## MITIGATION MONITORING CHECKLIST— MIDDLE GREEN VALLEY SPECIFIC PLAN

This Mitigation Monitoring Checklist contains the Mitigation Monitoring and Reporting Program for the Middle Green Valley Specific Plan. The mitigation measures in the table represent the final language of all project mitigation measures. The mitigation measures listed in column two below have been incorporated into the Middle Green Valley Specific Plan, or the Board of Supervisors has otherwise determined that they shall be implemented, in order to mitigate identified environmental impacts. A completed and signed chart will indicate that each mitigation requirement has been completed and that monitoring requirements have been fulfilled with respect to Public Resources Code Section 21081.6.

Following direction from the Solano County Board of Supervisors to implement all mitigation measures, all measures described in the Mitigation Monitoring and Reporting Program will be implemented through a combination of one or more of the following, as appropriate to nature of the measure: (1) incorporation into the Specific Plan, the plan's policies, regulations, or project designs; (2) incorporation into conditions of approval, permits, entitlements, and agreements with contractors and other parties concerning plan implementation; or (3) carried out directly by County staff. It should be noted that the term "individual project applicants" includes, to the extent relying upon this environmental impact report (EIR) for approvals or actions undertaken, any governmental entities such as the County Services Area (CSA) or Solano Irrigation District (SID).

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Impact 3-1: Impacts on Scenic Vistas. Prominent views from the plan area of the Western Hills have been identified in the Solano County General Plan as one of the County's important "scenic vistas." The Draft Specific Plan (DSP) neighborhood and open lands framework (DSP section 3.2.1) and associated visual resource protection policies, development standards, and design guidelines (DSP sections 3.2, 3.3, 3.4, 4.2, 4.4, and 5.1 through 5.9) have been specifically formulated with the intent to ensure that future plan area land use and development under the Specific Plan remains compatible with, benefits from, enhances and protects the rural character and unique scenic features of Middle Green Valley, including views of the Western Hills, as well as views of plan area riparian corridors, meadows and foothills. The DSP calls for establishment of a system of environmental stewardship (section 3.3.4) to implement the plan's visual and agricultural landscape preservation and enhancement goals, to be applied in conjunction with a plan area <i>Neighborhood Design Code</i> and associated Design Review Process. The Design Code would identify project-specific design submittal requirements for all future discretionary development. The proposed plan area Design Review Process is intended to supplement the requirements of the standard County development review process with a newly- established Middle Green Valley Conservancy Design Review Committee. Nevertheless, until individual project-specific applications are submitted with associated detailed design information sufficient to verify to Green Valley Conservancy Design Review Committee and County staff satisfaction adequate protection of scenic vistas and adequate visual screening from Green Valley	<ul> <li>Mitigation 3-1: Prior to County approval of any future plan area subdivision or other discretionary development application, the project applicant/developer shall provide site plan, architectural, landscape and infrastructure design details demonstrating to the satisfaction of the Middle Green Valley Conservancy Design Review Committee, County staff and County Planning Commission that the development design:</li> <li>sufficiently protects existing visual access from Green Valley Road and other important plan area vantage points towards foreground and middle-ground rural landscapes and the Western Hills background;</li> <li>protects existing intervening landforms and vegetative buffers;</li> <li>maintains building rooflines that do not exceed existing intervening landforms and vegetative screening; and</li> <li>emphasizes building forms, designs, colors, materials, etc. that are reflective of and conducive to the surrounding rural landscape.</li> <li>Implementation of this measure would reduce this potential impact to a less-than-significant level.</li> </ul>	Individual project applicants (must demonstrate compliance to County satisfaction).	MGV Conservancy Design Review Committee and County.	Prior to any subdivision or other discretionary approval.		

