Final Environmental Impact Report

Alamo Creek and Ulatis Creek Detention Basins Project

Volume 1 of 2: Response to Comments

State Clearinghouse No. 2010022023

City of Vacaville
650 Merchant Street
Vacaville, CA 95688
(707) 449-5170

February 2011

Final Environmental Impact Report

Alamo Creek and Ulatis Creek Detention Basins Project

Volume 1 of 2: Response to Comments

State Clearinghouse No. 2010022023

Lead Agency:

City of Vacaville
650 Merchant Street
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February 2011

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Chapter 1
Introduction

1.1 OVERVIEW

This Response to Comments document has been prepared to address comments received by the City of Vacaville (City/Lead Agency) on the Draft Environmental Impact Report (Draft EIR) for the proposed Alamo Creek and Ulatis Creek Detention Basins Project (Proposed Project). The Draft EIR was submitted to the State Clearinghouse on October 25, 2010 (SCH# 2010022023). This Response to Comments together with the Draft EIR, as revised, comprises the Final EIR.

An EIR is an informational document that must be considered by the Lead Agency prior to project approval.

CEQA *Guidelines* Section 15132 specifies that the Final EIR shall consist of:

- The Draft EIR or a revision of the draft (Draft EIR together with Chapter 4.0 of this Final EIR Response to Comments).
- Comments and recommendations received on the Draft EIR either verbatim or in summary (Chapter 2.0 of this Final EIR Response to Comments).
- A list of persons, organizations, and public agencies commenting on the Draft EIR (Chapter 2.0 of this Final EIR Response to Comments).
- Responses of the Lead Agency to significant environmental points raised in the review and consultation process (Chapters 3.0 and 4.0 of this Final EIR Response to Comments).
- Any other information added by the Lead Agency.

1.2 PUBLIC PARTICIPATION PROCESS

The process of environmental review for the Proposed Project was initiated with public release of the Notice of Preparation (NOP) on February 8, 2010. A scoping meeting was held at the City Council Chambers, City Hall on March 1, 2010. The Notice of Availability (NOA) for the Draft EIR was released on October 25, 2010. The NOA announced a 45-day comment period running from October 25, 2010 to December 8, 2010, as well as a public meeting on November 18, 2010, at the City Council Chambers, City Hall, 650 Merchant Street, Vacaville.

The public comment period provides an opportunity for interested public and private parties to provide input regarding the completeness and adequacy of an EIR. CEQA Guidelines Section 15151 addresses the standards by which EIR adequacy is judged:

> An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

CEQA Guidelines Section 15204(a) encourages parties to focus comments on the "sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated." Commenters are advised:

> Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects. At the same time, reviewers should be aware that the adequacy of an EIR is determined in terms of what is reasonably feasible, in light of factors such as the magnitude of the project at issue, the severity of its likely environmental impacts, and the geographic scope of the project. CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commenters. When responding to comments, lead agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the EIR.

1.3 RESPONSE TO COMMENTS ORGANIZATION

This Response to Comments document consists of this introduction and the chapters outlined below:

Chapter 2, Comments on the Draft EIR – This chapter includes a list of all agencies, organizations, and individuals who submitted written comments during the public review period for the Draft EIR. The list is followed by copies of original written comments received during the public review period for the Draft EIR as well as a Record of Public Comments taken at the Public Meeting. Comment letters are each assigned a number, and individual comments are bracketed and numbered in the margin.

Chapter 3, Responses to Comments - This chapter provides individual responses to each written comment submitted during the public review period for the Draft EIR. Responses are keyed to the bracketed comment numbers provided in Chapter 2.0.

Chapter 4, Text Revisions to the Draft EIR – This chapter presents any revisions to the Draft EIR text that were made in response to comments received during the public review period for the Draft EIR. These revisions are organized by the section and page number as they appear in the Draft EIR. Additions are indicated with an underline (e.g. new text) and deletions are designated by with a strikethrough (e.g. ~~deleted text~~).

Chapter 5, Mitigation Monitoring and Reporting Plan - This chapter presents the Mitigation Monitoring and Reporting Plan for the Proposed Project.

Chapter 2
Comments on the Draft EIR

This chapter contains written comments that were received during the public review period for the Draft EIR prepared for the Alamo Creek and Ulatis Creek Detention Basins Project (Proposed Project). The Draft EIR was submitted to the State Clearinghouse (SCH#2010022023) and released for public and agency review for a 45-day review and comment period on October 25, 2010. The comment period closed on December 8, 2010. A total of seven comment letters were received by the City of Vacaville (City) in response to the Draft EIR during the comment period. The agencies, organizations and individuals who provided comments on the Draft EIR are listed in **Table 1**. Individual comment letters are provided following this table. As discussed in **Section 1.0**, each individual letter and comment has been provided a number in the right-hand margin. This number is cross-referenced with a specific response in **Section 3.0**.

Table 1. Persons, Organizations, and Public Agencies Commenting in Writing

Comment Letter Number	Name/Individual(s)	Agency/Organization	Date
1	Michael G. Waggoner	Department of Water Resources	11/24/2010
2	Matt Tuggle	Solano County Department of Resource Management	12/7/2010
3	Robert Macaulay	Solano Transportation Authority	12/7/2010
4	Scott Wilson	Department of Fish and Game	12/8/2010
5	Justin Hopkins	Solano Irrigation District	11/8/2010
6	James Herota	Central Valley Flood Protection Board	12/16/2010
7	Scott Morgan	State Clearinghouse	12/14/2010

Additional opportunity to comment on the Draft EIR was provided at the November 18, 2010, Draft EIR Public Meeting. A summary of the proceedings, including comments and questions raised in the meeting, is included at the end of this chapter. Individual comments raised at the meeting have been provided a number in the right-hand margin which is cross-referenced with a specific response in **Section 3.0**.

None of the comments received on the Draft EIR nor the responses thereto indicate new significant impacts or significant new information that would require recirculation of the Draft EIR pursuant to CEQA Guidelines Section 15088.5.

COMMENT LETTER 1: MICHAEL G. WAGGONER, CHIEF FIELD ENGINEERING BRANCH DIVISION OF SAFETY OF DAMS, DEPARTMENT OF WATER RESOURCES

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY

ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF WATER RESOURCES
1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791

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NOV 30 2010

NOV 24 2010

CITY OF VACAVILLE
PUBLIC WORKS
ENGINEERING SVC

Ms. Deborah Faaborg, Environmental Project Manager
City of Vacaville Public Works Department
650 Merchant Street
Vacaville, California 95688

SCH Number 2010022023, Draft Environmental Impact Report for the Alamo Creek and Ulatis Creek Detention Basins Project
Solano County

Dear Ms. Faaborg:

We have reviewed the subject Notice and Draft Environmental Impact Report for this project, which includes the construction of two separate jurisdictional size dams. As defined in Sections 6002 and 6003, Division 3, of the California Water Code, dams 25 feet or higher with a storage capacity of more than 15 acre-feet, and dams higher than 6 feet with a storage capacity of 50 acre-feet or more are subject to State jurisdiction. The dam height is the vertical distance measured from the maximum possible water storage level to the downstream toe of the barrier.

An application has been submitted for the proposed construction of Alamo Creek Detention Basin Dam. We are currently working with the owner and their consultant to resolve all dam safety related issues prior to approval of the application. Sharon Tapia, our Design Engineering Branch Chief, is responsible for the application process and can be reached at (916) 227-4660. 1-1

No application has been received yet for the construction of Ulatis Creek Detention Basin Dam. Based on the information provided, this dam will be approximately 14 feet high and will impound 544 acre-feet of water. A separate construction application, together with plans and specifications, will therefore be required. All dam safety related issues must be resolved prior to approval of the application, and the work must be performed under the direction of a Civil Engineer registered in California.

If you have any questions or need additional information, you may contact Office Engineer Randy Fessler at (916) 227-4601 or Regional Engineer Andrew Mangney at (916) 227-4631.

Sincerely,

Michael Waggoner

Michael G. Waggoner, Chief
Field Engineering Branch
Division of Safety of Dams

cc: (See attached list.)

cc: Ms. Nadell Gayou
Resources Agency Project Coordinator
Environmental Review Section
Division of Statewide Integrated Water Management
901 P Street
Sacramento, California 95814

Governor's Office of Planning and Research
State Clearinghouse
Post Office Box 3044
Sacramento, California 95812-3044

COMMENT LETTER 2: MATT TUGGLE, SENIOR CIVIL ENGINEER, SOLANO COUNTY DEPARTMENT OF RESOURCE MANAGEMENT

SOLANO COUNTY
Department of Resource Management
Public Works Engineering
675 Texas Street, Suite 5500
Fairfield, CA 94533
www.solanocounty.com

Telephone No.: (707) 784-6065
Fax No.: (707) 784-2894

Bill Emlen, Director
Clifford K. Covey, Assistant Director

December 7, 2010

City of Vacaville Public Works Department
Attn: Deborah Faaborg, Environmental Project Manager
650 Merchant Street
Vacaville, CA 95688

Re: Comments on Draft Environmental Impact Report
Alamo Creek and Ulatis Creek Detention Basins Project

Dear Ms. Faaborg:

We have reviewed the City of Vacaville's (City) Draft Environmental Impact Report (EIR) for the Alamo Creek and Ulatis Creek Detention Basins Project. Solano County supports the City's effort to create a flood control system that will alleviate the flooding that occurs in the City. However, the Draft Environmental Impact Report does not adequately address all the impacts to the County, and the potential mitigation measures that need to be considered for this project. The following are the County's comments:

Chapter 3 – Project Description:

1) Sections 3-4.1 and 3-4.2 note that up to 950,000 cubic yards of soil will be "trucked offsite to a suitable disposal area as determined by the contractor and approved by the City and County." The impacts and mitigation measures associated with exporting 950,000 cubic yards of soil to an offsite area need to be addressed before the soil is exported. The EIR should note that the export of that material to unincorporated Solano County requires the issuance of a grading permit from the County, as well as appropriate environmental clearance prior to disposal. Alternatively, the City could modify the language in the EIR to state that the soil will be disposed of in an area that is <u>not</u> within unincorporated Solano County, and that is already environmentally approved to accept that quantity of fill. 2-1

Building & Safety
David Cliche,
Chief Building Official

Planning Services
Mike Yankovich
Program Manager

Environmental Health
Terry Schmidtbauer
Program Manager

Administrative Services
Suganthi Krishnan
Senior Staff Analyst

Public Works Engineering
Paul Wiese
Engineering Manager

Public Works Operations
Wayne Spencer
Operations Manager

2) If any part of the 950,000 yards is to be placed on agriculturally zoned lands in the unincorporated county, then the EIR should note that the necessary environmental clearance will need to discuss the impacts on agriculturally zoned lands, including the potential loss of productive agricultural lands, and any mitigation measures proposed. 2-2

3) With regard to post-construction use of the property in Sections 3-4.1 and 3-4.2, the property is zoned agricultural in the County's General Plan. 2-3

4) Section 3-4.6 notes that the contractor will identify haul routes and delivery locations. The haul routes need to be identified prior to the export of soil in order to properly assess the potential impacts to traffic safety, road damage, and nuisance to local property owners. Identification of the haul routes is necessary for the City to mitigate the impacts to the County road system by ensuring that the City will repair damages caused to the County road system by the movement of exported material. 2-4

Chapter 4 – Environmental Evaluation:

1) Section 4-4.5 notes that no impacts are associated with tree preservation policies or ordinances, and that Solano County has not adopted a tree ordinance. The EIR should note that Solano County's adopted Road Improvement and Land Development Requirements, Section 1-2.15, require a minimum 2:1 tree replacement ratio for trees removed due to road related work. In addition, the County's General Plan values heritage oaks, and the project should make every effort to protect trees meeting this definition, including replacing such trees that require removal at a minimum 2:1 ratio. 2-5

2) Section 4-9.1 should be revised to accommodate comments noted above. 2-6

3) Section 4-9.1 notes that Vaca Valley Road and Pleasants Valley road will most likely be affected by offsite trucking. The EIR should note that Cherry Glen Road, Bucktown Lane and Rogers Lane will also likely be affected. 2-7

4) Bucktown Lane is a 14-16 foot wide road with unimproved shoulders, which is too narrow to facilitate two lanes of traffic involving a significant truck hauling operation. The intersections of Bucktown Lane and Rogers Lane with Vaca Valley Road are also too narrow for truck turning movements associated with a significant truck hauling operation. The EIR should require the project to widen the affected portion of Bucktown Lane to 20 feet and construct intersection improvements, or require other project alternatives acceptable to the County, for mitigating the impact of truck hauling operations on unsuitable roadways. 2-8

5) During the City's recent Encinosa Basin project truck haul, the County had two traffic related problems that require mitigation, and that should be addressed in the EIR:

   a. The stop sign on Cherry Glen Road at the intersection of Pleasants Valley Road was knocked down several times due to haul trucks cutting the corner. The EIR should propose improvements to the intersection to allow this location to be safely utilized as a haul route. 2-9

b. The County received numerous complaints about haul truck speeding and safety issues related to trucks passing cars on Pleasants Valley Road. The County placed speed indicators on the road in order to slow trucks down, with limited success. The EIR should propose specific mitigation measures to ensure that the contractor's haul drivers understand and respect the established speed limit. 2-10

6) Section 4-9.5.3 does not provide the County with reasonable assurance that all road damage impacts from the project will be mitigated. After lengthy discussions, the City and the County came to agreement on the City's recent Encinosa Basin project for road assessment and damage repair. The terms of that agreement, which include the following, should be utilized on this project and included in the DEIR:

a. The City and County shall enter into an encroachment permit agreement that requires the City and its contractor to repair any damages caused to the County road system by the project including the off-hauling of soil, that specifies the reimbursement by the City of all project costs incurred by the County, that provides for liability insurance, and that provides bonding or other financial assurances for the cost of repairing County road damages, and that includes other significant encroachment permit terms to the satisfaction of the County. 2-11

b. The City and County shall endeavor to agree on reasonable terms and the scope for the repairs to the County road system for damages caused by the project; however, the final allocation of responsibility for repairs and the scope of the repairs shall lie solely with the County.

We appreciate the opportunity to comment on this phase of the project, and look forward to seeing this important flood control project being completed. Please call me at (707) 784-2797 if you have any questions.

Sincerely,

Matt Tuggle
Senior Civil Engineer

R:\PWENG\USERS\MTuggle\Projects\Alamo & Ulatis Creek Detention Basins\101207 Detention Basins DEIR Comment Letter.doc

COMMENT LETTER 3: ROBERT MACAULAY, DIRECTOR OF PLANNING, SOLANO TRANSPORTATION AUTHORITY

Solano Transportation Authority
...working for you!

SOLANO TRANSPORTATION AUTHORITY

Member Agencies:
Benicia • Dixon • Fairfield • Rio Vista • Suisun City • Vacaville • Vallejo • Solano County

One Harbor Center, Suite 130, Suisun City, CA 94585-2473 • Telephone (707) 424-6075 / Facsimile (707) 424-6074
Email: staplan@sta-snci.com • Website: solanolinks.com

December 7, 2010

Deborah Faaborg
Environmental Project Manager
City of Vacaville Public Works Department
650 Merchant Street
Vacaville, CA 95688

Subject: Comments on Alamo Creek and Ulatis Creek Detention Basins Project Draft Environmental Impact Report

Thank you for the opportunity to provide comments on the Alamo Creek and Ulatis Creek Detention Basins Project Draft Environmental Impact Report (DEIR). In our role as the Congestion Management Agency for Solano County, the Solano Transportation Authority (STA) offers the following comments on the DEIR:

Bicycle Connectivity to the Solano County Bikeway Network
Overall, we are in agreement with the project report's findings. The potential impact is less-than-significant to already minimal existing alternative transportation. Through this project, we find an opportunity to enhance the benefit to users of the roadways in the vicinity of the area. 3-1

Impact 9-3: identifies damage to existing roads as a result of construction. The conclusion, found on page 4-9-12 states that "Implementation of Mitigation Measure 9-3 would reduce this impact to a less-than-significant level." We would like to suggest consideration for existing and future bicycle routes on impacted roads are included. Also, we suggest consideration of a trail network around the Basin to provide better accessibility in the area. With this assessment, consistency with adopted policies, plans, and programs supporting alternative transportation would be enhanced. 3-2

In addition, it would be helpful to identify bikeway improvements within the vicinity of the project already identified by City of Vacaville and Solano County, similar to that of Section 4-9.2.5 which identifies pedestrian capacity in the vicinity of the project. For example, Pleasants Valley Road and Vaca Valley Road are bicycle routes currently listed in the Solano Countywide Bicycle Plan and are part of the regional bikeway network. 3-3

The STA looks forward to your response and our continuing partnership with the City of Vacaville on improving transportation throughout Solano County. Please contact me at (707) 424-6006 if you have any questions or need clarification regarding these comments.

Sincerely,

R J Macaulay

Robert Macaulay, Director of Planning
Solano Transportation Authority

cc: STA Board

COMMENT LETTER 4: SCOTT WILSON, ACTING REGIONAL MANAGER, DEPARTMENT OF FISH AND GAME

State of California – The Natural Resources Agency
DEPARTMENT OF FISH AND GAME
Bay Delta Region
7329 Silverado Trail
Napa, CA 94558
(707) 944-5500
www.dfg.ca.gov

ARNOLD SCHWARZENEGGER, Governor
John McCamman, Director

December 8, 2010

Ms. Deborah Faaborg, Environmental Project Manager
City of Vacaville
650 Merchant Street
Vacaville, CA 95688

Dear Ms. Faaborg:

Subject: Alamo Creek and Ulatis Creek Detention Basins Project, Draft Environmental Impact Report, SCH #2010022023, City of Vacaville, Solano County

The Department of Fish and Game (DFG) has reviewed the City of Vacaville's (City) Alamo Creek and Ulatis Creek Detention Basins Project (Project) draft Environmental Impact Report (EIR). DFG is providing comments on the draft EIR as a Trustee Agency and Responsible Agency. As Trustee for the State's fish and wildlife resources, DFG has jurisdiction over the conservation, protection, and management of the fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of such species for the benefit and use by the people of California.

Project Description

The proposed Project area is located immediately west of the City and east of Pleasants Valley Road in an unincorporated portion of Solano County. The proposed Project includes the construction of two stormwater detention basins, one adjacent to Alamo Creek (Alamo site) and one adjacent to Ulatis Creek (Ulatis site). The Alamo site is located approximately 0.25 miles south of Vaca Valley Road and just west of Rogers Lane. The Ulatis site is located 0.25 miles north of Vaca Valley Road and just east of Bucktown Lane. The Alamo and Ulatis sites are approximately 79 and 50 acres in size, respectively, and are currently zoned for agricultural uses.

The purpose of the Project is to increase the detention capacity along the creek systems that convey stormwater run-off through the City, and reduce future flooding and damage to properties within urban areas during major storm events. Peak flows from large storm events would be directed out of the creek and into the basins for temporary storage. Detained water would be metered back into the system after a 24- to 72-hour period following storm subsistence. Each detention basin would include a surrounding berm, an inlet structure to convey flood flows from the creek to the basin, outlet pipes to meter the re-entry of detained flows back into the creek, and a spillway to provide for overflow stormwater to re-enter the creek should be capacity of the detention basin be exceeded. The maximum capacity of the Alamo and Ulatis basins would be 952 and 544 acre-feet, respectively. The Project sites are proposed to become open space land with the potential for agricultural cultivation, habitat creation and public recreational use.

