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# Chapter 2

## Executive Summary

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### 2.1 INTRODUCTION

This chapter provides an overview of the Proposed Project, which is described in detail in Chapter 3: Project Description and the conclusions of the environmental analysis evaluation are described in detail in Chapter 4: Environmental Evaluation. This chapter also summarizes the alternatives to the Proposed Project that are discussed in Chapter 5: Alternatives to the Project, and identifies the Environmentally Superior Alternative. Table 2-1, at the end of this Chapter, provides a summary of the environmental effects of the Proposed Project identified in each resource section of Chapter 4: Environmental Evaluation. Table 2-1 contains a summary of less-than-significant, potentially significant, or significant and unavoidable environmental impacts associated with the Proposed Project, mitigation measures that would reduce or avoid those effects, and the level of significance of the impacts following the implementation of mitigation measures.

### 2.2 LOCATION

The Proposed Project is located in Solano County, just west of the City of Vacaville (Figures 1 and 2). The Alamo Creek Detention Basin site (Alamo site) is located on the Fairfield North U.S. Geological Survey (USGS) 7.5-minute quadrangle map (revised 1980) within an unsectionalized portion of Township 6 North, Range 1 West, of the Los Putos land grant. The Ulatis Creek Detention Basin site (Ulatis site) is located on the Mt. Vaca USGS 7.5-minute quadrangle map (revised 1968) within an unsectionalized portion of Township 6 North, Range 1 West, of the Los Putos land grant. The Alamo site is located on approximately 79 acres east of Pleasants Valley Road. It is bound on the east by Rogers Lane and by Alamo Creek on the south. The north boundary of the site is approximately one-quarter mile south of Vaca Valley Road.

The Ulatis site is located on approximately 50 acres adjacent to and east of Bucktown Lane. It is bound on the north by Ulatis Creek and is approximately one-quarter mile north of Vaca Valley Road.

### 2.3 PROJECT DESCRIPTION SUMMARY

The Proposed Project includes construction of two stormwater detention basins, one adjacent to Alamo Creek and one adjacent to Ulatis Creek. Both basins would be upstream and northwest of the City, within an unincorporated portion of the County and would increase stormwater detention along Alamo and Ulatis Creeks resulting in a decrease in future flooding within the City.

## 2.4 ENVIRONMENTAL IMPACTS AND MITIGATION

An Initial Study Environmental Checklist (Environmental Checklist) (Appendix A) was prepared to determine whether the Proposed Project could result in a significant impact on the environment, and to focus the EIR analysis on resource areas with potentially significant impacts and those topics that require relatively detailed analyses in order to determine the severity of impacts. Based on the Environmental Checklist and a review of additional resource data, implementation of the Proposed Project could result in potentially significant impacts on the following resource areas, which are analyzed in detail in this EIR.

- Aesthetics and visual resources
- Land use and agriculture
- Air quality and greenhouse gas emissions
- Biological resources
- Cultural resources
- Hydrology, water quality, and hazardous materials
- Noise
- Public services (includes recreation)
- Transportation/traffic

Based on the conclusions reached in the Environmental Checklist, no additional resource areas required detailed analysis within this EIR. For some resource areas (i.e., mineral resources, geology, utilities, population and housing), impact topics that were determined to have no impact or less-than significant impact in the Environmental Checklist are not discussed in this EIR but the remaining impact topics that were determined to be potentially significant are discussed and evaluated in detail in Chapter 4 of this EIR. For all other resource areas listed above and evaluated in this EIR, a full scope of possible environmental impacts is discussed in Chapter 4 (Sections 4-1 through 4-9).

