

## 2.0 Summary

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This draft EIR has been prepared in accordance with the provisions of the California Environmental Quality Act (CEQA) to evaluate the potential impacts of the proposed Gordon Water Line Relocation project (project). This chapter presents an overview of the environmental analysis of the project. Section 15123 of the *State CEQA Guidelines* requires that an EIR summary identify the following: 1) each significant impact with proposed mitigation measures and alternatives that would reduce or avoid that impact; 2) areas of controversy known to the Lead Agency, including issues raised by agencies and the public; and 3) issues to be resolved, including choice among alternatives and whether or how to mitigate the significant impacts.

### 2.1 PROJECT UNDER REVIEW

Solano Transportation Authority (STA) proposes to relocate a portion of the existing 24-inch Gordon Water Line from its current location in the State Route 12 (SR 12) corridor. The new Gordon Water Line would be located within the Rockville Road right-of-way (ROW) between Suisun Valley Road and a point approximately 1,600 feet west of Green Valley Road. The diameter of the new line would be reduced to 12 inches to provide for optimization of the system and reduced maintenance costs.

The relocated Gordon Water Line would maintain the Vallejo Lakes water system connection between the 24-inch Gordon Water Line running within Suisun Valley Road and the existing 14-inch Green Water Line running west of Green Valley Road. Once the relocation is complete, those portions of the existing Gordon Water Line located along the north side of SR 12 and Interstate 80 (I-80) would be abandoned or removed.

### 2.2 AREAS OF CONTROVERSY/ISSUES TO BE RESOLVED

The project was originally anticipated to be exempt from the CEQA pursuant to Section 15303(d) of the *State CEQA Guidelines*, which covers “new construction”. However, preliminary analysis confirmed that a previously identified Native American cultural resource within the project limits would require analysis as part of an EIR. A Notice of Preparation (NOP) was published and circulated on December 21, 2009 (included in **Appendix A**) to solicit comments regarding the final scope and content of the EIR. Scoping comments received on the project’s NOP (included as **Appendix B**) included a letter from the California Department of Fish and Game (CDFG), the City of Fairfield Community Development Department, and the California Department of Transportation (Caltrans).

The letter from the CDFG provided general recommendations for the assessment of the project's effects (temporary and permanent) on local biological resources. The letter also included a summary of the appropriate permits and agency consultation that would be needed should impacts to specific biological resources be discovered during the environmental review of the project. **Section 4.1** addresses the recommendations raised by the CDFG.

The letter from the City of Fairfield expressed concerns related to the project's potential impacts on Rockville Hills Regional Park. Construction of the proposed water line would occur entirely within the Rockville Road ROW. As such, the project would not require the temporary use of any public and/or private lands surrounding the project corridor. During construction, access to cross streets and private driveways along Rockville Road would be maintained at all times. The project would therefore not have an effect on the adjacent Rockville Hills Park.

The letter from Caltrans identified the need for an encroachment permit for any work within the state ROW, and also identified the need for close coordination to ensure that all Caltrans issues and concerns are addressed as part the CEQA process. The project would not include any modifications within the state ROW.

### **2.3 SIGNIFICANT ENVIRONMENTAL IMPACTS**

According to the *State CEQA Guidelines*, a “significant effect on the environment” means a 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 (*State CEQA Guidelines* Section 15382). The summary table provided in **Subsection 2.5** below identifies the environmental impacts of the project prior to and following mitigation. As shown in the table, implementation of the project would have the potential to generate significant environmental impacts to biological and cultural resources prior to mitigation.

### **2.4 ALTERNATIVES TO THE PROJECT**

*State CEQA Guidelines* Section 15126(d) requires the Lead Agency to consider alternatives to the project that meet the project's basic objectives, while avoiding or reducing significant impacts. CEQA also requires consideration of the No Project (No Build) alternative and identification of an environmental superior alternative.

The alternatives evaluated in this draft EIR focus on avoiding or further reducing potentially significant and significant project impacts associated with biological and cultural resources and groundwater quality. Three alternatives were evaluated including a no build alternative, and two build alternatives that considered the realignment of the water line within other nearby roadways.