Conserving California's Wildlife Since 1870

Ms. Deborah Faaborg
December 8, 2010
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Biological Resources

The draft EIR states that habitat types located within the Alamo site include an abandoned orchard (46.2 acres), non-native annual grassland (23.5 acres), riparian (2.5 acres) and seasonal drainages/riparian (3.3 acres). Approximately 2.5 acres of the Alamo site are developed residential areas. Habitat types located within the Ulatis site include non-native annual grassland (44.5 acres), riparian (3.7 acres), seasonal drainages/riparian (3.8 acres) and seasonal wetland (0.1-acre). The Ulatis site includes an unnamed tributary to Ulatis Creek as well as two "erosional features" that drain agricultural field run-off into Ulatis Creek. The riparian habitat at both sites is multi-layered with a dense canopy cover and is composed of a diversity of mature, native and non-native trees and shrubs. 4-1

Mitigation 4-1

The proposed Project area supports elderberry shrubs (*Sambucus* spp.), which act as host plants for valley elderberry longhorn beetle (*Desmocerus californicus dimorphus;* VELB) which is a federally-listed species. The draft EIR states that consultation with the U.S. Fish and Wildlife Service (USFWS) has been initiated. While seasonally-appropriate botanical surveys were conducted on the Alamo site in 2008, protocol-level botanical surveys should be conducted prior to the start of construction at the Ulatis site and prior to future maintenance work at both sites. Please refer to the recently revised DFG protocols for surveying and evaluating impacts to rare plants available at http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/Protocols_for_Surveying_and_Evaluating_Impacts.pdf 4-2

Mitigation 4-2 and 4-3

The draft EIR states that protocol-level surveys were conducted within the Project area in 2008 for the California red-legged frog (*Rana draytonii*; CRLF) which is federally-listed and considered a State Species of Special Concern (SSC). The Project area also provides suitable dispersal habitat for the foothill yellow-legged frog (*Rana boylii*; FYLF) which is an SSC and has been documented upstream of both the Alamo and Ulatis sites. No special-status frog species were documented during surveys. The western pond turtle (*Actinemys marmorata*; WPT), which is a SSC, was observed at the Ulatis site. Suitable aquatic and nesting habitat is found within or near both Project sites.

Surveys should be conducted within the Project area for CRLF, FYLF and WPT by a qualified biologist within 48 hours prior to construction. DFG should be consulted in the event that individuals of these species are found. A biological monitor should be present during construction work and check the work area, including equipment left on-site, for WPT or other sensitive wildlife species in case individuals have moved into the work area. Prior to construction work, a barrier fence should be installed surrounding the construction and equipment staging areas to protect adjacent riparian and wetland habitats. 4-3

WPT nests are typically dug in a substrate with high clay or silt fraction, and are usually very difficult to find. Suitable oviposition sites must have the proper thermal and hydric environment for incubation of the eggs. The excavation of a large volume of soil material as part of Project implementation could change the soil composition and render upland habitat

Ms. Deborah Faaborg
December 8, 2010
Page 3

unsuitable for WPT nesting. The EIR should assess the potential loss of WPT nesting habitat, and provide mitigation for any loss of habitat through preservation of occupied habitat that also offers nesting sites. 4-3 (cont.)

Mitigation 4-4
Both the Alamo and Ulatis watersheds support steelhead trout (*Oncorhynchus mykiss*) which is federally-listed and Chinook salmon (*Oncorhynchus tshawytscha*). The draft EIR indicates that the National Marine Fisheries Service has been consulted for listed anadromous salmonids for the Alamo site and that consultation will be required for the Ulatis site.

The proposed Project could have an adverse impact on adult and juvenile trout and salmon during migration and rearing. The inlet weir could act as a side channel and attract fish seeking refugia during high flow events, and the timing and amount of flow releases could affect fish migration. Increased sedimentation as a result of ground disturbance during construction and maintenance work could affect water quality and fish habitat both at the Project sites and further downstream. Capturing and diverting water run-off in a historic floodplain area could adversely affect riparian habitat. The EIR should include a hydrologic analysis of potential direct and indirect effects of reducing peak flows, and a flow release schedule. The draft EIR indicates that the Ulatis Creek detention basin could reduce peak flows by an average of 30% for 5-year, 10-year, 25-year, 50-year and 100-year storm events. Based on the EIR, it is not clear why capturing flows during the smaller and more frequent storm events is necessary. 4-4

Mitigation 4-6
The proposed Project area provides suitable nesting and foraging habitat for Swainson's hawk (*Buteo swainsoni*) which is designated as threatened under the California Endangered Species Act (CESA). The draft EIR indicates that the Swainson's hawk was observed foraging at the Ulatis site in April 2009. Pre-construction surveys for nesting migratory birds and raptors will be conducted prior to the start of construction activities, and the survey area will be a 0.25-mile radius surrounding each Project site. The draft EIR states that if nesting birds or raptors are documented within or adjacent to the Project sites, a protective buffer will be established surrounding the nest to avoid "take" (Fish and Game Code sections 3503 and 3503.5). 4-5

The Project description includes the removal of large trees located within the riparian zone and further upland. These trees are potential nest sites for Swainson's hawk and other raptors. The draft EIR states that the no-disturbance buffer will be maintained around an occupied nest tree until the end of the breeding season or until the young have fledged. If a nest tree is removed even during the non-breeding season, the loss of nesting habitat must be mitigated. The extent of the compensatory mitigation for any permanent or temporary impacts to known raptor nesting habitat should be determined by the Project proponent in consultation with DFG.

Ms. Deborah Faaborg
December 8, 2010
Page 4

The draft EIR indicates that Project implementation will result in the conversion of orchard and unmaintained non-native annual grassland to short annual grassland, seasonal wetland and/or hay crop. While orchards are considered low quality foraging habitat for Swainson's hawk, annual grasslands do provide an available prey base early in the nesting season when plant height is low. Flood-irrigated alfalfa with its typical multi-year cycle is considered high quality foraging habitat for the hawk. Low-growing crops such as tomato and beet also allow for the establishment of good rodent populations. Seasonal wetlands are not considered suitable foraging habitat for Swainson's hawk; therefore, if conversion of annual grassland to wetlands occurs as part of Project development, any loss of hawk foraging habitat should be appropriately mitigated. DFG recommends a minimum 1:1 replacement ratio for any loss of suitable hawk foraging habitat. Mitigation lands should be protected in perpetuity and provide for long-term management of Swainson's hawk habitat. 4-5 (cont.)

Mitigation requirements for special-status species should be determined in consultation with USFWS and DFG, and fully disclosed in the EIR prior to certification. Please be advised that a CESA Permit must be obtained if the Project has the potential to result in "take" of Swainson's hawk or other species listed under CESA, either during construction or over the life of the Project. Issuance of a CESA Permit is subject to California Environmental Quality Act (CEQA) documentation; therefore, the EIR must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will impact CESA listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA Permit.

Mitigation 4-9

The draft EIR indicates that the installation of the inlet weirs on Alamo and Ulatis Creeks will result in permanent impacts to a total of approximately 0.29 acres of riparian habitat. Installation of the outlet pipes on both creeks will result in temporary impacts to approximately 0.05 acres of riparian habitat. To compensate for permanent impacts to riparian vegetation at the inlet locations, the draft EIR includes mitigation to replant trees with native riparian species at a minimum 2:1 ratio. After completion of the final design for each basin, the City will prepare a revegetation plan that specifies the location, number, type and size of the plantings and includes a monitoring component.

Riparian zones maintain shade, protect against windthrow, produce litterfall, provide important migratory routes for wildlife, and serve to recruit in-stream woody debris which provides habitat, food and shelter for invertebrates and fish. Riparian vegetation also acts as a filter strip for sedimentation from erosion sources. To adequately mitigate for loss of riparian habitat to below a level of significance, DFG recommends a minimum 3:1 replacement ratio for trees and shrubs. The mitigation proposed for temporary impacts at the outlet locations includes replanting with native riparian shrubs. Trees are not proposed to be planted at these locations because of the potential for their root systems to undermine the structural integrity of the outlet pipes. Mitigation plantings must be of similar quality and have the capacity to serve the same wildlife function as the impact sites. Any tree removal is therefore considered a permanent impact and should be effectively mitigated either elsewhere within the Project area or off-site at a DFG-approved location. 4-6

Ms. Deborah Faaborg
December 8, 2010
Page 5

The EIR should include a detailed adaptive management and monitoring plan for each habitat type including riparian, wetland, stream and grassland. The plan should describe how agricultural crops would be managed. Potential direct or indirect impacts to resources from any future proposed recreational activities should be assessed and avoided or minimized. The restoration and mitigation lands associated with the Project should be protected in perpetuity under a conservation easement, and include an endowment fund for long-term resource management. 4-6 (cont.)

Lake and Streambed Alteration Agreement
DFG will require a Lake and Streambed Alteration Agreement (LSAA) with the City for the proposed Project-related activities on Alamo Creek, Ulatis Creek and tributaries. Notification is required for any activity that will divert or obstruct the natural flow, change the bed, channel, or bank including associated riparian resources or use material from the streambed. Issuance of an LSAA is subject to CEQA. DFG, as a responsible agency under CEQA, will consider the EIR for the Project. To obtain information about the LSAA notification process, please access our website at http://www.dfg.ca.gov/habcon/1600/; or to request a notification package, contact the Lake and Streambed Alteration Program at (707) 944-5520. 4-7

The EIR should include a map showing the location of tributaries and "erosional features," and describe the direct and indirect Project-related impacts to all aquatic features located within the Project area. To prevent Project-related streambed and bank erosion, there should be sufficient energy dissipation of stormwater return flows at the basin outlets. As part of the notification process, detailed construction designs for the inlet and outlet structures will be required. Engineering designs of both the diversion and outlet structures should consider and conform to the geomorphology and processes currently active in the streams. 4-8

If you have any questions, please contact Ms. Brenda Blinn, Environmental Scientist, at (707) 944-5541; or Mr. Liam Davis, Habitat Conservation Supervisor, at (707) 944-5529.

Sincerely,

for Scott Wilson
Acting Regional Manager
Bay Delta Region

cc: State Clearinghouse

Mr. Ryan Olah
U.S. Fish and Wildlife Service
2800 Cottage Way, Room W2605
Sacramento, CA 95825-1888

COMMENT LETTER 5: JUSTIN HOPKINS, ASSISTANT CIVIL ENGINEER, SOLANO IRRIGATION DISTRICT

From: Justin Hopkins [mailto:jhopkins@SIDWater.org]
Sent: Monday, November 08, 2010 10:52 AM
To: Deborah Faaborg
Subject: Detention Basins DEIR

Deborah,

I would like to thank you again for sending over a copy of the DEIR for review. I finally had some time to take a look at it, and appreciate the City taking the District facilities into consideration. The only comment I have is in regards to the description of the District facilities impacted by the Ulatis Creek Detention Basin site. I understand this is only an EIR and therefore very broad, but I would still like to make some clarification.

The Ulatis Creek Detention Basin site actually impacts two of the District's distribution pipelines, the Bucktown and Buck laterals. These laterals provide agricultural irrigation water and non-potable water for in home use. I don't know if this information warrants a change in the DEIR, but wanted to make you fully aware that the lines do provide year round water for in home use. Please feel free to contact me with any questions or if you require additional information. 5-1

Respectfully,

Justin Hopkins, E.I.T.
Assistant Civil Engineer
Solano Irrigation District
707.455.4007
Fax: 707.452.8557
jhopkins@sidwater.org

COMMENT LETTER 6: JAMES HEROTA, STAFF ENVIRONMENTAL SCIENTIST, CENTRAL VALLEY FLOOD PROTECTION BOARD

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY ARNOLD SCHWARZENEGGER, GOVERNOR

CENTRAL VALLEY FLOOD PROTECTION BOARD
3310 El Camino Ave., Rm. 151
SACRAMENTO, CA 95821
(916) 574-0609 FAX: (916) 574-0682
PERMITS: (916) 574-0685 FAX: (916) 574-0682

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CITY OF VACAVILLE
PUBLIC WORKS
ENGINEERING

December 14, 2010

Ms. Deborah Faaborg
City of Vacaville
650 Merchant Street
Vacaville, California 95688

Subject: State Clearinghouse (SCH) Number: 2010022023
Alamo Creek and Ulatis Creek Detention Basins Project
Draft Environmental Impact Report

Dear Ms. Faaborg:

Staff for the Central Valley Flood Protection Board has reviewed the subject document and provides the following comments:

The proposed project is located within the jurisdiction of the Central Valley Flood Protection Board (formerly known as The Reclamation Board). The Board is required to enforce standards for the construction, maintenance, and protection of adopted flood control plans that will protect public lands from floods. The jurisdiction of the Board includes the Central Valley, including all tributaries and distributaries of the Sacramento River and the San Joaquin River, and designated floodways (Title 23 California Code of Regulations (CCR), Section 2).

A Board permit is required prior to starting the work within the Board's jurisdiction for the following:

- The placement, construction, reconstruction, removal, or abandonment of any landscaping, culvert, bridge, conduit, fence, projection, fill, embankment, building, structure, obstruction, encroachment, excavation, the planting, or removal of vegetation, and any repair or maintenance that involves cutting into the levee (CCR Section 6);
- Existing structures that predate permitting or where it is necessary to establish the conditions normally imposed by permitting. The circumstances include those where responsibility for the encroachment has not been clearly established or ownership and use have been revised (CCR Section 6); 6-2
- Vegetation plantings that will require the submission of detailed design drawings; identification of vegetation type; plant and tree names (i.e. common name and scientific name); total number of each type of plant and tree; planting spacing and irrigation method that will be within the project area; a complete vegetative management plan for maintenance to prevent the interference with flood control, levee maintenance, inspection and flood fight procedures (Title 23, California Code of Regulations CCR Section 131).

Ms. Deborah Faaborg
December 14, 2010
Page 2 of 2

The permit application and Title 23 CCR can be found on the Central Valley Flood Protection Board's website at http://www.cvfpb.ca.gov/. Contact your local, federal and State agencies, as other permits may apply.

If you have any questions please contact me at (916) 574-0651, or by email at jherota@water.ca.gov.

Sincerely,

James Herota

James Herota
Staff Environmental Scientist
Floodway Protection Section

COMMENT LETTER 7: SCOTT MORGAN, DIRECTOR, STATE CLEARINGHOUSE

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit

Arnold Schwarzenegger
Governor

Cathleen Cox
Acting Director

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CITY OF VACAVILLE
PUBLIC WORKS
ENGINEERING

December 14, 2010

Deborah Faaborg/Fred Buderi
City of Vacaville
650 Merchant Street
Vacaville, CA 95688

Subject: Alamo Creek and Ulatis Creek Detention Basins
SCH#: 2010022023

Dear Deborah Faaborg/Fred Buderi:

The enclosed comment (s) on your Draft EIR was (were) received by the State Clearinghouse after the end of the state review period, which closed on December 8, 2010. We are forwarding these comments to you because they provide information or raise issues that should be addressed in your final environmental document. 7-1

The California Environmental Quality Act does not require Lead Agencies to respond to late comments. However, we encourage you to incorporate these additional comments into your final environmental document and to consider them prior to taking final action on the proposed project.

Please contact the State Clearinghouse at (916) 445-0613 if you have any questions concerning the environmental review process. If you have a question regarding the above-named project, please refer to the ten-digit State Clearinghouse number (2010022023) when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

RECORD OF PUBLIC COMMENTS: DRAFT EIR PUBLIC MEETING

Alamo Creek & Ulatis Creek Detention Basins Project Public Meeting for Draft EIR

Meeting Minutes
November 18, 2010 - 6:30 p.m.

City Staff
Deborah Faaborg, Environmental Project Manager, Vacaville Public Works Department
Peyman Behvand, Senior Planner, Vacaville Community Development Department
James Loomis, Associate Engineer, Vacaville Public Works Department
Shawn Cunningham, Assistant Director, Vacaville Public Works Department
Tawnia Skow, Senior Engineer, Vacaville Public Works Department
Becky Rozumowicz, Area West Environmental Inc.

Agenda:

1. Introduction and Meeting Objectives
2. Detention Basins Purpose, Need and Project Description
3. Overview of California Environmental Quality Act (CEQA) & Environmental Impact Report Process
4. Issues Addressed in the Draft Environmental Impact Report
5. Public Comments & Questions:

Linda Giannini, Mark Giannini and Craig Giannini, owners of 6526 Rogers Lane, attended the meeting. They noted concerns regarding the proposed Alamo Creek Detention Basin; specifically, the height of the berm, loss of views, tree removal, location of parking area and location of the access road around the basin. They asked for clarification regarding public access and fencing and expressed security and privacy concerns. They also inquired about the condition of Rogers Lane during construction and upon completion of the project. PM-1

Staff discussed project technical details with the Giannini family. The Gianninis received the meeting presentation handout and information on how to provide formal written comments on the Draft EIR.

The meeting was adjourned at 7:40 p.m.

Note: *The Notice of Availability of the Draft EIR, including the November 18, 2010 Public Meeting Notice was mailed to over 500 property owners and residents in the surrounding neighborhoods on October 22, 2010.*

Chapter 3
Response to Comments

The following responses have been prepared for each bracketed comment included in **Chapter 2.0** of this Response to Comments document.

COMMENT LETTER 1: MICHAEL G. WAGGONER, CHIEF FIELD ENGINEERING BRANCH DIVISION OF SAFETY OF DAMS, DEPARTMENT OF WATER RESOURCES, NOVEMBER 24, 2010

Comment 1-1

The commenter notes that the project includes the construction of two separate dams, which are both subject to State jurisdiction under Sections 6002 and 6003, Division 3, of the California Water Code. The commenter states that an application has been submitted for the proposed construction of Alamo Creek Detention Basin Dam and that they are working with the responsible parties to resolve dam safety issues prior to approving the application. The commenter further states that no application has been received for the construction of Ulatis Creek Detention Basin Dam and that a separate construction application will be required prior to construction. All dam safety issues must be resolved prior to approval of the application. Additionally, the work must be performed under the direction of a Civil Engineer registered in California.

Response 1-1

The City acknowledges that the Alamo and Ulatis Basins are under State jurisdiction based on the proposed storage capacity and berm heights for each of the basins. The City will continue to coordinate with the Department of Water Resources's Division of Safety of Dams during permit processing to obtain approval for the Alamo basin. Once funding for the Ulatis basin has been procured, the City will apply for a Division of Safety of Dams Permit and will comply with all requirements of the permit.

COMMENT LETTER 2: MATT TUGGLE, SENIOR CIVIL ENGINEER, SOLANO COUNTY DEPARTMENT OF RESOURCE MANAGEMENT, DECEMBER 7, 2010

Comment 2-1

The commenter notes that sections 3-4.1 and 3-4.2 of the Draft EIR state that up to 950,000 cubic yards of soil will be transported and disposed of in an area approved by the City of Vacaville (City) and Solano County (County). The commenter further states that, if transported material is dumped in unincorporated Solano County, the issuance of a grading permit would be required from the County. Additionally, receiving sites would need to have completed an environmental clearance prior to disposal. Alternatively, the letter suggests that the City could state that the soil will be disposed of in a location, other than the County, that is already approved to accept the quantity of the fill.

Response 2-1

The Draft EIR explains that the City and County are mutually exclusive of each others regulations (Sec. 4-2.3.3.2, Land Use and Agriculture). This would exempt the City from obtaining a grading permit from the County of Solano for the project. The City recognizes the concerns regarding the disposition of off-site disposal of excavated materials and has included an explanation in the Draft EIR project description which explains the requirements that will be imposed on the project contractor (Section 3-4.6, Construction Information, third paragraph). These requirements will be specifically applied by the City

through Special Provisions in the contract when the specific haul route and receiving site is determined by the contractor. The contractor is required to identify haul routes and delivery locations where excess soil from the sites will be deposited. Haul routes and evidence of permit compliance (including environmental clearance) at delivery locations will be submitted to the City and subject to review and approval by both the City and the County prior to commencement of offsite soil transport. Since this requirement is already a component of the described project, it was not necessary to include it as a project modification requirement in the Draft EIR in the form of a mitigation measure. With regard to the alternative proposed by the commenter that the City ensure that the excavated material not be disposed of in the unincorporated area of Solano County, this restriction would be unreasonable as it is not imposed equally on all jurisdictions where excavated material may be transported and disposed in the unincorporated area; in addition, the permitting and environmental clearance is required at any receiving location, regardless of jurisdiction. It should be noted that although the Draft EIR analyzes a worst-case scenario as if both basins would be constructed during the same year, it is unlikely that both basins would be constructed concurrently based on the current funding status for the Project. Therefore, it is more likely that each basin will be constructed independently and during different years and the total amount of excavated material to be hauled during any one year will be much less than 950,000 cubic yards as noted by the commenter. The maximum potential of exported material for each basin is estimated at 400,000 to 500,000 cubic yards for the Alamo Basin and 300,000 to 450,000 cubic yards for the Ulatis Basin.