Under CEQA, a significant effect on the environment is defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. Based on the environmental analysis contained in this EIR, implementation of the Proposed Project could result in significant impacts on aesthetics and visual resources, land use and agriculture, air quality, biological resources, cultural resources, hydrology and water quality, noise, public services, and transportation/traffic circulation. Table 2-1 contains a summary of impact topics discussed for each resource area evaluated in this EIR and lists feasible mitigation measures to reduce significant or potentially significant impacts. With the exception of alteration of the project sites' visual character, the loss of Prime Farmland, construction air emissions, onsite construction noise, construction traffic noise, cumulative degradation of air quality, cumulative contribution to climate change, and obstruction of long-range views; all of the impacts listed in Table 2-1 could be reduced to a less-than-significant level through implementation of mitigation measures. The mitigation measures presented in the EIR will form the basis of the Mitigation Monitoring and Reporting Program. An impact that remains significant after mitigation is considered an unavoidable adverse impact of the Proposed Project.

Although the Proposed Project is not located within the City of Vacaville boundaries, because the City is proposing the project, applicable implementing and guiding policies from the City of Vacaville General Plan will be included in the discussion of each resource topic included in Chapter 4 of this EIR. The City of Vacaville General Plan was last comprehensively updated in 1990. Since that time, physical and demographic conditions in Vacaville have evolved, new State regulations have been enacted, and perspectives on land use

and environmental issues have changed. Since 1990, several amendments to the City of Vacaville General Plan have been adopted. Although the City's General Plan is in the process of being updated, this EIR references the currently adopted City of Vacaville General Plan as amended (City of Vacaville 1990).

### **2.4.1 Notice of Preparation and Scoping Comments**

The proposed scope of environmental analysis was disclosed to agencies and the public when the Environmental Checklist was circulated with the NOP from February 8, 2010 to March 9, 2010. The NOP and Environmental Checklist are provided in Appendix A. Comments received and a record of the public meeting held on March 1, 2010 are provided in Appendix B.

As part of the Phase 1 Environmental Assessment conducted for the Alamo site, additional testing was recommended for agricultural pesticides and an above ground tank. The Phase 1 Environmental Assessment conducted for the Ulatis site recommended additional testing for agricultural pesticides. The California State Department of Toxic Substances submitted an e-mail comment on the NOP recommending that the EIR include Phase 2 Environmental Assessment results for the Alamo site.

A comment letter dated March 11, 2010 was received from the Department of Water Resources', Division of Safety of Dams. The letter confirmed that the Division of Safety of Dams had received the application and design information from the City for the Alamo Detention Basin berms and would be reviewing the design and resolving all dam safety related issues prior to approval of the application. The design level geotechnical report and design of the project will be subject to final approval by the Division of Safety of Dams prior to issuance of a permit. The NOP environmental checklist provides background geotechnical information related to seismic, soils and stability characteristics for the area and confirms that the City will comply with all design and permit requirements imposed by the Division of Safety of Dams along with all other City standards related to geotechnical concerns; concluding therefore, that no further analysis in the EIR would be necessary.

A comment letter dated March 8, 2010 was received from the Solano County Department of Resource Management. The letter requested that the EIR address the export of soils from the site, the impacts of truck hauling on County roads, and the need for the basins to be utilized in conformance with the Solano County General Plan (Solano County 2008).

A transmittal was received from AT&T along with facility maps with a request that the City determine the presence of communication facilities within the project area and coordinate with AT&T staff as necessary.

A letter was received from the Solano Irrigation District with several general comments that confirm the facilities information included in the NOP.

Comments from the public, were received at the public scoping meeting, via e-mail, telephone calls, and in writing (Appendix B) and focused on concerns related to the Alamo Detention Basin regarding the appearance of detention basin berms, security and privacy impacts that may result from public access, construction related impacts from the use of Rogers Lane, mosquito control, and the need to consider off site overland drainage from adjacent properties.