### **Alternative 1 – No Build Alternative (relocation within the SR 12 corridor)**

The No Build alternative, Alternative 1, assumes that the relocation of the Gordon Water Line to the Rockville Road ROW would not occur.

However, widening of SR 12 from two to four lanes is already planned as part of a separate project that was approved by Caltrans in February 2008 and is scheduled to begin construction in late 2010. Relocation of the Gordon Water Line is already assumed as part of that project. Therefore, the No Build Alternative includes the relocation of the Gordon Water Line to the northern edge of the widened SR 12 corridor, outside of the existing ROW, from the intersection of Red Top Road and Jameson Canyon Road to a point approximately 3,000 west of the that intersection. The No Build Alternative would require permanent and temporary acquisition of undeveloped land north of SR 12.

### **Alternative 2 - Mangels Boulevard Alternative**

Under this alternative, the Gordon Water Line would be relocated to Mangels Boulevard and would connect the existing 14-inch Green Line to the Gordon Water Line within Suisun Valley Road. The existing Gordon Water Line within the SR 12 and I-80 ROW would be abandoned, similar to the proposed project.

Mangels Boulevard ends at a point west of Green Valley Road and does not extend to the location of the 14-inch Green Line. Installation of the water line beyond west of Mangels Boulevard would therefore require construction through undeveloped land on private property. Existing utility lines are also present within Mangels Boulevard and could conflict with the construction of the new water line. This portion of the alignment would require more intensive construction activities along steep hillsides as well as ROW acquisition.

### **Alternative 3 – Oakwood Drive Alternative**

Under the Oakwood Drive Alternative, the Gordon Water Line would be relocated to the Rockville Road ROW, similar to the proposed project. However, to avoid sensitive cultural resources, the alignment of the water line would deviate southward along Oakwood Drive, and then eastward through pasture land before connecting to the existing Gordon Water Line in Suisun Valley Road.

Lands outside the Oakwood Drive ROW are privately owned and would require acquisition of a water line easement. These lands are also being considered for a 33 single-family residential subdivision development (Woodcreek Residential Subdivision). An initial study/mitigated negative declaration was prepared for this project in January 2009.

## **2.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

CEQA requires the identification of the environmentally superior alternative among the alternatives to the project. The environmentally superior alternative must be an alternative to the project that causes the least amount of damage to the environment, even if the project would be more costly with this alternative. Identification of the environmentally superior alternative may not be that which best meets the goals or needs of the project. Additionally, if the No Project (No Build) alternative is determined to be the least damaging to the environment, CEQA requires that the EIR identify an environmentally superior alternative among the other alternatives (*State CEQA Guidelines* Section 15126.6(e)).

The criteria for selection of the environmentally superior alternative are based on comparison of the alternatives that would most substantially reduce or avoid significant and potentially significant impacts identified for the project. A comparison analysis is provided in detail in **Section 5.0** of this EIR.

Based on a comparison of potential impacts, it appears that Alternative 3 would have the least adverse environmental effect. Therefore, Alternative 3 is considered the environmentally superior alternative.

Overall, the physical impacts to the environment would be similar between Alternative 3 and the proposed project. Although Alternative 3 would reduce impacts to cultural resources by avoiding a known archeological site, it would result in a greater impact to biological resources since it would have a direct impact to a known jurisdictional waterway along Oakwood Drive. Alternative 3 would also require acquisition of an easement across private property. All other impacts would be similar to those identified for the project.

## **2.6 SUMMARY TABLE**

**Table 2-1** provides a summary of environmental impacts of the project, measures identified in this draft EIR to mitigate any significant impact, and the level of significance after implementation of the mitigation measures. The table is arranged in four columns: 1) environmental impacts; 2) level of significance before mitigation; 3) mitigation measures; and 4) level of significance after mitigation. **Chapter 4.0** provides a comprehensive analysis of significant and less-than-significant impacts of the project.