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projects undertaken in accordance with the Specific Plan may disrupt views of the Western Hills and plan area riparian, meadow and foothill features, from Green Valley Road and other important vantage points. In particular, development within the DSP-designated neighborhood areas nearest Green Valley Road would have the potential to alter foreground and middle- ground views from Green Valley Road. This possible Specific Plan effect on scenic vistas represents a <b>potentially significant impact</b> .						
Impact 3-2: Increase in Nighttime Lighting and Glare. The DSP includes a streetscape lighting description (section 5.7.6) that suggests, but does not mandate, "low-level lighting.""where nighttime events may warrant a lighted trail or path of travel for safety" and "directional and/or facility identification signs" that "may integrate low levels of light for visibility." The DSP also indicates that "All fixtures used in the landscape will be full-cut-off fixtures that will help maintain the dark nightime sky." (DSP page 5-113). Nevertheless, although the degree of darkness experienced in Middle Green Valley and views of stars and other features in the nighttime sky would not be substantially diminished as a result of Specific Plan implementation, project-specific new development permitted by the Specific Plan in the four designated neighborhoods, as well as the farmstand envisioned along Green Valley Road immediately north of Mason Road, would include new sources of exterior lighting in an otherwise rural setting that could result in localized "light trespass" into the nighttime sky (i.e., new sources of sky-glow) or towards Green Valley Road, Mason Road, or other plan area travel routes. In addition, development of neighborhood facilities such as the anticipated school and firehouse could include new exterior lighting features with noticeable and potentially adverse light and glare effects. The possible Specific Plan light and glare effects represent a <b>potentially significant impact</b> .	<ul> <li>Mitigation 3-2: To minimize glare and "sky glow" from new outdoor area lighting, prior to County approval of any future plan area subdivision or other discretionary development application that includes exterior lighting, the project applicant/developer shall include in the project application materials lighting design measures that ensure protection of surrounding uses from spillover light and glare, use of low lighting fixtures, use of adequately shielded light sources, use of light sources that provide a natural color rendition, and avoidance of light reflectance off of exterior building walls. County shall ensure that any project level application complies with the Model Lighting Ordinance (2011), as amended ("MLO"); that MLO Lighting Zone standard LZ0 or the equivalent is used for land use designations OL-N, OL-R, AG-WS, and AG-P; that MLO Lighting Zone standard LZ1 is used for all other land use designations – AG-R, RF, RM, RN, RC, CS, and PS; and that street lights within the Plan Area are limited to only the lights that are shown in Figure 5-82 of the Specific Plan, as amended.</li> <li>The County shall also require planting of native trees (per Appendix D of the Specific Plan), with a preference for non-deciduous native trees along the north side of the Three Creeks Neighborhood to reduce glare from buildings within the Three Creeks Neighborhood.</li> <li>Incorporation of these and similar measures by a qualified design professional into the project-specific design would reduce this potential for light and glare impacts to a less-than-significant level.</li> </ul>	Individual project applicants (must demonstrate compliance to County satisfaction).	MGV Conservancy Design Review Committee and County.	Prior to any subdivision or other discretionary approval.		
Impact 3-3: Project Contribution to General Plan- Identified Countywide Cumulative Impacts on the County Visual Character. The General Plan EIR has determined that cumulative development of General Plan-permitted urban land uses throughout Solano County would permanently change views, including	<b>Mitigation 3-3:</b> No mitigation has been identified which would be sufficient to eliminate the project contribution; therefore the project contribution to this impact would be <b>significant and unavoidable.</b>					

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valued scenic vistas, throughout the County and would substantially alter the visual character of the County through conversion of agricultural and open space lands to developed urban uses. The General Plan EIR notes that, although implementation of General Plan- required project-specific comprehensive design guidelines and architectural standards would reduce project-specific impacts on aesthetic resources, "there is no mechanism to allow implementation of development projects while avoiding the conversion of the local viewsheds from agricultural land uses and open spaces to urbandevelopment." The General Plan EIR has also determined that no feasible mitigation measures or policies are available that could fully preserve existing visual qualities countywide while allowing development of urban uses under the adopted General Plan, and "Therefore, this impact would remain <b>significant and unavoidable</b> " (General Plan Draft EIR page 4.11-9). Existing vegetative screening would block views of Draft Specific Plan-designated neighborhood development from Green Valley Road. The Draft Specific Plan land use and open space framework and associated stringent development standards and design guidelines would also minimize project visual impacts. The Draft Specific Plan would also retain about 78 percent of the plan area in permanent agricultural and open space use. In addition, the Draft Specific Plan includes detailed development standards and form-based design guidelines that would serve to substantially reduce the aesthetic impacts of development within the various Specific Plan- designated neighborhood areas. Nevertheless, the project contribution to this General Plan-identified cumulative impact would not be "de minimis" (the commonly-used CEQA term for an effect so small or minimal in difference to the status quo that it does not constitute an environmental impact). Therefore, under CEQA, the project contribution to this General Plan-identified significant unavoidable cumulative impact would be <b>significant</b> .							
AGRICULTURAL AND MINERAL RESOURCES							
Impact 4-1: Impact on Prime Farmland. The 2008 Solano County General Plan indicates that the county included approximately 365,650 acres of agricultural land in 2007, including approximately 157,740 acres of "Important Farmland." This "Important Farmland"	<b>Mitigation 4-1:</b> The DSP would facilitate rural development within the plan area in accordance with the adopted 2008 Solano County General Plan. It has been determined that such development could, over time, permanently remove up to an estimated 123						

