******** Version 1 - 05/29/2008 ********
Total Cost for project is $1.5 million
Emission Reduction in kg/day
ROG: 0.5
NOx .038
CO:
PM 2.5:
C/B Ratio: $247,200/ton

Butte County Association of Governments - Federal Transportation Improvement Program ****NEW ARRA TE Funds***
(Dollars in Whole)

Local Highway System

DIST: 03 COUNTY: Butte County
ROUTE: PM:
PPNO: KP:
EA: MPO ID: 08RTP5-13
CTIPS ID: 202-0000-0064

TITLE (DESCRIPTION):
ARRA TE - SR 99 Corridor Bikeway Project (Phase 1 - In the City of Chico thru the urbanized area construct class 1 and class 2 bikeway from south Chico at Southgate Avenue to North Chico at Hicks Lane along SR 99 Corridor)

MPO Aprv: / /
State Aprv: / /
Federal Aprv: / /

IMPLEMENTING AGENCY: Chico, City of
PRJ MGR: BOB GREENLAW
PHONE: (530) 879-6930

EPA TABLE II or III EXEMPT CATEGORY:
Bicycle and pedestrian facilities.

PROJECT VERSION HISTORY *(Printed Version is Shaded)*

(Dollars in whole)

Version	Status	Official Date	Updated By	Change Reason	Amend No.	Prog Con	Prog RW	PE
2	Active	08/20/2009	IGARCIA	Amendment - Cost/Scope/Sch. Change	8	1,925,000	150,000	350,000
1	Official	07/24/2008	IGARCIA	Adoption - New Project		1,000,000	150,000	350,000

• Other Fed -
• Fund Source 1 of 2
• Fund Type: ARRA - Transportation Enhancement
• Funding Agency: Chico, City of

	PRIOR	08/09	09/10	10/11	11/12	12/13	13/14	BEYOND	TOTAL
PE									
RW									
CON			1,925,000						1,925,000
TOTAL			1,925,000						1,925,000

• Loc Funds -
• Fund Source 2 of 2
• Fund Type: City Funds
• Funding Agency: Chico, City of

	PRIOR	08/09	09/10	10/11	11/12	12/13	13/14	BEYOND	TOTAL
PE		350,000							350,000
RW			150,000						150,000
CON									
TOTAL		350,000	150,000						500,000

Project Total

	PRIOR	08/09	09/10	10/11	11/12	12/13	13/14	BEYOND	TOTAL
PE		350,000							350,000
RW			150,000						150,000
CON			1,925,000						1,925,000
TOTAL		350,000	2,075,000						2,425,000

Comments:

******** Version 2 - 08/20/2009 ********

Programming State ARRA TE Funds $1.925m for Phase 1.

(Note: Phase 2 will be a separate project)

******** Version 1 - 05/29/2008 ********

Total Cost for project is $1.5 million

Emission Reduction in kg/day

ROG: 0.5

NOx .038

CO:

PM 2.5:

C/B Ratio: $247,200/ton

2009 FTIP

FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM

For
Butte County
Federal Fiscal Years 2008/09 – 2011/12

ADOPTED
July 24, 2008

Prepared by:

Butte County Association of Governments

2580 Sierra Sunrise Terrace, Suite 100, Chico CA 95928
(530)879-2468 www.bcag.org
Contact: Iván García, Programming Manager (email: igarcia@bcag.org)

BUTTE COUNTY ASSOCIATION OF GOVERNMENTS

RESOLUTION NO 2008/2009- 03

B-Line
Butte Regional Transit

ADOPTION OF THE 2009 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM (FTIP) AND AIR QUALITY CONFORMITY DETERMINATION FOR BUTTE COUNTY

WHEREAS, the Butte County Association of Governments (BCAG) is the designated Metropolitan Planning Organization for Butte County in accordance with 23 USC 134(b)(6); and Section 450.306 of the Metropolitan and Statewide Planning Rule;

WHEREAS, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) requires BCAG, as the Metropolitan Planning Organization, to prepare a Transportation Improvement Program in cooperation with the State and transit operators, to include all projects to be funded under Title 23 and the Federal Transit Administration grants; and requires BCAG to prepare a long-range Regional Transportation Plan (RTP) and short-range Federal Transportation Improvement Program (FTIP);

WHEREAS, the 2009 FTIP is consistent with the metropolitan transportation planning regulations from 23 Code of Federal Regulations Part 450;

WHEREAS, the 2004-2025 Regional Transportation Plan (RTP) describes a transportation system envisioned for the horizon years and was adopted by the BCAG Board of Directors on December 16, 2004;

WHEREAS, the 2009 FTIP is consistent with the transportation system described in the 2004-2025 RTP; and consistent with the draft 2008-2035 Regional Transportation Plan;

WHEREAS, the 2009 FTIP is financially constrained by year and includes a financial plan that demonstrates which projects can be implemented using committed funds;

WHEREAS, the 2009 FTIP includes all regionally significant projects to be funded from local, state, or federal resources;

WHEREAS, BCAG is conducting a new air quality determination on a previous emissions analysis for the 2009 FTIP demonstrating that the projects are within the allowable emissions budget identified for Butte County and comply with the applicable requirements set for Butte County and therefore conform to the Transportation Conformity Rule as applicable to Butte County;

WHEREAS, Butte County does not have any required Transportation Control Measures in the State Implementation Plan;

WHEREAS, BCAG developed the 2009 FTIP and Air Quality Conformity Determination utilizing the process contained in the adopted Public Participation Plan;

NOW THEREFORE BE IT RESOLVED that the Butte County Association of Governments hereby adopts the 2009 Federal Transportation Improvement Program and Air Quality Conformity Finding;

BE IT FURTHER RESOLVED that BCAG staff is hereby directed and authorized to work with the California Department of Transportation, the Federal Highway Administration, the Federal Transit Administration, and the Environmental Protection Agency to make any necessary changes or corrections that may be needed to ensure the timely delivery of the FTIP to obtain its approval by these agencies;

BE IT FURTHER RESOLVED that the BCAG Board authorizes its staff to administratively amend the 2009 FTIP as outlined in the procedures defined in the FTIP.

PASSED AND ADOPTED by the Butte County Association of Governments on the 24th day of July 2008 by the following vote:

AYES:

Dolan, Connelly, Kirk, Yamaguchi, Gruendl, White, Johansson

NOES:

None

ABSENT:

Josiassen, Arnold, Fichter, Jernigan

ABSTAIN:

None

APPROVED:

JANE DOLAN, CHAIR
BUTTE COUNTY ASSOCIATION OF GOVERNMENTS

ATTEST:

JON A. CLARK, EXECUTIVE DIRECTOR
BUTTE COUNTY ASSOCIATION OF GOVERNMENTS

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
CALIFORNIA DIVISION
650 Capitol Mall, Suite 4-100
Sacramento, CA 95814

November 17, 2008

IN REPLY REFER TO
HDA-CA
Document #: S52242

Mr. Will Kempton, Director
California Department of Transportation
1120 N Street
Sacramento, CA 95814

Attention: Federal Resources Office, MS #82
For Rachel Falsetti, Transportation Programming

Dear Mr. Kempton:

SUBJECT: California 2009 Federal Statewide Transportation Improvement Program

We have completed our review of California's proposed 2009 Federal Statewide Transportation Improvement Program (2009 FSTIP), Statewide Planning Certification and related supporting documentation that was submitted by the California Department of Transportation (Caltrans) to the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA) by letter dated September 29, 2008. Once approved by the FTA and FHWA, the 2009 FSTIP supersedes the 2007 FSTIP for California that was approved by FHWA and FTA on October 2, 2006, and all subsequent amendments to the 2007 FSTIP.

Section 450.218 of Title 23, Code of Federal Regulations requires the State to submit the entire proposed FSTIP concurrently to the FTA and the FHWA at least every four years for joint approval. California's proposed 2009 FSTIP includes the project and project phase listings for proposed transportation projects located outside the planning area boundaries of the State's designated Metropolitan Planning Organizations (MPOs). California's proposed 2009 FSTIP also incorporates by reference those projects listed in the 2009 Federal Transportation Improvement Programs (FTIPs) that were adopted by the State's eighteen MPOs and approved by the Governor.

With the exceptions of the Lake Tahoe metropolitan planning area and the 8 metropolitan planning areas located in the San Joaquin Valley, the FHWA and the FTA have completed the air quality conformity determinations required by 23 CFR 450.216(b) for the MPO FTIPs in areas of the State designated as nonattainment or maintenance for national ambient air quality standards. As proposed, the 2009 FSTIP also includes interim FTIPs, prepared in accord with 40 CFR Part 93, for the Lake Tahoe and San Joaquin Valley MPOs.

Based on our review of the information submitted with the State's proposed 2007 FSTIP, including revenue and proposed project funding information required to demonstrate financial

constraint, and documentation for statewide and metropolitan planning process in support of California's Statewide Planning Certification, we are approving the 2009 FSTIP as proposed. Any project or project phase listed in a MPO FTIP that is not included in the MPO's Regional Transportation Plan, is not approved for inclusion in the FSTIP pursuant to 23 CFR §§ 450.216(k) and 450.324(g).

Our FSTIP approval action includes project listings that indicate no funds are proposed for obligation during the four-year program period from 2009 to 2012. These project and project phases cannot be advanced to implementation without an action by the FHWA and the FTA on the FSTIP pursuant to 23 CFR 450.216(l) and 450.328(e). In addition, project or project phase funding included in the 2009 FSTIP that is proposed for obligation outside the four year program cycle (i e before 2009 or after 2012) is accepted by the FHWA and the FTA as 'informational' in accord with 23 CFR §§ 450.216(a) and 450.324(a).

We are approving the 2009 FSTIP with the understanding that the eligibility of individual projects for funding is subject to the applicant's satisfaction of all administrative requirements. This joint FHWA and FTA approval of the FSTIP does not constitute an eligibility determination for the federal funds proposed for obligation on the listed projects. If you have questions or need additional information concerning our approval of the 2007 FSTIP, please contact Wade Hobbs of FHWA at (916) 498-5027, or by email at Wade.Hobbs@fhwa.dot.gov; or Ted Matley of FTA at (415) 744-2590, or by email at Ted.Matley@dot.gov.

Sincerely,

Leslie T. Rogers
Regional Administrator
Federal Transit Administration

For
Gene K. Fong
Division Administrator
Federal Highway Administration

c: (e-mail)

EPA, Region IX
ARB
Caltrans:
  Federal Resources, Fardad Falakfarsa
  Local Assistance
  Transportation Programming
  Transportation Planning
Bureau of Indian Affairs, Pacific Region Roads Engineer
All California MPOs (18)
FTA Region IX, R Sukys
FHWA:
  LA Metro Office
  CFLHD
  NV Division

cc:
2009 FSTIP Binder

WHobbs/

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
CALIFORNIA DIVISION
650 Capitol Mall, Suite 4-100
Sacramento, CA. 95814

November 17, 2008

IN REPLY REFER TO
HDA-CA
Document # S52139

Ivan Garcia, Programming Manager
Butte County Association of Governments
2580 Sierra Sunrise Terrace, Suite 100
Chico, CA 95928

Dear Mr. Garcia:

SUBJECT: BCAG - Conformity Determination for the 2009 FTIP and 2025 RTP

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) have completed our review of the conformity determination for the Butte County Association of Government's (BCAG) 2009 Transportation Improvement Program (TIP) and the 2025 Regional Transportation Plan (RTP). A joint FTA/FHWA air quality conformity determination for the TIP and RTP is required by the Environmental Protection Agency's (EPA) *Transportation Conformity Rule*, 40 CFR Parts 51 and 93, and the FHWA/FTA *Metropolitan Planning Rule*, 23 CFR 450.

The BCAG adopted the 2009 TIP and made the corresponding conformity determination on July 24, 2008 via BCAG Resolution 2008/2009-03. The FHWA and FTA have determined that the 2009 TIP does not require a new regional emissions analysis because the projects were found to conform as a part of a previous analysis, pursuant to the transportation conformity provisions found in 40 CFR Part 93 section 122(g). This finding has been coordinated with Region 9 of the Environmental Protection Agency (EPA) in accordance with the procedures outlined in the *National Memorandum of Understanding between DOT and EPA on Transportation Conformity*, dated April 25, 2000, and the *Transportation Conformity Rule*. Therefore, we find that the 2009 TIP conforms to the applicable State Implementation Plan (SIP) in accordance with the provisions of 40 CFR Parts 51 and 93.

In accordance with the July 15, 2004, *Memorandum of Understanding (MOU) between the Federal Highway Administration, California Division and the Federal Transit Administration, Region IX*, the FTA has concurred with this conformity determination.

In accordance with the above MOU, the FHWA's single signature constitutes FHWA and FTA's joint air quality conformity determination for the BCAG's 2009 TIP. If you have any questions

pertaining to this conformity finding, please contact Aimee Kratovil, FHWA Air Quality Specialist, at (916) 498-5866 or aimee.kratovil@fhwa.dot.gov.

Sincerely,

/s/ K. Sue Kiser

For
Gene K. Fong
Division Administrator

MOVING THE AMERICAN ECONOMY

cc: (email)
Paul Page, FTA
Karina O'connor, EPA
John Kelly, EPA
Brian Lasagna, BCAG
Dennis Wade, CARB
Gail Williams, Butte County AQMD
Muhaned Aljabiry, Caltrans
Mike Brady, Caltrans
Jody Tian, Caltrans
Steve Luxenberg, FHWA
Wade Hobbs, FHWA

cc: (other)
BCAG TIP Binder
BCAG RTP File

AKratovil/ac

ATTACHMENT – B
Site Photos – Phase 1

Photo P1-1 – Silverbell Road, facing south; Class II/III proposed.

Photo P1-2 – SUDAD Ditch, facing west toward SUDAD Channel and SR 99; Class I proposed.

Photo P1-3 – SUDAD Channel, facing south; Class I proposed.

Photo P1-4 – SUDAD Channel, facing north from E. Lassen Avenue; Class I proposed.

Photo P1-5 – SUDAD Channel, facing south from E. Lassen Avenue; Class 1 proposed.

Photo P1-6 – SUDAD Channel terminating at Panama Avenue, facing north from Panama Avenue; Class 1 proposed.

Photo P1-7 – Panama Avenue, facing east toward Tom Polk Avenue; Class II proposed.

Photo P1-8 – Tom Polk Avenue, facing south toward East Avenue; Class II proposed.

Photo P1-9 – Signalized intersection ad El Paso Way and East Avenue, facing west on East Avenue toward SR 99; Class II proposed.

Photo P1-10 – Tom Polk Avenue, facing south from East Avenue; Class II proposed.

Photo P1-11 – Alba Avenue; Class II proposed.

Photo P1-12 – Terminus of Alba Avenue at existing Class 1 bike path.

Photo P1-13 – P1llsbury Road; Class II proposed.

Photo14 – P1llsbury Road, facing east toward Cohasset Road and Manzanita Avenue intersection; Class II proposed.

Photo P1-15 – Manzanita Avenue, facing south from Nissan Dealership; Class II proposed.

Photo P1-16 – Existing facilities at Lindo Channel and SR 99.

Photo P1-17 – Existing facilities on Manzanita Avenue, facing west from facilities across Lindo Channel at SR 99.

Photo P1-18 – Existing facilities across Lindo Channel from Manzanita Avenue.

Photo P1-19 – East Lindo Avenue from existing bridge crossing; Class II proposed.

Photo P1-20 – Neal Dow Avenue at East 5th Avenue intersection; Class II/III proposed.

Photo P1-21 – Neal Dow Avenue, facing south from East 1st Avenue; Class II/III proposed.

Photo P1-22 – Sierra Vista Way; Class II/III proposed.

Photo P1-23 – Rey Way facing south toward Bidwell Park; Class II proposed.

Photo P1-24 – Bidwell Park entrance at Rey Way and Vallombrosa Avenue.

Photo P1-25 – Existing facilities at Lindo Channel and Sheridan Avenue, west of SR 99.

Photo P1-26 – Sheridan Avenue at Lindo Channel, facing south; Class II/III proposed.