Comment 2-2

The commenter states that if any of the 950,000 cubic yards of excavated material will be placed on agriculturally zoned lands within the County, the EIR must discuss the need for environmental clearance.

Response 2-2

See Response 2-1 regarding the requirement for compliance with environmental and other permitting processes prior to disposal of excavated material.

Comment 2-3

The commenter notes that regarding post-construction use of the property defined in Sections 3-4.1 and 3-4.2, the property is zoned agricultural in the County's General Plan.

Response 2-3

Comment noted. Section 4-2.2.1, Section 4-2.3.3.1, and Section 4-2.3.3.2 of the Draft EIR describe the regulatory land use setting for each basin and disclose that the properties are designated "Agriculture" in the Solano County General Plan and are within the A-40 Zoning District. Further discussion of consistency with the County Agricultural General Plan designation and the A-40 Zoning is provided in Section 4-2.5.2 of the Draft EIR. Based on the County's zoning ordinance, allowed uses within the A-40 zoning district relevant to the Proposed Project include agricultural education, conservation banks, and public service facilities. Construction of the detention basins would be a permitted use (public service facility) under the existing zoning. The passive public access component of the Project, while not a designated permitted use within the A-40 zoning district, would be limited to incidental public access by an appointment or by a docent-led program and would not require the construction of improvements such as restrooms, picnic tables, play fields, paved trails, or other constructed facilities. The Solano County General Plan includes several policies and implementing programs to promote public access to and appreciation of natural open space features on agricultural lands (Solano County General Plan policies AG.P-23, AG.P-25, AG.P-34, AG.P-46, AG.P-47, and AG.I-13).

Comment 2-4

The commenter references Section 3-4.6 of the Draft EIR Project Description and states that haul routes and delivery locations need to be identified prior to the export of soil to assess the potential impacts to traffic safety, road damage, and nuisance to property owners. The haul routes need to be identified in order for the City to mitigate properly and minimize impacts.

Response 2-4

See Response to Comment 2-1 which confirms that, as part of the project contract documents, the contractor will be required to identify the delivery locations and haul routes prior to construction. Since opportunities for material disposal off site are unknown at this time and are based on the timing, status and need of projects and properties in other areas of the City, County and region it is not possible to specifically identify receiving locations for purposes of EIR analysis. However, even though detailed haul routes have not been identified, the EIR concludes that the most likely roadways to be used for offsite disposal are Vaca Valley Road and Pleasants Valley Road (as stated in Section 4-9.1 of the Draft EIR). The City commits that it will enter into an agreement with the County of Solano, using similar terms as were applied with the agreement used for the Encinosa Basin project with regard to repair of any damage to County roads caused by hauling material from the proposed detention basins. The specifics of the agreement will be negotiated between the City and County prior to commencement of construction.

To identify potential impacts on traffic from the Proposed Project, Chapter 4-9 of the Draft EIR evaluates traffic operations along Vaca Valley Road and Pleasants Valley Road near the Alamo and Ulatis sites and along Interstate 80 near the Pena Adobe interchange. Mitigation Measures 9-2 and 9-3 of the Draft EIR address traffic safety and damage to existing roadways. Nuisance to property owners from the increase in haul trucks would not be significant since the average daily trips (ADT) during Project construction (estimated at worst case scenario of both basins being constructed together) would not exceed the capacity for the existing Level of Service (LOS) on the roadways proposed for hauling, as described under Impact 9-1 of the Draft EIR.

Comment 2-5

In Section 4-4.5, the commenter would like the EIR to address Solano County's Road Improvement and Land Development Requirements, which require a minimum 2:1 tree replacement ratio for trees removed due to road related work. Moreover, the County's General Plan values heritage oaks and the project should address the need to protect and replace such trees at a 2:1 ratio.

Response 2-5

Based on review of the Solano County's Road Improvement Standards and Land Development Requirements (adopted 2006), Section 1-2.15 (Tree Replacement and Planting Slopes) applies to road projects. Tree removal associated with the Project would occur as part of basin construction and not part of road improvements or road construction. Therefore, it does not appear that the Project is subject to this regulation. The commenter may be anticipating tree removal as a result of road improvements suggested in Comment 2-8; please refer to the City's response to comment 2-8 which explains why tree removal is not expected along these roadways.

Section 4-4.5 of the Draft EIR notes that the Solano County General Plan includes Implementing Program RS.I-3 that states that the County will develop and adopt an ordinance to protect oak woodlands and heritage oak trees; however, an oak tree ordinance has not been formally adopted by the County. In recognition of the County's policy of protecting native and heritage oak trees (RS.P-6), the City has committed to limiting the removal of native oak trees to the minimum necessary for construction of the basins, as stated in Section 4-4.5 of the Draft EIR.

Comment 2-6

The commenter states that Section 4-9.1 of the EIR should also be adjusted to incorporate Comment 2-5.

Response 2-6

See response to Comment 2-5 above. The Solano County Road Improvement Standards and Land Development Requirements do not appear to apply to the Project.

Comment 2-7

The commenter notes that in Section 4-9.1, the EIR should also include Cherry Glen Road, Bucktown Lane, and Rogers Lane in the roadways that will most likely be affected by offsite trucking. Cherry Glen Road, Bucktown Lane, and Rogers Lane have been added to Section 4-9.1 of the Final EIR as roadways to be used for offsite hauling of excavated material.

Comment 2-8

The commenter states that the paved width of Bucktown Lane is too narrow to facilitate two lanes of traffic involving extensive truck hauling and the intersections of Bucktown Lane at Vaca Valley Road and Rogers Lane at Vaca Valley Road are also too narrow for truck turning. The commenter requests that the EIR require the project to widen the affected portions of roadway and construct intersection improvements as mitigation for the impact of truck hauling during construction of the basins. Alternatively, it is requested that the EIR offer alternatives acceptable to the County for proper mitigation.

Response 2-8

The Draft EIR provides capacity and hazard analysis for roadways potentially impacted by the temporary construction related traffic, including truck hauling. Discussion and data provided under Section 4-9.5.1, including specific discussion under Impacts 9-1, supports the conclusion that there will be a less-than-significant impact to overall roadway operation resulting from temporary construction related traffic. Discussion under Section 4-9.5.2, Impact 9-2, recognizes the significant impact to the operational safety of roadways resulting from truck movements and concludes that these impacts will be less than significant with the implementation of Mitigation Measure 9-2 which requires the submittal and implementation of a traffic control plan that is subject to approval by both the City and the County. Flagging control is typically used during construction to direct both construction and public traffic where roadways will not allow safe two-way passage of vehicles. The construction traffic control plan is a standard requirement used by both the City and the County for addressing temporary construction traffic impacts. The Draft EIR demonstrates that there are no long term operational traffic impacts that would warrant a permanent widening of Bucktown Lane. The permanent improvements suggested for Bucktown Lane and the intersections of Bucktown Lane and Rogers Lane with Vaca Valley Road are not reasonably related to the short term, temporary impacts associated with project construction. Modification to the Draft EIR as suggested by the commenter is not warranted.

Comment 2-9

The commenter noted that a stop sign was knocked down at Cherry Glen Road and Pleasants Valley Road during construction hauling related to the Encinosa Basin Project (2008) and requests that the EIR require improvements to that intersection to reduce the potential for future damage by haul trucks should the same intersection be used with the proposed project.

Response 2-9

See Response to Comments 2-1 and 2-4 above. As required under Mitigation Measure 9-3 of the Draft EIR, once haul routes for each basin project are determined, the City and County will jointly assess roadway conditions and coordinate the repair of damages caused by the project construction.

Comment 2-10

The commenter explains that complaints have been received regarding haul trucks speeding and passing along Pleasants Valley Road. The commenter would like the EIR to propose specific mitigation to ensure that the contractor's haul drivers respect the established speed limits.

Response 2-10

The City expects that the contractor and all subcontracting haulers will obey all posted speed limits. The City does not have the ability to enforce traffic violations along County roads. Complaints regarding haul truck activities such as described by the commenter should be shared with the City so that the Contractor can be advised to remind haul drivers of the need to comply with traffic laws.

Comment 2-11

The commenter states that the City and County shall enter an encroachment permit agreement requiring the City and its contractor to repair any damages caused to the County road system by the hauling of soil. The commenter further notes that the City and County shall agree on reasonable terms and the scope for repairs to the County road system for damages caused by the Project. The commenter states that final allocation for responsibility of repairs shall lie solely with the County.

Response 2-11

The comment is acknowledged. The requested process for addressing road damage and repair will be implemented as stated in Mitigation Measure 9-3 and as described under Response to Comment 2-4 above. Details regarding terms and scope for repairs will be negotiated between the City and the County. Prior to construction of the Project, the City will commit to enter into an agreement with the County regarding road repair.

COMMENT LETTER 3 ROBERT MACAULAY, DIRECTOR OF PLANNING, SOLANO TRANSPORTATION AUTHORITY, DECEMBER 7, 2010

Comment 3-1

The commenter states that the Solano Transportation Authority (STA) is, generally in agreement with the Draft EIR findings. The commenter acknowledges that the Project would have a less than significant impact to the minimal existing alternative transportation (i.e., bicycle routes) in the vicinity of the Project and feels that the Project has an opportunity to enhance alternative transportation for users of roadways impacted by the Project. The commenter notes that Impact 9-3 of the Draft EIR identifies the potential damage of existing roads as a result of construction and that Mitigation Measures 9-3 has been proposed to reduce this impact to a less-than-significant level.

Response 3-1

Comment noted. The Project objective is to construct storm water detention facilities along Alamo Creek and Ulatis Creek. The impacts of the Project action have been evaluated in the Draft EIR and mitigation measures have been identified to reduce Project impacts. While the City recognizes that STA is interested in opportunities to improve bicycle routes in the vicinity, there is no apparent nexus between temporary construction impacts to existing roadways related to construction of detention basins and the desire that the City improve the bicycle routes in the vicinity beyond the existing conditions.

Comment 3-2

The commenter suggests that the EIR consider existing and future bicycle routes on roadways impacted by the Project. The commenter suggests considering a trail network around the basins to provide better accessibility to the area.

Response 3-2

See Response to Comment 3-1 above. Mitigation Measure 9-3 addresses the repair of road damage and wear as a result of temporary construction (truck hauling) activities. The terms and scope of roadway repairs shall be determined as part of the agreement between the City and the County. The City intends to fully mitigate for project-related impacts to the existing roadways. There is no reasonable relationship between temporary construction impacts to road surfaces and a desire on the part of STA that the City develop improved bicycle facilities along those roadways.

In response to the commenter's request to consider a trail network around the basins, the primary objective of the Project is to establish and operate storm water detention facilities along Alamo Creek and Ulatis Creek. The incidental public access described in Section 3.4.4 of the Draft EIR and further discussed in Section 4-2.5.2 of the Draft EIR is included in the Project Description to comply with certain grant funding requirements. However, due to the agricultural zoning of the property, more intense recreational use, such as a developed bike path, would not be allowed or be consistent with the Agricultural policies of the County General Plan. In addition, the use of the Project sites for recreational bicycle use is not identified in any of the STA bicycle planning documents or in either the City or County General Plans.

Comment 3-3

The commenter would like the EIR to identify bikeway improvements, already identified by the City of Vacaville and Solano County, within the vicinity of the project. For example, Pleasants Valley Road and Vaca Valley Road are bicycle routes listed in the Solano Countywide Bicycle Plan and are part of the regional bikeway network.

Response 3-3

A discussion has been added to Section 4-9.2.5 of the Final EIR that identifies existing and planned bikeways in the vicinity of the Project. Because the Bicycle Plan is currently being updated, the Final EIR text referenced the available 2004 plan in addition to STA's 2010 bicycle plan project list.

COMMENT LETTER 4 SCOTT WILSON, ACTING REGIONAL MANAGER, DEPARTMENT OF FISH AND GAME, DECEMBER 8, 2010

Comment 4-1

The commenter summarizes the habitat types present on the Alamo and Ulatis sites.

Response 4-1

The commenter states that approximately 2.5 acres of the Alamo site are developed residential areas. Figure 4-4.1 of the Draft EIR depicts these areas as developed and Section 4-4.2.2.1 of the Draft EIR describes these areas as having previously supported farm buildings and equipment but are currently vacant and disturbed with minimal ground vegetation. There are no areas within either the Alamo or Ulatis sites that support multiple residential buildings.

Comment 4-2

Regarding Mitigation Measure 4-1, the commenter notes that the project area supports elderberry shrubs (habitat for the federally listed valley elderberry longhorn beetle) and that consultation with U.S. Fish and Wildlife Service (USFWS) has been initiated for the Alamo site. The commenter also states that seasonally-appropriate botanical surveys were conducted for the Alamo site but that protocol-level botanical surveys for rare plants should be conducted prior to construction at the Ulatis site and prior to maintenance work at the Alamo and Ulatis sites.

Response 4-2

In response to the comment on consultation for valley elderberry longhorn beetle, a biological opinion (incidental take permit) was received from the USFWS on September 28, 2010 for the Alamo site. Consultation will be initiated with the USFWS for the Ulatis site once adequate funding has been procured, construction of the basin is certain, and the project design phase has commenced.

Preconstruction botanical surveys were not included in the Draft EIR as a mitigation measure for the Ulatis site because no special-status plants were observed on the Ulatis site during the October 22, 2008 and April 13, 2009 botanical surveys conducted by AWE. These surveys coincided with 38 of the 56 special-status plant species that were identified in Table 4-4.2 of the Draft EIR as having the potential to occur in the project vicinity. The remaining 18 species that would not have been identifiable at the time of the October and April botanical surveys are not expected to occur on the Ulatis site because suitable habitat for these species is not present (including chaparral, cismontane woodland, coniferous forest, brackish marsh, swamp, meadows, seeps, playa, coastal prairie, coastal scrub, alkaline soils, serpentinite soils, mesic grasslands, and vernal pools). Section 4-4.1.3.1 of the Draft EIR provides methods of botanical surveys including Table 4-4.1 that lists the survey dates, location, and personnel for all botanical surveys conducted within the study area. Section 4-4.4.1 of the Draft EIR provides a summary of results of the botanical surveys for both the Alamo site and Ulatis site. Additional text has been added to Section 4-4.1.3.1 of the Final EIR to provide more clarification on survey dates specific to the Alamo site and to the Ulatis site.

No botanical surveys are proposed prior to future maintenance work at either the Alamo or Ulatis sites because the area where maintenance activities will occur is along the newly constructed basin berms and on the basin floor. These areas are not expected to support special-status plants with potential to occur in the project vicinity because the berms and basin floor will not provide suitable habitat for these species. Additionally, maintenance activities would consist of mowing or cultivation, which is consistent with existing conditions.

Comment 4-3

The commenter notes that, regarding Mitigation Measures 4-2 and 4-3, surveys should be conducted within the Project area for California red-legged frog (*Rana drytonii*), foothill yellow-legged frog (*Rana boylii*), and the western pond turtle (*Actinemys marmorata*) within 48 hours prior to construction. If any of these species are found, the Department of Fish and Game (DFG) should be consulted. Furthermore, a

biologist should be present during construction work and should check the work area for sensitive wildlife species and, prior to construction, barrier fences should be installed.

The commenter also states that the EIR should provide mitigation for any loss of western pond turtle habitat.

Response 4-3

As stated in Mitigation Measures 4-2 and 4-3 of the Draft EIR, a qualified biologist shall conduct a preconstruction clearance survey for foothill yellow-legged frogs and western pond turtle immediately before any ground disturbance within or adjacent to Alamo Creek at the Alamo site and within or adjacent to Ulatis Creek and onsite tributary at the Ulatis site. A requirement to conduct the survey within 48 hours prior to construction has been added to Mitigation Measures 4-2 and 4-3 of the Final EIR. Additional text has also been added to Mitigation Measures 4-2 and 4-3 for the Final EIR to state that if a foothill yellow-legged frog or western pond turtle is observed during the preconstruction surveys, DFG will be contacted to determine if additional avoidance measures are necessary. Regarding California red-legged frog, protocol-level surveys were conducted within both project areas and no California red-legged frogs were observed, as described in sections 4-4.1.3.2 and 4-4.4.2.2 of the Draft EIR. Results of the surveys were provided to USFWS and no mitigation measures were identified for California red-legged frog in the biological opinion received from USFWS for the Alamo site. A similar response from the USFWS is expected for the Ulatis site. Therefore, no preconstruction surveys specific to California red-legged frog are proposed. Mitigation Measure 4-2 of the Final EIR has been modified to address any special-status amphibian that is observed during the preconstruction survey.

Regarding the commenter's suggestion of having a biological monitor present during construction, additional text has been added to item 3 of Mitigation Measure 4-4 in the Final EIR to include monitoring for special-status reptiles and amphibians (i.e., western pond turtle, foothill yellow-legged frog) in conjunction with anadramous fish monitoring.

To protect aquatic and riparian habitat for western special-status species, equipment staging will be located a minimum of 100 feet from the edge of the stream habitat (described in Mitigation Measures 4-10B of the Draft EIR) and construction barrier fencing will be installed along the riparian zone adjacent to stream habitat (described in Mitigation Measures 4-9A of the Draft EIR).

The commenter also suggests that the EIR assess the potential loss of western pond turtle nesting habitat and provide mitigation for such loss. During a January 10, 2011 telephone conversation with DFG biologist Brenda Blinn, Ms. Blinn requested that additional information be provided on the location and suitability of potential nesting habitat identified on the Alamo and Ulatis sites to explain why no mitigation for loss of western pond turtle nesting habitat was included in the Draft EIR. Overall, it was determined that the Proposed Project would not result in a significant loss of nesting habitat for western pond turtle for the following reasons.

- Upland habitat closest to Alamo and Ulatis Creeks will not be affected and will remain open space (undeveloped). For Alamo this undeveloped zone is between approximately 60 feet and 170 feet wide. For Ulatis this undeveloped zone is between approximately 50 feet and 450 feet wide (proposed basin footprint is shown on Figures 3-3 and 3-4 of the Draft EIR). Relatively little is known about upland movements of western pond turtles. Although they have been documented to move more than 1,300 feet from aquatic habitats to nest (Jennings

and Hayes 1994[1]), they typically nest in upland habitats much closer (averaging 92 feet) to aquatic sites (Rathbun et. al. 2002[2]).

- Although potential nesting habitat is present in grassland areas within the proposed basin footprint for both the Alamo and Ulatis sites (as stated in Section 4-4.4.2.4 of the Draft EIR), these areas have been historically farmed (i.e., orchard, row crop, hay) and routinely disked/disturbed. Disturbance of potential upland habitat as part of basin construction will not significantly change the existing habitat quality for western pond turtles. The undeveloped zone (approximately 60 feet to 170 feet wide for the Alamo site and approximately 50 feet to 450 feet wide for the Ulatis site) between the creek bank and the proposed basins will provide long-term potential habitat for western pond turtles since these areas will not be subject to seasonal disturbance from agricultural practices.

Comment 4-4

Regarding Mitigation Measure 4-4, the commenter states that the proposed Project could have an adverse impact on adult and juvenile trout and salmon during migration and rearing. The commenter requests that the EIR contain a hydrologic analysis of potential direct and indirect effects of reducing peak flows, and a flow release schedule. The commenter further states that, regarding the Ulatis Creek detention basin, it is unclear why capturing flows during the smaller, more frequent storms is necessary.