## 2.5 SIGNIFICANT AND UNAVOIDABLE IMPACTS

As described in Chapter 4 of this EIR, the Proposed Project would result in the following significant and unavoidable impacts: alter the project sites' visual character (Impact 1-1), the loss of Prime Farmland (Impact 2-1), short term construction air emissions (Impact 3-1), onsite construction noise (Impact 7-1), construction traffic noise (Impact 7-2), cumulative degradation of air quality, cumulative contribution to climate change, and cumulative obstruction of long-range views. No feasible mitigation measures are available that would avoid or reduce these impacts to less than significant levels.

Under CEQA, when a project is determined to have significant impacts after mitigation, the decision makers must then evaluate whether the benefits of the project outweigh the significant effects to the environment. This evaluation will be provided in a Statement of Overriding Considerations (SOC) to be adopted at the time the FEIR is certified.

## 2.6 SUMMARY OF PROJECT ALTERNATIVES

The following alternatives to the Proposed Project are evaluated in this EIR:

- **Alternative 1:** No Project/No Action
- **Alternative 2:** Drop Structure Modification to Lower the Upstream Water Surface Elevations
- **Alternative 3:** Limited Channel Improvements
- **Alternative 4:** Offsite Alternative, Bucktown Lane (Ulatis Creek) and Gates Canyon Road (Alamo Creek)

A complete description of project alternatives is provided in Chapter 5. Table 5-1, within Chapter 5 provides a comparison of the relative impacts of the alternatives.

In addition to the discussion and comparison of impacts of the alternatives to the Proposed Project, CEQA requires that an environmentally superior alternative be selected and the reasons for such selection disclosed. In general, the environmentally superior alternative is the alternative that would be expected to generate the fewest adverse impacts. Although using a cursory review it would appear that the No Project/No Action Alternative would have no impacts, a more detailed review identifies that this alternative would continue the cycle of flooding which results in multiple environmental impacts. Environmental effects from flooding include: air, noise, and transportation impacts when heavy equipment is used to perform cleanup operations, people drive to alternate locations when they are displaced, and when transportation routes are disrupted; water quality impacts from erosion; public services impacts from increased need for public assistance during emergency periods; and land use impacts from the massive amount of material that is sent to landfills after it is damaged from floodwaters. As such, the Proposed Project as modified by the mitigation measures contained in this EIR, even considering the unavoidable significant impacts, would be considered environmentally superior. A detailed discussion of the environmentally superior alternative selected is discussed in Chapter 5.

## 2.7 POTENTIAL AREAS OF CONCERN OR CONTROVERSY

Comments received during the scoping period are summarized in Section 2.4.1 NOP and Scoping Comments. Each of these issues is addressed in the EIR and a summary of the location of further discussion is provided below.

The Federal Emergency Management Agency (FEMA), as the federal lead agency for the Proposed Project has expressed concerns regarding the potential for cultural resources to be found onsite. This concern is addressed in Chapter 4 (Section 4-5 Cultural Resources).

The Department of Conservation was concerned that CEQA analysis had not been completed for the Alamo component of the Proposed Project. The result of this additional evaluation is included in Section 4-6 Hydrology and Water Quality of this EIR. The Ulatis site is viewed at a program level of analysis in this EIR and will be subject to more detailed evaluation as necessary at a future date, when the project design and construction timing is more certain.

The County's Department of Resource Management concerns regarding the impacts of truck hauling on County roads is addressed in Chapter 4 (Section 4-9 Transportation/Traffic). Their concern regarding the need for the basins to be utilized in conformance with the Solano County General Plan (Solano County 2008) is addressed in each of the resource sections within Chapter 4 of this EIR.

To address AT&T concerns, City staff will conduct an Underground Service Alert request prior to any ground disturbance and if necessary will coordinate with AT&T staff. This is a standard construction practice that does not require analysis in this EIR.

Solano Irrigation District comments are general and provide facility information that has already been included in the project description. Solano Irrigation District facility issues are addressed throughout the EIR.