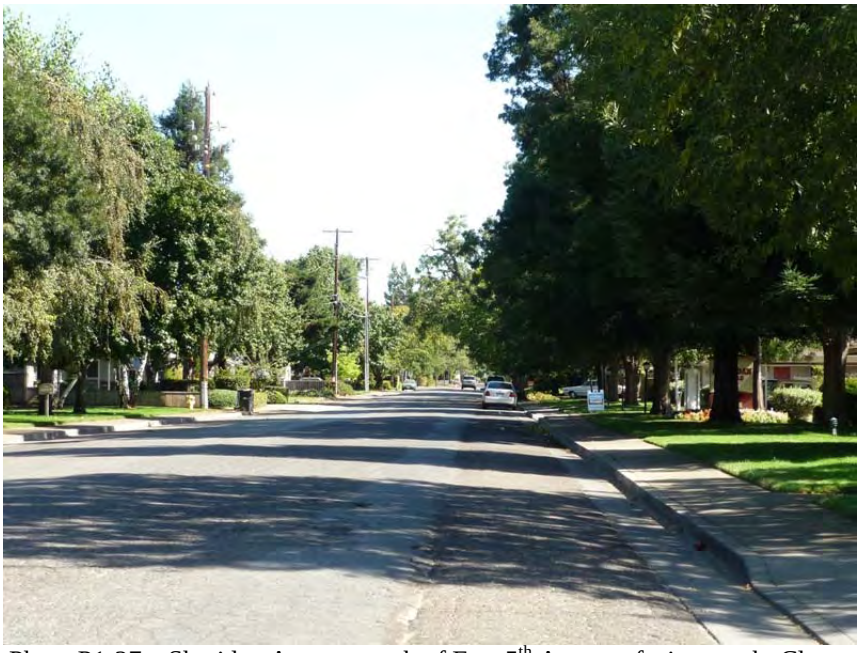


Photo P1-27 – Sheridan Avenue south of East 5th Avenue, facing south; Class II/III proposed.

Photo P1-28 – Sheridan Avenue south of East 1st Avenue, facing south; Class II/III proposed.

Photo P1-29 – Bidwell Park entrance at Sheridan Avenue and Vallombrosa Avenue.

Photo P1-30 – Bidwell Park entrance at Fir Street.

Photo P1-31 – Fir Street at SR 32; Class II proposed.

Photo P1-32 – Existing facilities at Fir Street and Humboldt Road at Little Chico Creek.

Photo P1-33 – Existing unpaved path/maintenance road at Teichert Ponds; Class I proposed.

Photo P1-34 – Existing facilities extending south from Teichert Ponds, behind Kohls.

Photo P1-35 – Kohls southern property boundary looking east toward Springfield Drive; Class I proposed.

Photo P1-36 – Notre Dame Boulevard at Les Schwab Tires, facing south toward Skyway; Class II proposed.

Photo P1-37 – Notre Dame Boulevard, south of Skyway at Payless Building Supply, facing south; Class II proposed.

Photo P1-38 – Notre Dame Boulevard at the Neighborhood Church facing north; Class II proposed.

ATTACHMENT - C
Site Photos – Phase 2

Photo P2-1 – SUDAD channel, parallel to SR 99 and facing north toward Eaton Road; Class I proposed.

Photo P2-2 – Intersection of Panama Avenue and Emilio Way, facing south on Emilio Way; Class II proposed.

Photo P2-3 – Terminus of Emilio Way facing south toward East Avenue; Class I proposed.

Photo P2-4 – Facing north at terminus of White Avenue facing north toward East Avenue; Class I proposed, right-of-way needed.

Photo P2-5 – Palmetto Avenue facing west toward SR 99; Class II proposed.

Photo P2-6 – Cal Water facility off Palmetto Avenue, facing south; Class I proposed, right-of-way needed.

Photo P2-7 – Extension of existing facilities adjacent to SR 99, along the East 20th Street northbound onramp; Class I proposed.

Photo P2-8 - Extension of existing facilities adjacent to SR 99, along the East 20th Street northbound onramp; Class I proposed.

Photo P2-9 – Extension of existing facilities from southwest corner of Wal-Mart property south adjacent to SR 99; Class I proposed, right-of-way needed.

Photo P2-10 – Talbert Drive facing west toward SR 99; Class I and Class II proposed; right-of-way needed for Class I facilities.

Photo P2-11 – Between Butte College and Lowes parking lots facing toward Forest Avenue; Class II proposed

Photo P2-12 – Notre Dame Boulevard at the Neighborhood Church facing south toward Southgate Avenue; Class II proposed.

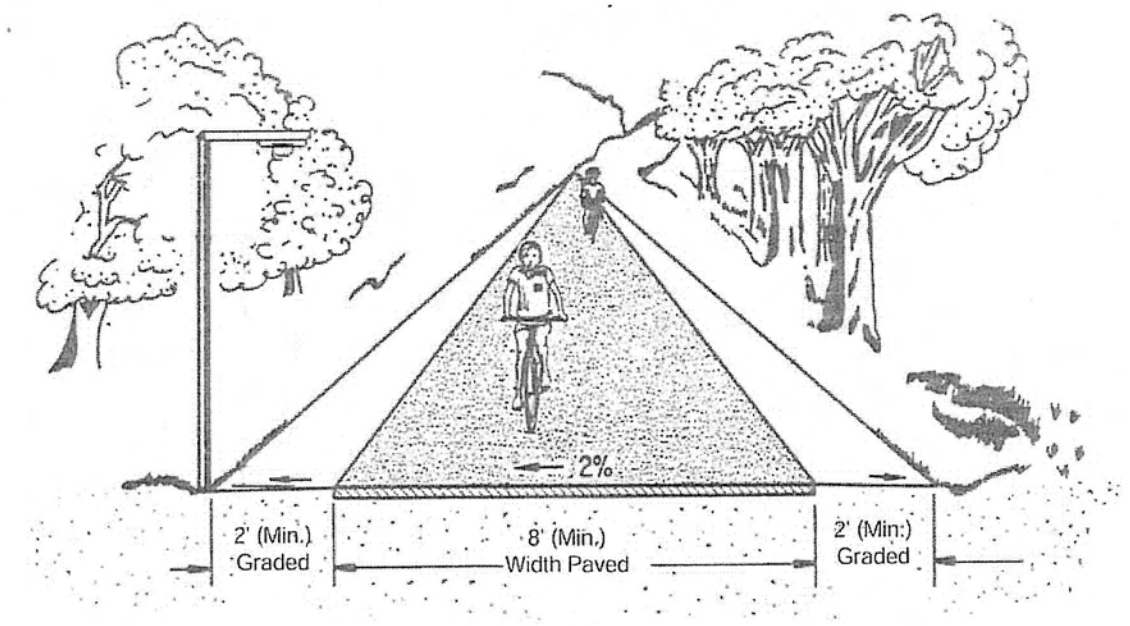
Photo P2-13 – Southgate Avenue facing north; Class I proposed, right-of-way needed.

Photo P2-14 – Example design of clear-span bridge; located in Lower Bidwell Park near Manzanita Avenue.

ATTACHMENT - D
Typical Bicycle Facility Cross-Sections

Figure 1003.1A

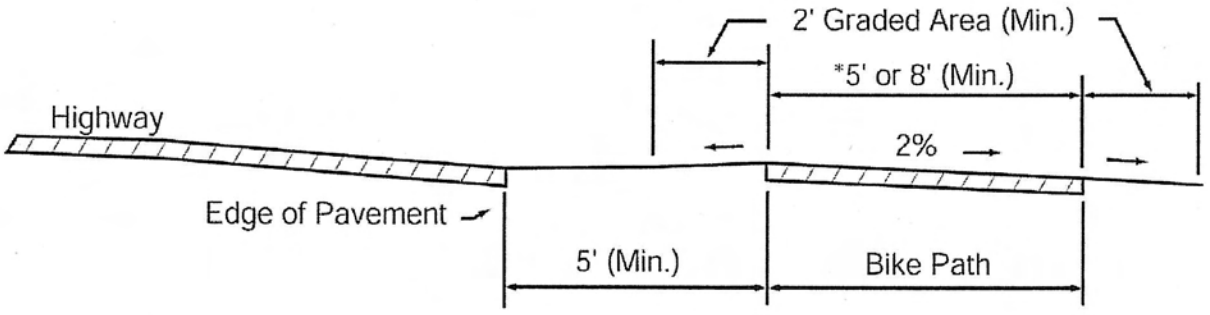
Two-Way Bike Path on Separate Right of Way



Note: For sign clearances, see MUTCD, Figure 9B-1.

Figure 1003.1B

Typical Cross Section of Bike Path Along Highway



NOTE: See Index 1003.1(5)

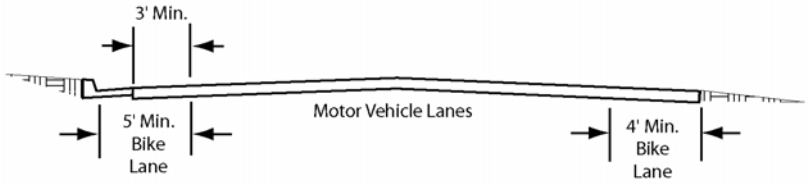
*One - Way: 5' Minimum Width
Two - Way: 8' Minimum Width

Figure 1003.2A
Typical Bike Lane Cross Sections
(On 2-lane or Multilane Highways)

(1) MARKED PARKING

* 13' is recommended where there is substantial parking or turnover of parked cars is high (e.g. commerical areas).

(2) PARKING PERMITTED WITHOUT MARKED PARKING OR STALL



(With Gutter)

(3) PARKING PROHIBITED

(Without Gutter)

(4) TYPICAL ROADWAY IN OUTLYING AREAS PARKING RESTRICTED

Note: For pavement marking guidance, see the MUTCD and California Supplement, Section 9C.04

Natural Environment Study

(Minimal Impacts)

City of Chico, California

Section 25 of T22N, R1E, Sections 30, 31 of T22N, R2E,

and Sections 5, 6 of T21N, R2E

September 2009

STATE OF CALIFORNIA
Department of Transportation

City of Chico
411 Main Street- 2nd Floor
P.O. Box 3420
Chico, CA 95927

Prepared By: _____ Date: _____
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(530) 343-8327
111 Mission Ranch Blvd, Ste 100
Chico, CA 95926

Approved By: _____ Date: _____
Biological Content Reviewer, Title:
Phone Number
Office Name
District/Region

Approved By: _____ Date: _____
Management Content Reviewer, Title:
Phone Number
Office Name
District/Region

Table of Contents

Table of Figures

Appendix A – Observed Species Table
Appendix B - Special Status Species Reports

List of Abbreviated Terms

Caltrans	California Department of Transportation
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
City	City of Chico
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CWA	Clean Water Act
DBH	Diameter at Breast Height
EPA	U.S. Environmental Protection Agency
ESA	Environmentally Sensitive Area
GGS	Giant Garter Snake
MBTA	Migratory Bird Treaty Act
NEPA	National Environmental Policy Act
NES	Natural Environment Study
SR 99	State Route 99
SUDAD	Shasts Union Drainage Assessment District
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VELB	Valley Elderberry Longhorn Beetle

1. Summary

The City of Chico (City) is proposing to create a more safe and direct route for cyclists and pedestrians to travel throughout the City. Currently, several existing bike facilities parallel the east side of State Route 99 (SR 99); however, a number of barriers, such as creeks and freeways, are hindering the effective use of bicycles. With the completion of the proposed SR 99 Bike Path Project (Project), a continuous bike path alignment comprised of a combination of Class I and Class II/Class III facilities will be intact for 6.7 miles along the SR 99 corridor from Eaton Road at the northern terminus to Southgate Avenue at the southern terminus. The Project is a long-term bicycle facilities project expected to be developed in two Phases. Phase I will be completed within the next 12 months and will be funded by the new American Recovery and Reinvestment Act (ARRA) Statewide Transportation Enhancement (State TE) funds. Phase II is planned for completion within three years, and is planned to be funded as part of the Congestion Mitigation and Air Quality (CMAQ) plan. Along this 6.7 mile long bike path, only Little Chico Creek will require the placement of a clear-span bridge to facilitate through traffic as Lindo Channel, Big Chico Creek and Comanche Creek already support existing bike facilities. During construction of the Class I bike path south of Little Chico Creek immediately adjacent to the Teichert Ponds, upland giant garter snake (GGS) habitat will be temporarily impacted. However, following completion of this portion of the bike path in one construction season and strict implementation of U.S. Fish and Wildlife Service (USFWS) avoidance and minimization measures specific to GGS, this Project is not likely to adversely affect GGS and will not require formal consultation under Section 7 of the Endangered Species Act (ESA). Suitable nesting and foraging habitat for raptors, including Swainson's hawk, white-tailed kite and western burrowing owl occur within the Project's footprint. Pre-construction raptor surveys will be conducted prior to commencement of Class I construction activities to determine if raptors are nesting within 500 feet of the Project's Class I locations. If nesting raptors are located, consultation with the California Department of Fish and Game (CDFG) will be initiated to determine appropriate measures to avoid disturbing the nests and young. It is recommended that all necessary vegetation be removed during the non-breeding season (September 15-February 15) to prevent the establishment of migratory bird nests and maternity bat roosts. If the vegetation is not removed during the non-breeding season, a qualified biologist will conducted pre-construction migratory bird and bat surveys no more than 2 days and no less than 15 days prior to vegetation removal. The placement of a box culvert within a portion of the Shasta Union Drainage Assessment District (SUDAD) ditch during Phase I of the Project will require the issuance of a U.S. Army Corps of Engineers (USACE) Clean Water Act (CWA) Section 404 and the Regional Water Quality Control Board (RWQCB) CWA Section 401 permits. Due to the avoidance of jurisdictional federal and state waters during Phase II of the Project, a USACE CWA Section 404 and RWQCB CWA Section 401 permits will not be required. However, removal of riparian vegetation for the placement of the clear-span bridge over Little Chico Creek during Phase II will require the issuance of a CDFG Section 1600 Streambed Alteration Agreement.

2. Introduction

2.1 Purpose and Need

The proposed Project would provide for a more consistent, direct and safe route for cyclists and pedestrians to travel throughout the City. The Chico Urban Bicycle Plan (CUBP) includes the goal to "provide safe and direct routes for cyclists between and through residential neighborhoods, commercial areas, schools, and other major destinations within the Chico Urban Area." This Project would create a more cohesive community where movement throughout the City is available to a broader range of the population. The Issues Section of the CUBP states:

> *The chief issue facing the planning and implementation of bikeways in the Chico Urban Area is the physical barriers to bicycle travel. A number of major barriers exist throughout the area, which inhibit the use of bicycles, or make the use of bicycles very inconvenient for many trips. Some of these barriers are of a fixed physical nature, such as creeks and freeways, while others such as busy roadways are more perceptive.*

The proposed Project would enhance the utility of existing bicycle and pedestrian routes, possibly reduce automobile traffic, and thus, enhance the functionality of the City's transportation network.

2.2 Proposed Project

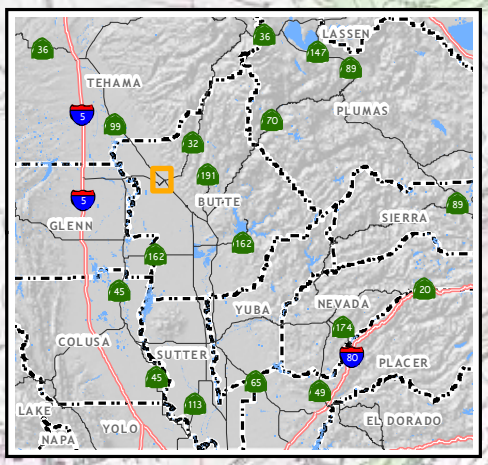
The Project is a long-term bicycle facilities project expected to be developed in two Phases. Phase I will be completed within the next 12 months and will be funded by the new American Recovery and Reinvestment Act (ARRA) Statewide Transportation Enhancement (State TE) funds. Phase II is planned for completion within three years, and is planned to be funded as part of the Congestion Mitigation and Air Quality (CMAQ) plan. The ultimate bike path alignment is a 6.7-mile long continuous bikeway comprised of a combination of Class I and Class II/Class III facilities along the SR 99 corridor from Eaton Road at the northern terminus to Southgate Avenue at the southern terminus. These facilities will generally parallel the SR99 corridor to the greatest extent possible using City surface streets, drainage easements and City parkland (**Figure 1**).