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included state-designated "Prime Farmland" (farmland considered to have the soil quality, growing season, and moisture supply needed to produce sustained high yields) and "Farmland of Statewide Importance" (farmland similar to "Prime Farmland," but with minor shortcomings, such as greater slopes, etc.). The plan area includes approximately 700 acres of Prime Farmland. A principal goal of the Draft Specific Plan (DSP), implemented through the DSP-proposed Green Valley Agricultural Conservancy, Agricultural Business Plan, Resource Management Plan, and Transfer of Development Rights program, is to return the substantial portion of this 700-acre total that has not been in recent cultivation back to cultivated agricultural use. Nevertheless, the DSP-designated Elkhorn, Nightingale and Three Creeks neighborhood areas overlap some areas of Prime Farmland in the plan area. The DSP-designated Agriculture Residential (5-acre minimum residential lots) and Rural Farm (2 to 5 acres per unit) land use categories within these three neighborhoods, totaling roughly 66 acres, would not preclude continued primary use for sustained high-yield agricultural production. However, the DSP-designated Rural Neighborhood (1 to 4 units per acre) and Rural Mixed-Use Center (4 to 8 units per acre) and Rural Impedude continued high-yield agricultural production. The DSP would therefore, over time, convert up to approximately 123 acres of Prime Farmland to non-agricultural use. Although this DSP-related Prime Farmland loss would constitute a small (0.08 percent) portion of the County's total "Important Farmland" inventory, and would be offset by the DSP measures to return other plan area Prime Farmlands to high-yield agricultural production, it would nevertheless represent a significant environmental impact under CEQA.	acres of Prime Farmland from agricultural production. Chapter 19 of this Draft EIR, Alternatives to the Proposed Action, evaluates an alternative Specific Plan land use layout that would avoid all plan area Prime Farmland (Alternative 19.2). The evaluation indicates that the land use layout changes necessary to accommodate the County General Plan-suggested maximum development capacity of up to 400 new primary residential units and up to 100 new secondary residential units in a manner that avoids the 123 acress of plan area Prime Farmland would force more development into sensitive viewsheds and wildlife habitat and corridors, thereby defeating many of the key project objectives listed in section 2.3 of this Draft EIR. Therefore, it has been determined that no feasible mitigation is currently available to avoid this impact, this Specific Plan-related long-term potential for conversion of Prime Farmland in the plan area to urban use would represent a <b>significant and unavoidable</b> <b>impact</b> .					
Impact 4-2: Indirect Impacts on Prime Farmland. DSP-facilitated development in the Elkhorn, Nightingale and Three Creeks neighborhoods could cause conflicts between new, project-facilitated Residential or Community Services (e.g., private school) uses and adjacent or nearby Prime Farmland agricultural activity. The large size of most DSP- proposed residential lots would allow substantial building setbacks from this property line, which would reduce the possibility for conflicts. Nevertheless, the introduction of new residential uses near existing Prime	<b>Mitigation 4-2:</b> Chapter 2.2 of the Solano County Code protects farm operations from nuisance complaints associated with residential uses located next to active agricultural operations. The County's "right-to-farm ordinance," as it is commonly known, guarantees existing farm owners the right to continue agricultural operations, including, but not limited to, cultivating and tilling the soil, burning agricultural byproducts, irrigating, raising crops and/or livestock, and applying approved chemicals in a proper manner to fields and farmland. The ordinance limits the circumstances	Individual project applicants (must demonstrate compliance to County satisfaction).	County	Prior to any subdivision or other discretionary approval.		