Table 2-1 Summary of Environmental Impacts

Environmental Impact		Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
<b>Biological Resources</b>				
BIO-1	Construction of the project could impact nesting habitat for Swainson's hawk and other migratory birds.	Potentially Significant	BIO-1: Preconstruction Surveys. If construction work is to be performed during the nesting season (March 1 through August 15) a preconstruction nesting survey for the Swainson's hawk and other migratory birds shall be conducted by a qualified biologist within 14 days of start of construction.	Less Than Significant
BIO-2	Construction of the project could impact waterways or associated riparian habitat where sensitive species could exist.	Potentially Significant	BIO-2: Install Construction Netting at Green Valley Creek. A screen or netting would be placed below the work area during the removal of the existing water line and installation of the replacement water line across the Green Valley Creek bridge. The construction netting would protect the water quality of the creek by catching any falling material	Less Than Significant
<b>Cultural Resources</b>				
CULT-1	Ground disturbing activities would impact known cultural resources (P-48-188 (CA-SOL-364))	Significant	CULT-1a: Construction Monitoring. During project earth-moving activities within known historic resources, a total of three cultural resources monitors shall be present to direct the speed of the trench digging and grading, recover significant artifact materials, investigate and document encountered features, and reduce potentially destructive impacts to human remains. These monitors shall consist of two archaeologists (one archeologist examining the trench and another examining removed backdirt) and a single Native American monitor who will generally oversee the trench excavation and be on-hand to expedite notification procedures for the potential discovery of human remains (see Mitigation Measure CULT-1e).	Less Than Significant

Environmental Impact		Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
			<p>CULT-1b: Manual Excavation. In order to minimize impact to historic resources, the archeologist recovery team appointed by the designated qualified archeologist shall conduct a hand excavation of a professionally justifiable sample of soil matrix within the proposed water line corridor. The soil shall be excavated in 10 centimeter increments, placed at the discretion of the archaeologists, and dry screened utilizing ¼- and ⅛-inch mesh. All discovered artifacts shall be sent to the designated qualified archeologist laboratory for processing and analysis (see <b>Mitigation Measure CULT-1d</b>). If an intact burial is discovered during excavation, the control unit will be closed and the burial removal process will begin (see <b>Mitigation Measure CULT-1e</b>).</p>	
			<p>CULT-1c: Systematic Mechanical Excavation. Within the area identified by the qualified archaeologist, a small backhoe with a straight-edged 2 to 3-foot bucket shall systematically clear prehistoric midden soils associated with CA-SOL-364 that are apparent in the trench corridor. A backhoe operator shall be recommended by the designated qualified archeologist. Systematic clearing will be limited to the areas near CA-SOL-364 that were identified as sensitive by the qualified archaeologist. The mechanical clearing shall take place after the 8 cubic meters of control units have been excavated (see <b>Mitigation Measure CULT-1b</b>).</p>	
			<p>CULT-1d: Discovery of Artifacts. If features such as hearths, fire-cracked rock deposits, refuse pits, etc. are encountered during project construction, the portions of those features that would be directly impacted by construction shall be excavated by one of the archaeologists according to standard archaeological procedure. This will ensure that any scientific data that could contribute towards an understanding of the stated research questions will be recovered and documented.</p> <p>The designated qualified archeologist and/or Native American monitor may move the excavation machinery a safe distance from the find so that construction may proceed relatively unaffected by archaeological recovery efforts.</p>	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		<p>CULT-1e: Discovery of Human Remains. Any human remains discovered during construction monitoring shall be treated in accordance with California law and within an accord agreed to by the Native American monitor, the most likely descendant (MLD), and the archaeological recovery team. The following procedure listed below shall be followed as part the data recovery of human remains.</p> <ul style="list-style-type: none"> <li>a) The Native American monitor shall be notified upon the discovery of human remains, and any ceremony the monitor deems necessary shall be carried out.</li> <li>b) Before excavation of the human remains begins, a tarp shall be erected over each burial area to keep direct sunlight off the remains to prevent bones from drying, cracking, and/or splintering.</li> <li>c) Burial removal is considered private by the Native Americans, as well as potentially distracting to passing motorists. As such, the project applicant and general contractor shall provide the materials and personnel needed to visually shield recovered resources from the general public. Steel plates shall be used to cover exposed burials, midden, or excavation units until the trench has been cleared and backfilled to appropriate safety standards. Solid (non-see through) fencing shall be provided around areas being hand-excavated or where burials are being removed. Concrete dividers (K rails) and road safety personnel shall also be provided to keep the archaeological crew at a safe distance from roadway traffic.</li> <li>d) The archaeological recovery team shall make an on site determination on whether to use metal or wooden tools for excavation. The choice shall be dictated by a methodology which minimizes potential damage to the bones during excavation.</li> <li>e) During excavation, the burial areas may be frequently wet down with a fine spray of water to keep the soil from hardening. Bone fragments that come off each burial from contact with heavy equipment or during manual excavation shall be placed in a paper bag and kept with the burial. The excavation process shall include complete exposure of each element and any associated grave goods as best possible given the condition of each individual burial.</li> </ul>	