In general, the City uses the Caltrans' design standards, as described in Chapter 1000 of the Caltrans Highway Design Manual, dated September 2006 to define the different bicycle facility classes. There are cases, however, where the City design standards may exceed those used by Caltrans.

- **Class I Bike Path.** Provides a completely separated facility designed for the exclusive use of bicycles and pedestrians with minimal cross flows by motorists. Caltrans standards call for Class I bikeways to have a minimum of 8 feet of pavement with 2-foot graded shoulders on either side, for a total right-of-way of 12 feet. These bikeways must also be at least 5 feet from the edge of a paved roadway.

City of Chico SR-99 Bicycle Path

Location



Bike Path Alignment

Existing Features

- Class I
- Class II/III

Proposed Phase I

- Class I
- Class II/III

Proposed Phase II

- Class I
- Class II/III

Proposed Alignment based on City of Chico Capital Improvements AutoCAD drawing, subject to change.
Within Arroyo Chico Land Grant, and Section 25 of T22N, R1E, Sections 30, 31 of T22N, R2E, and Sections 5, 6 of T21N, R2E
Map show Chico and Richardson Springs USGS 7.5' Quads.
Map Date: September 4, 2009

Miles
0 0.25 0.5

GALLAWAY CONSULTING
A DIVISION OF NORTHSTAR ENGINEERING

Figure 1

- **Class II Bike Lane.** Provides a restricted right-of-way designated for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians is prohibited, but with vehicle parking and cross flows by pedestrians and motorists permitted. Caltrans standards generally require a 4-foot bike lane from face of curb or edge of roadway with a 6-inch white stripe separating the roadway from the bike lane.
- **Class III Bike Route.** Provides a right-of-way designated by signs or permanent markings and shared with pedestrians and motorists. Roadways designated as Class III bike routes should have sufficient width to accommodate motorists, bicyclists, and pedestrians. Other than a street sign, there are no special markings required for a Class III bike route.

There are three components to the SR 99 Bike Path project: existing Class I and Class II bicycle facilities and proposed Phase I and Phase II improvements. Phase I and Phase II components include the construction of Class I bike paths and Class II/III designated bike lanes and routes. Buildout of the Project will be constructed in two phases as funding becomes available, with an emphasis on connecting the segments in the center of the urban area and working outwards, northerly and southerly towards the urban limits (**Figure 2**).

2.3 Existing Facilities

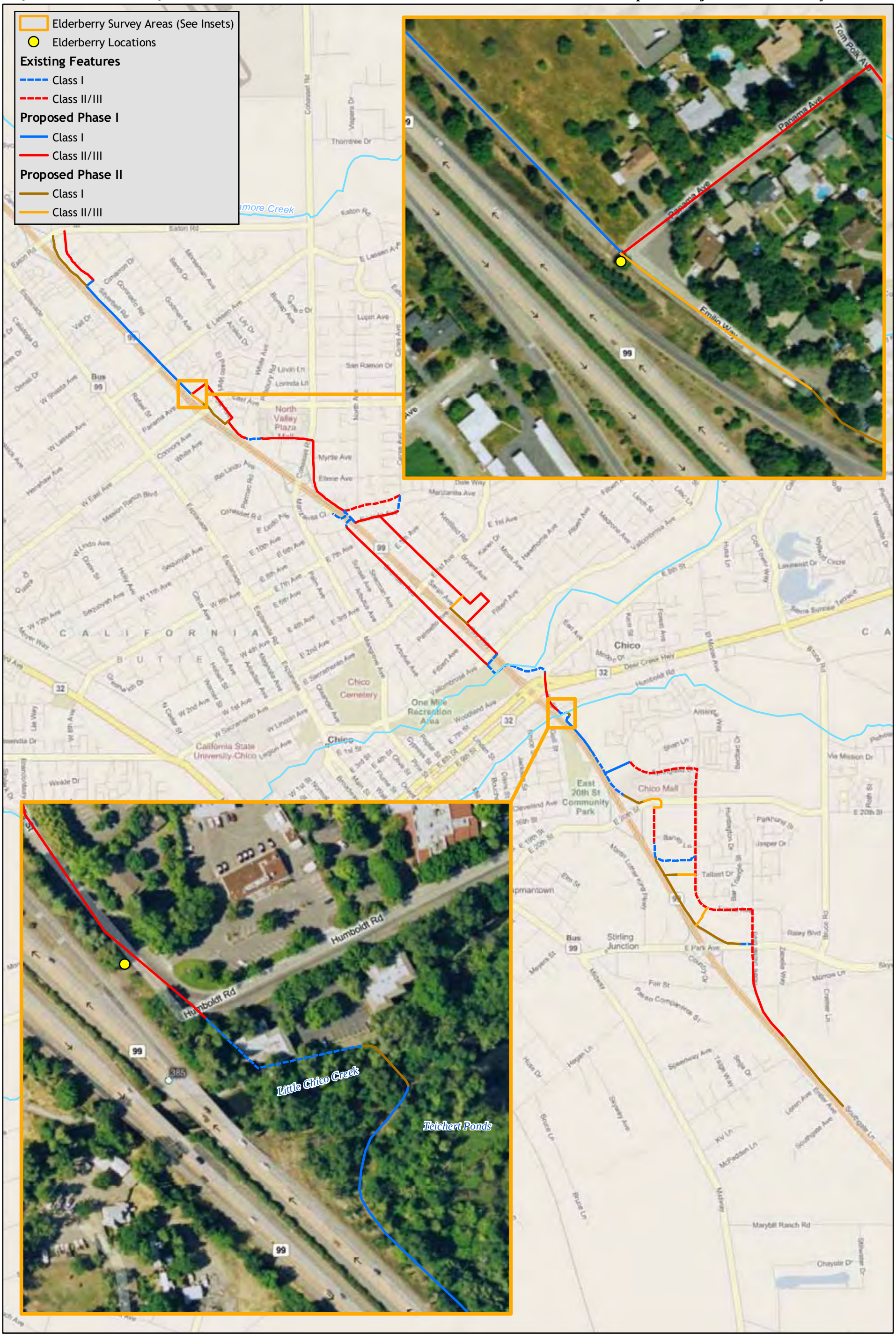
Existing facilities along the proposed bike path corridor include Class II bike lanes on Manzanita Avenue, Springfield Drive, Business Lane, Forest Avenue, and Notre Dame Boulevard. Existing Class I bike paths are intermittent along the corridor including facilities between Alba Avenue and Pillsbury Road, across Lindo Channel, through Bidwell Park between Vallombrosa Avenue and East 8th Street, along the SR 99 frontage from Teichert Pond to Logan's Roadhouse restaurant, and the west and south sides of the Wal-Mart property extending to Forest Avenue. The remaining corridor roadways currently do not have bike facilities.

2.4 Proposed Phase I Facilities

Moving from the northern terminus of the Project south, Phase 1 of the Project is located along the surface streets and existing drainage facilities adjacent to the SR 99 corridor. Proposed Phase I facilities include:

- Class II/III bike lane (1850 feet) on Silverbell Road, extending from Eaton Road to the SUDAD channel;
- Class I bike path will cross over the SUDAD channel and will follow the maintenance road extending from Silverbell Road to East Lassen Avenue (3500 feet);
- Class I bike path along the SUDAD channel maintenance road to Panama Avenue (1400 feet) and converting 1200 feet of the drainage ditch to 36-inch storm drain pipe;
- Class II bike lanes on Panama Avenue and Tom Polk Avenue to East Avenue, looping west to SR 99 and east to a signalized intersection at El Paso Way (1200 feet);
- Class II bike lanes extending south of East Avenue on Tom Polk Avenue to White Avenue and Alba Avenue (800 feet);

City of Chico, SR-99 Bicycle Path — **Proposed Project and Elderberry Locations**



Alignment provided by City of Chico
Elderberry Survey by TL (09/04/09)
Aerial: Microsoft
Map Date: September 10, 2009

Miles
0 0.5 1

GALLAWAY CONSULTING

Figure 2

- Class II bike lanes on Pillsbury Road to Cohasset Road (1500 feet) and Manzanita Avenue to Lindo Channel (1500 feet);
- From existing facilities across Lindo Channel, a Class II bike lane on East Lindo Avenue (1450 feet), Class II/III bike lanes on Neal Dow Avenue (3600 feet), and Class III bike lanes on Hill View Way, Downing Avenue and Sierra Vista Way (2100 feet) and a Class II bike lane on Rey Way to Vallombrosa Avenue (1200 feet);
- On the west side of SR 99, Class II/III bike lanes on Sheridan Avenue to Vallombrosa Avenue (6000 feet);
- South of Bidwell Park, Class II bike lanes on Fir Street to existing facilities at Little Chico Creek (1200 feet);
- South of Little Chico Creek, a Class I bike path along the frontage of SR 99 adjacent to Teichert Ponds (1400 feet) and along the southerly property line on the Kohl's parcel extending to Springfield Drive (900 feet);
- Class II bike lanes on portions of Forest Avenue at Talbert Drive (500 feet) and in front of Lowes (500 feet);
- Class II bike lanes on portions of Notre Dame Boulevard fronting the Raley's Shopping Center (800 feet) and extending south through the Morrow Lane intersection in front of Payless Building Supply and terminating on the north side of the Neighborhood Church property (2200 feet).

2.5 Proposed Phase II Facilities

Phase II of the proposed Project is located similarly along City surface streets. However portions of the proposed corridor may require the designation of easements and/or right-of-way acquisition and are dependent upon obtaining future funding. Proposed Phase II facilities include:

- Class I bike path on the SUDAD channel maintenance road just south of Eaton Avenue to the SUDAD ditch (1900 feet);
- Class II bike lanes extending from Panama Avenue on Emilio Way (500 feet);
- Class I bike path from the terminus of Emilio Way across East Avenue to White Avenue (1100 feet);
- Class II bike lanes on Palmetto Avenue, extending from Neal Dow Avenue to SR 99 (500 feet);
- Class I bike path from Palmetto Avenue to Sierra Vista Way (700 feet);
- Clear-span bridge across Little Chico Creek north of Teichert Pond;
- Class I bike path along the SR 99 northbound onramp at East 20th Street (800 feet);
- Class II bike lanes extending across East 20th Street to Business Lane (900 feet);
- Class I bike path along SR 99 frontage extending from the southwest property boundary at Wal-Mart to Notre Dame Boulevard (3900 feet);
- Class I bike path (400 feet) and Class II bike lanes (500 feet) on Talbert Drive north of Wittmeier Auto;
- Class II bike lanes extending from Forest Avenue between the Butte College Chico Center and Lowes (600 feet);

- Class I bike lane fronting SR 99 at the Neighborhood Church property extending to the Southgate Avenue/SR 99 intersection (2800 feet).

3. Study Methods

As requested by the City, Gallaway Consulting performed biological surveys within the footprint of the Project on September 4, 2009 to: 1) determine the presence of sensitive natural resources within the Project area and, 2) to determine if these resources would be impacted by the proposed Project.

3.1 Biological and Botanical Resources

While surveying the Project footprint, Gallaway Consulting compiled a list of observed wildlife and plant species (**Appendix A**). Topographic maps and aerial photos of the site were reviewed and areas of potential impact noted. The USFWS was contacted on September 4, 2009 for documentation regarding a list of special-status species likely to occur within the Chico USGS quadrangle and surrounding quadrangles (**Appendix B**). RareFind (v 3.0.3) was used to access recent California Natural Diversity Database (CNDDB) data regarding special-status species potentially occurring in or near the Project area (**Appendix B**). The *Inventory of Rare and Endangered Plants of California*, Sixth Edition, published by the California Native Plant Society (CNPS; September 2009) was also reviewed to determine special-status plant species that may occur in or near the Project site (**Appendix B**). Following the field visit, the lists were reviewed taking into account existing conditions present within the Project footprint and the potential for occurence of special-status species was determined. Special-status species are those that fall into one of the following categories:

- Designated as threatened or endangered under the federal Endangered Species Act (ESA) (50 CFR 17.12) or the California Endangered Species Act (CESA) (14 CCR 670.5);

- Designated as a Species of Special Concern by the California Department of Fish and Game (CDFG);

- Protected under the federal Migratory Bird Treaty Act (MBTA) and section 3503.5 of the California Fish and Game Code (CFGC);

- Included on the CNPS List 1A, 1B, 2 or 3.

Under the ESA, species may be listed as either “endangered” or “threatened”. Endangered means a species is in danger of extinction throughout all or a significant portion of its range. Threatened means a species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range. All species of plants and animals, except pest insects and non-natives, are eligible for listing as endangered or threatened. The USFWS also maintains a list of “candidate” species. These are species for which there is enough information to warrant proposing them for listing, but that have not yet been proposed. The ESA makes it unlawful to “take” a listed animal without a permit. Take is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct”.

Through regulations, the term "harm" is defined as "an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering."

The CESA is similar to the ESA, but pertains to state-listed endangered and threatened species. The CESA requires state agencies to consult with the CDFG when preparing California Environmental Quality Act (CEQA) documents. The purpose is to ensure that the actions of the lead agency do not jeopardize the continued existence of a listed species or result in the destruction, or adverse modification of habitat essential to the continued existence of those species. In addition to formal listing under the federal and state endangered species acts, "Species of Special Concern" receive consideration by CDFG. Species of Special Concern are those whose numbers, reproductive success, or habitat may be threatened.

The CNPS maintains a list of plant species native to California with low population numbers, limited distribution, or otherwise threatened with extinction. This information is published in the *Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2001). Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review.

3.2 Waters of the U.S.

The USACE and the U.S. Environmental Protection Agency (EPA) regulate the discharge of dredged or fill material into jurisdictional waters of the United States, under Section 404 of the Clean Water Act (CWA). The term "waters of the United States" is an encompassing term and includes "wetlands" and "other waters". Wetlands have been defined for regulatory purposes as follows: "Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." Other waters of the United States are seasonal or perennial water bodies, including lakes, stream channels, drainages, ponds, and other surface water features, that exhibit an ordinary high-water mark but lack positive indicators for one or more of the three wetland parameters (i.e. hydrophytic vegetation, hydric soil, and wetland hydrology) (33 Code of Federal Regulations [CFR] 328.4). Four main drainages, Lindo Channel, Little Chico Creek, Big Chico Creek and Comanche Creek occur along the proposed 6.7 mile long bike path. Facilities to transport pedestrians and bicyclists already exist over Lindo Channel, Big Chico Creek and Comanche Creek; therefore, these drainages will not be impacted as a result of the Project. A box culvert placed in a small section of the SUDAD ditch just south of Eaton Road will require the issuance of USACE CWA Section 404 and RWQCB CWA Section 401 permits. During Phase II of the Project, a clear-span bridge will be placed over Little Chico Creek, east of SR 99. Improvements would be placed outside the ordinary high water mark of Little Chico Creek and will connect to the Class I bike path proposed as part of Phase I as well as the existing bike path undercrossing SR 99 on the north side of Little Chico Creek. The clear-span bridge would be approximately 130 linear feet across and would be similar in appearance to other City bicycle/pedestrian bridges, such as the one crossing Big Chico Creek in Lower Bidwell Park near Manzanita Avenue. The City opted for the placement of a clear-span bridge to prevent impacts to Little Chico Creek and negate the need for a USACE CWA Section 404 and RWQCB CWA Section 401 permit.

4. Environmental Setting

The proposed Project will enhance the utility of existing bicycle and pedestrian routes throughout the City of Chico's residential neighborhoods, commercial areas, schools, and other major destinations within the City.

4.1. Description of the Existing Biological and Physical Conditions

The Project alignment is a 6.7-mile long continuous bikeway comprised of a combination of Class I and Class II/Class III facilities along the SR 99 corridor from Eaton Road at the northern terminus to Southgate Avenue at the southern terminus. These facilities will generally parallel the SR99 corridor to the greatest extent possible using City surface streets, drainage easements, City parkland and existing crossings over Lindo Channel, Big Chico Creek and Edgar Slough. The Project is projected to be completed in two Phases, depending on funding.