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Farmland operations could result in land use compatibility problems for the existing farmland operations, such as nuisance complaints from new residents, livestock disturbance by domestic pets, trespassing, and vandalism. Nuisance complaints can potentially cause farm operators to curtail operations, and can deter additional investment in farm-related improvements that support the county's agriculture economy. This potential conflict between DSP- facilitated existing farmland operations, residential development and existing agricultural uses represents a <b>potentially significant impact</b> .	under which agriculture may be considered a nuisance. To prevent future residential/agriculture conflicts in the County, notice of this ordinance is currently required to be given to purchasers of real property. Consistent with the Solano County Code, and as a condition of future subdivision and other discretionary development approvals in the plan area, the County shall require the development applicant/developer to provide notification in writing to all prospective purchasers of Residential or Community Services property of the potential nuisances associated with adjacent and nearby farm operations and the existence of the County right-to- farm ordinance. Implementation of this measure would reduce the potential for project indirect impacts on Prime Farmland to a <b>less-than-significant level</b> .					
AIR QUALITY	•		•			-
Impact 5-1: Construction-Related Air Quality Impacts. Construction or demolition activities permitted and/or facilitated by the proposed Specific Plan may generate construction-period exhaust emissions and fugitive dust that could temporarily but noticeably affect local air quality. This would represent a potentially significant impact.	<ul> <li>Mitigation 5-1. The County shall require construction contractors to comply with Solano County General Plan Implementation Program HS.I-59 (best management practices) and Implementation Program RS.I-49 (requirements for diesel vehicles). In addition, for all discretionary grading, demolition, or construction activity in the Specific Plan area, the County shall require implementation of the following measures by construction contractors, where applicable:</li> <li>Dust (PM<sub>10</sub>) control measures that apply to all construction activities:</li> <li>Water all active construction areas that have ground disturbances at least twice daily and more often during windy periods.</li> <li>Cover all hauling trucks or maintain at least two feet of freeboard.</li> <li>Pave, apply water at least twice daily, or apply (nontoxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas.</li> <li>Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas, and sweep streets daily (with water sweepers) if visible soil material is deposited onto the adjacent roads.</li> <li>Enhanced dust (PM<sub>10</sub>) control measures (for construction sites that are greater than four acres, are located adjacent to sensitive receptors, or otherwise warrant additional control measures):</li> <li>Hydroseed or apply (non-toxic) soil stabilizers to</li> </ul>	Individual project applicants and their construction contractors (must demonstrate compliance to County satisfaction).	County	Condition of subdivision map approval; verified during individual project construction.		

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	inactive construction areas (i.e., previously graded areas that are inactive for 10 days or more).					
	<ul> <li>Enclose, cover, water twice daily, or apply (non- toxic) soil binders to exposed stockpiles.</li> </ul>					
	<ul> <li>Limit traffic speeds on any unpaved roads to 15 miles per hour.</li> </ul>					
	<ul> <li>Replant vegetation in disturbed areas as quickly as possible.</li> </ul>					
	<ul> <li>Suspend construction activities that cause visible dust plumes to extend beyond the construction site.</li> </ul>					
	Measures to reduce diesel particulate matter and $PM_{2.5}$ :					
	<ul> <li>Post clear signage at all construction sites indicating that diesel equipment standing idle for more than five minutes shall be turned off. This would include trucks waiting to deliver or receive soil, aggregate, or other bulk materials. Rotating drum concrete trucks could keep their engines running continuously as long as they were onsite or adjacent to the construction site.</li> </ul>					
	<ul> <li>Prevent the use of construction equipment with high particulate emissions. Opacity is an indicator of exhaust particulate emissions from off-road diesel powered equipment. The project shall ensure that emissions from all construction diesel-powered equipment used on the project site do not exceed 40-percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40- percent opacity (or Ringelmann 2.0) shall be repaired or replaced immediately.</li> </ul>					
	<ul> <li>Ensure that contractors install temporary electrical service whenever possible to avoid the need for independently powered equipment (e.g. compressors).</li> </ul>					
	<ul> <li>Properly tune and maintain equipment for low emissions.</li> </ul>					
	The above measures are BAAQMD-identified "feasible control measures for construction emissions of $PM_{10}$ ." Implementation of these measures would reduce the construction-related air quality impact to a <b>less-thansignificant level</b> .					
Impact 5-2: Odor Impacts on "Sensitive Receptors." Specific Plan-facilitated development in the plan area may expose sensitive receptors, such as housing and potentially a school, to odors. This effect is considered	<b>Mitigation 5-2.</b> In reviewing projects proposed in accordance with the Specific Plan, the Middle Green Valley Conservancy and County shall implement Solano County General Plan policies and	MGV Conservancy and County- implemented	MGV Conservancy and County- implemented	Ongoing inspection/ monitoring of ag. operations		