Comments from the public, related to the Alamo Detention Basin regarding the appearance of detention basin berms are discussed in Chapter 4 (Section 4-1 Aesthetics and Visual Resources). Security and privacy impacts that may result from public access are discussed in Chapter 4 (Section 4-8 Public Services). Construction related impacts from the use of Rogers Lane are discussed in Chapter 4 (Section 4-3 Air Quality and Greenhouse Gas Emissions, Section 4-7 Noise, and Section 4-9 Transportation//Traffic). Mosquito control and the need to consider off site overland drainage from adjacent properties are discussed in Chapter 4 (Section 4-6 Hydrology, Water Quality, and Hazardous Materials).

## 2.8 UNRESOLVED ISSUES

No unresolved issues have been identified for the Proposed Project.

Table 2-1. Summary of Impacts and Mitigation Measures

Impacts	Significance Before Mitigation <sup>1</sup>	Mitigation Measure	Significance After Mitigation <sup>1</sup>
<b>Aesthetics and Visual Resources</b>			
1-1 Potential to Alter the Project Sites' Visual Character	S	No mitigation available	SU
1-2 Substantial Adverse Effect on a Scenic Vista or a Scenic Resource	LTS	No mitigation required	LTS
1-3 Creation of Visual Incompatibility with Surrounding Land Uses	LTS	No mitigation required	LTS
1-4 Cumulative Contribution to Alteration of Visual Character of the Solano County	C/LTS	No mitigation required	C/LTS
<b>Land Use and Agriculture</b>			
2-1 Potential Loss of Prime Farmland	S	No established mitigation guidelines are currently in place to reduce the severity of this potential impact	SU
2-2 Potential to Conflict with Agricultural Zoning	S	2-2 Restrict Public Access and Limit Basin Construction and Maintenance Traffic during Cultivation and Harvest Activities on Adjacent Parcels	LTS
2-3 Potential to Conflict with Williamson Act Contracts	S	2-3 Confirm that Existing Williamson Act Contracts on the Alamo Site are Voided	LTS
2-4 Cumulative Contribution to the Loss of Prime Farmland in Solano County	C/LTS	No mitigation required	C/LTS
<b>Air Quality and Greenhouse Gas Emissions</b>			
3-1 Short-Term Construction Increases of Criteria Air Pollutants	S	3-1 Minimize Short-Term Increases of Criteria Air Pollutants	SU
3-2 Long-Term Operational Increases of Criteria Air Pollutants	LTS	No mitigation required	LTS
3-3 Increased Exposure of Sensitive Receptors to Localized Concentrations of Toxic Air Contaminants	LTS	No mitigation required	LTS
3-4 Contribution to Local Mobile-Source Concentrations of Carbon Monoxide	LTS	No mitigation required	LTS
3-5 Increased Exposure of Sensitive Receptors to Odors	LTS	No mitigation required	LTS
3-6 Cumulative Contribution to Local Air Quality	C/LTS	No mitigation required	C/LTS
3-7 Cumulative Contribution to Regional Air Quality	C/SU	3-1 Minimize Short-Term Increases of Criteria Air Pollutants	C/SU
3-8 Cumulative Contribution to Climate Change and Consistency with Applicable Plans, Policies, or Regulations Adopted for the Purpose of Reducing GHG Emissions	C/PS	3-8a Minimize Short-Term Increases of Construction-Generated Emissions	C/LTS