4.1.1 Phase I

Moving from the northern terminus of the Project south, Phase 1 of the Project is located along surface streets and existing drainage facilities adjacent to the SR99 corridor. The SUDAD system, originally designed in 1964 is comprised of a network of open, gravity drainage systems that discharge into Sycamore Creek and are operated and maintained by Butte County. One section of the SUDAD system receives storm water and residential run-off from neighborhoods to the east and transports east through the Project site and north to SR 99. To facilitate the crossing of the bike path over this portion of the SUDAD ditch, a box culvert will be placed in the east-west flowing portion of the ditch.

The section of the SUDAD system south of the box culvert location does not actively transport water; it merely acts as a roadside ditch that collects water following precipitation events that quickly evaporates, as evident by the lack of hydrophytic vegetation. The channel also lacks ordinary high water mark indicators, is heavily vegetated with upland grasses and has been exposed to large amount of human debris. A Class I bike path will be constructed along the access road adjacent to the SUDAD channel for approximately 3500 feet from Silverbell Road to East Lassen Avenue. However, to facilitate the Class I minimum width requirements from East Lassen Avenue to Panama Avenue, 1200 feet of the SUDAD channel will be converted into a 36 inch storm drain pipe. The portion of the SUDAD system within the Project's footprint only receives water in the form of runoff from neighboring residences and SR 99.

Completion of Phase I will also connect the proposed bike path to the existing facilities crossing Lindo Channel, a flood control channel that diverts water from Big Chico Creek during heavy precipitation events. During no to low flow in Lindo Channel, an existing concrete Class I path on the east side of SR 99 will be utilized by bicyclists. An existing pedestrian/bicycle crossing located 650 feet east of SR 99 will facilitate pedestrian traffic during times of high flows. No impacts will occur within Lindo Channel as a result of the Project. From Lindo Channel, the bike path will be directed to existing facilities in Bidwell Park via paved surface roads on Sheridan Avenue to Vallombrosa Avenue, no impacts will occur within Bidwell Park.

A Class I bike path will also be constructed along the frontage of SR 99 adjacent to the Teichert Ponds for 1400 feet, just south of Little Chico Creek. Currently, a compacted dirt maintenance road exists along the proposed Class I bike path and is heavily used by the public for running, biking, fishing and dog walking. The pond's maintenance road is bordered by great valley mixed riparian forest composed of valley oak (*Quercus lobata*), Fremont cottonwood (*Populus fremontii*), various willows (*Salix* spp), California grape (*Vitis californica*), Himalayan blackberry (*Rubus discolor*) and various grasses and forbes. The Teichert Ponds were created in the 1960's when the area was quarried to supply aggregate needed to build Highway 99 and Highway 32. During mining operations, an underlying shallow aquifer was ruptured resulting in one of the mining pits filling with water. Subsequent to mining of the area, two additional ponds were created and the area was and still is utilized as a storm water detention facility (Restoration Resources 2009).

A Class II/III bike path will also cross Comanche Creek toward the southern end of the Project site via an existing bridge on Notre Dame Blvd. No impacts will occur to Comanche Creek.

4.1.2 Phase II

Phase II of the Project is located similarly along City surface streets. However, portions of the proposed corridor may require the designation of easements and/or right-of-way acquisition and are dependent upon obtaining future funding. Following right-of-way acquisitions, the Class I bike path along the northern portion of the Project will be extended from the SUDAD channel north to Eaton Road.

Currently, Little Chico Creek, bordering the Teichert Ponds to the north, is acting as a physical barrier preventing the safe and efficient passage of pedestrian traffic from Bidwell Park to the populated commercial portion of Chico supporting such businesses as the Chico Mall, Kohl's, Wal-Mart, Lowe's and the Butte College Chico Center. During Phase II of the Project, a clear-span bridge will be placed outside the ordinary high water mark of Little Chico Creek and connected to the Class I bike path proposed as part of Phase I, as well as the existing bike path undercrossing SR 99 on the north side of Little Chico Creek. It is anticipated that vegetation will be removed as a result of the clear-span bridge but impacts below Little Chico Creek's ordinary high water mark and resident aquatic wildlife will be avoided. Following installation of the bridge, any remaining disturbed areas will be revegetated to pre-construction conditions.

4.2. Regional Species and Habitats of Concern

As previously mentioned, the majority of construction associated activities for the bike path will occur along paved City streets or existing bicycle facilities. Throughout the entire 6.7 mile Project site, the section of the bike path bordering the Teichert Ponds and Little Chico Creek offers the highest potential for sensitive species to occur. Northwestern pond turtles have been documented as occurring within the Teichert Ponds and the potential also exists for the giant garter snake (GGS) and various species of migratory birds and bats to occur on-site.

Two elderberry trees immediately adjacent to the Project footprint's Class II/III bike routes will be avoided by all construction activities (**Figure 1**). Though briefly discussed below, the elderberry tree does not provide the habitat necessary for the federally threatened valley

elderberry longhorn beetle to persist. The trees will not be removed or impacted as a result of the Project and will therefore not require formal consultation with the USFWS.

4.3. Vegetation

The special-status plants provided in **Appendix B** were excluded as potentially occurring in the Project area due to lack of suitable habitat, the site being outside of the known range of the species, and the amount of disturbed and/or developed area surrounding the Project's proposed bike paths. Remnant great valley mixed riparian habitat occurs on-site around the Teichert Pond's and Little Chico Creek area. The majority of on-site vegetation consists of native and non-native upland grasses with an overstory of valley oak, Western sycamore, Fremont cottonwood and various ornamental and fruiting trees.

4.4. Animals

4.4.1 Invertebrates

Valley Elderberry Longhorn Beetle

The valley elderberry longhorn beetle (VELB) occurs in the Central Valley of California below 3,000 feet. It is distributed primarily within riparian habitats from Shasta County to Kern County. The beetle is dependent solely on blue elderberry shrubs to complete its lifecycle. The adult beetles emerge from the elderberry stems from April to early June. The adults mate and the females lay eggs on the tips of twigs. The eggs hatch and the larva bore into twigs and feed on the pith. Before the larva pupates, it makes an exit hole in the elderberry stem. These holes serve as an indication of the occurrence of valley longhorn beetles in elderberry shrubs. After pupation, the adult beetle emerges from the pupal skin and exists from the interior of the elderberry stem. Besides exhibiting a preference for "stressed" elderberry, VELB prefers shrubs with stems of a certain size class. Exit holes have been found more frequently in trunks or branches that are 5 to 20 cm (2-8 in) in diameter, or at least 1.0 inch or greater at ground height (USFWS 1999) and less than one meter off the ground (Collinge *et al.* 2001). Research also shows that exit holes more consistently occur in clumps or stands than in isolated shrubs (Collinge *et al.* 2001).

Though the elderberry trees on-site are located well within the range of VELB, they have not been designated as critical habitat. One elderberry tree exists along the eastern edge of SR 99 near the intersection of Emilio Way and Panama Avenue. The second elderberry tree is located within the SR 99 right-of-way immediately across from the California Highway Patrol office on Humboldt Road. Located in an upland area bordered by SR 99 and a highly developed residential area, these trees lack the close proximity of riparian habitat and connectivity to other elderberry shrubs that supports and encourages the propagation of VELB. Currently, the elderberry trees are surrounded by private and commercial residences, and are supported by runoff water from SR 99 and neighboring residences. They also have no physical barrier from herbicides and/or pesticides. The proposed Project will not result in any ground disturbing activities near the trees as Class II/III bike path will merely be demarcated on the existing pavement. As a result of the isolated nature and the Project's avoidance of the trees, it is not anticipated that Section 7 consultation with the USFWS will be necessary and, therefore, the elderberry tree will not be discussed further.

4.4.2 Reptiles

Giant Garter Snake

The giant garter snake is endemic to the Sacramento and San Joaquin valleys where it inhabits agricultural wetlands and other waterways such as irrigation and drainage canals, sloughs, ponds, small lakes, low gradient streams, and adjacent uplands. Because of the direct loss of natural habitat, the GGS relies heavily on rice fields in the Sacramento and San Joaquin Valley, but also uses managed marsh areas in federal national wildlife refuges and state wildlife areas. GGS are typically absent from larger rivers because of lack of suitable habitat and emergent vegetative cover, and from wetlands with sand, gravel, or rock substrates. Riparian woodlands typically do not provide suitable habitat because of excessive shade, lack of basking sites, and absence of prey populations. However, some riparian woodlands do provide good habitat.

With known occurrences of GGS in Dead Horse Slough and the City of Chico's Water Pollution Control Plant, both hydrologically connected to Little Chico Creek, Little Chico Creek has the potential to act as a hyrologic corridor for GGS to migrate into Teichert Ponds. The footprint of the proposed Project occurs on an existing, heavily trafficked maintenance road paralleling SR 99, immedately adjacent to potential GGS aquatic habitat within the Teichert Ponds area.

Northwestern Pond Turtle

The northwestern pond turtle, a California species of concern, can be found throughout California and is the only abundant native turtle in California. They are associated with permanent or nearly permanent water in a wide variety of habitats at elevations ranging from near sea level to 1430 meters. They require basking sites including partially submerged logs, rocks, mats of floating vegetation, or open mud banks. The northwestern pond turtle hibernates in colder areas underwater on muddy bottoms. Nesting sites are typically constructed along the banks of permanent water in soils at least 10 cm deep and must have high internal humidity for eggs to develop and hatch. Northwestern pond turtles were observed within the Teichert Ponds in 2006 (Restoration Resources 2009) as well as by Gallaway Consulting biologists on September 4, 2009.

4.4.3 Mammals

Hoary Bat

The hoary bat is the most widespread of the North American bats. It is typically solitary, winters along the coast and in southern California, and breeds inland and north of the winter range. Suitable breeding habitats include all woodlands and forests with medium to large-sized trees and dense foliage at elevations ranging from sea level to 13,200 feet. The hoary bat primarily feeds on moths, however, their diet can be varied and include any number of flying insects. They prefer open habitats or habitat mosaics with access to water, trees with dense foliage for cover and breeding, and open areas or habitat edges for feeding and foraging. Their spring migration northward occurs from February to May, with the females preceding the males, and fall migration occurs from September to November. Due to documented occurrence of the hoary bat within 1 mile of the Project site and the presence of riparian habitat adjacent to Little Chico Creek and the Teichert Ponds, potential exists for the hoary bat to occur on-site.

Pallid Bat

The pallid bat is a rather large, pale, yellowish-brown bat with long prominent ears, a blunt snout, with pinkish-brown or gray wing and tail membranes. Pallid bats tend to roost alone or in small groups and are known to use day and night roosts in crevices of rocky outcrops and cliffs, caves, mines, trees (bole cavities of oaks, exfoliating Ponderosa pine and valley oak bark, deciduous trees in riparian areas, and fruit trees in orchards), and various man-made structures such as bridges and buildings. The pallid bat primarily preys on a variety of arthropods, grasshoppers, crickets, beetles, moths, occasionally small reptiles and rodents, and has developed a mechanism to prey upon scorpions. This species of bat is very vulnerable to disturbance that many times results in mass displacement of the species. Due to documented occurrence of the pallid bat within 1 mile of the Project site and the presence of riparian habitat adjacent to Little Chico Creek and the Teichert Ponds, potential exists for the pallid bat to occur on-site.

Silver-Haired Bat

The silver-haired bat is a medium sized bat with black or brown fur, tipped with silver. Females form small colonies that roost almost exclusively in trees—inside natural hollows and bird excavated cavities or under loose bark of large diameter snags. It has been observed that both the male and female silver-haired bats use multiple roosts within a limited area, indicating that clusters of large trees are necessary for the roosting needs of these bats. Foraging of numerous insects, especially moths, occurs above the canopy, over open meadows, and in the riparian zone along water courses. The silver-haired bat is primarily a forest bat, associated with northern temperate zone conifer and conifer/ mixed hardwood forests; however, they have been found in lower elevation, more xeric (dry) conditions, during winter and seasonal migration. As all bats are vulnerable to disruption while in torpor (state of decreased metabolic activity, similar to hibernation) in their winter hibernacula, Project associated activities will not begin until spring. Due to documented occurrence of the silver-haired bat within 1 mile of the Project site and the presence of riparian habitat adjacent to Little Chico Creek and the Teichert Ponds, potential exists for the silver-haired bat to occur on-site.

4.4.4 Birds

Swainson's hawk

Swainson's hawks are a long-distance migrants with nesting grounds in western North America. The Swainson's hawk population that nests in the Central Valley winters primarily in Mexico, while the population that nests in the interior portions of North America winters primarily in Argentina. Swainson's hawks arrive in the Central Valley between March and early April to establish breeding territories, and breeding occurs from late March to late August, peaking in late May through July (Zeiner *et al*. 1990). In the Central Valley, Swainson's hawks nest in isolated trees, small groves, or large woodlands, next to open graslands or agricultural fields. This species typically nests near riparian areas; however, it has been known to nest in urban areas as well. Nest locations are usually in close proximity to suitable foraging habitats, which include fallow fields, irrigated pastures, alfalfa and other hay crops, and low-growing row crops. Swainson's hawks leave their breeding grounds to return to their wintering grounds in late August or early September (Bloom and DeWater 1994). No Swainson's hawks were observed during field surveys; however, pre-construction raptor surveys will be completed prior to construction due to the presence of suitable habitat throughout the Project site.

Western burrowing owls

Western burrowing owls inhabit dry, open grasslands. Nests are usually in small burrows that have been constructed and abandoned by small mammals such as ground squirrels or badgers. The breeding season for burrowing owls is from late March through May. They perch on top of the burrows and other low structures to forage and watch for other predators. Their diet consists of insects, small reptiles or amphibians and small mammals. There is a low potential for burrowing owls to occur within the Project site due to the abundance of private and commercial residences and lack of open fields. However, the Project site will be surveyed for burrowing owls during the pre-construction raptor survey.

White-tailed kites

are a California fully protected species and a federal bird of conservation concern. This raptor species typically inhabits herbaceous lowlands with variable tree growth and dense population of voles. They use substantial groves of dense, broad-leafed deciduous trees for nesting and roosting. The white-tailed kite preys on rodents that may be harmful to agricultural crops, primarily voles and other small, diurnal mammals, and occasionally on birds, insects, reptiles, and amphibians. The kite forages in undisturbed, open grasslands, meadows, farmlands and emergent wetlands. It soars, glides, and hovers less than 30 m (100 ft) above ground in search of prey and slowly descends vertically upon prey with wings held high, and legs extended; it rarely dives into tall cover. The kite is a yearlong resident in coastal and valley lowlands; rarely found away from agricultural areas, the white-tailed kite has extended its range and increased numbers in recent decades. No white-tailed were observed during field surveys; however, pre-construction raptor surveys will be completed prior to construction due to the presence of suitable habitat.

Migratory Birds and Raptor Species

Migratory birds and raptors in the orders Falconiformes (hawks, eagles, and falcons) and Strigiforms (owls) are protected in varying degrees under California Fish and Game Code, Section 3503.5, the Migratory Bird Treaty Act (MBTA), and CEQA. The footprint of the Project provides suitable nesting and/or foraging habitat within the area surrounding Little Chico Creek and the Teichert Ponds. Direct take of active nests, eggs, or birds is prohibited by the California Department of Fish and Game (CDFG) and measures must be taken to minimize disturbance. Therefore, a qualified biologist should conduct a pre-construction migratory bird/raptor survey during April-May, or no more than 30 days prior to construction activities, to determine the presence/absence of nesting birds in the Project site. Should nesting migratory birds or raptors be observed, appropriate spatial and temporal buffers will be required by MBTA and/or CDFG.

5. Project Impacts

The Project is expected to be developed in two phases. Phase I will be completed within the next 12 months and Phase II is planned for completion within three years, depending on funding. During Phase I of the Project, several Class II/III bike paths will be demarcated along surface streets to connect existing facilities and will not require any ground disturbing activities. Class I bike paths, requiring ground disturbance activities, will occur adjacent to and within the SUDAD channel toward the northern terminus of the Project site, as well as, along the Teichert Ponds SR

99 frontage road. Phase II construction will also entail Class I/II/III bike routes as well as a clear-span bridge over Little Chico Creek.