Response 4-4

National Marine Fisheries Service (NMFS) was consulted for the Alamo Basin and determined in their August 18, 2010 and December 8, 2010 letters to the City that the Alamo project area is not considered essential fish habitat for salmonid species and that construction of the Alamo basin will not adversely affect Central Valley steelhead, the only federally-listed species under NMFS jurisdiction that could potential occur in the Alamo project area. This determination was made by NMFS based on the implementation of avoidance/minimization measures provided by NMFS and incorporated into the Draft EIR under Mitigation Measure 4-4. Although fall-run Chinook salmon, a species that could potential occur in the project area during migration, is not federally listed and was not addressed in consultation with NMFS, Mitigation Measure 4-4 of the Draft EIR addresses this species and would ensure that Chinook salmon are not adversely affected by the project. The Draft EIR also states that in addition to implementation of Mitigation Measure 4-4 at the Ulatis site, that additional consultation with NMFS will be conducted for this site once adequate funding has been procured, construction of the basin is certain, and the project design phase has commenced.

The commenter expressed concern about the project capturing and diverting water run-off and its adverse effects on riparian habitat and suggests conducting hydrologic analysis of potential direct and indirect effects of reducing peak flows. As stated in Section 3.4 of the Draft EIR, only peak flows from large storm events (those that would cause downstream flooding and subsequent property damage and personal injury) would be directed out of the creek and into the basins for temporary storage. The basins would not impede normal and/or low flows of the creek and detained water would be metered back into the same system after a 24- to 72-hour period following storm subsidence. These temporary impoundments would occur infrequently and are not likely to impact riparian habitat on or downstream from the Project. Based on the presence of homes and farm buildings along the portions of Alamo and Ulatis Creeks within and

[1] Jennings, M. R., and M. Hayes. 1994. Amphibian and Reptile Species of Special Concern in California. Sacramento, California: California Department of Fish and Game.
[2] Rathbun, G.B., N.J. Scott Jr., and T.G. Murphey. 2002. Terrestrial habitat use by Pacific pond turtles in a Mediterranean climate. Southwestern Naturalist 47:225-235.

adjacent to the Project area it is unlikely that these areas experienced frequent overtopping. The purpose of the Project is to reduce downstream flooding where the creeks flow through urban areas. These areas support a narrow band of riparian habitat, which would not be affected by reduced flooding since the riparian vegetation occurs directly adjacent to the creek channel and is not dependent on flood waters. Downstream from the Vacaville urban limits, Alamo and Ulatis Creeks are channelized and devoid of riparian vegetation.

Regarding the question about why capturing flows during smaller and more frequent storm events at the Ulatis basin is necessary (i.e., 5-year and 10-year event), the amount and frequency of diversions into the basin is unknown until there is sufficient funding to enable the design phase for Ulatis to proceed. Peak flows during these smaller storm events could still result in flooding; however, the amount of diverted water would be much less during these events. Overall, the construction of the Ulatis basin would have a beneficial impact on water quality downstream from the Ulatis site because the reduction of damaging peak flows would reduce erosion and sediment accumulation, and would reduce hazardous materials runoff from urban flooding.

Comment 4-5

The commenter describes Mitigation Measure 4-6 of the Draft EIR. The commenter states that if a Swainson's hawk (*Buteo swainsoni*) nest tree is removed, even during non-breeding seasons, the loss of habitat needs to be mitigated. The extent of compensatory mitigation for any impacts on known nesting habitat should be determined by the Project proponent in consultation with DFG.

Additionally, if the Project results in conversion of annual grasslands to wetlands, this must be mitigated for as well since wetlands are not suitable foraging habitat for Swainson's Hawk. The minimum replacement ratio is 1:1.

The commenter further notes that if the Project has the potential to result in "take" of Swainson's Hawk or another California Endangered Species Act (CESA) listed species, a CESA permit will be required. If a CESA permit will potentially be required, early consultation is suggested because significant modifications to the Project and/or mitigation measures could be required for permit approval.

Response 4-5

As indicated in comment 4-5, potential nesting habitat for Swainson's hawks is present on the Alamo and Ulatis sites and some tree removal will be required as part of the detention basin construction. To ensure that the project does not adversely affect nesting Swainson's hawk, a preconstruction survey will be conducted and appropriate avoidance measures will be implemented to avoid take (as described in Mitigation Measures 4-6 of the Draft EIR and revised in the Final EIR to include potential nest monitoring). During field surveys conducted in 2009, no existing raptor nests were observed in the areas where tree removal is proposed and no known Swainson's hawk nests have been previously documented on or adjacent to the Alamo or Ulatis sites. The likelihood that a Swainson's hawk pair would nest within the few trees proposed for removal prior to construction is low since there are no existing raptor nests within those trees and Swainson's hawk nesting activity in the project vicinity is overall low (closest documented nest location is 2.5 miles south of study area as stated on page 4-4-43 of the Draft EIR). Specific mitigation for removal of a known nest tree was not identified in the Draft EIR because there are no known nests on the Alamo or Ulatis sites and potential for nesting is speculative. The DEIR did not identify a Project impact associated with removal of a known Swainson's hawk nest since currently there are none on the Alamo or Ulatis sites. In the unlikely event that a new Swainson's hawk nest is constructed within a tree proposed for removal prior to construction, the City would implement Mitigation Measure 4-6 as revised in the Final EIR and would comply with the processes stipulated for

nest tree removal during the non-breeding season in the final administrative draft Solano County Multispecies Habitat Conservation Plan that has been developed in close coordination with DFG.

In response to the comment on the quality of foraging habitat in the project areas and the need to mitigate for the loss of foraging habitat for Swainson's hawk as a result of the Project, the Draft EIR (see discussion under Impact 4-6) states that foraging habitat in the project areas at the time of the 2008 field surveys was considered marginal. Vegetation height within the unmaintained grassland areas (fallow agricultural field) at the Ulatis site reached over 3 feet in height during the summer months and the majority of existing habitat at the Alamo site is orchard (plum trees), with unmaintained grassland (fallow field) in the northwestern portion of the Alamo site. These habitat characteristics at both the Ulatis and Alamo sites likely reduce prey accessibility during the spring/summer season when Swainson's hawks are present in the area (generally April through September). During early stages of project planning, the City was considering using the Ulatis and Alamo sites as habitat conservation sites for Swainson's hawk foraging habitat and met with Greg Martinelli and Patrick Moeszinger from DFG (Bay Delta Region) on September 2, 2008 and October 22, 2008 (field meeting). In a follow-up email on December 10, 2008, Mr. Martinelli stated that based on the lack of nesting/foraging habitat found onsite, the project areas are not appropriate mitigation sites.

In response the commenter's statement that seasonal wetlands would not be suitable foraging habitat, the wetlands that could develop within the basins are not intended for waterfowl management. These seasonal wetlands would develop during the winter months from runoff/water diversions resulting in seasonal inundation within the low-lying portion of the basins (located adjacent to the outlet structure). During the late spring/summer months when Swainson's hawk return from their wintering grounds to breed, the seasonal wetlands would likely be dry and would be mowed as part of fire hazard reduction. These areas would more closely resemble annual grassland habitat in structure. In the event that these wetland areas do not provide suitable rodent burrowing areas because of saturated soils, they would still provide foraging opportunities for rodents that could in turn be preyed upon by Swainson's hawks.

Based on project objectives (preserve open space, wildlife habitat, and agricultural land in perpetuity, Draft EIR page 3-1) and the existing and proposed habitat conditions, the project would not result in the loss of Swainson's hawk foraging habitat. Overall, the project would convert 46.2 acres of orchard and 23.5 of annual grassland (fallow agriculture) at the Alamo site and 44.5 acres of annual grassland (fallow agricultural) at the Ulatis site to annual grassland (mowed for fire hazard reduction), seasonal wetland, and/or hay (harvested annually during the summer). To clarify the impact conclusion related to foraging habitat impacts associated with the Project, Impact 4-6 in the DEIR has been modified in the Final EIR to state that overall, the Project would result in a no-net-loss of potential foraging habitat for Swainson’s hawks because these habitat types would provide similar or better habitat value compared to the existing orchard and non-native annual grassland.

In response to the commenter's note that mitigation requirements for special-status species should be determined in consultation with USFWS and DFG and fully disclosed in the EIR, the Draft EIR includes Mitigation Measures 4-1a, 4-1b, 4-1c, and 4-4, which are from the USFWS biological opinion and the NMFS consultation letter issued for the Alamo site. These same mitigation measures would likely apply to the Ulatis site since they have similar resource issues. Consultation with these agencies will be initiated for the Ulatis site once adequate funding has been procured and project design can commence. With regard to consultation with DFG, in addition to the 2008 site visit with Greg Martinelli and Patrick Moeszinger referenced above, the EIR Notice of Preparation (NOP) as well as the Draft EIR was sent to DFG Bay Delta Region to solicit comments and recommendations. Comment letter 4 identified above will be incorporated into the Final EIR. Revisions to the text of the discussions and mitigation measures

in the Final EIR reflect the information in these responses as clarified and confirmed in a phone conversation with Brenda Blinn, DFG Region 3, on January 10, 2011.

Regarding the need for a CESA "take" permit for Swainson's hawk, the project will avoid take of Swainson's hawk by implementing Mitigation Measure 4-6 as revised in the Final EIR, which states that for any active Swainson's hawk nest that is identified within 0.25-mile of project construction DFG will be contacted to determine the need and extent of a no-disturbance buffer and whether additional avoidance measures (i.e., periodic nest monitoring) would be required to ensure "take" avoidance.

Comment 4-6

The commenter describes Mitigation Measure 4-9 and states that, although the mitigation measure accounts for the loss of riparian habitat and trees with a 2:1 ratio, a 3:1 ratio is recommended by the DFG to adequately mitigate for loss of riparian habitat. The commenter further notes that mitigation plantings must be of similar quality and be sufficient to support the same wildlife function as impacted sites. Since trees will be removed, they need to be effectively mitigated for either elsewhere within the Project area or off-site at a DFG-approved location.

The commenter additionally explains that the EIR needs to include an adaptive management and monitoring plan for each habitat type. This plan needs to describe how agricultural crops would be managed. Moreover, potential direct or indirect impacts to resources from any future proposed recreation activities should be assessed and avoided or minimized. The restoration and mitigation lands associated with the Project should be protected and have an endowment fund for long-term resource management.

Response 4-6

Mitigation Measures 4-9c of the Final EIR has been revised to state that riparian habitat removal will be compensated at a minimum 3:1 ratio and includes three options for compensation: on-site replacement including preparation of a planting plan (including management and monitoring tasks to be completed by the City), purchasing mitigation credits at a DFG-approved mitigation site that includes long-term management and monitoring, or contributing to a DFG-approved in-lieu fee fund. To address the commenter's concern about providing similar habitat quality for replacement riparian plantings, Mitigation Measure 4-9c has been modified in the Final EIR to state that temporary removal of riparian habitat associated with construction of the outlet pipes would be compensated at the same ratio as permanent riparian habitat removal since it is not be feasible to replant trees over or adjacent to the outlet pipe because of the potential for their root systems to undermine the integrity of the outlet pipes.

An adaptive management plan for onsite habitats will not be prepared as future impacts, if any, would be analyzed and permitted as required by local, state, and federal regulations. Since there is no net loss of foraging habitat resulting from the project, the potential agricultural cultivation of the basins is not a biological mitigation measure, as such, agricultural crop management will be conducted according to common practices and will not require specialized management under a biologic mitigation. Passive public use will be limited to incidental public access by an appointment or by a docent-led program. Because public access will be controlled and focused on outdoor education and appreciation of the natural habitat, the potential for direct and indirect impacts to resources is not expected. Section 4-4.6.5 of the Final EIR adds discussion to clarify this conclusion. Agricultural crop management will be conducted according to common practices. Incidental public access will focus on outdoor education and appreciation of the natural habitat and will be limited by an appointment or by a docent-led program. Therefore, potential direct and indirect impacts to resources from future proposed recreation use are not expected. A discussion that clarifies this impact conclusion has been added to Section 4-4.6.5 of the Final EIR.

Comment 4-7

The commenter states that the DFG will require a Lake and Streambed Alteration Agreement (LSAA) with the City for the proposed Project activities defined in the EIR. The commenter provides information on obtaining an LSAA.

Response 4-7

Prior to construction, the City will apply for and obtain a LSAA to construct the inlet pipes and outlet weirs within the Alamo Creek bank and Ulatis Creek bank. Separate LSAA notifications will be submitted for each basin. Mitigation Measures 4-10b and 4-10c of the Final EIR have been modified to identify this permit requirement.

Comment 4-8

The commenter would like the EIR to include a map with the location of the tributaries and "erosional features." It is requested that the EIR describe the direct and indirect Project-related impacts to all aquatic features located within the Project area. The commenter states that detailed construction designs for the inlet and outlet structures will be required and that engineering designs of both the diversion and outlet structures should consider and conform to the processes currently active in the streams.

Response 4-8

The unnamed tributary to Ulatis Creek and erosional features described for the Ulatis site are shown on Figure 4-4.2 of the Draft EIR; however, the erosional features were not labeled. Figure 4-4.2 in the Final EIR has been revised to identify the location of the two erosional features. Impact 4-10 of Draft EIR identifies permanent and temporary impacts to potentially jurisdictional waters and has been revised in the Final EIR to include approximate acreages of permanent and temporary impacts to those waters. Impact 4-10, Mitigation Measure 4-10b, and 4-10c of the Final EIR have been revised to include state jurisdictional waters.

COMMENT LETTER 5 JUSTIN HOPKINS, ASSISTANT CIVIL ENGINEER, SOLANO IRRIGATION DISTRICT, NOVEMBER 8, 2010

Comment 5-1

The commenter clarifies that the Ulatis Creek Detention Basin site impacts two of the Solano Irrigation District's pipelines, the Bucktown and Buck laterals. Both of these laterals provide agricultural irrigation water and non-potable water for in-home use.

Response 5-1

Sections 3.2.2, 3.4.3, and 4-2.2.2.2 have been revised in the Final EIR to identify and clarify the utility of both the Bucktown Lateral and Buck Lateral water distribution lines that are present on the Ulatis Site. The City will coordinate with the Solano Irrigation District to accommodate continued water delivery service through the Ulatis Site.

COMMENT LETTER 6 JAMES HEROTA, STAFF ENVIRONMENTAL SCIENTIST, CENTRAL VALLEY FLOOD PROTECTION BOARD, DECEMBER 16, 2010

Comment 6-1

The commenter notes that a Central Valley Flood Protection Board (Board) permit will be required prior to starting work in the Board's jurisdiction.

Response 6-1

Deborah Faaborg, City of Vacaville Environmental Project Manager, contacted James Herota and Gary Lemon, both with the Board staff, to discuss the extent of their jurisdiction. Both cited the fact that because Ulatis Creek is listed in Table 8.1 of Title 23 Code of California Regulations, their Board has permitting authority for encroachment over the creek bank at the Ulatis site. They verified that the encroachment permit requirement would apply to any portion of Ulatis Creek that is within Solano County. Therefore, the necessary Board permit for the Ulatis basin will be obtained prior to beginning construction of the Ulatis Basin Project. Please note that although environmental analysis of the Ulatis Basin is included in the Draft EIR, it will not be designed or constructed until a later date, when funding becomes available. The City will submit an application for an Encroachment Permit when construction of the basin is certain and the necessary design documents required for the permit submittal are available.

The bulleted items in the letter refer to existing levees and other flood control facilities/structures. There are no constructed facilities such as levees on the Ulatis site or in the vicinity of the Ulatis site. The Project will not affect any existing facilities/structures under the jurisdiction of the Flood Protection Board.

COMMENT LETTER 7: SCOTT MORGAN, DIRECTOR, STATE CLEARINGHOUSE, DECEMBER 14, 2010

Comment 7-1

The commenter confirms the close of the Draft EIR circulation period and informs the City that a comment letter from the DFG was received after the comment period ended. The letter encourages the City to respond to comments in the letter, even though it was received after the close of circulation.

Response 7-1

The Department of Fish and Game sent the comment letter to both the State Clearinghouse and the City. The City received the letter before the comment period ended and has already addressed the concerns raised in the letter. The DFG comment letter appears as Comment Letter 4 in this Response to Comments document.

RECORD OF PUBLIC COMMENTS: DRAFT EIR PUBLIC MEETING, NOVEMBER 18, 2010

A public meeting was held to address questions and concerns regarding the Draft EIR for the Proposed Project at the City Council Chambers, City Hall, 650 Merchant Street, in Vacaville on November 18, 2010. A summary of comments and question raised at the public meeting is provided in Chapter 2.0. All individual comments raised at the meeting are responded to below.

Comment PM - 1

The commenters, owners of 6526 Rogers Lane, asked for clarification of several project design details regarding the Alamo Detention basin specifically, the height of the berm and affect on views, tree removal, and the location of the parking areas and access road around the basin. The commenters asked for clarification regarding the public access and fencing and expressed concerns about privacy and security. The commenters also inquired about the condition of Rogers Lane during construction and upon completion of the project.

Response PM - 1

Impact 1-1 in Section 4-1.5.1 of the Draft EIR recognizes that views onto the Alamo site and long-range views for nearby residences would be altered. However, the Draft EIR further states that the City's

objective is to develop the maximum capacity feasible for the detention basins in the interest of public safety. As such, it is not feasible to set berms back from the property line to create a sufficient landscape screen that is adequately separated from the base of the berm to avoid root and irrigation impacts to berm integrity. Therefore, the conclusion reached in Section 4-1.5.1 of the Draft EIR is that the impact on visual character of the site and long-range views is significant and unavoidable.

Although the FEIR conclusion in Impact 1-1, regarding impact on visual character in the vicinity of the project, is disclosed as a significant and unavoidable impact, it should be noted that the analysis and conclusion in the EIR for Alamo Basin is based on the preliminary design concept which showed a 2:1 outside slope on the surrounding berms (this would have resulted in a 50 foot horizontal distance from the toe of the slope to the top of the berm). This original concept design, which would be the worse case scenario and therefore was used in the EIR, has since been modified as a result of the permit process with the Department of Safety of Dams. The current design of the berms around the Alamo Basin provides for a 4:1 outside slope (100 foot horizontal distance from the toe of the slope to the top of the berm) which is a more gradual slope similar to the nearby natural terrain changes in the Vaca Valley area. The current design of the Alamo Creek basin eliminates the abrupt terrain change of the berms that led to the significant and unavoidable impact conclusion; however, the EIR conclusion cannot be altered at this time because 1) the analysis must be based on the worse case scenario project as described in the EIR; and 2) the impact may still apply to the Ulatis Basin until such time as the final berm design is determined once that project undergoes future review by the Department of Safety of Dams.

It should also be noted that the Solano County General Plan designation and zoning of “Agriculture” for the land surrounding both the Alamo and Ulatis Detention Basin sites, along with County land use policies and regulations, demonstrate that the primary land use objective is for agricultural production, not residential development. As such, even though the visual character of the basin sites will change with the project, the change is not incompatible with agricultural uses. The prime agricultural land surrounding the basin site can be successfully cultivated for agricultural production regardless of the change in visual character on the nearby basin sites.

In response to the commenter's concern regarding tree removal, see response to Comment 2-5.

For the Alamo basin, two small parking areas (12 parking spaces) would be sited on and adjacent to the detention basin berms and the maintenance access road would follow on top of and along the southern perimeter of the berms as described in Section 3.4.1 of the Draft EIR and shown on Figure 3-3 of the Draft EIR. Following construction of the Alamo Basin, use of these facilities would be limited to periodic maintenance activities and incidental public access. Section 3.4.4 of the Draft EIR states that incidental public access for passive recreational uses is limited by an appointment or by a docent-led program and administered directly by the City or through an agreement with the Solano Land Trust. As stated under Mitigation Measure 2-2 in the Draft EIR, fencing on the detention basin sites would be placed to restrict public access to component use areas, such as agricultural fields and sensitive habitat, and to protect neighboring properties from casual trespass.

Regarding the condition of Rogers Lane during and after construction, Section 4-9.5.3 of the Draft EIR includes a discussion of impacts (Impact 9-3) to existing roads from construction traffic and identifies mitigation (Mitigation Measure 9-3) to address the repair of road damage that would be completed by the City.