Environmental Impact		Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
			<ul style="list-style-type: none"> <li>f) If portions of a human remains discovery extend beyond the walls of a designated excavation unit for the project, then archaeologists shall excavate enough of the adjacent area to ensure complete recovery of the skeleton and any associated grave goods.</li> <li>g) After excavation is completed, the archaeological recovery team shall make a detailed scale drawing of each burial and a record photograph shall be taken.</li> <li>h) To insure against damage during burial removal and transportation, the archaeological recovery team shall conduct a brief in-field osteological analysis. Where possible, identification of skeletal elements present, age, sex, and any pathological or traumatic conditions visible, as well as records of any bone measurements possible, shall be recorded, as well as burial position and orientation.</li> <li>i) Once each individual burial has been fully recorded, the remains shall be removed element by element and much of the remaining matrix shall be removed to minimize potential damage to the remains during transportation. Skeletal material shall be wrapped in paper and stored in cardboard boxes to allow slow and even drying of the elements. Pending agreement with the MLD, the remains shall be transported to an appropriate secure location where they will be stored in a secure, climate-controlled atmosphere until their laboratory analysis is completed or pending final disposition.</li> </ul>	
			<p>CULT-1f: Site Documentation and Reporting. All documentation aspects of the data recovery project shall be conducted in accordance with guidance outlined in the State of California Office of Historic Preservation’s Instructions for Recording Historical Resources (OHP 1995) and the Federal Secretary of the Interior’s Standards and Guidelines for the Identification of Cultural Resources (48 CFR 44720-23). Written field documentation shall include unit and level excavation records, field supervisor’s notes, and accompanying digital and print photography.</p> <p>Post-field documentation shall consist of the production of a draft detailed data recovery report to be submitted to the client and the MLD</p>	

Environmental Impact		Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
			<p>approximately 12 months following the completion of the construction monitoring phase of the archaeological investigations. The archeological investigations shall also include specialized studies analyzing faunal remains, lithic artifacts, shell ornaments, bone implements, etc. Some of these analyses are highly specialized and shall be conducted by recognized experts in their respective fields, as selected by the designated qualified archeologist. These sub-contractors shall perform their detailed analyses and provide separate reports that will be incorporated into the body of the data recovery report and/or attached as technical appendices.</p> <p>Once the completed draft report has been reviewed by client and the MLD and their input has been incorporated or otherwise taken into consideration, the designated qualified archeologist will provide final copies to the client, the MLD, and the California Historical Resources Information System.</p>	
CULT-2	Ground-disturbing activities could impact unknown subsurface archeological resources.	Significant	<p>CULT-2a: Require Protection Measures for Cultural Resources within the Excavation Contract. To ensure that exposed cultural resources are protected throughout the excavation process, the project proponent shall develop project specifications regarding project procedures and requirements during and after the exposure of cultural resources in the General Conditions section of any excavation contract, consistent with the Archaeological and Cultural Monitoring Plan (see <b>Mitigation Measure CULT-3c</b>) and including the legal and/or regulatory implications of knowingly destroying cultural resources or removing prehistoric artifacts, human remains, historic artifacts including bottles and other cultural materials from the project area.</p>	Less Than Significant
			<p>CULT-2b: Project Archeologist Conducts Pre-Construction Meeting. The designated qualified archaeologist shall conduct a pre-construction meeting for construction personnel to discuss the sensitivity of archaeological resources potentially encountered during construction.</p>	