5.1 Giant Garter Snake

Throughout the entire 6.7 mile long Project corridor, the potential to temporarily disturb GGS upland habitat is limited to construction of 1400 feet of a Class I bike path along the Teichert Pond's. This section of the Project is already comprised of an existing, heavily compacted dirt maintenance road paralleling SR 99 that is continually maintained and trafficked by the general public. Dense riparian cover of the maintenance road has reduced the potential for GGS to utilize this area for basking during the active season as adequate sunlight cannot penetrate the dense foliage. The replacement of the maintenance road with a Class I bike path will result in Level 1 minimal environmental effects to upland GGS habitat as discussed in the USFWS *Programmatic Biological Opinion on the Effects of Small Highway Projects on the Threatened Giant Garter Snake in Butte, Colusa, Glenn, Sacramento, San Joaquin, Solano, Sutter, Yolo, and Yuba Counties, California* (USFWS 2005) (GGS Programmatic). Though the Project will temporarily disturb and slightly modify GGS upland habitat, it is highly unlikely GGS will be harmed following implementation of the minimization and avoidance measures discussed in Section 6 below.

No construction activities will be conducted within aquatic GGS habitat during either Phase of the Project.

5.2 Migratory Birds, Raptors and Bats

Several species of bats, migratory birds and raptors including Swainson's hawks, western burrowing owls and white-tailed kites have the potential to nest/roost within the Teichert Ponds/ Little Chico Creek portion of the Project, as well as within existing vegetation buffering the entire Project site. Active raptor nests immediately adjacent or within 500 feet of the Project's Class I bike path constructions could potentially be disturbed as a result of ground disturbing activities or vegetation removal. Demarcation of Class II/III bike paths will not require ground disturbing activities or the production of excessive noise as these paths only require striping along existing surface streets, therefore, these activities should not cause disturbances to nesting migratory birds or roosting bats, if present.

6. Mitigation Measures

Giant Garter Snake

The Project proponent will mitigate for Level 1 impacts to potential upland GGS habitat by completing the replacement of the maintenance road with a Class I bike path during one construction season. The following minimization measures will be used to minimize the potential for impacts to occur to GGS, as well as prevent impacts and the need for formal consultation with the USFWS under Section 7 of the Endangered Species Act. The following terms and conditions implement reasonable and prudent measures for protecting GGS during construction activities per the GGS Programmatic:

1. Confine movements of heavy equipment to existing roadways to minimize habitat disturbance and reduce stockpiled materials adjacent to aquatic GGS habitat.

2. Construction activity within habitat will be conducted between May 1 and October 1. This is the active period for GGS and direct mortality is lessened, because snakes are expected to actively move and avoid danger on their own.

3. Confine vegetation clearing to the minimal area necessary to facilitate construction activities. Flag and designate avoided giant garter snake habitat within or adjacent to the Project area as Environmentally Sensitive Areas. This area should be avoided by all construction personnel.

4. Construction personnel will receive Service-approved worker environmental awareness training to recognize GGS and their habitat from a Caltrans approved biologist.

5. 24-hours prior to construction activities, the Project area will be surveyed for GGS. Survey of the Project area will be repeated if a lapse in construction activity of two weeks or greater has occurred. If a snake is encountered during construction, activities shall cease until appropriate corrective measure have been completed or it has been determined that the snake will not be harmed. Any sightings or incidental take will be reported to the USFWS immediately by telephone at (916) 414-6600.

6. After completion of construction activities, all construction debris will be removed from the area and, wherever feasible, disturbed areas will be restored to pre-project conditions. Restoration work may include such activities as replanting species removed from banks.

Migratory Birds, Raptors and Bats

Per the "exceptions" section of the *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (*Buteo swansoni*) in the Central Valley of California, 1994* it states:

> Cities, counties and project sponsors should be encouraged to focus development on open lands within already urbanized areas. Since small disjunct parcels of habitat seldom provide foraging habitat needed to sustain the reproductive efforts of a Swainson's hawk pair, Staff does not recommend requiring mitigation pursuant to CEQA nor a Management Authorization by the Department for infill (within an already urbanized area) projects in area which have less than 5 acres of foraging habitat and are surrounded by existing urban development, unless the project area is within ¼ mile of an active nest tree.

As the proposed Project is located within the urbanized area of Chico supporting less than 5 acres of Swainson's hawk foraging habitat, no compensatory mitigation will be required.

Pre-construction raptor surveys, with specific attention directed toward Swainson's hawks, white-tailed kites and burrowing owls will be conducted no more than 30 days prior to initiation of Class I construction activities. If active raptor nests are located within the Project's Class I footprint or within 500 feet of the proposed bike path, consultation with the CDFG will be necessary to determine appropriate avoidance measures.

It is recommended that all necessary vegetation removal be conducted during the non-breeding season (September 15- February 15) to prevent unnecessary disturbance to nesting birds, raptors and roosting bats as a result of the Project. If vegetation removal is not conducted during the non-breeding season, a qualified biologist will survey the vegetation no less than 2 days, no more than 15 days prior to initiation of construction activities. If active nests or roosts are located within the vegetation planned for removal, the nest/roost will be avoided and vegetation removal delayed until a qualified biologist has determined the nest/roost inactive.

Northwestern Pond Turtle

Due to the known presence of northwestern ponds in the Teichert Ponds, a pre-construction survey of the maintenance road should be conducted no more than 48 hours prior to initiation of construction activities. Northwestern pond turtles typically begin mating in late April to early May and are laying their eggs during May and June. The females leave the aquatic habitat to find upland locations to nest where they bury their eggs 3-4 inches deep. The pre-construction survey will inspect the Project's footprint to ensure no northwestern pond turtle nests will be disturbed as a result of construction activities. If an active nest is located during the survey, consultation with CDFG may be required to determine appropriate relocation/avoidance measures. If adult pond turtles are located within the construction site during construction, they should be returned to the pond a safe distance from the construction activities.

7. Permits Required

The placement of a box culvert within a small section of the SUDAD ditch during Phase I will require the issuance of USACE Section 404 and RWQCB Section 401 permtis. Due to existing facilities across Lindo Channel, Big Chico Creek and Comanche Creek and the placement of a clear-span bridge over Little Chico Creek, Phase II of the Project will not require a RWQCB Section 401 or a USACE Section 404 permit. However, the removal of riparian vegetation along Little Chico Creek for the placement of the clear-span bridge during Phase II of the Project willrequire the issuance of a CDFG Section 1600 Streambed Alteration Agreement. Following avoidance of the two on-site elderberry trees by the demarcation of a Class II/III bike route on existing surface roads abutting the trees and proper implementation of avoidance and minimization measures for GGS, formal consultation with USFWS under Section 7 of the Endangered Species Act is not anticipated.

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9. Site Photos

Photo 1. East-west portion of SUDAD ditch proposed for placement of box culvert at far end of ditch during Phase I of the Project.

Photo 2. Portion of SUDAD south of East Lassen Avenue. Proposed to be converted to a 36 inch stormdrain to facilitate Class I bike path minimum width requirements. Phase I.

Photo 3. Existing facilities for low flow transportation across Lindo Channel. Phase I.

Photo 4. Existing maintenance road between Teichert Ponds and SR 99. Photo taken looking north from behind Kohl's. Phase I.

Photo 5. Location of Class II/III along Emilio Way looking south. Phase II.

Photo 6. Class I along White Avenue looking west. Phase II.

Appendix A.

Observed Species on SR 99 Bikepath Project

Appendix A
Observed Spedies

Wildlife Species Observed along the Project	
Common Name	**Scientific Name**
American Crow	*Corvus brachyrhynchos*
Belted kingfisher	*Megaceryle alcyon*
Black phoebe	*Sayornis nigricans*
Black-tailed jackrabbit	*Lepus californicus*
Brewer's blackbird	*Euphagus cyanocephalus*
Bullfrog	*Rana catesbiana*
California ground squirrel	*Spermophilus beecheyi*
European starling	*Sturnus vulgaris*
Great blue heron	*Ardea herodias*
Great egret	*Casmerodius albus*
Killdeer	*Charadrius vociferus*
Mallard	*Anas platyrynchos*
Mourning dove	*Zenaida macroura*
Northwestern pond turtle	*Clemmys marmorata*
Red-tailed hawk	*Buteo jamaicensis*
Rock dove	*Columba livia*
Scrub jay	*Aphelocoma coerulescens*
Turkey vulture	*Cathartes aura*
Wood duck	*Aix sponsa*
Yellow-billed magpie	*Pica nuttalli*

Plant Species Observed along the Project	
Common Name	***Scientific Name***
Tree of Heaven	*Ailanthus altissima*
Silver hairgrass	*Aira caryophyllea*
Onion	*lliums sp.*
Common ragweed	*Ambrosia artemisiifolia*
Narrow-leaved milkweed	*Asclepias fascicularis*
Aster	*Aster chilensis var. chilensis*
Oat	*Avena spp.*
Black mustard	*Brassica nigra*
Rip-gut brome	*Bromus diandrus*
Soft chess	*Bromus hordeaceous*
Yellow-star thistle	*Centaurea solstitialis*
Bull thistle	*Cirsium vulgare*
Bindweed	*Convulvulus arvensis*
Bermudagrass	*Cynodon dactylon*
Barnyardgrass	*Echinochloa crus-galli*
Turkey mullein	*Eremocarpus setigerus*
Filaree	*Erodium spp.*
Tarweed	*Hemizonia congesta*

Common Name	***Scientific Name***
Barley	*Hordeum spp.*
Prickly lettuce	*Lactuca serriola*
Western sycamore	*Platanus racemosa*
Fremont's cottonwood	*Populus fremontii*
Valley oak	*Quercus lobata*
Rose	*Rosa spp.*
Himalayan blackberry	*Rubus discolor*
Blue elderberry	*Sambucus mexicana*
Milk thistle	*Silybum marianum*
Johnson grass	*Sorghum halepense*
Medusa head	*Taeniatherum caput medusae*
Poison oak	*Toxicodendron diversilobium*
Cattails	*Typha ssp.*
California wild grape	*Vitis californica*
Fescue	*Vulpia spp.*
Cocklebur	*Xanthium strumarium*

Appendix B.

Special-status Species Reports
CNDDB, CNPS, USFWS

California Department of Fish and Game
Natural Diversity Database
Selected Elements by Scientific Name - Chico, Nord, Richardson Springs, Hamlin Canyon, Shippee, Paradise W, Ord Ferry, Llano Seco, Nelson USGS Quads

	Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
1	***Actinemys marmorata marmorata*** northwestern pond turtle	ARAAD02031			G3G4T3	S3	SC
2	***Agelaius tricolor*** tricolored blackbird	ABPBXB0020			G2G3	S2	SC
3	***Anthicus antiochensis*** Antioch Dunes anthicid beetle	IICOL49020			G1	S1	
4	***Anthicus sacramento*** Sacramento anthicid beetle	IICOL49010			G1	S1	
5	***Antrozous pallidus*** pallid bat	AMACC10010			G5	S3	SC
6	***Ardea alba*** great egret	ABNGA04040			G5	S4	
7	***Ardea herodias*** great blue heron	ABNGA04010			G5	S4	
8	***Astragalus tener var. ferrisiae*** Ferris' milk-vetch	PDFAB0F8R3			G1T1	S1.1	1B.1
9	***Athene cunicularia*** burrowing owl	ABNSB10010			G4	S2	SC
10	***Branchinecta conservatio*** Conservancy fairy shrimp	ICBRA03010	Endangered		G1	S1	
11	***Branchinecta lynchi*** vernal pool fairy shrimp	ICBRA03030	Threatened		G3	S2S3	
12	***Buteo swainsoni*** Swainson's hawk	ABNKC19070		Threatened	G5	S2	
13	***California macrophylla*** round-leaved filaree	PDGER01070			G3	S3.1	1B.1
14	***Calystegia atriplicifolia ssp. buttensis*** Butte County morning-glory	PDCON04012			G5T3	S3	4.2
15	***Campylopodiella stenocarpa*** flagella-like atractylocarpus	NBMUS84010			G5	S1.2	2.2
16	***Carex vulpinoidea*** brown fox sedge	PMCYP03EN0			G5	S2.2	2.2
17	***Castilleja rubicundula ssp. rubicundula*** pink creamsacs	PDSCR0D482			G5T2	S2.2	1B.2
18	***Chamaesyce hooveri*** Hoover's spurge	PDEUP0D150	Threatened		G2	S2.1	1B.2
19	***Clarkia gracilis ssp. albicaulis*** white-stemmed clarkia	PDONA050J1			G5T2	S2.2?	1B.2
20	***Coastal and Valley Freshwater Marsh***	CTT52410CA			G3	S2.1	
21	***Coccyzus americanus occidentalis*** western yellow-billed cuckoo	ABNRB02022	Candidate	Endangered	G5T3Q	S1	
22	***Delphinium recurvatum*** recurved larkspur	PDRAN0B1J0			G2	S2.2	1B.2
23	***Dendroica petechia brewsteri*** yellow warbler	ABPBX03018			G5T3?	S2	SC

	Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
24	***Desmocerus californicus dimorphus*** valley elderberry longhorn beetle	IICOL48011	Threatened		G3T2	S2	
25	***Didymodon norrisii*** Norris' beard moss	NBMUS2C0H0			G2G3	S2.2	2.2
26	***Eumops perotis californicus*** western mastiff bat	AMACD02011			G5T4	S3?	SC
27	***Falco peregrinus anatum*** American peregrine falcon	ABNKD06071	Delisted	Endangered	G4T3	S2	
28	***Fritillaria eastwoodiae*** Butte County fritillary	PMLIL0V060			G3Q	S3	3.2
29	***Fritillaria pluriflora*** adobe-lily	PMLIL0V0F0			G3	S3	1B.2
30	***Great Valley Cottonwood Riparian Forest***	CTT61410CA			G2	S2.1	
31	***Great Valley Mixed Riparian Forest***	CTT61420CA			G2	S2.2	
32	***Great Valley Valley Oak Riparian Forest***	CTT61430CA			G1	S1.1	
33	***Great Valley Willow Scrub***	CTT63410CA			G3	S3.2	
34	***Haliaeetus leucocephalus*** bald eagle	ABNKC10010	Delisted	Endangered	G5	S2	
35	***Hibiscus lasiocarpos*** woolly rose-mallow	PDMAL0H0Q0			G4	S2.2	2.2
36	***Imperata brevifolia*** California satintail	PMPOA3D020			G2	S2.1	2.1
37	***Juncus leiospermus var. leiospermus*** Red Bluff dwarf rush	PMJUN011L2			G2T2	S2.2	1B.1
38	***Lanius ludovicianus*** loggerhead shrike	ABPBR01030			G4	S4	SC
39	***Lasionycteris noctivagans*** silver-haired bat	AMACC02010			G5	S3S4	
40	***Lasiurus blossevillii*** western red bat	AMACC05060			G5	S3?	SC
41	***Lasiurus cinereus*** hoary bat	AMACC05030			G5	S4?	
42	***Lepidurus packardi*** vernal pool tadpole shrimp	ICBRA10010	Endangered		G3	S2S3	
43	***Limnanthes floccosa ssp. californica*** Butte County meadowfoam	PDLIM02042	Endangered	Endangered	G4T1	S1.1	1B.1
44	***Limnanthes floccosa ssp. floccosa*** woolly meadowfoam	PDLIM02043			G4T4	S3.2	4.2
45	***Linderiella occidentalis*** California linderiella	ICBRA06010			G3	S2S3	
46	***Monardella douglasii ssp. venosa*** veiny monardella	PDLAM18082			G5T1	S1.1	1B.1
47	***Myotis yumanensis*** Yuma myotis	AMACC01020			G5	S4?	

	Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
48	***Northern Basalt Flow Vernal Pool***	CTT44131CA			G3	S2.2	
49	***Northern Hardpan Vernal Pool***	CTT44110CA			G3	S3.1	
50	***Northern Volcanic Mud Flow Vernal Pool***	CTT44132CA			G1	S1.1	
51	***Oncorhynchus tshawytscha spring-run*** spring-run chinook salmon	AFCHA0205A	Threatened	Threatened	G5	S1	
52	***Orcuttia pilosa*** hairy orcutt grass	PMPOA4G040	Endangered	Endangered	G2	S2.1	1B.1
53	***Pandion haliaetus*** osprey	ABNKC01010			G5	S3	
54	***Paronychia ahartii*** Ahart's paronychia	PDCAR0L0V0			G3	S3	1B.1
55	***Phrynosoma coronatum (frontale population)*** coast (California) horned lizard	ARACF12022			G4G5	S3S4	SC
56	***Potamogeton filiformis*** slender-leaved pondweed	PMPOT03090			G5	S1S2	2.2
57	***Rhynchospora californica*** California beaked-rush	PMCYP0N060			G1	S1.1	1B.1
58	***Rhynchospora capitellata*** brownish beaked-rush	PMCYP0N080			G5	S2S3	2.2
59	***Riparia riparia*** bank swallow	ABPAU08010		Threatened	G5	S2S3	
60	***Sidalcea robusta*** Butte County checkerbloom	PDMAL110P0			G2	S2.2	1B.2
61	***Spea hammondii*** western spadefoot	AAABF02020			G3	S3	SC
62	***Taxidea taxus*** American badger	AMAJF04010			G5	S4	SC
63	***Thamnophis gigas*** giant garter snake	ARADB36150	Threatened	Threatened	G2G3	S2S3	
64	***Trifolium jokerstii*** Butte County golden clover	PDFAB40310			G1	S1.2	1B.2
65	***Tuctoria greenei*** Greene's tuctoria	PMPOA6N010	Endangered	Rare	G2	S2.2	1B.1
66	***Wolffia brasiliensis*** Brazilian watermeal	PMLEM03020			G5	S1.3	2.3

Inventory of Rare and Endangered Plants

v7-09c 7-14-09

Status: search results - Fri, Sep. 4, 2009, 14:15 b

{QUADS_123} =~ m/577A|593C|593D|576B|576C|592C|577B|577(Search

Tip: `+Lathyrus +"coastal dunes"` returns only those Lathyrus in coastal dunes. Note the "+" and quotes.[all tips and help.][search history]

Your Quad Selection: Chico (577A) 3912167, Nord (593C) 3912178, Richardson Springs (593D) 3912177, Hamlin Canyon (576B) 3912166, Shippee (576C) 3912156, Paradise West (592C) 3912176, Ord Ferry (577B) 3912168, Llano Seco (577C) 3912158, Nelson (577D) 3912157

Hits 1 to 26 of 26

Requests that specify topo quads will return only Lists 1-3.

To save selected records for later study, click the ADD button.

ADD checked items to Plant Press | check all | check none

Selections will appear in a new window.

open	save	hits	scientific	common	family	CNPS
		1	**Astragalus tener var. ferrisiae**	Ferris' milk-vetch	Fabaceae	List 1B.1
		1	**California macrophylla**	round-leaved filaree	Geraniaceae	List 1B.1
		1	**Campylopodiella stenocarpa**	flagella-like atractylocarpus	Dicranaceae	List 2.2
		1	**Cardamine pachystigma var. dissectifolia**	dissected-leaved toothwort	Brassicaceae	List 3
		1	**Carex vulpinoidea**	brown fox sedge	Cyperaceae	List 2.2
		1	**Castilleja rubicundula ssp. rubicundula**	pink creamsacs	Scrophulariaceae	List 1B.2
		1	**Chamaesyce hooveri**	Hoover's spurge	Euphorbiaceae	List 1B.2
		1	**Clarkia gracilis ssp. albicaulis**	white-stemmed clarkia	Onagraceae	List 1B.2
		1	**Delphinium recurvatum**	recurved larkspur	Ranunculaceae	List 1B.2
		1	**Didymodon norrisii**	Norris' beard moss	Pottiaceae	List 2.2
		1	**Fritillaria eastwoodiae**	Butte County fritillary	Liliaceae	List 3.2
		1	**Fritillaria pluriflora**	adobe-lily	Liliaceae	List 1B.2
		1	**Hibiscus lasiocarpos**	woolly rose-mallow	Malvaceae	List 2.2
		1	**Imperata brevifolia**	California satintail	Poaceae	List 2.1
			Juncus leiospermus			

		1	**var. leiospermus**	Red Bluff dwarf rush	Juncaceae	List 1B.1
		1	**Limnanthes floccosa ssp. californica**	Butte County meadowfoam	Limnanthaceae	List 1B.1
		1	**Monardella douglasii ssp. venosa**	veiny monardella	Lamiaceae	List 1B.1
		1	**Orcuttia pilosa**	hairy Orcutt grass	Poaceae	List 1B.1
		1	**Paronychia ahartii**	Ahart's paronychia	Caryophyllaceae	List 1B.1
		1	**Potamogeton filiformis**	slender-leaved pondweed	Potamogetonaceae	List 2.2
		1	**Rhynchospora californica**	California beaked-rush	Cyperaceae	List 1B.1
		1	**Rhynchospora capitellata**	brownish beaked-rush	Cyperaceae	List 2.2
		1	**Sidalcea robusta**	Butte County checkerbloom	Malvaceae	List 1B.2
		1	**Trifolium jokerstii**	Butte County golden clover	Fabaceae	List 1B.2
		1	**Tuctoria greenei**	Greene's tuctoria	Poaceae	List 1B.1
		1	**Wolffia brasiliensis**	Brazilian watermeal	Lemnaceae	List 2.3

To save selected records for later study, click the ADD button.

ADD checked items to Plant Press | check all | check none

Selections will appear in a new window.

No more hits.

U.S. Fish & Wildlife Service

Sacramento Fish & Wildlife Office

Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 090904033513

Database Last Updated: January 29, 2009

Quad Lists

Listed Species

Invertebrates

Branchinecta conservatio

Conservancy fairy shrimp (E)

Critical habitat, Conservancy fairy shrimp (X)

Branchinecta lynchi

Critical habitat, vernal pool fairy shrimp (X)

vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus

valley elderberry longhorn beetle (T)

Lepidurus packardi

Critical habitat, vernal pool tadpole shrimp (X)

vernal pool tadpole shrimp (E)

Fish

Acipenser medirostris

green sturgeon (T) (NMFS)

Hypomesus transpacificus

delta smelt (T)

Oncorhynchus mykiss

Central Valley steelhead (T) (NMFS)

Critical habitat, Central Valley steelhead (X) (NMFS)

Oncorhynchus tshawytscha

Central Valley spring-run chinook salmon (T) (NMFS)

Critical Habitat, Central Valley spring-run chinook (X) (NMFS)

Critical habitat, winter-run chinook salmon (X) (NMFS)

winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Rana aurora draytonii

California red-legged frog (T)

Reptiles

Thamnophis gigas

giant garter snake (T)

Plants

Chamaesyce hooveri

Critical habitat, Hoover's spurge (X)

Hoover's spurge (T)

Limnanthes floccosa ssp. californica

Butte County (Shippee) meadowfoam (E)

Critical habitat, Butte County (Shippee) meadowfoam (X)

Orcuttia pilosa

Critical habitat, hairy Orcutt grass (X)

hairy Orcutt grass (E)

Tuctoria greenei

Critical habitat, Greene's tuctoria (=Orcutt grass) (X)

Greene's tuctoria (=Orcutt grass) (E)

Candidate Species

Birds

Coccyzus americanus occidentalis

Western yellow-billed cuckoo (C)

Quads Containing Listed, Proposed or Candidate Species:

HAMLIN CANYON (576B)

SHIPPEE (576C)

CHICO (577A)

ORD FERRY (577B)

LLANO SECO (577C)

NELSON (577D)

PARADISE WEST (592C)

NORD (593C)

RICHARDSON SPRINGS (593D)

County Lists

No county species lists requested.

Key:

(E) *Endangered* - Listed as being in danger of extinction.

(T) *Threatened* - Listed as likely to become endangered within the foreseeable future.

(P) *Proposed* - Officially proposed in the Federal Register for listing as endangered or threatened.

(NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.

Critical Habitat - Area essential to the conservation of a species.

(PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.

(C) *Candidate* - Candidate to become a proposed species.

(V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.

(X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about size of San Francisco.

The animals on your species list are ones that occur within, or may be affected by proje within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by t list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online Inventory of Rare and Endangered Plants.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. See our Protocol and Recovery Permits pages.

For plant surveys, we recommend using the Guidelines for Conducting and Reporting Botanical Inventories. The results of your surveys should be published in any environment documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

> Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that n result in take, then that agency must engage in a formal consultation with the Service.

  During formal consultation, the Federal agency, the applicant and the Service work together t avoid or minimize the impact on listed species and their habitat. Such consultation would resu in a biological opinion by the Service addressing the anticipated effect of the project on listed proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

  Should your survey determine that federally listed or proposed species occur in the area and a likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct a indirect impacts to listed species and compensates for project-related loss of habitat. You shou include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essenti to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our Map Room page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose th for listing as threatened or endangered. By considering these species early in your plannir process you may be able to avoid the problems that could develop if one of these candida was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts More info

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defir by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, yo will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6580.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem.

However, we recommend that you get an updated list every 90 days. That would be December 03, 2009.

DRAFT

Delineation of Waters of the United States

State Route 99 Bike Path

Chico, Butte County, CA

September 2009

Prepared for:

City of Chico
411 Main Street
Chico CA, 95928

Prepared by:

GALLAWAY CONSULTING
A DIVISION OF NORTHSTAR ENGINEERING
111 MISSION RANCH BLVD, STE 100, CHICO CA 95926
PHONE (530) 343-8327 • FAX (530) 893-2113

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Page

Tables **Page**

Figures

DRAFT
DELINEATION OF WATERS OF THE UNITED STATES

State Route 99 Bike Path
Chico, Butte County, CA.

Introduction and Project Location

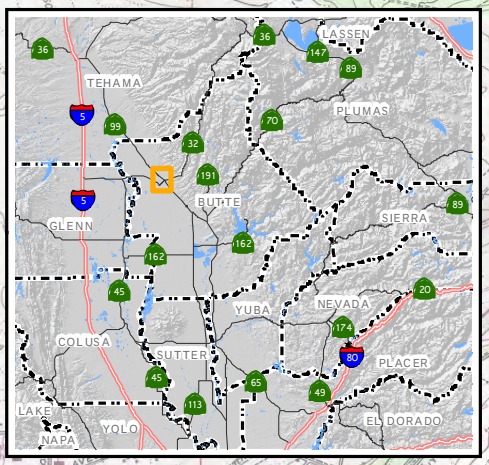
Gallaway Consulting conducted a delineation of waters of the U.S. for an approximately 6.7 mile long State Route 99 Bike Path project (Project) area located in Chico, Butte County, California (**Figure 1**). A field survey was conducted on September 8, 2009 by biologists Brooks Taylor and Trish Ladd. The Project is located in Sections 23 and 25, Township 22N, Range 1E, of the Chico and Richardson Springs U.S. Geological Survey (USGS) 7.5 minute quadrangle maps. For the purpose of this report only areas where there are potential impacts are addressed. This report addresses botanical resources, soils, hydrological features, and determination of wetland characteristics based on the *United States Army Corps of Engineers Wetlands Delineation Manual* (1987)*;* the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (2008); and the *U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook* (2007).

The Project is a long-term bicycle facilities project expected to be developed in two Phases; Phase I will be completed within the next 12 months, and Phase II is planned for completion within three years, depending on funding. The ultimate bike path alignment is a 6.7-mile long continuous bikeway comprised of a combination of Class I and Class II/Class III facilities along the SR 99 corridor from Eaton Road at the northern terminus to Southgate Avenue at the southern terminus (**Figure 2**). These facilities will generally parallel the SR 99 corridor to the greatest extent possible using City surface streets, drainage easements and City parkland. Phase 1 of the project is being funded by the new American Recovery and Reinvestment Act (ARRA) Statewide Transportation Enhancement (State TE) funds. ARRA funding is part of the economic stimulus package enacted by Congress in February 2009 and is intended to provide a stimulus to the U.S. economy. State TE funding activities are a means to more creatively and sensitively integrate surface transportation facilities into the surrounding community.

A clear-span bicycle/pedestrian bridge would cross Little Chico Creek, with improvements placed outside the ordinary high water mark. The proposed bicycle path will connect to the existing path/Highway 99 undercrossing on the north side of Little Chico Creek, loop around to the proposed clear-span bridge over Little Chico Creek and extend to the East 20th Street Community Park to the south. The clear-span bridge would be approximately 130 linear feet across and would be similar in appearance to other City bicycle/pedestrian bridges. Additionally, a box culvert will be placed in an unnamed stormwater channel which was originally created and maintained by the Shasta Union Drainage Assessment District (SUDAD). The SUDAD channel conveys water north toward Sycamore Creek which is located north of the Project. The SUDAD channel is currently operated and maintained by Butte County.

City of Chico SR-99 Bicycle Path

Location



Bike Path Alignment

Existing Features

- Class I
- Class II/III

Proposed Phase I

- Class I
- Class II/III

Proposed Phase II

- Class I
- Class II/III

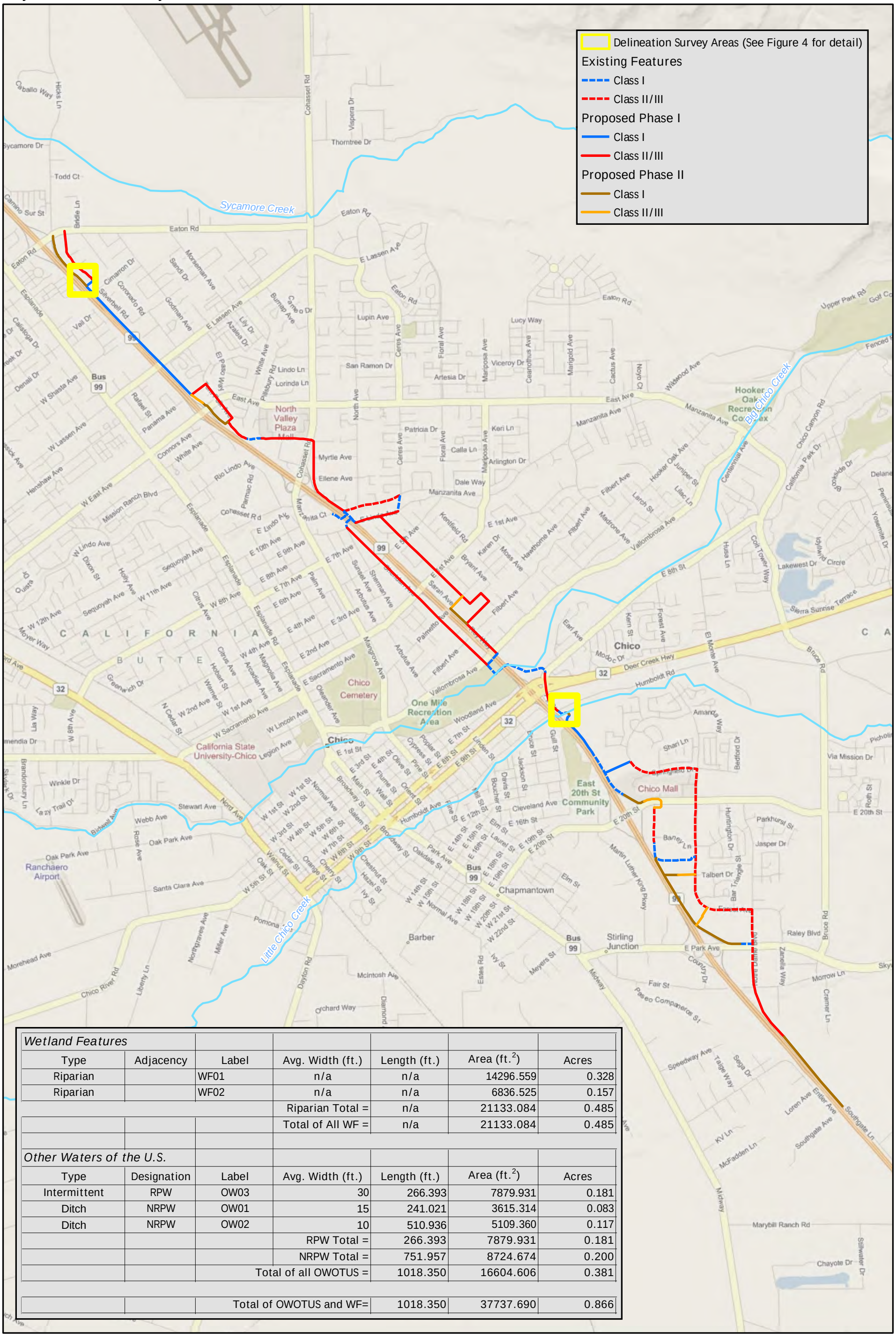
Proposed Alignment based on City of Chico Capital Improvements AutoCAD drawing, subject to change.
Within Arroyo Chico Land Grant, and Section 25 of T22N, R1E, Sections 30, 31 of T22N, R2E, and Sections 5, 6 of T21N, R2E
Map show Chico and Richardson Springs USGS 7.5' Quads.
Map Date: September 4, 2009

Miles
0 0.25 0.5

GALLAWAY CONSULTING
A DIVISION OF NORTHSTAR ENGINEERING

Figure 1

City of Chico, SR-99 Bicycle Path **Draft Delineation of the Waters of the U.S. Overview**



Wetland Features						
Type	Adjacency	Label	Avg. Width (ft.)	Length (ft.)	Area (ft.^{2})	Acres
Riparian		WF01	n/a	n/a	14296.559	0.328
Riparian		WF02	n/a	n/a	6836.525	0.157
			Riparian Total =	n/a	21133.084	0.485
			Total of All WF =	n/a	21133.084	0.485
Other Waters of the U.S.						
Type	Designation	Label	Avg. Width (ft.)	Length (ft.)	Area (ft.^{2})	Acres
Intermittent	RPW	OW03	30	266.393	7879.931	0.181
Ditch	NRPW	OW01	15	241.021	3615.314	0.083
Ditch	NRPW	OW02	10	510.936	5109.360	0.117
			RPW Total =	266.393	7879.931	0.181
			NRPW Total =	751.957	8724.674	0.200
			Total of all OWOTUS =	1018.350	16604.606	0.381
			Total of OWOTUS and WF=	1018.350	37737.690	0.866

All features in this document to remain preliminary until written verification from the USACE.
Survey: TL (09/08/09)
Aerial: Microsoft
Map Date: September 10, 2009

Miles
0 0.5 1

GALLAWAY CONSULTING
A DIVISION OF NORTHSTAR ENGINEERING

Figure 2

This report addresses the nature, jurisdictional status, and landscape position of the wetlands in the Project area; it does not provide information suitable for structural analysis of soils for construction purposes, flood plain delineation, or other purposes not expressly stated. Wetland acreages presented in this report should be considered preliminary, and subject to review and modification by the U.S. Army Corps of Engineers (USACE) during the wetland delineation verification process.