Chapter 4
Text Revisions to the Draft EIR

4.1 INTRODUCTION

The following corrections/edits have been preformed to the text of the Draft EIR since the public release in October of 2010. The corrections made by the EIR authors include corrections that will improve the clarity of writing, correct grammatical errors, and correct consistency errors. Additional corrections or clarifications have been made based on requests by commenters, or to update information provided in the Draft EIR. Text that has been deleted from the Final EIR will be marked in this chapter and in the corresponding EIR section as a strikeout (~~deleted text~~), while new text will be labeled with an underline (new text). None of the text revisions represent new significant impacts or significant new information that would require recirculation of the Draft EIR pursuant to CEQA Guidelines Section 15088.5.

4.2 TEXT REVISIONS

Final EIR Pages 2-7, 2-8, and 2-9

Table 2-1 in Chapter 2 of the DEIR has been revised as follows to address Comment 4-6 and to provide additional clarification.

4-9 Permanent and Temporary Loss of Riparian Habitat at the Alamo Site and Ulatis Site	S	4-9a Establish a No-Disturbance Buffer Around Protected Riparian Habitat and Conduct Biweekly Visits 4-9b Restore Temporarily Disturbed Riparian Habitat 4-9c Compensate for Temporary and Permanent Loss of Riparian Habitat	LTS

4-10 Permanent and Temporary Fill to Waters of the U.S. and State at the Alamo Site and Ulatis Site	S	4-10a Restrict Work in the Creek Channel to the Dry-Season and Dewater the Channel, if Necessary 4-10b Comply with the Conditions of Clean Water Act, Sections 401, 402, and 404 Permits and Streambed Alteration Agreement Obtained for the Proposed Project 4-10c Compensate for Permanent Impacts to Waters of the U.S. and State	LTS

7-1 Short-Term Exposure to Onsite Construction Noise	PS	7-1 Limit Hours of Construction Operations and Implement Noise-Reduction Measures for Equipment	SU

Final EIR Page 3-4

The second paragraph of the discussion of "Ulatis Site Conditions" in Section 3.2.2 of the Draft EIR has been revised as follows to address Comment 5-1.

> Existing structures and easements within the Ulatis site include two Pacific Gas & Electric (PG&E) high-voltage transmission towers, located in the center of the Ulatis site, and one tower at the southwest corner of the site. The high-tension power lines associated with these towers extend across the property from northeast to southwest. The site also contains two ~~a~~ Solano Irrigation District distribution pipelines identified as the "Bucktown Lateral" and "Buck Lateral", which convey~~s~~ agricultural irrigation water and non-potable water for in-home use to the Ulatis site and ~~adjacent~~ nearby properties. There are no urban services for potable water or public sewer to the site. An existing domestic well is located at the southwest corner of the property adjacent to Bucktown Lane. A water line runs east from the well along the south property line to serve an adjacent property owner. Surrounding land uses consist of open agricultural and natural lands, interspersed with rural residences.

Final EIR Page 3-11

The first paragraph of the discussion of "Utilities" in Section 3.4.3 of the Draft EIR has been revised as follows to address Comment 5-1.

> At the Ulatis site, the existing PG&E high-voltage transmission towers, located in the center of the site and at the southwest corner of the site, would not be disturbed during construction. The design would maintain the existing grade around the tower and provide for access as required by PG&E. The project would either reroute or abandon the existing Bucktown Lateral and Buck Lateral agricultural water distribution lines on the Ulatis site, depending on the requirements of the Solano Irrigation District and needs of the Proposed Project. An existing domestic well is located at the southwest corner of the Ulatis site adjacent to Bucktown Lane. A water line runs east from the well along the south property line to serve an adjacent property owner to the east. If water service is still needed to the adjacent property at the time of construction, and depending on the final design and location of the berm along the southern boundary of the Ulatis site, the existing water line will be left as-is or, if necessary, relocated closer to the site boundary and a water line easement will be established.

Final EIR Page 4-2-7

The third paragraph of the discussion of "Ulatis Site" in Section 4-2.2.2.2 of the Draft EIR has been revised as follows to address Comment 5-1.

> Existing structures and easements within the Ulatis site include three PG&E high-voltage transmission towers, two located in the center of the basin site and one located in the southwest corner of the site, with high-tension power lines extending across the property from northeast to southwest. The site also contains ~~a~~ two Solano Irrigation District distribution pipelines identified as the "Bucktown Lateral" and the "Buck Lateral", which convey~~s~~ agricultural irrigation water and non-potable water for in-home use to the Ulatis site and ~~adjacent~~ nearby properties. The existing PG&E high-voltage transmission towers will not be disturbed as part of the Proposed

Project. The design will maintain the existing grade around the tower and provide for access as required by the power company. The Proposed Project would either reroute or abandon the existing Bucktown and Buck laterals agricultural water distribution lines, depending on the requirements of the Solano Irrigation District. There are no urban services for potable water or public sewer to the site. An existing domestic well is located at the southwest corner of the property adjacent to Bucktown Lane. A water line runs east from the well along the south property line to serve an adjacent property owner to the east. If water service is still needed to the adjacent property at the time of construction, and depending on the final design and location of the berm along the south property line, the existing water line will be left as-is or, if necessary, relocated closer to the property line and a water line easement will be established.

Final EIR Page 4-2-11

The discussion of the "Solano Multi-Species Habitat Conservation Plan" in Section 4-2.3.3.5 of the Draft EIR has been revised as follows to reflect the most recent document version.

In ~~February 2007~~ April 2009, SCWA issued ~~Working Draft 2.2~~ a final administrative draft of the Solano Multi-Species HCP. The HCP establishes a framework for complying with federal and state regulations for endangered species while accommodating future urban growth, development of infrastructure, and ongoing operations and maintenance activities associated with flood control, irrigation facilities, and other public infrastructure undertaken by or under the permitting authority/control of the HCP participants within the plan area. The City is an HCP participant.

Final EIR Page 4-4-3

Mitigation Measure 3-8 "Minimize Short-Term Increases of Greenhouse Gas Emissions" within Section 4-3.4 has been revised to correctly state the appropriate mitigation numbers.

The following measures shall be implemented to reduce short-term increases of GHG emissions:

1. Implement Mitigation Measure 3-1, (8) and (9) ~~and (10)~~.
2. Construction waste shall be reused and/or recycled, to the maximum extent practical.
3. Construction of onsite facilities shall reduce building material waste and incorporate the use of local building materials, to the maximum extent practical.
4. Construction workers shall be encouraged to car/vanpool or utilize alternative means of transportation to commute to and from the construction site.

Final EIR Page 4-4-3

The discussion of "Special-Status Plant Surveys" in Section 4-4.1.3.1 of the Draft EIR has been revised as follows to address Comment 4-2 and to provide additional clarification on the timing and location of botanical surveys conducted for the Project.

Within the study area, several protocol-level botanical surveys were conducted at the Alamo and Ulatis sites. Table 4-4.1 lists the survey dates, personnel, and location for each type of survey conducted. At the Alamo site, botanical surveys were conducted by URS on April 24–25, May 19–20, and June 11, 2008, to look for federally listed plant species. On October 22, 2008 and April 13, 2009, AWE botanist Mary Bailey conducted additional botanical surveys at the Alamo site to look for all special-status plants. Ms. Bailey also conducted botanical surveys for special-status plants at the Ulatis site on October 22, 2008 and April 13, 2009. ~~within the entire study~~

~~area to document special-status plant species on both the Alamo and Ulatis sites.~~ During the AWE surveys, Ms. Bailey walked meandering transects through the study area and all plants were identified to the level necessary to determine whether they qualified as special-status plants or were plant species with unusual or significant range extensions.

Final EIR Page 4-4-9

Figure 4-4.2 (Biological Community Types within the Ulatis Site) of the DEIR has been revised to address Comment 4-8 to include a label showing the location of erosional features at the Ulatis site.

Final EIR Page 4-4-16

The third paragraph of the discussion of "Seasonal Wetland" in Section 4-4.2.2.2 of the Draft EIR has been revised as follows to provide clarification on the state jurisdictional status of seasonal wetlands based on the Corps preliminary jurisdictional determination for the site.

On the Ulatis site, 0.066 acre of seasonal wetland was determined to be potentially jurisdictional by the Corps and would also be considered jurisdictional by RWQCB.

Final EIR Page 4-4-20

The discussion of the "Solano Multi-Species Habitat Conservation Plan" in Section 4-4.3.3.3 of the Draft EIR has been revised as follows to reflect the most recent document version.

In April 2009~~February 2007~~, SCWA issued a final administrative draft ~~Working Draft 2.2~~ of the Solano Multi-Species Habitat Conservation Plan. The HCP establishes a framework for complying with federal and state regulations for endangered species while accommodating future urban growth, development of infrastructure, and ongoing operations and maintenance activities associated with flood control, irrigation facilities, and other public infrastructure undertaken by or under the permitting authority/control of the HCP participants within the plan area. The City is a HCP participant.

Final EIR Pages 4-4-42 and 4-4-43

The second, third, and forth paragraphs of the discussion of "Swainson's Hawk" in Section 4-4.4.2.7 of the Draft EIR has been revised as follows to address Comment 4-5 and to provide additional clarification on potential habitat for Swainson's hawks at the Alamo and Ulatis sites.

Within the Alamo site, suitable nesting habitat for Swainson's hawks is present within the riparian corridor along Alamo Creek and within large oak trees within a developed area along Rogers Lane. Swainson's hawks are not likely to nest in the orchard trees at the Alamo site. ~~Although Swainson's hawks have been known to nest in orchard trees (CNDDB 2009), the Alamo site provides alternative nesting opportunities within higher quality habitat (larger and more protected trees).~~

Within the Ulatis site, suitable nesting habitat for Swainson's hawks is present within the riparian corridor along Ulatis Creek and the unnamed tributary, and within large oak trees along Bucktown Road adjacent to the Ulatis site.

> Presently, annual grasslands in the study area provide only marginal foraging habitat for Swainson's hawks because they are not regularly mowed and support high grasses (up to 3 feet), ~~decreases visibility and foraging opportunities~~ which reduces prey accessibility.

Final EIR Page 4-4-50

The discussion of the Solano Multi-Species Habitat Conservation Plan under "Significance Criteria" in Section 4-4.5 of the Draft EIR has been revised as follows to reflect the most recent document version.

> In April 2009~~February 2007~~, SCWA issued ~~Working Draft 2.2~~ a final administrative draft of the Solano Multispecies HCP. Although the HCP has not been adopted, the Proposed Project is generally consistent with the conservation strategies and mitigation requirements outlined in the HCP for Swainson's hawk and burrowing owl; therefore, there would be no impact associated with this criteria.

Final EIR Page 4-4-54

Impact 4-2 (Disturbance or Loss of Foothill Yellow-legged Frog at the Alamo Site and Ulatis Site) under the discussion of "Potential to Adversely Affect Candidate, Sensitive, or Special-Status Species, as Identified in Local or Regional Plans, Policies, or Regulations, or by DFG or USFWS" in Section 4-4.6.1 of the Draft EIR has been revised as follows to address Comment 4-3 by referencing additional avoidance measures for foothill yellow-legged frogs.

> Foothill yellow-legged frogs are unlikely to breed at the Proposed Project sites because of lack of suitable substrate; however, they may disperse through Alamo Creek at the Alamo site and through Ulatis Creek and onsite tributary at the Ulatis site. If foothill yellow-legged frogs are present within proposed work areas during construction, the movement of equipment and placement of rock-slope protection within the creek channel could crush foothill yellow-legged frogs. This impact is considered ***significant***; implementation of items 1 and 2 of Mitigation Measure 4-1a, ~~and~~ Mitigation Measure 4-2, and item 3 of Mitigation Measure 4-4 would reduce potential impacts on foothill yellow-legged frog to a ***less-than-significant*** level.

Final EIR Page 4-4-55

Mitigation Measure 4-2 (Conduct a Preconstruction Survey for Foothill Yellow-legged Frog) under the discussion of "Potential to Adversely Affect Candidate, Sensitive, or Special-Status Species, as Identified in Local or Regional Plans, Policies, or Regulations, or by DFG or USFWS" in Section 4-4.6.1 of the Draft EIR has been revised as follows to address Comment 4-3 regarding foothill yellow-legged frog preconstruction surveys.

> 1. A qualified biologist shall conduct a preconstruction clearance survey for foothill yellow-legged frogs ~~immediately before any ground disturbance~~ within 48 hours prior to construction within or adjacent to Alamo Creek at the Alamo site and within or adjacent to Ulatis Creek and onsite tributary at the Ulatis site. The survey shall focus on the construction areas of the proposed outlet pipes and the inlet structures.
>
> 2. Any foothill yellow-legged frogs or other special-status amphibians found at the Proposed Project site shall be allowed to voluntarily move out of the work area or shall be captured and held for the minimum amount of time necessary to release them in suitable habitat outside the construction work area. If a foothill yellow-legged frog or other special-status amphibian

species is observed during the preconstruction survey, DFG and/or USFWS, as applicable to the species, will be contacted to determine if additional avoidance measures are necessary.

Final EIR Page 4-4-55

The third paragraph of Impact 4-3 (Disturbance or Loss of Western Pond Turtle at the Alamo Site and Ulatis Site) under the discussion of "Potential to Adversely Affect Candidate, Sensitive, or Special-Status Species, as Identified in Local or Regional Plans, Policies, or Regulations, or by DFG or USFWS" in Section 4-4.6.1 of the Draft EIR has been revised as follows to address Comment 4-3 regarding western pond turtle preconstruction surveys.

> Disturbance or loss of western pond turtles is considered ***significant***; implementation of items 1 and 2 of Mitigation Measure 4-1a, ~~and~~ Mitigation Measure 4-3, and item 3 of Mitigation Measure 4-4 would reduce potential impacts on western pond turtle to a ***less-than-significant*** level.

Final EIR Pages 4-4-55 and 4-4-56

The first and second paragraph of Mitigation Measure 4-3 (Conduct Preconstruction Surveys for Western Pond Turtle and Establish No-disturbance Buffers, if Necessary) under the discussion of "Potential to Adversely Affect Candidate, Sensitive, or Special-Status Species, as Identified in Local or Regional Plans, Policies, or Regulations, or by DFG or USFWS" in Section 4-4.6.1 of the Draft EIR has been revised as follows to address Comment 4-3 regarding western pond turtle preconstruction surveys.

1. In conjunction with the foothill yellow-legged frog clearance survey, a qualified biologist shall conduct a preconstruction clearance survey for western pond turtles ~~immediately~~ within 48 hours prior to any ground disturbance within or adjacent to Alamo Creek at the Alamo site and within or adjacent to Ulatis Creek and the onsite tributary at the Ulatis site. Surveys shall focus on the construction areas of the proposed outlet pipes and the inlet structures.

2. Any western pond turtles found at the Proposed Project site shall be allowed to voluntarily move out of the work area or shall be captured and held for the minimum amount of time necessary to release them in suitable habitat outside the construction work area. If a western pond turtle is observed during the preconstruction survey, DFG will be contacted to determine if additional avoidance measures are necessary.

Final EIR Pages 4-4-56 and 4-4-57

The third paragraph of Impact 4-4 (Disturbance or Loss of Central Valley Steelhead and Central Valley Fall/late-Fall-Run Chinook Salmon at the Alamo Site and Ulatis Site) under the discussion of "Potential to Adversely Affect Candidate, Sensitive, or Special-Status Species, as Identified in Local or Regional Plans, Policies, or Regulations, or by DFG or USFWS" in Section 4-4.6.1 of the Draft EIR has been revised to update the consultation history with NMFS for the Alamo site.

> To comply with the ESA, any potential direct or indirect effects on the federally threatened Central Valley steelhead will be addressed through Section 7 consultation between FEMA (the federal lead agency for the Proposed Project) and NMFS. For the Alamo site, a formal consultation request was sent by FEMA to NMFS on January 22, 2010, accompanied by a Biological Assessment report prepared for NMFS regarding the Alamo site (FEMA 2010). On August 18, 2010, NMFS sent a response letter to FEMA concluding that construction activity proposed at the Alamo site may affect, but ~~are~~ is not likely to adversely affect Central Valley steelhead with implementation of avoidance and minimization measures (NMFS 2010). A

follow-up letter from NMFS was received by the City for the Alamo site on December 21, 2010 amending the August 18, 2010 letter with timing restrictions for work adjacent to Alamo Creek that would allow preconstruction archaeological mitigation to occur earlier in the year. Additional consultation between FEMA and NMFS will be required for the Ulatis site and a similar response from NMFS is expected for Ulatis Creek. The avoidance measures listed under Mitigation Measure 4-4 are consistent with the measures identified by NMFS in their August 18, 2010 letter to avoid effects on Central Valley steelhead at the Alamo site. The City will also implement these measures at the Ulatis site to avoid potential effects to steelhead and salmon within Ulatis Creek.

Final EIR Page 4-4-57

The first paragraph of Mitigation Measure 4-4 (Avoid and Minimize Impact to Central Valley Steelhead and Central Valley Fall/late-Fall-Run Chinook Salmon) under the discussion of "Potential to Adversely Affect Candidate, Sensitive, or Special-Status Species, as Identified in Local or Regional Plans, Policies, or Regulations, or by DFG or USFWS" in Section 4-4.6.1 of the Draft EIR has been revised to update the timing restrictions based on additional consultation with NMFS.

1. Limit construction activities within the banks and riparian zone of Alamo Creek and Ulatis Creek to June 15 to October 15, which is the period when Central Valley steelhead and Chinook salmon are least likely to be within Alamo Creek and Ulatis Creek. The exception to this timing and location restriction would be for archaeological investigations that could occur adjacent to the creek banks and within the riparian zone between April 15 and October 15, consistent with ~~the avoidance measures listed~~ timing conditions identified in the response letters from NMFS for the Alamo site.

Final EIR Page 4-4-57

The third paragraph of Mitigation Measure 4-4 (Avoid and Minimize Impact to Central Valley Steelhead and Central Valley Fall/late-Fall-Run Chinook Salmon) under the discussion of "Potential to Adversely Affect Candidate, Sensitive, or Special-Status Species, as Identified in Local or Regional Plans, Policies, or Regulations, or by DFG or USFWS" in Section 4-4.6.1 of the Draft EIR has been revised to address Comment 4-3 and to provide additional construction monitoring for special-status reptiles and amphibians concurrently with fish monitoring.

3. Provide a NMFS-approved biologist to monitor all construction activities in, or adjacent to the active stream channel of Alamo and Ulatis Creeks to ensure compliance with best management practices outlined in Section 5 of the Biological Assessment prepared for the Alamo site (FEMA 2010). The monitoring biologist will also be familiar with the identification of reptiles and amphibians in the event that a special-status reptile (i.e., western pond turtle) or amphibian (i.e., foothill yellow-legged frog, California red-legged frog) is observed during monitoring. If a special-status fish, reptile, or amphibian is observed within the construction area, the biologist will have the authority to stop construction until the animal voluntarily moves out of the construction area or the biologist relocates the animal to suitable habitat outside the construction area. The monitor will notify the City immediately of the animal's presence within the construction area. If a steelhead or salmon is observed, the City will contact NMFS to determine if additional avoidance measures are necessary. If a special-status reptile or amphibian is found within the construction area, the City will contact DFG and/or USFWS as appropriate for the species observed.

Final EIR Page 4-4-59

Impact 4-5 (Disturbance or Loss of Nesting Swainson's Hawk at the Alamo Site and Ulatis Site) under the discussion of "Potential to Adversely Affect Candidate, Sensitive, or Special-Status Species, as Identified in Local or Regional Plans, Policies, or Regulations, or by DFG or USFWS" in Section 4-4.6.1 of the Draft EIR has been revised to address Comment 4-5.