Environmental Impact		Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
			<p>CULT-2c: Develop and Implement an Archaeological and Cultural Monitoring Plan to Guide Construction Monitoring. The contractor shall develop and implement an Archaeological and Cultural Monitoring Plan (ACMP) that details the rationale and procedures to be followed during monitoring and unexpected discoveries. The ACMP should include a Discovery Plan for Unanticipated Cultural Resources and a Native American Burial Plan to guide the evaluation, management and mitigation of any previously unknown significant subsurface cultural materials and skeletal remains inadvertently exposed by project's construction activities. Within the ACMP, the Discovery Plan should also include the protocols for developing a find-specific Treatment Plan in the event of a significant discovery during construction in order to guide the removal, analysis, report requirements and future curation of the discovery. The implementation of any cultural resources conditions and/or protection measures mandated by any regulatory/permitting agencies should be incorporated into the document as appropriate. The ACMP must be reviewed and approved by the County prior to the start of construction.</p>	
CULT-3	Ground-disturbing activities could impact unknown human remains.	Significant	<p>CULT-3: Compliance with California law regarding the treatment of Native American human remains as contained in California Health and Safety Code 7050.5 and 7052 and California Public Resources Code 5097. California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. The California Health and Safety Code requires that if human remains are found in any location other than a dedicated cemetery, work is to be halted in the immediate area, and the County coroner is to be notified to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code §7050.5[b]). If the coroner determines that the remains are those of a Native American interment, then the NAHC shall be consulted to identify the most likely descendants and the appropriate disposition of the remains.</p> <p>In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the steps listed below should be taken.</p>	Less Than Significant

Environmental Impact		Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
			<ul style="list-style-type: none"> <li>• There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the coroner of the County in which the remains are discovered is contacted to determine that no investigation of the cause of death is required; and</li> <li>• If the coroner determines the remains to be Native American:                             <ul style="list-style-type: none"> <li>• the coroner shall contact the NAHC within 24 hours</li> <li>• the NAHC shall identify the person or persons it believes to be the MLD from the deceased Native American</li> <li>• the MLD may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98; or</li> </ul> </li> <li>• Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance:                             <ul style="list-style-type: none"> <li>• the NAHC is unable to identify a MLD or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission;</li> <li>• the descendant identified fails to make a recommendation; or</li> <li>• the landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the NAHC fails to provide measures acceptable to the landowner.</li> </ul> </li> </ul>	
<b>Other Resources</b>				
HYDRO-1	Excavation of the trench to a depth between 5 and 10 feet deep would impact groundwater quality	Significant	HYDRO-1: If groundwater is encountered during trenching, the following Caltrans water pollution control standards would be implemented: <ul style="list-style-type: none"> <li>• At least 10 days before starting dewatering, submit a Dewatering and Discharge Plan to the County under Section 5-1.02, "Plans and Working Drawings," and "Water Pollution Control" of the Standard Specifications. Dewatering and Discharge Plan must include:</li> </ul>	Less Than Significant

Environmental Impact		Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
			<ul style="list-style-type: none"> <li>• Title sheet and table of contents;</li> <li>• Description of dewatering and discharge activities detailing locations, quantity of water, equipment, and discharge point;</li> <li>• Estimated schedule for dewatering and discharge (start and end dates, intermittent or continuous);</li> <li>• Discharge alternatives such as dust control or percolation;</li> <li>• Visual monitoring procedures with inspection log;</li> <li>• Conduct dewatering activities under the Field Guide for Construction Dewatering;</li> <li>• Ensure that dewatering discharge does not cause erosion, scour, or sedimentary deposits that impact natural bedding materials;</li> <li>• Discharge water within project limits. If water cannot be discharged within project limits due to site constraints, dispose of it in the same way specified for material in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way";</li> <li>• Do not discharge storm water or non-storm water that has an odor, discoloration other than sediment, an oily sheen, or foam on the surface. Notify the Engineer immediately upon discovering any of those conditions;</li> <li>• Water Pollution Control (WPC) manager must inspect dewatering activities;               <ul style="list-style-type: none"> <li>• Daily when dewatering work occurs daily;</li> <li>• Weekly when dewatering work does not occur daily.</li> </ul> </li> </ul>	