Site Conditions

The Project is located in Chico, California (**Figure 1**). The Project area includes approximately 6.7 linear miles of land throughout the City of Chico. The footprint of the Project will be no wider than 12 feet in most areas and will be constructed on previously graded land. Topography is relatively flat throughout the extent of the Project site and elevations vary from 235 feet to 180 feet. The Project will span Little Chico Creek (OW03), Big Chico Creek, Lindo Channel, the SUDAD channel (OW01 and OW02) and Comanche Creek (please note Comanche Creek is sometimes referred to as Edgar Slough). Pedestrian/bicycle facilities, including bridges which already exist over Lindo Channel, Big Chico Creek and Comanche Creek, will be utilized as part of this Project; therefore, no impacts will occur to these creeks and will not be discussed further in this document. Little Chico Creek and the SUDAD Channel are the only remaining jurisdictional features on-site that have the potential to be impacted by the Project. One additional feature, a remnant irrigation ditch, exists in the northern portion of the Project area and is discussed in the non-jurisdictional section of this report.

Many of the terms used throughout this report have specific meanings relating to the federal wetland delineation process. Term definitions are based on the *USACE Wetlands Delineation Manual* (1987); the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands* (1989); the *Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Arid West Region* (2008); and, the *U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook* (2007). The terms defined below have specific meaning relating to the delineation of waters of the U.S. as prescribed by §404 of the Clean Water Act (CWA).

Survey Methodology

Terminology

Abutting: When referring to wetlands that are adjacent to a tributary, abutting defines those wetlands that are not separated from the tributary by an upland feature, such as a berm or dike.

Adjacent: Adjacent as used in "Adjacent to a traditional navigable water," is defined in USACE and EPA regulations as "bordering, contiguous, or neighboring." Wetlands separated from other waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes and the like are 'adjacent wetlands.'

Atypical situation (significantly disturbed): In an atypical (significantly disturbed) situation, recent human activities or natural events have created conditions where positive indicators for hydrophytic vegetation, hydric soil, or wetland hydrology are not present or observable.

Ephemeral stream: An ephemeral stream has flowing water only during and for a short duration after, precipitation events in a typical year. Ephemeral streambeds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

Growing season: The growing season is the portion of the year when soil temperatures at 19.7 inches below the soil surface are above biologic zero (41^{o} F) as defined by soil taxonomy.

Hydric soil: Soil is hydric that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic (oxygen-depleted) conditions in its upper part (*i.e.* within the shallow rooting zone of herbaceous plants).

Intermittent stream: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

Jurisdictional wetland: Sites that meet the definition of wetland provided below and that fall under USACE regulations pursuant to §404 of the CWA are considered jurisdictional wetlands.

Man-induced wetlands: A man-induced wetland is an area that has developed at least some characteristics of naturally occurring wetlands due to either intentional or incidental human activities.

Non-relatively permanent waters: This describes a body of water such as an ephemeral stream, which has flowing water only during and for a short period of time following precipitation events in a typical year. Non-relatively permanent waters (NRPWs) are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

Normal circumstances: This term refers to the soil and hydrologic conditions that are normally present, without regard to whether the vegetation has been removed.

Other waters of the United States: Other waters of the U.S. are seasonal or perennial water bodies, including lakes, stream channels, drainages, ponds, and other surface water features, that exhibit an ordinary high-water mark but lack positive indicators for one or more of the three wetland parameters (hydrophytic vegetation, hydric soil, and wetland hydrology) (33 CFR 328.4).

Perennial stream: A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

Plant indicator status categories:

Obligate wetland plants (OBL) – plants that occur almost always (estimated probability 99%) in wetlands under normal conditions, but which may also occur rarely (estimated probability 1%) in non-wetlands.

Facultative wetland plants (FACW) - plants that usually occur (estimated probability 67% to 99%) in wetlands under normal conditions, but also occur (estimated probability 1% to 33%) in non-wetlands.

Facultative plants (FAC) – Plants with a similar likelihood (estimated probability 33% to 67%) of occurring in both wetlands and non-wetlands.

Facultative upland plants (FACU) – Plants that occur sometimes (estimated probability1% to 33%) occur in wetlands, but occur more often (estimated probability 67% to 99%) in non-wetlands.

Obligate upland plants (UPL) – Plants that occur rarely (estimated probability 1%) in wetlands, but occur almost always (estimated probability 99%) in non-wetlands under natural conditions.

Ponded: Ponding is a condition in which free water covers the soil surface (e.g., in a closed depression) and is removed only by percolation, evaporation, or transpiration.

Problem area: Problem areas are those where one or more wetland parameters may be lacking because of normal seasonal or annual variations in environmental conditions that result from causes other than human activities or catastrophic natural events.

Relatively permanent: As defined in the *Rapanos* guidance document, a water body is "relatively permanent" if its flow is year round or its flow is continuous at least "seasonally," (e.g., typically 3 months). Wetlands adjacent to a "relatively permanent" tributary are also jurisdictional if those wetlands directly abut such a tributary.

Significant nexus: A water body is considered to have a "significant nexus" with a traditional navigable water if its flow characteristics and functions in combination with the ecologic and hydrologic functions preformed by all wetlands adjacent to such a tributary, affect the chemical, physical, and biological integrity of a downstream traditional navigable water.

Traditional navigable water: Includes all of the "navigable water of the United States," defined in 33 C.F.R. § 329, and by numerous decisions of the Federal courts, plus all other waters that are navigable-in-fact. As defined in 33 C.F.R. § 329, "Navigable waters of the United States are those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. A determination of navigability, once made, applies laterally over the entire surface of the water

body, and is not extinguished by later actions or events which impede or destroy navigable capacity."

Tributary: As defined in the *Rapanos* guidance document a tributary is a natural, man-altered, or man-made water body that carries flow directly or indirectly into traditional navigable waters. For purposes of determining "significant nexus" with a traditional navigable water, a "tributary" is the entire reach of the stream that is of the same order (i.e., from the point of confluence, where two lower order streams meet to from the tributary, downstream to the point such tributary enters a higher order stream).

Waters of the United States: This is the encompassing term for areas under federal jurisdiction pursuant to § 404 of the CWA. Waters of the U.S. are divided into "wetlands" and "other waters of the U.S."

Wetland: Wetlands are defined as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3 [b], 40 CFR 230.3). To be considered under federal jurisdiction, a wetland must support positive indicators for hydrophytic vegetation, hydric soil, and wetland hydrology.

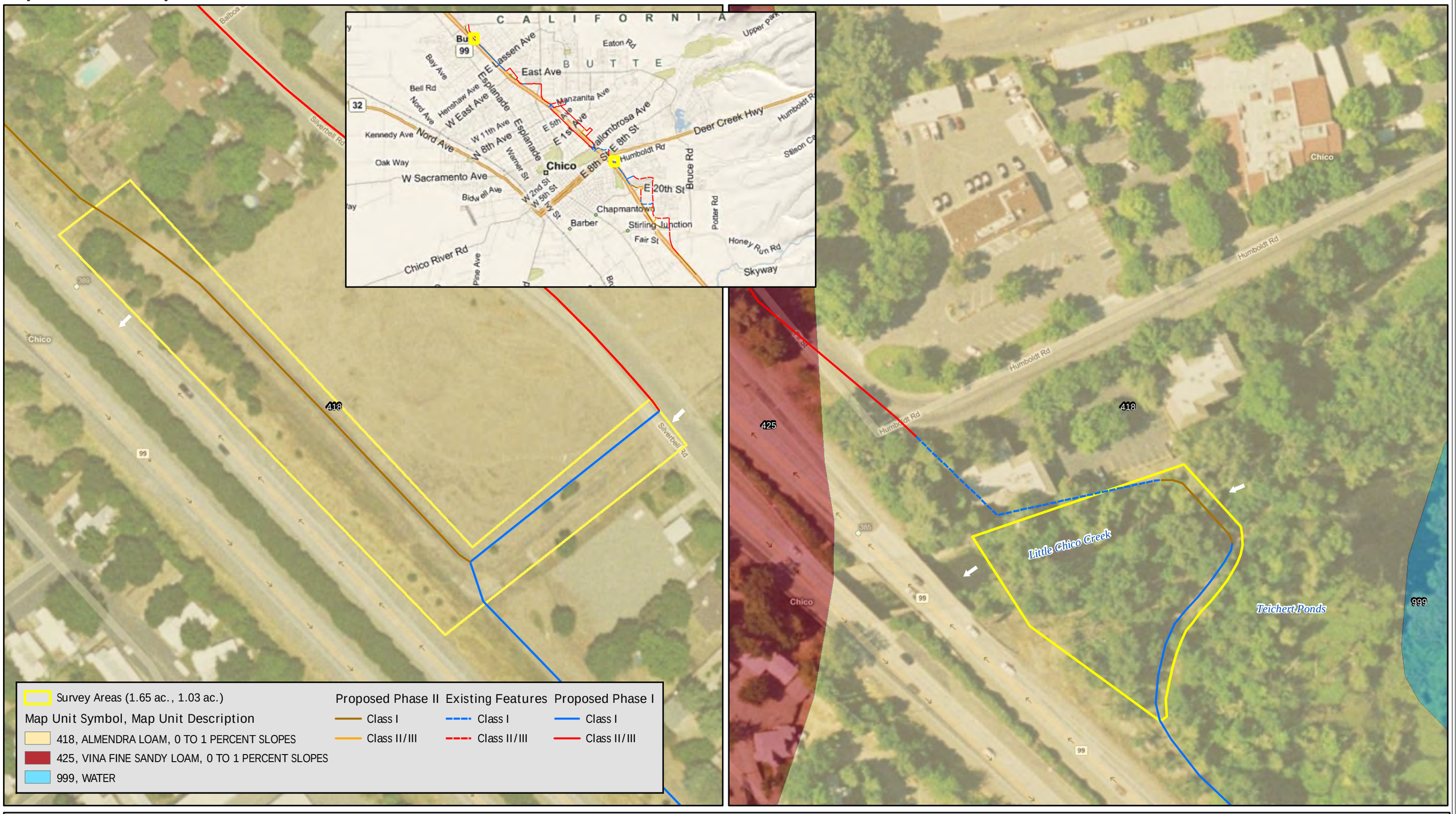
Determination of Hydrophytic Vegetation

The presence of hydrophytic vegetation was determined using the methods outlined in the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands* (1989) and the *Interim Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Arid West Region* (2006), which are approved by the USACE for use in conjunction with the *Wetlands Delineation Manual* (1987). Areas are considered to have positive indicators of hydrophytic vegetation if they pass the dominance test, meaning more than 50 percent of the dominant species are OBL, FACW, FAC (Reed 1988). Plant species were identified to the lowest taxonomy possible.

Determination of Hydric Soils

Soil survey information was reviewed for the survey area and the Natural Resources Conservation Service (NRCS) database was consulted on the local soil conditions. The use of hydric soil indicators, as outlined in the *Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Arid West Region* (2008), was applied to all soil samples. Official soil series descriptions are provided in **Appendix A** and the distribution of soil map units for the site is shown in **Figure 3**.

City of Chico, SR-99 Bicycle Path **Soils Characterization**



Soils derived from NRCS
Aerial: Microsoft
Map Date: September 10, 2009

Feet
0 200 400

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Figure 3

Determination of Wetland Hydrology

Wetland hydrology was determined to be present if a site supported one or more of the following characteristics:

- Landscape position and surface topography (e.g. position of the site relative to an up-slope water source, location within a distinct wetland drainage pattern, and concave surface topography);
- Inundation or saturation for a long duration either inferred based on field indicators or observed during repeated site visits; and
- Residual evidence of ponding or flooding resulting in field indicators such as scour marks, sediment deposits, algal matting, and drift lines.

The presence of water or saturated soil for approximately 5 to 12.5 percent of the growing season typically creates anaerobic conditions in the soil, and these conditions affect the types of plants that can grow and the types of soils that develop (Environmental Laboratory 1987).

Determination of Ordinary High Water Mark

The lateral extent of non-tidal water bodies (e.g. intermittent streams) were based on the ordinary high water mark (OHWM), which is "the line on the shore established by the fluctuations of water" (USACE 2005). The OHWM was determined based on physical characteristics of the area, including scour, multiple observed flow events (from current and historical aerial photos), shelving, changes in the character of soil, presence of mature vegetation, deposition, and topography. Due to the wide extent of some floodplains, adjacent riparian areas characterized by hydric soils, hydrophytic vegetation, and hydrology may be included within the OHWM of a non-tidal water body.

Jurisdictional Boundary Determination and Acreage Calculation

The wetland-upland boundary was determined based on the presence or inference of positive indicators of all mandatory criteria. On September 8, 2009 Gallaway Consulting biologists Brooks Taylor and Trish Ladd conducted the field delineation and prepared the map and acreage calculations (**Figure 4**). The spatial data obtained during the preparation of this delineation was collected using a Trimble GeoXT Global Positioning System (GPS) Receiver on September 8, 2009. The maximum position dilution of precision (PDOP) during data collection was 7.5. No readings were taken with fewer than 5 satellites. Point data locations were recorded for 25 seconds at a rate of 1 position per second. Area and line data was recorded at a rate of 1 position per second while walking at a slow pace. All GPS data was differentially corrected for maximum accuracy using the nearest National Geodetic Survey's Continuously Operating Reference Station (CORS).