> The Project sites provide suitable nesting and marginal foraging habitat for Swainson's hawks. The highest quality nesting habitat at the Alamo and Ulatis sites is located within the riparian corridor along Alamo and Ulatis Creeks (respectively). A Swainson's hawk was observed soaring over ~~foraging at~~ the Ulatis site in April 2009. The proposed detention basins have been sited to avoid and minimize riparian habitat loss and disturbance. Based on preliminary design, the Proposed Project will remove riparian habitat only at the location of the inlet weirs and outlet pipe (Figures 3-4.3 and 3-4.4). Potential nest sites for Swainson's hawk also occur within large native oak trees adjacent to Rogers Lane at the Alamo site and adjacent to Bucktown Lane at the Ulatis site and some of these trees may need to be removed as part of Project construction or access. In addition to tree removal, noise associated with construction activities that occurs during the breeding season (generally between March 1 and August 31) could disturb Swainson's hawks nesting at or near the Project sites (within a 0.25-mile radius). These disturbances could cause nest abandonment and death of young or loss of reproductive potential at active nests. Removal of trees containing an active Swainson's hawk nest with eggs or young or disturbance of nesting Swainson's hawks that results in the abandonment of an active nest with eggs or young would violate California Fish and Game Codes 3503.5 and 2080, CESA, and MBTA.
>
> Construction of the Proposed Project will convert orchard and unmaintained non-native annual grassland (summer height excess of 3 feet) to short annual grassland (~~along berms~~ mowed), seasonal wetland (within low-lying portions of the basin floor~~a portion or the entire basin floor~~), and/or hay crop ~~(oat or alfalfa~~ planted on the basin floor~~)~~. Creation of annual grassland (mowed ~~or grazed~~), seasonal wetland, and/or ~~alfalfa~~ hay would result in ~~an increase~~ a no-net-loss of potential foraging habitat for Swainson's hawks because these habitat types would have ~~be maintained at a low height by grazing, mowing, or cultivating. Low vegetation height increases visibility of prey and provides a higher habitat value for Swainson's hawks. If oat hay is planted on the basin floor, this habitat will function~~ similar~~ly~~ or better habitat value compared to the existing orchard and non-native annual grassland. ~~with exception of the basin berms, which will be maintained by mowing and will provide access to prey moving into and out of the basins. Overall, the Proposed Project will have a net increase in potential foraging habitat for Swainson's hawks. This is considered a beneficial result of the Proposed Project.~~

Final EIR Page 4-4-60

The third paragraph of Mitigation Measure 4-6 (Conduct a Preconstruction Nesting Bird and Raptor Survey and Establish No-disturbance Buffers, if Necessary) under the discussion of "Potential to Adversely Affect Candidate, Sensitive, or Special-Status Species, as Identified in Local or Regional Plans, Policies, or Regulations, or by DFG or USFWS" in Section 4-4.6.1 of the Draft EIR has been revised to address Comment 4-5.

> 3. If migratory birds or raptors are found to be nesting in or adjacent to the Project sites, a no-disturbance buffer shall be established around the nest to avoid disturbance of the nest site and to avoid take. The buffer will be maintained around the nest site until the end of the breeding season or until a qualified biologist determines that, the young have fledged and are foraging on their own. The extent of these buffers shall be determined by the biologist

(coordinating with the DFG) and shall depend on the species identified, level of noise or construction disturbance, line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. If a Swainson's hawk nest is found within 0.25-mi from construction activities, the City will consult with DFG to determine if additional avoidance measures (i.e., nest monitoring) should be implemented during construction to "avoid" take.

Final EIR Page 4-4-62

Mitigation Measure 4-9b (Restore Temporarily Disturbed Riparian Habitat) under the discussion of "Potential to Adversely Affect Riparian Habitat or Other Sensitive Natural Community" in Section 4-4.6.2 of the Draft EIR has been revised to address Comment 4-6 regarding monitoring and management of riparian shrub revegetation.

Following installation of the outlet pipes on each basin, disturbed riparian habitat will be restored. These areas shall be revegetated with locally native riparian shrubs that establish quickly such as, California bay laurel, California rose, California grape, and mugwort. Trees will not be planted in this area because of the potential for their root systems to undermine the integrity of the outlet pipes. Plantings shall consist of cuttings taken from local plants, or plants grown from local material obtained within the Alamo Creek and Ulatis Creek watershed. Because the proposed planting are hardy and fast-growing species, the replacement plantings would be planted in the fall following construction and monitored the following spring to ensure their survival. Any remedial measures (i.e., additional plantings) would be conducted in the following fall season.

Final EIR Pages 4-4-62 and 4-4-63

Mitigation Measure 4-9c (Compensate for Temporary and Permanent Loss of Riparian Habitat) under the discussion of "Potential to Adversely Affect Riparian Habitat or Other Sensitive Natural Community" in Section 4-4.6.2 of the Draft EIR has been revised to address Comment 4-6 regarding compensation for trees removal within temporarily disturbed areas and to provide an additional offsite mitigation option.

MITIGATION MEASURE 4-9C: COMPENSATE FOR TEMPORARY AND PERMANENT LOSS OF RIPARIAN HABITAT

1. For purposes of determining appropriate riparian habitat compensation, temporary removal of riparian habitat associated with construction of the outlet pipes would be compensated at the same ratio as permanent riparian habitat removal because it is not be feasible to replant trees over or adjacent to the outlet pipe because of the potential for their root systems to undermine the integrity of the outlet pipes. To compensate for the temporary and permanent removal of riparian ~~habitat~~ trees and shrubs associated with the construction of the inlet weirs and outlet pipes, the City shall replant riparian trees and shrubs at a minimum ~~2:1~~ 3:1 ratio (~~two~~ three trees/shrubs planted for every tree/shrub removed). The replacement plantings shall consist of a variety of native tree species such as valley oak, Freemont cottonwood, red willow, arroyo willow, and white alder; and native shrub species such as California Bay, California buckeye, and California rose.

2. The City shall accomplish riparian habitat compensation by implementing one of the following two options.

a. After completion of the final design for each basin, the City shall prepare a planting plan that identifies the location of the riparian mitigation plantings and the number, type, and size of plants. The planting plan shall also describe the irrigation and maintenance required to establish and monitor the planting area. Mitigation plantings will be done between October 15 and December 31 of the year immediately following when impacts occur. All mitigation plantings will be monitored for 5 years. All plantings will have a minimum of 80% survival goal at the end of 5 years. If the survival requirements are not meeting this goal, replacement plantings will be installed. Replacement plants shall be monitored with the same survival and growth requirements for 5 years after planting. The City will be responsible for planting, replanting, watering, weeding, invasive exotic eradication, and any other practice needed to ensure this goal. An annual status report on the mitigation will be provided to DFG by December 31 of each year. The report will include the survival, percent cover, and height of both tree and shrub species. The number by species of plants and trees replaced, and overview of the revegetation effort, and the method used to assess these parameters will also be included. Photographs of the mitigation area will also be included. To ensure success of the mitigation plantings, the City shall prepare and implement an adaptive management plan that identifies specific monitoring tasks, success criteria, and reporting requirements.

or

b. The City shall purchase mitigation credits at a DFG-approved riparian mitigation site at a 3:1 ratio (three trees/shrubs planted for every tree/shrub removed) that includes long-term management and monitoring.

Final EIR Page 4-4-63

The title and discussion under Section 4-4.6.3 of the Draft EIR has been revised as follows to address Comment 4-7 and to provide additional clarification on state jurisdiction for aquatic features on the Alamo and Ulatis sites.

4-4.6.3 Potential to Adversely Affect ~~Federal~~ Waters of the U.S. and State, Including Wetlands, under the Jurisdiction of the ~~CWA~~ Clean water Act~~, Section 404~~ and the California Fish and Game Code

A wetland delineation was conducted that identified potential waters of the U.S., including wetlands, on the Proposed Project sites. The Alamo site supports 3.294 acres of seasonal drainage (Alamo Creek) and the Ulatis site supports 3.807 acres of seasonal drainage (Ulatis Creek, unnamed tributary, and two erosional features) and 0.066 acre of seasonal wetland habitat. These features were determined to be potentially jurisdictional under ~~Section 404 of~~ the CWA and/or the California Fish and Game Code (CFGC), Section 1600.

Final EIR Page 4-4-63

The title and first paragraph of Impact 4-10 (Permanent and Temporary Fill to Waters of the U.S. and State at the Alamo Site and Ulatis Site) under the discussion of "Potential to Adversely Affect Waters of the U.S. and State, including Wetlands, under the Jurisdiction of the Clean Water Act and the California Fish and Game Code" in Section 4-4.6.3 of the Draft EIR has been revised to address Comment 4-8 regarding impacts on aquatic features.

IMPACT 4-10: PERMANENT AND TEMPORARY FILL TO WATERS OF THE U.S. AND STATE AT THE ALAMO SITE AND ULATIS SITE

The Proposed Project has been designed to avoid and minimize impacts to waters of the U.S. and State, including wetlands, to the maximum extent practicable. Permanent and temporary impacts on potentially jurisdictional waters would result from construction of an inlet weir and outlet pipe on each of the two basins. Installation of the inlet weir would require the placement of articulated concrete revetment block, or a similar stabilization feature, within the creek bank along the north side of Alamo Creek and the south side of Ulatis Creek at the Project sites. Riprap would also be placed along the creek banks and in the bed of the creeks to serve as an energy dissipation area for the outlet pipes. These activities would result in permanent and temporary fill of waters of the U.S. (Alamo Creek and Ulatis Creek) and alteration of the stream bank, and would require CWA, Section 401, 402, and 404 Permits and a Streambed Alteration Agreement in compliance with CFGC, Section 1600. According to preliminary basin designs, construction of the inlet weir and outlet pipes at the Alamo site may permanently fill approximately 0.382 acre and temporarily fill approximately 0.048 acre of waters of the U.S. and State (Alamo Creek). Construction associated with the inlet weir and outlet pipes at the Ulatis site may permanently fill approximately 0.159 acre and temporarily fill approximately 0.087 acre of waters of the U.S. and State (Ulatis Creek).

Final EIR Page 4-4-64

The title and first paragraph of Mitigation Measure 4-10b (Comply with the Conditions of Clean Water Act, Section 401, 402, and 404 Permits and Streambed Alteration Agreement Obtained for the Proposed Project) under the discussion of "Potential to Adversely Affect Waters of the U.S. and State, including Wetlands, under the Jurisdiction of the Clean Water Act and the California Fish and Game Code" in Section 4-4.6.3 of the Draft EIR has been revised to address Comment 4-8 regarding impacts on state jurisdictional aquatic features.

MITIGATION MEASURE 4-10B: COMPLY WITH THE CONDITIONS OF CLEAN WATER ACT, SECTION 401, 402, AND 404 PERMITS AND STREAMBED ALTERATION AGREEMENT OBTAINED FOR THE PROPOSED PROJECT

1. Before any ground-disturbing activities (including equipment staging), the City shall obtain and comply with the conditions of a CWA, Section 404 permit from the Corps; ~~and~~ a CWA, Section 401 water quality certification from RWQCB; and Streambed Alteration Agreement from DFG.

Final EIR Page 4-4-65

The title and discussion of Mitigation Measure 4-10c (Compensate for Permanent Impacts to Waters of the U.S. and State) under the discussion of "Potential to Adversely Affect Waters of the U.S. and State, including Wetlands, under the Jurisdiction of the Clean Water Act and the California Fish and Game Code" in Section 4-4.6.3 of the Draft EIR has been revised to address Comment 4-8 regarding impacts on state jurisdictional aquatic features.

MITIGATION MEASURE 4-10C: COMPENSATE FOR PERMANENT IMPACTS TO WATERS OF THE U.S. AND STATE

The Proposed Project appears to qualify for authorization under the Nationwide Permit Program. Specifically, the Proposed Project may qualify for authorization under a Nationwide Permit 43 for Stormwater Management Facilities. Additionally, DFG will require a Streambed Alteration Agreement with the City for project-related activities that impact waters of the State. Authorization of these activities by the Corps and DFG will require compensation for impacts on Corps and DFG jurisdictional features. To compensate for permanent impacts on jurisdictional waters, the City shall purchase waters of the U.S. and/or State credits from a Corps- and/or DFG-approved mitigation bank, or in-lieu fees shall be paid to a Corps- and/or DFG-approved fund at a 1:1 replacement ratio (1 acre of habitat replaced for every 1 acre filled).

Final EIR Page 4-4-66

A discussion of incidental public use was added to Section 4-4.6 of the Draft EIR to address Comment 4-6 related potential recreational activities on the Alamo and Ulatis sites.

4-4.6.5 Potential for Incidental Passive Public Use to Directly or Indirectly Impact Biological Resources

The Proposed Project includes an incidental passive public use component that would allow limited public access on the Alamo and Ulatis sites. Incidental passive public uses may include wildlife or habitat viewing and educational field trips and access would be limited by appointment or by a docent-led program administered directly through the City or through an agreement with the Solano Land Trust. This incidental passive public use would not require the construction of improvements such as restrooms, picnic tables, play fields, paved trails, or other constructed facilities. Fencing on the detention basin sites would be placed only as required to restrict public access to component use areas such as agricultural fields and sensitive habitat, and to protect neighboring properties from casual trespass.

The potential for limited incidental passive public use of the Alamo and Ulatis sites would not result in adverse impacts on biological resources because only passive public uses would be allowed and fencing would restrict access to non-sensitive areas. This would be a ***less-than-significant*** impact and no mitigation is required.

Final EIR Page 4-5-15

The second and third paragraph of Mitigation Measure 5-1a (Develop and Implement a Treatment Plan for the Alamo Site) under the discussion of "Potential to Adversely Affect the Significance of an Archaeological Resource" in Section 4-5.6.1 of the Draft EIR has been revised to provide clarification on location of mitigation.

2. Mitigation for archaeological deposits shall involve data recovery excavations to obtain a sufficient sample from the Alamo site so as to exhaust the research potential of the deposits. This shall be accomplished through a combination of hand excavation, supervised backhoe trenching, and monitored grading of archaeological deposits. The City shall implement the treatment plan.

3. In addition, one goal of archaeological mitigation shall be the recovery of any human interments or remains prior to the inception of construction at the Alamo site. The removal, treatment, and repatriation of any such remains shall be undertaken in accordance with Mitigation Measure 5-1c.

Final EIR Page 4-5-15

The second and third paragraph of Mitigation Measure 5-1b (Develop and Implement a Treatment Plan for the Ulatis Site) under the discussion of "Potential to Adversely Affect the Significance of an Archaeological Resource" in Section 4-5.6.1 of the Draft EIR has been revised to provide clarification on location of mitigation.

2. Mitigation for archaeological deposits shall involve data recovery excavations to obtain a sufficient sample from the Ulatis site so as to exhaust the research potential of the deposits. This shall be accomplished through a combination of hand excavation, supervised backhoe trenching, and monitored grading of archaeological deposits. The City shall implement the evaluation/ treatment plan.

3. In addition, one goal of archaeological mitigation shall be the recovery of any human interments or remains prior to the inception of construction at the Ulatis site. The removal, treatment, and repatriation of any such remains shall be undertaken in accordance with Mitigation Measure 5-1c.

Final EIR Page 4-9-1

The first paragraph of the discussion of "Study Methods" in Section 4-9.1 of the Draft EIR has been revised as follows to address Comment 2-7.

> Methods used to identify and evaluate transportation resources in and around the Proposed Project sites consisted of a review of existing traffic counts and studies. The study area for evaluating transportation resources encompasses the Proposed Project sites, and roadways within unincorporated Solano County that extend up to 15 miles from the Proposed Project sites. This distance was selected because the Proposed Project will involve excavating and transporting up to 950,000 cubic yards of soil. The soil will be transported to a site that will be determined by the construction contractor and is, therefore, not yet known. In compliance with City Standard Specifications, haul routes through City streets will be prohibited by the construction contract unless needed to access a disposal site within the City, in which case the most direct route will be used that avoids local residential streets, subject to approval by the City's Traffic Engineer. As such, the most likely roadways to be used for offsite disposal are Vaca Valley Road, ~~and~~ Pleasants Valley Road, Cherry Glen Road, Bucktown Lane, and Rogers Lane (Figure 3-1). To identify potential impacts on traffic from the Proposed Project, this section evaluates traffic operations along Vaca Valley Road and Pleasants Valley Road near the two Proposed Project sites and along Interstate (I)-80 near the Pena Adobe interchange. For purposes of this EIR, traffic impact calculations were analyzed for the worst case condition (although unlikely) that both basins would be under construction at the same time and for each basin individually.

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The discussion of "Pedestrian/Bicycle Network" in Section 4-9.2.5 of the Draft EIR has been revised as follows to address Comment 3-3.

Pedestrian/Bicycle Network

Generally, roadways in unincorporated Solano County are not designed with sidewalks because these roadways generally are located in areas with low population or employment density. The County's connectivity consists primarily of short sidewalks and multiuse trails. Class I bicycle trails are usually designed as multiuse trails that can be shared with pedestrians. The closest Class I bike path is located approximately 0.4 mile east and southeast from the Alamo site within the City of Vacaville limits. This bikeway does not overlap with any proposed Project features or haul routes. Pedestrian facilities also include crosswalks and pedestrian-actuated signals at major intersections near developed areas. There is no developed pedestrian network in the vicinity of the project sites or along the probable construction haul routes. Because of the distances between destinations in the rural agricultural setting, pedestrian use of roadways is minimal.

The Solano Countywide Bicycle Plan (Solano Transportation Authority 2004) identifies numerous bikeway facilities throughout Solano County. The only existing developed bikeway in the vicinity of the Project is a Class I bike path located approximately 0.4 mile east and southeast from the Alamo site within the City of Vacaville limits. As indicated above, this bikeway does not overlap with any proposed Project features or haul routes. Roadways proposed for offsite disposal include Pleasants Valley Road and Vaca Valley Road. Both of these roadways are recognized as popular undeveloped bike routes. However, due to the existing narrow pavement widths, these roads could not accommodate a Class II bike lane without widening (Solano Transportation Authority 2004). According to the Bicycle Plan Project List, adopted by Solano Transportation Authority Board on March 15, 2010, Pleasants Valley Road from Cherry Glenn Road to the Yolo County Line is designated as a planned project (Solano Transportation Authority 2010).

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The following documents were added to the list of references under "Introduction" in Section 8-1 of the Draft EIR to include a list of documents referenced for general information on the Project and regional setting.

The following documents provided general background information during preparation of this EIR.

City of Vacaville. 1990. City of Vacaville General Plan. Adopted 1990, amended 1991-2008. City of Vacaville. Available online at: http://www.cityofvacaville.com/departments/community_development/general_plan.php.

City of Vacaville. 2007a. City of Vacaville Infrastructure, Facilities and Services Status Report. Available online at: http://www.ci.vacaville.ca.us/departments/community_development/__documents/plans_reports/PGO.pdf

City of Vacaville. 2007b. City of Vacaville Alamo Creek Detention Basin, California Department of Water Resources Flood Protection Corridor Program Proposition 84 Grant Application. November 2, 2007.

City of Vacaville. 2007c. City of Vacaville Alamo Creek Detention Basin DR-1628 HMGP Application Submittal. February 2007. Vacaville, California.

City of Vacaville. 2008. City of Vacaville Ulatis Creek Detention Basin DR-1731 HMGP Application Submittal. August 28, 2008. Vacaville, California.

Solano County. 2008a. Final Environmental Impact Report for the 2008 Draft Solano County General Plan. Certified on August 5, 2008. Solano County, California.

Solano County. 2008b. Solano County General Plan. December 2008. Solano County, California.

Solano County. 2008c. CEQA Findings of Fact, Statement of Overriding Considerations of the Solano County Board of Supervisors for the Solano County 2008 Draft General Plan Environmental Impact Report. Solano County, California. Available online at: http://www.co.solano.ca.us/BOSAgenda/MG29288/AS29351/AS29382/AS29383/AI30032/DO31491/DO_31491.PDF. Accessed on August 12, 2009.

West Yost Associates. 2008. Solano County Water Agency Ulatis System Drainage Study. March 2008.

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The following reference for "Land Use and Agriculture" in Section 8.4.2 of the DEIR has been revised as follows to correct a discrepancy in the text.

Solano County Water Agency. ~~2009~~2010. Solano Multispecies Habitat Conservation Plan (Administrative Draft ~~May~~ April 2009). Accessed August 29, 2010. Available online http://www.scwa2.com/Conservation_Habitat_FinalAdminDraft.aspx.