**Table 2-1. Summary of Impacts and Mitigation Measures (continued)**

Impacts	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation <sup>1</sup>
<b>Biological Resources</b>			
4-1 Disturbance or Loss of Valley Elderberry Longhorn Beetle at the Alamo Site and Ulatis Site	S	4-1a Avoid and Minimize Impacts on Valley Elderberry Longhorn Beetle Habitat  4-1b Transplant Elderberry Shrubs that cannot be Avoided  4-1c Compensate for Direct Impacts on Valley Elderberry Longhorn Beetle Habitat	LTS
4-2 Disturbance or Loss of Foothill Yellow-Legged Frog at the Alamo Site and Ulatis Site	S	4-1a Avoid and Minimize Impacts on Valley Elderberry Longhorn Beetle Habitat  4-2 Conduct a Preconstruction Survey for Foothill Yellow-Legged Frog	LTS
4-3 Disturbance or Loss of Western Pond Turtle at the Alamo Site and Ulatis Site	S	4-1a (2) Avoid and Minimize Impacts on Valley Elderberry Longhorn Beetle Habitat  4-3 Conduct Preconstruction Surveys for Western Pond Turtle and Establish No-Disturbance Buffers, if Necessary	LTS
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	S	4-4 Avoid and Minimize Impact to Central Valley Steelhead and Central Valley Fall/Late-Fall-Run Chinook Salmon	LTS
4-5 Disturbance or Loss of Wintering and Nesting Burrowing Owl at the Alamo Site and Ulatis Site	S	4-5 Conduct A Preconstruction Burrowing Owl Survey and Implement California Department of Fish and Game Guidance on Avoiding Active Burrows or Relocating Wintering Owls	LTS
4-6 Disturbance or Loss of Nesting Swainson’s Hawk at the Alamo Site and Ulatis Site	S	4-6 Conduct a Preconstruction Nesting Bird and Raptor Survey and Establish No-disturbance Buffers, if Necessary	LTS
4-7 Disturbance or Loss of Nesting White-Tailed Kite at the Alamo Site and Ulatis Site	S	4-6 Conduct a Preconstruction Nesting Bird and Raptor Survey and Establish No-disturbance Buffers, if Necessary	LTS
4-8 Disturbance or Loss of Loggerhead Shrike at the Alamo Site and Ulatis Site	S	4-6 Conduct a Preconstruction Nesting Bird and Raptor Survey and Establish No-disturbance Buffers, if Necessary	LTS
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 <u>Temporary and Permanent</u> Loss of Riparian Habitat	LTS

**Table 2-1. Summary of Impacts and Mitigation Measures (continued)**

<b>Impacts</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measure</b>	<b>Significance After Mitigation<sup>1</sup></b>
4-10 Permanent and Temporary Fill to Waters of the U.S. <u>and State</u> 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 <u>and Streambed Alteration Agreement</u> Obtained for the Proposed Project  4-10c Compensate for Permanent Impacts to Waters of the U.S. <u>and State</u>	LTS
4-11 Disturbance or Loss of Migratory Birds at the Alamo Site and Ulatis Site	S	4-6 Conduct a Preconstruction Nesting Bird and Raptor Survey and Establish No-Disturbance Buffers, if Necessary	LTS
4-12 Cumulative Contribution to the Loss of Special-Status Wildlife Species or Their Habitats in Solano County	C/LTS	No mitigation required	C/LTS
4-13 Cumulative Contribution to the Loss of Sensitive Natural Communities in Solano County	C/LTS	No mitigation required	C/LTS
<b>Cultural Resources</b>			
5-1 Loss of Integrity of Cultural Deposits, Loss of Information, and the Alteration of a Site Setting at the Alamo Site and Ulatis Site	S	5-1a Develop and Implement a Treatment Plan for the Alamo Site  5-1b Develop and Implement a Treatment Plan for the Ulatis Site  5-1c Treatment of Native American Human Remains	LTS
5-2 Disturbance of Human Remains	S	5-1c Treatment of Native American Human Remains	LTS
5-3 Cumulative Contribution to Impacts on Historic Resources and Previously Unidentified Subsurface Archeological Resources	C/LTS	No mitigation required	C/LTS
<b>Hydrology, Water Quality, and Hazardous Materials</b>			
6-1 Violation of Water Quality Standards or Waste Discharge Requirements	S	6-1 Acquire Appropriate Stormwater Permits for Construction Activity and Implement a Stormwater Pollution Prevention Plan (SWPPP)	LTS
6-2 Potential to Substantially Increase the Rate or Amount of Surface Runoff that would Result in Flooding	LTS	No mitigation is required.	LTS