City of Chico, SR-99 Bicycle Path — **Draft Delineation of the Waters of the U.S.**

Wetland Features						
Type	Adjacency	Label	Avg. Width (ft.)	Length (ft.)	Area (ft.^{2})	Acres
Riparian		WF01	n/a	n/a	14296.559	0.328
Riparian		WF02	n/a	n/a	6836.525	0.157
			Riparian Total =	n/a	21133.084	0.485
			Total of All WF =	n/a	21133.084	0.485
Other Waters of the U.S.						
Type	Designation	Label	Avg. Width (ft.)	Length (ft.)	Area (ft.^{2})	Acres
Intermittent	RPW	OW03	30	266.393	7879.931	0.181
Ditch	NRPW	OW01	15	241.021	3615.314	0.083
Ditch	NRPW	OW02	10	510.936	5109.360	0.117
			RPW Total =	266.393	7879.931	0.181
			NRPW Total =	751.957	8724.674	0.200
			Total of all OWOTUS =	1018.350	16604.606	0.381
			Total of OWOTUS and WF=	1018.350	37737.690	0.866

All features in this document to remain preliminary
until written verification from the USACE.
Survey: TL (09/08/09)
Aerial: Microsoft
Map Date: September 10, 2009

Feet
0 200 400

GALLAWAY CONSULTING
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Figure 4

Results

A total of 0.866 acres of pre-jurisdictional waters of the U.S. were delineated within the Project area. The types of waters of the U.S. identified on-site are distinguished as Other Waters of the United States and Jurisdictional Riparian (**Table 1**). These features are mapped at a 1" to 200' scale and are presented in **Figure 4**. Waters of the U.S. acreages presented in this report should be considered preliminary, subject to review and modification by the USACE during the wetland delineation verification process. The wetlands, and the data of interpretation used to delineate their jurisdictional boundaries are described below. Field data sheets are available in **Appendix B.**

Table 1. Jurisdictional wetland totals delineated within the SR99 Bike Path Project Area.

Wetland Features						
Type	Adjacency	Label	Avg. Width (ft.)	Length (ft.)	Area ($ft.^2$)	Acres
Riparian		WF01	n/a	n/a	14296.559	0.328
Riparian		WF02	n/a	n/a	6836.525	0.157
			Riparian Total =	n/a	21133.084	0.485
			Total of All WF =	n/a	21133.084	0.485
Other Waters of the U.S.						
Type	Designation	Label	Avg. Width (ft.)	Length (ft.)	Area ($ft.^2$)	Acres
Intermittent	RPW	OW03	30	266.393	7879.931	0.181
Ditch	NRPW	OW01	15	241.021	3615.314	0.083
Ditch	NRPW	OW02	10	510.936	5109.360	0.117
			RPW Total =	266.393	7879.931	0.181
			NRPW Total =	751.957	8724.674	0.200
			Total of all OWOTUS =	1018.350	16604.606	0.381
			Total of OWOTUS and WF=	1018.350	37737.690	0.866

Jurisdictional Features

Jurisdictional Riparian

Jurisdictional riparian habitats occur in California's Central Valley and lower foothills along the Cascades, Sierra Nevada and Coast ranges. All features classified as riparian wetlands display positive indicators for wetland hydrology including saturation in the upper twelve inches and distinct drainage patterns. They are generally associated with low flow, flood plains and gentle topography. The canopy cover contains a mix of cottonwood, sycamore and valley oak that provide a cover of 20 to 80 percent. The subcanopy often includes various willows, alders and maples. In addition to a subcanopy, a vine understory often occurs, which includes blackberry, grapes, poison oak, and wild rose. Occasionally an herbaceous layer with various shade tolerant grasses exists. The transition to adjacent non-riparian habitat is usually abrupt; and is usually associated with agriculture, grassland, oak woodland and riverine habitats. Riparian habitats

provide food, water, migration and dispersal corridors, and escape, nesting, and thermal cover for an abundance of wildlife. At least 50 amphibians and reptiles occur in lowland riparian systems. Many are permanent residents; others are transient or temporal visitors. In one study conducted on the Sacramento River, 147 bird species were recorded as nesters or winter visitants. Additionally, 55 species of mammals are known to use California's Central Valley riparian communities (Mayer 1988). The Project area supports a margin of riparian vegetation totaling 0.485 acres within the boundaries of the Little Chico Creek survey area.

Other Waters of the United States

Other waters of the United States (OWOTUS) are seasonal or perennial water bodies, including lakes, stream channels, drainages, ponds, and other surface water features that exhibit an ordinary high-water mark but lack positive indicators for one or more of the three wetland parameters (*i.e.,* hydrophytic vegetation, hydric soil, and wetland hydrology) (33 CFR 328.4). The above definition was applied while delineating all OWOTUS features on-site. Drainages exhibited an ordinary high water mark and contained bed, bank, and/or scour morphology. A total of 0.381 acres (1018.35 linear feet) of OWOTUS features were delineated within the Project area.

Traditional Navigable Waters
No TNW's within the Project area.

Relatively Permanent Waters
Relatively Permanent Waters within the Project area include Little Chico Creek (OW03). This feature totals 0.181 acres (266.393 linear feet).

Non-Relatively Permanent Waters
Non-relatively permanent waters within the Project include the SUDAD channel (OW01 and OW02). These features total 0.200 acres (751.957 linear feet).

Non-Jurisdictional Features
One non-jurisdictional (NJ) feature occurs on-site from Panama Avenue north to the SUDAD channel (OW01 and OW02) just south of Eaton Road. The SUDAD system was designed as a gravity drainage system comprised of a network of open channels of varying sizes that is operated and maintained by Butte County. When the drainage system was originally built in 1964, it was under the assumption that the northwestern portion of Chico would remain in agricultural and rural use (Northwest Chico Specific Plan). However, recent residential and commercial development within the SUDAD service area over the past decades have opted to construction on-site detention basins to mitigate for increase in peak flows to the SUDAD system. This trend away from agriculture and toward on-site detention basins has ultimately turned this section of the SUDAD system into a roadside ditch only receiving storm water runoff from the adjacent SR 99 to the west and residential properties to the east. This section of the SUDAD system lacks ordinary high watermark indicators and is heavily vegetated with upland grasses such as ripgut brome, wild oats, meadow barely and fescue. Topography of the ditch in this area is also relatively flat, further facilitating the holding of storm water run-off rather than flowing water north. Based on the lack of flow characteristics and hydrophytic vegetation within

the ditch it appears runoff merely empties into the ditch, quickly evaporates and does not normally flow directly or indirection into a TNW. Therefore, this feature has an insubstantial effect on the chemical, physical and/or biological integrity of TNWs and has been designated as NJ.

Significant Nexus

Little Chico Creek flows indirectly to the Sacramento River which is a TNW. Little Chico Creek has been diverted in numerous locations in its lower reaches. It reaches the Sacramento River after passing through the Butte Sink, which is an area where numerous creeks form a confluence before entering the Sacramento River. The SUDAD channel located in the northern portion of the Project area conveys water to Sycamore Creek. Sycamore creek is a tributary to the Sacramento River.

Soils

The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) 2006 *Soil Survey of Butte Area, California Parts of Butte and Plumas Counties* identified the Alamendra Loam 0-1 percent slopes as the only soil map unit occurring within features delineated in this report (**Appendix A**). No surface water was observed within the riparian areas. Field data sheets are available in **Appendix B**.

Vegetation

Wetland vegetation present within the assessment area includes: cottonwood *Populous fremontii* (FACW) willows *Salix sp.* (FACW-OBL), California sycamore *Platanus racemosa* (FACW), Oregon Ash *Fraxinus latifolia* (FACW), California wild grape *Vitis Californica* (FACW) and Himalayan blackberry *Rubus discolor* (FACW). Upland and wetland boundaries were fairly easy to identify based on topography. Upland vegetation included vetch *Astragalu sp.*, fiddleneck *Amsinckia sp*, tree of heaven, *Ailanthus altissima*, California poppy, *Eschscholzia californica*, and rat-tail fescue, *Bulpia myuros*.

Hydrology

Hydrology within the Project area being assessed in this report is limited to Little Chico Creek which conveys water from east to west toward the Sacramento River and the SUDAD channel which conveys water to Sycamore Creek. Little Chico Creek is a tributary to the Sacramento River though it is highly channelized and diverted in its lower reaches. There are additional hydrologic features within the SR99 Bike Path project however, due to pre-existing pedestrian/bicycle facilities over these features and the lack of potential to impact these features they are not discussed in this report.

Site Photos

SUDAD Channel (OW01) looking west toward OW02

SUDAD Channel (OW02) looking south.

Non-jurisdictional remnant irrigation ditch at intersection with East Lassen Street looking south.

Little Chico Creek (OW03) looking west.

Little Chico Creek (OW03) looking east, approximate location of proposed pedestrian/bicycle bridge.

Little Chico Creek and associated riparian habitat.

References

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Hickman, James C., editor. 1993. *The Jepson Manual Higher Plants of California*. University of California Press, Berkeley.

Natural Resources Conservation Service. 2007. On-line Soil Data Mart – Butte County Area Soil Survey Information (Hydric Soils and Soil Descriptions). Available on-line at http://soildatamart.nrcs.usda.gov/.

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Reed, P.B., Jr. 1988. National list of plant species that occur in wetlands: California (Region 1). U.S. Fish and Wildlife Service Biological Report. 88(26.10) 135pp.

United States Fish and Wildlife Service. 2006. Sacramento Fish and Wildlife Office: Endangered Species Program, Species and Habitat Information. Sacramento, CA.

U.S. Army Corps of Engineers. 2005. Regulatory Guidance Letter: Ordinary High Water Mark Identification.

U.S. Army Corps of Engineers and U.S. Environmental Protection Agency. 2007. *Jurisdictional Determination Form Instructional Guidebook*.

U.S. Army Corps of Engineers and U.S. Environmental Protection Agency. 2008. *Regional Supplement to the corps of Engineers Wetland Delineation manual: Arid West Region (Version 2.0)*

U.S. Department of Agriculture (USDA). 2006. *Soil Survey of Butte Area, California Parts of Butte and Plumas Counties.* Natural Resources Conservation Service.

Wetland Training Institute. 1995. Field guide for wetland delineation: 1987 Corps of Engineers Manual (WTI 95-3). Poolsville, MD.

Butte Area, California, Parts of Butte and Plumas Counties

418—ALMENDRA LOAM, 0 TO 1 PERCENT SLOPES

Map Unit Setting

Elevation: 110 to 230 feet
Mean annual precipitation: 20 to 26 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 245 to 255 days

Map Unit Composition

Almendra, loam, and similar soils: 85 percent
Minor components: 15 percent

Description of Almendra, Loam

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy alluvium derived from igneous, metamorphic and sedimentary rock

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 2.83 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 3.0 mmhos/cm)
Available water capacity: High (about 9.5 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability (nonirrigated): 3c

Typical profile

0 to 4 inches: Loam
4 to 14 inches: Loam
14 to 29 inches: Loam
29 to 40 inches: Loam
40 to 52 inches: Loam
52 to 74 inches: Very fine sandy loam
74 to 86 inches: Very fine sandy loam

Minor Components

Conejo, clay loam
Percent of map unit: 5 percent
Landform: Alluvial fans

Unnamed, water table 30 to 72 inches
Percent of map unit: 3 percent
Landform: Alluvial fans

Unnamed, weak cementation below 40 inches
Percent of map unit: 3 percent
Landform: Alluvial fans

Vina, fine sandy loam
Percent of map unit: 2 percent
Landform: Alluvial fans

Charger
Percent of map unit: 1 percent
Landform: Alluvial fans

Chico
Percent of map unit: 1 percent
Landform: Fan terraces

Data Source Information

Soil Survey Area: Butte Area, California, Parts of Butte and Plumas Counties
Survey Area Data: Version 9, Jun 2, 2009

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: SR99 Bike Path | City/County: Chico/Butte County | Sampling Date: 9/10/2009

Applicant/Owner: City of Chico | State: CA | Sampling Point: WF01, WF02

Investigator(s): Brooks Taylor | Section, Township, Range: 25 T22N R1E

Landform (hillslope, terrace, etc.): floodplane | Local relief (concave, convex, none): | Slope (%): 15

Subregion (LRR): C - Mediterranean California | Lat: 39 44 03.99 | Long: -121 48 59.65 | Datum: NAD 83

Soil Map Unit Name: Almendra Loam 0-1% slopes | NWI classification: Riparian

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ○ No ◉ (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ◉ No ○

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ◉	No ○	
Hydric Soil Present?	Yes ◉	No ○	**Is the Sampled Area within a Wetland?** Yes ◉ No ○
Wetland Hydrology Present?	Yes ◉	No ○	

Remarks:

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Platanus racemosa*	65	Yes	FACW
2. *Populous fremontii*	15	Yes	FACW
3. *Fraxinus latifolia*	15	Yes	FACW
4.			
	95 %		
Sapling/Shrub Stratum			
1. *Salix sp.*	45	Yes	FACW
2.			
3.			
4.			
5.			
Total Cover:	45 %		
Herb Stratum			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	%		
Woody Vine Stratum			
1. *Rubus discolor*	45	Yes	FACW
2. *Vitis Californica*	45	Yes	FACW
Total Cover:	90 %		

% Bare Ground in Herb Stratum 0 % | % Cover of Biotic Crust %

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	0
FACW species	230	x 2 =	460
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	230 (A)		460 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☒ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ◉ No ○

Remarks:

SOIL

Sampling Point: WF01, W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture[3]	Remarks
1	7.5YR 2.5/2	100					Sandy Loam	sandy/organic layer
1-10	7.5YR 3/3	10					Sandy Loam	90% cobble

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

[3]Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[4]

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[4]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present? Yes ◉ No ○

Remarks: soils sample taken within highwater mark of Little Chico Creek

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☒ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (**Nonriverine**)
- ☐ Sediment Deposits (B2) (**Nonriverine**)
- ☐ Drift Deposits (B3) (**Nonriverine**)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☒ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☒ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☒ Drift Deposits (B3) (**Riverine**)
- ☒ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ◉ No ○

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Riparian area located within high water mark of Little Chico Creek

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: SR99 Bike Path | City/County: Chico/Butte County | Sampling Date: 9/10/2009

Applicant/Owner: City of Chico | State: CA | Sampling Point: U001

Investigator(s): Brooks Taylor | Section, Township, Range: 25 T22N R1E

Landform (hillslope, terrace, etc.): upland | Local relief (concave, convex, none): | Slope (%): 15

Subregion (LRR): C - Mediterranean California | Lat: 39 44 03.99 | Long: -121 48 59.65 | Datum: NAD 83

Soil Map Unit Name: Almendra Loam 0-1% slopes | NWI classification: upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes (●) No ( ) (If no, explain in Remarks.)

Are Vegetation [ ] Soil [ ] or Hydrology [ ] significantly disturbed? Are "Normal Circumstances" present? Yes (●) No ( )

Are Vegetation [ ] Soil [ ] or Hydrology [ ] naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( )	No (●)	
Hydric Soil Present?	Yes ( )	No (●)	**Is the Sampled Area within a Wetland?** Yes ( ) No (●)
Wetland Hydrology Present?	Yes ( )	No (●)	

Remarks:

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Platanus racemosa*	45	Yes	FACW
2. *Populous fremontii*	15	Yes	FACW
3.			
4.			
	60 %		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:	%		
Herb Stratum			
1. *Astragula sp.*	15	Yes	FACU
2. *Amsinckia sp.*	10		UPL
3. *Ailanthus altissima*	20	Yes	FACU
4. *Bulpia myuros*	10	Yes	UPL
5.			
6.			
7.			
8.			
Total Cover:	55 %		
Woody Vine Stratum			
1.			
2.			
Total Cover:	%		

% Bare Ground in Herb Stratum 0 % | % Cover of Biotic Crust %

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 40.0 % (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	0
FACW species	60	x 2 =	120
FAC species		x 3 =	0
FACU species	35	x 4 =	140
UPL species	20	x 5 =	100
Column Totals:	115 (A)		360 (B)

Prevalence Index = B/A = 3.13

Hydrophytic Vegetation Indicators:

- (●) Dominance Test is >50%
- (●) Prevalence Index is ≤3.0[1]
- [ ] Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ( ) No (●)

Remarks:

SOIL

Sampling Point: U001

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture[3]	Remarks
8	7.5YR 3/3	10					loamy sand	90% cobble

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

[3]Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:[4]

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[4]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ○ No ◉

Remarks: soil sample taken within previously graded roadway adjacent to riparian area. This area has been used for gravel mining in the past and is highly disturbed. Extensive cobble made soil sampling difficult.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (**Nonriverine**)
- ☐ Sediment Deposits (B2) (**Nonriverine**)
- ☐ Drift Deposits (B3) (**Nonriverine**)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches): _____

Water Table Present? Yes ○ No ◉ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches): _____

Wetland Hydrology Present? Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Upland area adjacent to riparian area and Tiechert Ponds.