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The following two additional "Traffic/Transportation" references were added to Section 8.4.9 of the DEIR in response to Comment 3-3.

Solano Transportation Authority. 2004. The Solano Countywide Bicycle Plan. October 2004. Solano County, California.

Solano Transportation Authority. 2010. Bicycle Plan Project List adopted by Solano Transportation Authority Board on March 15, 2010. Accessed on December 23, 2010. Available online: http:// http://www.sta.dst.ca.us/pdfs/Packets/BAC/2010/Full%20BAC%20Agenda%20July%202010.pdf.

Chapter 5
Mitigation Monitoring and Reporting Plan

5.1 INTRODUCTION

The California Environmental Quality Act (CEQA) requires that a Lead Agency establish a program to report on and monitor measures adopted as part of the environmental review process to mitigate or avoid significant effects on the environment. This Mitigation Monitoring and Reporting Plan (MMRP) is designed to ensure that the mitigation measures identified in the Environmental Impact Report (EIR) for the Alamo Creek and Ulatis Creek Detention Basins Project (Proposed Project) are fully implemented. The MMRP, as presented **Table 2**, describes the timing/frequency of mitigation implementation responsibilities and standards, and verification of compliance for the mitigation measures identified in the Proposed Project EIR.

Table 2 presents all recommended mitigation measures and is organized in the same order as the contents of the EIR, by topic. A number of entities have been assigned monitoring responsibilities under this MMRP. All monitoring actions, once completed, would be reported (in writing) to the City of Vacaville Department of Public Works, which would maintain mitigation monitoring records for the Proposed Project. The MMRP will be considered by the City Council, and/or staff in conjunction with review and approval of the project and each subsequent approval related to future project phases, and will be adopted as a condition of project approval for each action and future action. The components of this table are addressed below.

Mitigation Measure: The mitigation measures are taken verbatim from the Draft EIR or, when a revision has been made, from the Final EIR. Mitigation measures are assigned the same number they have in the EIR.

Timing/Frequency of Action: Identifies the timing for the implementation of each action.

Responsibility for Implementation: Identifies the authority responsible for implementing the mitigation measures.

Responsibility for Monitoring: Identifies the authority responsible for monitoring implementation of the mitigation measure.

Standards for Compliance: Identifies the action that must be completed in order for the mitigation measure to be considered implemented.

Verification of Compliance: Identifies verification of compliance with each identified mitigation measure.

Table 2. Mitigation Monitoring and Reporting Plan for Alamo Creek and Ulatis Creek Detention Basins Project

Mitigation Measure	Timing/ Frequency of Action	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
Land Use and Agriculture					
Mitigation Measure 2-2 The following measures shall be implemented during and after basin construction to ensure that that Proposed Project does not interfere with farm operations on adjacent agricultural parcels.					
1. The City shall coordinate with adjacent landowners so that construction and maintenance activities and traffic will not interfere with adjacent agricultural activities, such as during cultivation and harvest on the shared roads.	During construction; ongoing after basin construction	City	City	Verify agricultural activities are not being disturbed	
2. Passive public use shall have limited access by an appointment or by a docent-led program.	Ongoing after basin construction	City	City	Verify public use results in limited access	
3. Fencing on the detention basin sites shall be placed as required to restrict public access to component use areas such as agricultural fields and sensitive habitat, and to protect neighboring properties from casual trespass.	Ongoing after basin construction	City	City	Verify fencing is established and maintained	
4. Parking areas shall be limited and the design and security measures should be taken to reduce the late-night attractive nuisance.	Ongoing after basin construction	City	City	Verify parking areas are limited and security measures are implemented	
Mitigation Measure 2-3 Prior to construction of the Alamo detention basin, the City shall coordinate with the County and the Department of Conservation to ensure that Condition #7 of the existing Williamson Act contracts is applicable by the City (as the land owner) and that no additional actions are necessary to void the Williamson Act contracts covering the three parcels on the Alamo site.	Prior to construction of the Alamo detention basin	City	City	Verify Condition #7 of the Williamson Act contracts is applicable to the City and that no other actions are necessary	

Mitigation Measure	Timing/ Frequency of Action	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
Air Quality and Greenhouse Gas Emissions					
Mitigation Measure 3-1					
The following measures shall be implemented for the control of fugitive dust emissions associated with the construction of the Proposed Project:					
1. Water all active construction areas at least three times daily. Frequency of application should be based on the type of operation, soil and wind exposure.	Throughout the construction period	City's construction contractor	City	Verify all active construction areas are watered as necessary	
2. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard.	Throughout the construction period	City's construction contractor	City	Verify all trucks meet guidelines	
3. Hydroseed exposed areas after cut and fill operations.	Throughout the construction period; after cut and fill operations	City's construction contractor	City	Verify hydroseeding after cut and fill operations	
4. Replant vegetation in disturbed areas as quickly as possible.	Immediately following construction	City	City	Verify revegetation is complete	
5. Enclose, cover, or water three times daily exposed stockpiles, such as dirt, sand, etc.	Throughout the construction period	City's construction contractor	City	Verify that exposed dirt is covered or watered daily	
6. Sweep streets daily, with water sweepers, if visible soil materials are carried onto adjacent public streets.	Throughout the construction period	City's construction contractor	City	Verify streets are swept	
7. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.	Throughout the construction period	City's construction contractor	City	Verify sandbags/ erosion control installed as necessary	
The following measures shall be implemented for the control of mobile-source emissions associated with the construction of the proposed Alamo Creek and Ulatis Creek detention basins:					
8. Construction equipment shall not be left idling for periods longer than 5 minutes when not in use.	Throughout the construction period	City's construction contractor	City	Verify vehicles are not left idling	

Mitigation Measure	Timing/ Frequency of Action	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
9. The project contractor shall provide a plan for approval by the City, in consultation with YSAQMD, demonstrating that the heavy-duty (>50 horsepower), off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project-wide fleet-average 20-percent NOX reduction and 45-percent particulate reduction compared to the most recent CARB's fleet-average at the time of construction. Acceptable options for reducing emissions include the use of late-model engines, low-emission diesel products, alternative fuels, PM traps, engine retrofit technology, after-treatment products, and/or such other options as become available.	Prior to construction	City's construction contractor	City	Verify that a plan for reduced emissions in construction equipment has been prepared and implemented	
Mitigation Measure 3-8					
The following measures shall be implemented to reduce short-term increases of GHG emissions:					
1. Implement Mitigation Measure 3-1, (8) and (9).	Throughout the construction period	City's construction contractor	City	Verify mitigation measures are met	
2. Construction waste shall be reused and/or recycled, to the maximum extent practical.	During and after construction	City's construction contractor	City	Verify construction waste is being reused/recycled as practical	
3. Construction of onsite facilities shall reduce building material waste and incorporate the use of local building materials, to the maximum extent practical.	Throughout the construction period	City's construction contractor	City	Verify waste reduction as practical	
4. Construction workers shall be encouraged to car/vanpool or utilize alternative means of transportation to commute to and from the construction site.	Throughout the construction period	City's construction contractor	City	Verify car/vanpool as practical	
Biological Resources					
Mitigation Measure 4-1a					
The following measures will be implemented by the City to avoid and minimize effects to the Valley elderberry longhorn beetle:					
1. Before any work occurs at the Project sites, including grading and equipment staging, the City shall require all construction personnel to participate in an environmental awareness training regarding special-status species	Prior to construction	City's biological consultant	City	Verify that all construction personnel participate in environmental	

Mitigation Measure	Timing/ Frequency of Action	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
(including valley elderberry longhorn beetle) and habitats present at the Proposed Project site. If new construction personnel are added to the Proposed Project, the City shall require the contractor to ensure that the personnel receive the mandatory training before starting work. As part of the training, an environmental awareness handout will be provided to all personnel that describes and illustrates sensitive resources that will be avoided during Project construction and identifies all relevant permit conditions and protection measures related to those resources.				awareness training	
2. All areas to be avoided during construction will be fenced and flagged. In areas where encroachment occurs within a 100-foot buffer of protected elderberry shrub, a buffer of at least 20 feet from the dripline of each elderberry shrub will be established. The fencing and flagging will be clearly marked and an "environmentally sensitive area". If project work occurs within 20 feet of the dripline of the avoided elderberry shrubs, the on-site City Public Works Inspector, working with the project biologist, will cease project work and notify FEMA that reinitiation of consultation with the Service is necessary.	Prior to construction	City's construction contractor and biological consultant	City	Verify exclusion fencing is installed and maintained	
3. Signs will be erected every 50 feet along the edge of the avoidance areas with the following information: "This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. The Endangered Species Act of 1973, as amended, protects this species. Violators are subject to prosecution, fines, and imprisonment". The signs will be clearly readable from a distance of 20 feet, and will be maintained for the duration of construction.	Prior to construction	City's construction contractor and biological consultant	City	Verify signs are installed and maintained	
4. Dust control procedures, such as regular watering of disturbed soils and soil piles, the covering of soil piles, and the establishment of vehicle speed limits will be used throughout the construction period.	Throughout the construction period	City's construction contractor	City	Verify dust control measures are implemented	
The City will ensure restoration and maintenance of disturbed areas within 100 feet of elderberry shrubs be accomplished by implementation of the following measures:					

Mitigation Measure	Timing/ Frequency of Action	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
5. Any habitat disturbance within the 100-foot buffer area will be restored. Restoration will include erosion control and re-vegetate with appropriate native plants.	Immediately after construction is complete	City	City	Verify habitat disturbance within the 100-foot buffer area is restored	
6. No insecticides, herbicides, fertilizer, or other chemicals that might harm the beetle or its host plant will be used in the buffer areas, or within 100 feet of any shrubs with one or more stems measuring one inch or greater in diameter at ground level during construction or maintenance of the Proposed Project.	During construction; ongoing after basin construction	City	City	Verify no chemicals harmful to the beetle or its host plant are used	
7. The City will provide a written description to USFWS on how the buffer areas are to be restored, protected, and maintained after construction is completed.	Prior to the completion of construction	City or City's biological consultant	City	Provide a description of buffer areas to USFWS	
Mitigation Measure 4-1b					
1. The City shall ensure that all elderberry shrubs with stems measuring 1 in or more in diameter and that cannot be avoided during construction will be transplanted onsite (along Alamo or Ulatis Creek) or to an offsite conservation area in accordance with the Conservation Guidelines for Valley Elderberry Longhorn Beetle (USFWS 1999) and the USFWS Biological Opinion for the Alamo site (USFWS 2010). Transplantation guidelines include but are not limited to the following. a. Elderberry shrubs will be transplanted during the dormant period of the shrubs (November through the first 2 weeks of February), or as approved by the USFWS, by a licensed arborist. b. In the event that an elderberry shrub is unlikely to survive transplantation because of poor condition or location, the shrub may be exempted from transplantation at the discretion of USFWS. c. The location of the onsite or offsite conservation area shall be approved by USFWS before removal (transplanting) of the shrubs.	November through the first 2 weeks of February preceding construction	City	City	Verify elderberry shrubs that are unavoidable during construction are transplanted	

Mitigation Measure	Timing/ Frequency of Action	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
Mitigation Measure 4-1c					
1. The City shall compensate for direct impacts on all elderberry shrubs with stems measuring 1 inch or more at ground level in accordance with the Conservation Guidelines for Valley Elderberry Longhorn Beetle (Guidelines) (USFWS 1999) and the USFWS Biological Opinion obtained for the Alamo site (USFWS 2010). Additional compensation requirements may be required by USFWS as part of Section 7 consultation for the Ulatis Creek Detention Basin. Compensation requirements for direct effects on valley elderberry longhorn beetle include but are not limited to the following: a. Replacement plantings at a ratio between 1:1 and 8:1 (new plantings to affected stems), depending on the diameter of the stem at ground level, presence or absence of exit holes, and whether the shrub is located in riparian habitat. b. Replacement plantings of elderberry seedlings or cuttings and associated native plantings at an onsite or offsite USFWS-approved conservation area.	Prior to construction	City	City	Verify direct impacts are compensated for according to USFWS's Biological Opinion	
Mitigation Measure 4-2					
1. A qualified biologist shall conduct a preconstruction clearance survey for foothill yellow-legged frogs within 48 hours prior to construction within or adjacent to Alamo Creek at the Alamo site and within or adjacent to Ulatis Creek and onsite tributary at the Ulatis site. The survey shall focus on the construction areas of the proposed outlet pipes and the inlet structures.	Within 48 hours prior to the start of construction activities within or adjacent to creek	City's biological consultant	City	Provide documentation of preconstruction clearance survey and results	
2. Any foothill yellow-legged frogs or other special-status amphibians found at the Proposed Project site shall be allowed to voluntarily move out of the work area or shall be captured and held for the minimum amount of time necessary to release them in suitable habitat outside the construction work area. If a foothill yellow-legged frog or other special-status amphibian species is observed during the preconstruction survey, DFG and/or USFWS, as applicable to the species, will be contacted to determine if	Throughout the construction period	City's biological consultant	City	Verify that any foothill yellow-legged frogs found site are properly handled	

Mitigation Measure	Timing/ Frequency of Action	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
additional avoidance measures are necessary.					
Mitigation Measure 4-3					
1. In conjunction with the foothill yellow-legged frog clearance survey, a qualified biologist shall conduct a preconstruction clearance survey for western pond turtles within 48 hours prior to any ground disturbance within or adjacent to Alamo Creek at the Alamo site and within or adjacent to Ulatis Creek and the onsite tributary at the Ulatis site. Surveys shall focus on the construction areas of the proposed outlet pipes and the inlet structures.	Within 48 hours prior to the start of construction activities within or adjacent to creek	City's biological consultant	City	Provide documentation of preconstruction clearance survey and results	
2. Any western pond turtles found at the Proposed Project site shall be allowed to voluntarily move out of the work area or shall be captured and held for the minimum amount of time necessary to release them in suitable habitat outside the construction work area. If a western pond turtle is observed during the preconstruction survey, DFG will be contacted to determine if additional avoidance measures are necessary.	Throughout the construction period	City or City's biological consultant	City	Verify any western pond turtles found at the project site are properly handled	
3. Preconstruction surveys for western pond turtle shall also be conducted no more than 48 hours before the start of construction activities within upland habitat 1,300 feet north of Alamo Creek at the Alamo site and 1,300 feet south of Ulatis Creek at the Ulatis site. These surveys shall include searching for adult pond turtles in addition to nests containing pond turtle hatchlings and eggs.	Within 48 hours prior to the start of construction activities in upland areas	City's biological consultant	City	Provide documentation of preconstruction clearance survey and results	
4. If an adult western pond turtle is located within upland habitat in the designated construction work area, the biologist shall move the turtle to a suitable aquatic site, outside the construction area. If an active pond turtle nest containing either pond turtle hatchlings or eggs is found, DFG shall be consulted to determine and implement appropriate avoidance measures, which may include a “no-disturbance” buffer around the nest site until the hatchlings have moved to a nearby aquatic site.	Throughout the construction period	City or City's biological consultant	City	Verify any western pond turtles found in the designated construction work area are properly handled	

Mitigation Measure	Timing/ Frequency of Action	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
Mitigation Measure 4-4					
1. Limit construction activities within the banks and riparian zone of Alamo Creek and Ulatis Creek to June 15 to October 15, which is the period when Central Valley steelhead and Chinook salmon are least likely to be within Alamo Creek and Ulatis Creek. The exception to this timing and location restriction would be for archaeological investigations that could occur adjacent to the creek banks and within the riparian zone between April 15 and October 15, consistent with timing conditions identified in the response letters from NMFS for the Alamo site.	Throughout the construction period	City	City	Verify construction activities creek occur during time period approved by NMFS	
2. Provide a NMFS-approved biologist to conduct training sessions familiarizing all construction personnel with identification of Central Valley steelhead and Chinook salmon, and their habitats, as well as the general provisions and protections afforded by the Endangered Species Act to raise awareness of potential factors that might degrade habitat during construction in order to avoid them.	Prior to construction	City's biological consultant	City	Verify that all construction personnel participate in training	
3. Provide a NMFS-approved biologist to monitor all construction activities in, or adjacent to the active stream channel of Alamo and Ulatis Creeks to ensure compliance with best management practices outlined in Section 5 of the Biological Assessment prepared for the Alamo site (FEMA 2010). The monitoring biologist will also be familiar with the identification of reptiles and amphibians in the event that a special-status reptile (i.e., western pond turtle) or amphibian (i.e., foothill yellow-legged frog, California red-legged frog) is observed during monitoring. If a special-status fish, reptile, or amphibian is observed within the construction area, the biologist will have the authority to stop construction until the animal voluntarily moves out of the construction area or the biologist relocates the animal to suitable habitat outside the construction area. The monitor will notify the City immediately of the animal's presence within the construction area. If a steelhead or salmon is observed, the City will contact NMFS to determine if additional avoidance measures are necessary. If a special-status	Throughout the construction period	City's biological consultant	City	Provide documentation of monitoring and compliance with best management practices	

Mitigation Measure	Timing/ Frequency of Action	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
reptile or amphibian is found within the construction area, the City will contact DFG and/or USFWS as appropriate for the species observed.					
4. Remove debris that accumulates within the detention basins (during flooding events) at a time when the area is dry and steelhead and salmon would not be present (i.e., June through September) unless waiting for the dry season would create undue safety concerns.	June through September	City	City	Verify removal of accumulated debris in basins	
5. Ensure that all demolition and removal, of structures in the course of completing the project conforms to all applicable hazardous materials safety guidelines.	Throughout the construction period	City's construction contractor	City	Verify project conforms to hazardous materials safety guidelines	
6. Ensure that all areas that are particularly susceptible to erosion from flooding events (e.g., the intake and spillway) have been appropriately hardened against scour.	During and after construction	City's construction contractor	City	Verify inlet and outlet are properly constructed to prevent scour	
7. Avoid entrapment of steelhead and salmon within the detention basins through the installation of a 42-inch-diameter reinforced-concrete pipe outlet at the lowest elevation within the basins.	Prior to construction	City	City	Verify final plans include installation of outlet pipe at lowest elevation within basins	
Mitigation Measure 4-5					
1. The City shall retain a qualified biologist to conduct a preconstruction survey to locate any burrowing owl burrows on the Project sites and within a 500-foot-wide buffer around the site. The preconstruction survey shall be conducted in accordance with guidelines provided in DFG's Staff Report on Burrowing Owl Mitigation (DFG 1995) and no more than 30 days before the start of construction activities (including grading and equipment staging). If no burrowing owls are detected, no further mitigation is required.	No more than 30 days prior to the start of construction activities	City's biological consultant	City	Provide documentation of preconstruction survey and results	
2. If active burrowing owls are detected in the survey area,	Prior to and during	City's biological consultant	City	Verify appropriate avoidance,	

Mitigation Measure	Timing/ Frequency of Action	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
the following measures shall be implemented. a. Occupied burrows shall not be disturbed during the nesting season (generally February 1–August 30). b. When destruction of occupied burrows is unavoidable during the non-breeding season (September 1–January 31),the City shall coordinate with DFG and unsuitable burrows shall be enhanced (enlarged or cleared of debris) or new burrows created (installing artificial burrows) at a ratio of 2:1 on protected areas within or adjacent to the Project boundaries. Newly created burrows shall follow guidelines established by DFG. c. If owls must be moved away from the Project sites during the non-breeding season, passive relocation techniques (e.g., installing one-way doors at burrow entrances) shall be used instead of trapping. At least 1 week shall be necessary to accomplish passive relocation and allow owls to acclimate to alternate burrows.	construction			relocation, and compensation actions have been implemented as determined by preconstruction survey and DFG coordination	
Mitigation Measure 4-6					
1. If construction (including equipment staging and tree removal) will occur during the breeding season for migratory birds and raptors (generally between March 1 and August 30), the City shall retain a qualified biologist to conduct a preconstruction nesting bird and raptor survey before the onset of construction activities.	Prior to construction between March 1-August 30	City's biological consultant	City	Provide documentation of preconstruction survey and results	
2. The preconstruction nesting bird and raptor surveys shall be conducted between March 1 and August 30 within suitable habitat at the Project sites. Surveys for raptors nests should also extend ¼-mi from the Project sites to ensure that nesting raptors are not indirectly affected by construction noise. The survey shall be conducted no more than 1 week before the initiation of construction activities. If no active nests are detected during the survey, no additional mitigation is required and construction can proceed.	Within 1 week prior to construction between March 1-August 30	City's biological consultant	City	Provide documentation of preconstruction survey and results	
3. If migratory birds or raptors are found to be nesting in or adjacent to the Project sites, a no-disturbance buffer shall	Prior to construction	City's biological consultant	City	Verify that nesting birds and raptors	