**Table 2-1. Summary of Impacts and Mitigation Measures (continued)**

<b>Impacts</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measure</b>	<b>Significance After Mitigation<sup>1</sup></b>
6-3 Water Quality Degradation from Fertilizers or Herbicides during Farming Activities	S	6-3 Prohibit Agricultural Chemical Use	LTS
6-4 Potential Hazard to the Public or Environment from Accidental Spills of Project-Related Hazardous Materials	LTS	No mitigation is required.	LTS
6-5 Hazard to Construction Workers or Environment from Lead at the Alamo Detention Basin Burn Area	S	6-5 Remove the Burn Area at the Alamo Detention Basin Prior to Construction	LTS
6-6 Potential Hazard to the Environment from Wells and Septic Systems at the Detention Basins	S	6-6 Abandon Wells and Septic Systems Per County Regulations	LTS
6-7 Potential Hazard to the Public from Mosquitoes Breeding at the Detention Basins	S	6-7 Implement Mosquito Vector Control as Required	LTS
6-8 Cumulative Contribution to Hydrology and Water Quality	C/LTS	No mitigation required	C/LTS
<b>Noise</b>			
7-1 Short-Term Exposure to Onsite Construction Noise	<u>PS</u>	7-1 Limit Hours of Construction Operations and Implement Noise-Reduction Measures for Equipment	SU
7-2 Short-Term Exposure to Construction Traffic Noise	PS	7-2 Post Warning Signs, Limit Construction Activity to Daytime Hours, and Locate Entry Points and Loading Areas Away from Sensitive Areas	SU
7-3 Long-Term Exposure to Onsite Noise Sources	PS	7-3 Limit Onsite Noise Sources	LTS
7-4 Long-Term Exposure to Operational Traffic Noise	LTS	No mitigation is required	LTS
7-5 Exposure to Excessive Groundborne Vibration	LTS	No mitigation is required	LTS
7-6 Cumulative Contribution to Noise	C/LTS	No mitigation required	C/LTS
<b>Public Services</b>			
8-1 Potential to Increase Demand for Law Enforcement Facilities	LTS	No mitigation is required	LTS
8-2 Potential to Increase Law Enforcement Response Rates or Impact Service Levels	LTS	No mitigation is required	LTS
8-3 Potential to Increase Demand for Fire Protection Services	LTS	No mitigation is required	LTS
8-4 Potential to Increase Fire Protection Response Rates or Impact Service Levels	LTS	No mitigation is required	LTS

**Table 2-1. Summary of Impacts and Mitigation Measures (continued)**

<b>Impacts</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measure</b>	<b>Significance After Mitigation<sup>1</sup></b>
8-5 Potential for Inadequate Emergency Access	LTS	No mitigation is required	LTS
8-6 Potential to Increase Wildland Fire Risk	LTS	No mitigation is required	LTS
8-7 Potential for Public Uses Resulting in Physical Impacts	LTS	No mitigation is required	LTS
8-8 Cumulative Contribution to Law Enforcement, Fire Enforcement, and Parks and Recreation Services	C/LTS	No mitigation required	C/LTS
<b>Transportation/Traffic</b>			
9-1 Temporary Increase in Traffic during Construction	LTS	No mitigation is required.	LTS
9-2 Temporary Increase in Hazards	S	9-2 Address Traffic Safety and Operation on Public Streets Associated with Truck Traffic	LTS
9-3 Damage to Existing Roads as a Result of Construction	S	9-3 Address Road Damage and Wear Related to Truck-Hauling Activities	LTS
9-4 Cumulative Contribution to Traffic	C/LTS	No mitigation required	C/LTS

<sup>1</sup> Significance acronyms

C = Cumulative  
LTS = Less-than-significant  
PS = Potentially significant  
S = Significant  
SU = Significant and unavoidable