Mitigation Measure	Timing/ Frequency of Action	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
be established around the nest to avoid disturbance of the nest site and to avoid take. The buffer will be maintained around the nest site until the end of the breeding season or until a qualified biologist determines that, the young have fledged and are foraging on their own. The extent of these buffers shall be determined by the biologist (coordinating with the DFG) and shall depend on the species identified, level of noise or construction disturbance, line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. If a Swainson's hawk nest is found within 0.25-mi from construction activities, the City will consult with DFG to determine if additional avoidance measures (i.e., nest monitoring) should be implemented during construction to "avoid" take.				are not disturbed during construction	
Mitigation Measure 4-9a					
1. Before any ground-disturbing activities (including grading and equipment staging), the City shall ensure that temporary exclusion area fencing (4-foot-high orange construction fencing or sediment fencing) is installed at the edge of riparian habitat that will be avoided during construction.	Prior to ground-disturbing activities	City's construction contractor	City	Verify exclusion fencing is properly installed	
2. The extent of the riparian buffer and exclusion fencing shall be shown on the final construction plans for the Proposed Project. The purpose of the fencing is to alert construction personnel of this protected habitat and the need for avoidance. The fencing shall be checked and maintained throughout the construction period.	Prior to construction; throughout the construction period	City	City	Verify exclusion fencing shown on final plans and that fencing is maintained throughout construction	
3. A City representative shall conduct biweekly site visits to monitor construction at the Project sites and ensure that the contractor maintains the temporary exclusion area fencing to avoid protected riparian habitat.	Throughout the construction period	City	City	Provide documentation of site visits and condition of fencing	

Mitigation Measure	Timing/ Frequency of Action	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
Mitigation Measure 4-9b					
Following installation of the outlet pipes on each basin, disturbed riparian habitat will be restored. These areas shall be revegetated with locally native riparian shrubs that establish quickly such as, California bay laurel, California rose, California grape, and mugwort. Trees will not be planted in this area because of the potential for their root systems to undermine the integrity of the outlet pipes. Plantings shall consist of cuttings taken from local plants, or plants grown from local material obtained within the Alamo Creek and Ulatis Creek watershed. Because the proposed planting are hardy and fast-growing species, the replacement plantings would be planted in the fall following construction and monitored the following spring to ensure their survival. Any remedial measures (i.e., additional plantings) would be conducted in the following fall season.	Following installation of the outlet pipes on each basin	City	City	Verify riparian restoration at outlet pipe is complete	
Mitigation Measure 4-9c					
1. For purposes of determining appropriate riparian habitat compensation, temporary removal of riparian habitat associated with construction of the outlet pipes would be compensated at the same ratio as permanent riparian habitat removal because it is not be feasible to replant trees over or adjacent to the outlet pipe because of the potential for their root systems to undermine the integrity of the outlet pipes. To compensate for the temporary and permanent removal of riparian trees and shrubs associated with the construction of the inlet weirs and outlet pipes, the City shall replant riparian trees and shrubs at a minimum 3:1 ratio (three trees/shrubs planted for every tree/shrub removed). The replacement plantings shall consist of a variety of native tree species such as valley oak, Freemont cottonwood, red willow, arroyo willow, and white alder; and native shrub species such as California Bay, California buckeye, and California rose.	Following project completion	City	City	Verify riparian compensation is complete	

Mitigation Measure	Timing/ Frequency of Action	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
2. The City shall accomplish riparian habitat compensation by implementing one of the following two options. a. After completion of the final design for each basin, the City shall prepare a planting plan that identifies the location of the riparian mitigation plantings and the number, type, and size of plants. The planting plan shall also describe the irrigation and maintenance required to establish and monitor the planting area. Mitigation plantings will be done between October 15 and December 31 of the year immediately following when impacts occur. All Mitigation plantings will be monitored for 5 years. All plantings will have a minimum of 80% survival goal at the end of 5 years. If the survival requirements are not meeting this goal, replacement plantings will be installed. Replacement plants shall be monitored with the same survival and growth requirements for 5 years after planting. The City will be responsible for planting, replanting, watering, weeding, invasive exotic eradication, and any other practice needed to ensure this goal. An annual status report on the mitigation will be provided to DFG by December 31 of each year. The report will include the survival, percent cover, and height of both tree and shrub species. The number by species of plants and trees replaced, and overview of the revegetation effort, and the method used to assess these parameters will also be included. Photographs of the mitigation area will also be included. To ensure success of the mitigation plantings, the City shall prepare and implement an adaptive management plan that identifies specific monitoring tasks, success criteria, and reporting requirements. or b. The City shall purchase mitigation credits at a DFG-approved riparian mitigation site at a 3:1 ratio (three trees/shrubs planted for every tree/shrub removed) that includes long-term management and monitoring.	After completion of the final design for each basin	City	City	Verify completion of planting plan	

Mitigation Measure	Timing/ Frequency of Action	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
Mitigation Measure 4-10a					
1. Construction of the inlet weir and outlet piping shall occur only during the dry season or low-flow period. The construction window may be extended based on seasonal conditions with approval from a qualified biologist and at the discretion of permitting agencies.	During construction	City's construction contractor	City	Verify construction within the creek is restricted to low-flow period	
2. Water is not anticipated in Alamo Creek during the proposed work period for construction of the inlet and outlet structures; however, Ulatis Creek may contain standing or running water during the proposed work period because of the presence of irrigation runoff upstream of the Ulatis site and beaver dams that detain water within the Ulatis site boundaries. If water is present in the creeks at the inlet and outlet structure locations, flow will be temporarily diverted around or, in the case of stagnant water, excluded from the worksites through the installation of cofferdams before construction of these features.	Throughout the construction period	City's contractor	City	Verify temporary water diversion around work area as necessary	
3. Any temporary cofferdams will be immediately removed upon completion of construction activities in the areas of the proposed inlet and outlet structures.	Upon completion of construction within the creek	City	City	Verify removal of cofferdams	
Mitigation Measure 4-10b					
1. Before any ground-disturbing activities (including equipment staging), the City shall obtain and comply with the conditions of a CWA, Section 404 permit from the Corps; and a CWA, Section 401 water quality certification from RWQCB; and Streambed Alteration Agreement from DFG.	Prior to and during construction	City	City	Verify compliance with all permit conditions	
2. The City shall also obtain a General Permit for Discharges of Stormwater associated with construction activity from the SWRCB as required under Section 402 of the CWA. As part of this permit, the City shall prepare and implement a SWPPP that includes erosion control measures and construction-waste containment measures to ensure that waters of the State are protected during and after Project construction. The SWPPP shall include site design to minimize offsite stormwater runoff that might otherwise affect surrounding wetland habitat.	Prior to construction	City's construction contractor	City	Verify preparation and implementation of SWPPP	

Mitigation Measure	Timing/ Frequency of Action	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
The SWPPP shall be prepared with the following objectives: (a) to identify pollutant sources, including sources of sediment, that may affect the quality of stormwater discharges from the construction of the project; (b) to identify BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the site during construction; (c) to outline and provide guidance for BMP monitoring; (d) to identify project discharge points and receiving waters; (e) to address post-construction BMP implementation and monitoring; and (f) to address sedimentation, siltation, turbidity, and non-visually detectable pollutant monitoring, and outline a sampling and analysis strategy. The SWPPP shall include the following provisions: a. All excavated materials shall be deposited or stored in such a manner that the material cannot be washed into any watercourse, and excess supplies of certified weed-free straw bales and/or sedimentation fencing shall be available at the construction site for use as needed. b. No refueling, storage, servicing, or maintenance of equipment shall take place within 100 ft of wetland habitat. All machinery shall be properly maintained and cleaned to prevent spills and leaks. Any spills or leaks from construction equipment shall be cleaned up in accordance with applicable local, state, and/or federal regulations. c. Exposed soil shall be seeded with a native grassland seed mix.					
Mitigation Measure 4-10c					
The Proposed Project appears to qualify for authorization under the Nationwide Permit Program. Specifically, the Proposed Project may qualify for authorization under a Nationwide Permit 43 for Stormwater Management Facilities. Additionally, DFG will require a Streambed Alteration Agreement with the City for project-related activities that impact waters of the State. Authorization of these activities by the Corps and DFG will require compensation for impacts on Corps and DFG jurisdictional features. To compensate for	Prior to construction	City	City	Verify compensation for impacts on Corps-jurisdictional waters	

Mitigation Measure	Timing/ Frequency of Action	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
permanent impacts on jurisdictional waters, the City shall purchase waters of the U.S. and/or State credits from a Corps- and/or DFG-approved mitigation bank, or in-lieu fees shall be paid to a Corps- and/or DFG-approved fund at a 1:1 replacement ratio (1 acre of habitat replaced for every 1 acre filled).					
Cultural Resources					
Mitigation Measure 5-1a					
1. Prior to any ground-disturbing activities (including grading and equipment staging), the City shall prepare an evaluation/treatment plan to determine the significance of the two prehistoric archaeological sites identified in the Alamo site. FEMA has assumed that these sites are eligible for listing on the California Register for the sake of this project. Therefore, the treatment plan shall include recommendations for mitigating impacts on cultural sites that are determined eligible for listing on the California Register, and for handling and disposition of any human remains found.	Prior to any ground-disturbing activities	City's archaeological consultant	City	Prepare an evaluation/ treatment plan for the Alamo site	
2. Mitigation for archaeological deposits shall involve data recovery excavations to obtain a sufficient sample from the Alamo site so as to exhaust the research potential of the deposits. This shall be accomplished through a combination of hand excavation, supervised backhoe trenching, and monitored grading of archaeological deposits. The City shall implement the treatment plan.	Prior to any ground-disturbing activities	City's archaeological consultant	City	Verify data recovery excavations have been completed at the Alamo site	
3. In addition, one goal of archaeological mitigation shall be the recovery of any human interments or remains prior to the inception of construction at the Alamo site. The removal, treatment, and repatriation of any such remains shall be undertaken in accordance with Mitigation Measure 5-1c.	Prior to any ground-disturbing activities	City's archaeological consultant	City	Verify proper recovery of any human internments or remains at the Alamo site	
Mitigation Measure 5-1b					
1. Before any ground-disturbing activities (including grading and equipment staging), the City shall prepare an evaluation/treatment plan to determine the significance of the archaeological deposits noted during	Prior to any ground-disturbing activities	City's archaeological consultant	City	Prepare an evaluation/ treatment plan for the Ulatis site	

Mitigation Measure	Timing/ Frequency of Action	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
geoarchaeological testing of the Ulatis site. This plan shall include provisions for additional exploration to look for archaeological resources that are likely to be found along the creek margin, where backhoe trenching was not previously possible because of the presence of sensitive biological resources (elderberry shrubs). These areas shall be tested once impacts on the elderberries have been permitted and mitigation has been approved but the USFWS. The archaeological evaluation plan shall also include recommendations for mitigation of impacts on sites that are determined eligible for listing on the California and National Registers, and for handling and disposition of any human remains found.					
2. Mitigation for archaeological deposits shall involve data recovery excavations to obtain a sufficient sample from the Ulatis site so as to exhaust the research potential of the deposits. This shall be accomplished through a combination of hand excavation, supervised backhoe trenching, and monitored grading of archaeological deposits. The City shall implement the evaluation/treatment plan.	Prior to any ground-disturbing activities	City's archaeological consultant	City	Verify data recovery excavations have been completed at the Ulatis site	
3. In addition, one goal of archaeological mitigation shall be the recovery of any human interments or remains prior to the inception of construction at the Ulatis site. The removal, treatment, and repatriation of any such remains shall be undertaken in accordance with Mitigation Measure 5-1c.	Prior to any ground-disturbing activities	City's archaeological consultant	City	Verify proper recovery of any human internments or remains at the Ulatis site	
Mitigation Measure 5-1c					
If human remains are discovered anywhere on either Proposed Project site, work shall immediately stop in the vicinity of the discovery and the Solano County Coroner shall be contacted. If the skeletal remains are found to be prehistoric Native American (not modern), the coroner shall call the Native American Heritage Commission (NAHC) in Sacramento within 24 hours. The NAHC shall identify the person(s) it believes to be the "Most Likely Descendant." Responsible for recommending the disposition and treatment of the remains, the Most Likely Descendant may make recommendations for the excavation work for means of treating or disposing of, with	Throughout the construction period	City	City	Ensure proper treatment or disposal of human remains discovered during project excavations	

Mitigation Measure	Timing/ Frequency of Action	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98.					
Hydrology, Water Quality, and Hazardous Materials					
Mitigation Measure 6-1					
1. The City shall consult with the Central Valley RWQCB to acquire the appropriate regulatory approvals that may be necessary to obtain SWRCB statewide NPDES stormwater permit for general construction activity, Central Valley RWQCB NPDES permit for construction dewatering activity, and any other necessary site-specific waste discharge requirements.	Prior to construction	City	City	Obtain applicable NPDES permits	
2. As required under the NPDES stormwater permit for general construction activity, the City shall prepare and submit the appropriate Notice of Intent and prepare the SWPPP and other necessary engineering plans and specifications for pollution prevention and control. The SWPPP and other appropriate plans shall be implemented by the City and shall identify and specify the use of erosion sediment control BMPs, means of waste disposal, implementation of approved local plans, non-stormwater management controls, permanent post-construction BMPs, and inspection and maintenance responsibilities. The SWPPP shall also specify the pollutants that are likely to be used during construction and that could be present in stormwater drainage and non-stormwater discharges. A sampling and monitoring program shall be included in the SWPPP that meets the requirements of SWRCB Order 2009-0009-DWQ to ensure the BMPs are effective. The SWPPP shall identify construction techniques that would reduce potential runoff and identify the erosion and sedimentation control measures to be implemented. The SWPPP shall also specify spill prevention and contingency measures, identify the types of materials used for equipment operation, and identify measures to prevent or clean up spills of hazardous materials used for equipment operation and hazardous waste. Emergency procedures for responding to spills shall also be identified. BMPs identified in the SWPPP shall be used in subsequent site	Prior to construction	City and City's construction contractor	City	Submit NOI to RWQCB and Prepare and implement a SWPPP	

Mitigation Measure	Timing/ Frequency of Action	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
development activities. The SWPPP shall identify personnel training requirements and procedures to ensure that workers are aware of permit requirements and proper installation and performance inspection methods for BMPs specified in SWPPP. The SWPPP shall also identify the appropriate personnel responsible for supervisory duties related to implementation of the SWPPP. All construction contractors shall retain a copy of the approved SWPPP on the construction site.					
Mitigation Measure 6-3					
The City will prohibit the use of chemicals during agricultural operations within the basins. City stormwater facilities will be operated in a manner consistent with the City's Stormwater Management Plan and Pollution Prevention Program for compliance with the MS4 program.	During agricultural operations within the basins	City	City	Verify that agricultural chemicals are not used within the basins	
Mitigation Measure 6-5					
The City shall remove the burn area at the Alamo site prior to basin construction and dispose of materials in accordance with CCR Title 8 and 22 CCR Division 4.5, which regulates generators, transporters, and land disposal of hazardous wastes. Such removal shall be completed prior to grading activities in the construction phase.	Prior to construction at the Alamo site	City	City	Verify burn area at Alamo site is removed and materials properly disposed	
Mitigation Measure 6-6					
The City shall abandon identified wells and any additional wells discovered during basin construction in accordance with Chapter 13, Section 13.10-10 of the Solano County Code. The City shall obtain well permits prior to beginning abandonment. Drilling procedures and well design and construction must be accomplished in a manner that prevents the spread of contamination, and shall be developed by an appropriate licensed professional such as a professional engineer or professional geologist. The City shall destroy identified septic tanks and any additional septic tanks discovered during basin construction in accordance with Article 8 Section 6-4.85 of the Solano County Code that identifies destruction of tanks associated with onsite sewage treatment systems, such as septic tanks.	Prior to and during basin construction	City and City's construction contractor	City	Verify wells or septic tanks found prior to or during construction are properly abandoned	

Mitigation Measure	Timing/ Frequency of Action	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
Mitigation Measure 6-7					
In the event that standing water causes mosquitoes to breed at the detention basins, the City shall coordinate with the mosquito vector control district to ensure that vector elimination procedures are followed.	Ongoing after basin construction	City	City	Verify absence of mosquito breeding	
Noise					
Mitigation Measure 7-1					
The following measures shall be implemented during construction activities.					
1. Noise-generating construction operations shall be limited to the hours between 7 a.m. and 6 p.m. Monday through Friday, unless an expanded time frame is granted in writing by the City of Vacaville Director of Public Works as necessary to address special construction circumstances or to maintain the construction schedule.	Monday through Friday, 7 a.m. to 6 p.m. throughout the construction period	City	City	Verify mitigation measures are met	
2. Construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation.	Throughout the construction period	City	City	Verify mitigation measures are met	
3. When not in use, motorized construction equipment shall not be left idling for periods of greater than 5 minutes.	Throughout the construction period	City	City	Verify mitigation measures are met	
Mitigation Measure 7-2					
The following measures shall be implemented during construction activities.					
1. Install a minimum of two construction warning signs along the haul route at least 30 days in advance of hauling to inform the residents in the area about the project trucking schedule.	A minimum of 30 days in advance of hauling activities	City's construction contractor	City	Verify installation of signage	
2. All truck activity related to removal of excavated materials shall be limited to the hours between 7 a.m. to 6 p.m. Monday through Friday, unless a variance is granted in writing by the City of Vacaville Director of Public Works.	During hauling activities	City's construction contractor	City	Verify that hauling activities occur between 7 a.m. and 6 p.m.	
3. When feasible, haul truck entrances to the construction site and truck loading areas shall be located at the furthest	During hauling activities	City's construction	City	Verify construction	

Mitigation Measure	Timing/ Frequency of Action	Responsibility for Implementation	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
practical distance from nearby noise-sensitive land uses.		contractor		entrances and loading areas are appropriately sited	
Mitigation Measure 7-3					
Detention basin maintenance and end-use activities (i.e., agricultural and incidental public access) shall be limited to between the hours of 7:00 a.m. and 6:00 p.m.	Ongoing after basin construction	City	City	Verify that maintenance and public use activities occur between 7 a.m. and 6 p.m.	
Transportation/Traffic					
Mitigation Measure 9-2					
Prior to commencement of construction activities, the City shall require that the Project contractor submit and implement a Traffic Control Plan that will be subject to approval by the City's Traffic Engineer as well as by the County of Solano through the encroachment permit process. The traffic control plan will be required to address truck haul routes and any advance warning, sight distance, traffic delay, and special flagman measures that might be necessary to ensure traffic safety on public roadways during offsite hauling activities.	Prior to and during construction	City's construction contractor	City	Verify preparation and implementation of the traffic control plan	
Mitigation Measure 9-3					
Construction traffic shall comply with the California Vehicle Code sections related to vehicle weight and width. Any extra legal loads needed for specialized deliveries shall be subject to special permit requirements from Solano County. The City shall obtain an encroachment permit for any modifications to project access points along County roadways, which may include specific requirements to address issues relating to the construction access and egress conditions. Repairs of any roadway damage along the Proposed Project's frontage that is directly attributable to the construction of the basins will be assessed jointly by the City and County with repairs completed by the City.	Prior to and after construction execute road repair agreement between City and County During construction comply with California Vehicle Code and implement applicable permit requirements	City and City's construction contractor	City	Verify construction traffic meets California Vehicle Code and all applicable County permits are obtained and road repairs completed Implement road repair agreement between City and County	