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to be a potentially significant project and cumulative impact.	implementation programs to reduce the potential for odor impacts on sensitive receptors, including Implementation Program HS.I-58 (encouraging agricultural best management practices) and Implementation Program HS.I-63 (establishing buffers). Implementation of these measures would be expected to reduce odor impacts on sensitive receptors to a <b>less-than-significant level</b> .	education program; individual project applicant- implemented development design measures.	ongoing monitoring program (for best management practices); MGV Conservancy Design Review Committee and County verification of adequate buffering through design review (for buffer requirement).	by MGV Conservancy and County to advocate best management practices; condition of subdivision map approval (for buffering).		
Impact 5-3: Long-Term Regional Air Emissions Increases. Specific Plan-facilitated development is not reflected in the latest applicable Clean Air Plan (CAP). In addition, future traffic increases associated with Specific Plan-facilitated development would generate regional emissions increases that would exceed the latest proposed BAAQMD emission-based threshold of significance for reactive organic gases (ROG). The effect of long-term regional emissions associated with Specific Plan-facilitated development is therefore considered to be a significant project and cumulative impact.	<ul> <li>Mitigation 5-3. In addition to the energy-efficiency and other emissions-reducing measures already included in the Specific Plan (e.g., provisions of sidewalks, bicycle lanes, etc.), the County shall require that the Specific Plan include the following requirements:</li> <li>Wire each housing unit to allow use of emerging electronic metering communication technology.</li> <li>Restrict the number of fireplaces in residences to one per household and/or require residential use of EPA-certified wood stoves, pellet stoves, or fireplace inserts. EPA-certified fireplaces and fireplace inserts are 70- to 90-percent effective in reducing emissions from this source. Also encourage the use of natural gas-fired fireplaces.</li> <li>Require outdoor outlets at residences to allow use of electrical lawn and landscape maintenance equipment.</li> <li>Make natural gas available in residential backyards to allow use of natural gas-fired barbecues.</li> <li>Require that any community services operation in the plan area use electrical or alternatively fueled equipment for maintenance of the areas under its jurisdiction.</li> <li>These strategies can be expected to reduce Specific Plan-related regional emissions assumed in the air quality analysis by perhaps 5 percent. This amount would fall short of the 23-percent reduction needed for emissions to fall below the proposed BAAQMD significance threshold for ROG.</li> <li>The finding of a significant impact is based primarily on inconsistencies among the land use projections used</li> </ul>	County, by incorp. these requirements into Specific Plan; individual project applicants, by incorp. into project designs.	MGV Conservancy Design Review Committee and County.	Prior to any subdivision or other discretionary approval.		

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		in various plans (i.e., the proposed Specific Plan, the recently adopted Solano County General Plan, and the 2005 Bay Area Ozone Strategy). As a result, the Specific Plan's inconsistency with the CAP is primarily an administrative effect, in that the CAP is out-of-date and does not reflect current planning projections. The BAAQMD is likely to adopt an updated CAP that would include the latest County projections, including proposed development in the Specific Plan area. Until the current CAP is updated to reflect changed assumptions regarding the County General Plan and Specific Plan projections, adoption and implementation of the Specific Plan would remain technically inconsistent with the current CAP. In addition, however, Specific Plan-facilitated development would likely exceed the proposed BAAQMD significance threshold for ROG, should that threshold be adopted. Since no additional feasible full mitigation has been identified, the Specific Plan's effect on long-term regional emissions increases, as reflected in these administrative provisions, would therefore represent a <b>significant and unavoidable impact</b> .					
	BIOLOGICAL RESOURCES						
	Impact 6-1: General Areawide Impacts on Biological Resources. The Draft Specific Plan (DSP) neighborhood and open lands framework (DSP sections 3.2.1 and 3.3.2), street network (DSP sections 3.2.1 and 3.3.2), street network (DSP sections 3.3.4 and 5.5.6) have been formulated with the intent to avoid and protect mixed oak woodland forest, grassland pockets, and Hennessey Creek and Green Valley Creek riparian corridors, and to minimize biological resource impacts in general. The Draft Specific Plan also specifically acknowledges the framework that would be established by the Bureau of Reclamation and Solano County Water Agency's proposed Solano Multi-Species Habitat Conservation Plan (HCP) (DSP section 2.4.3) for complying with federal and state regulations for special-status species while accommodating future urban growth. In addition, the tree and habitat protection objectives identified in the DSP (section 5.5.6) specifically call for the protection of existing mature hardwood and oak trees; preservation, conservation and enhancement of open lands that provide wildlife habitat; minimization of tree and shrub removal in foothill areas; and repair of	<b>Mitigation 6-1.</b> The County shall encourage avoidance, minimization and compensatory mitigation of identified biological resources, including careful consideration by prospective individual project applicants of the biological resource constraint information provided in this EIR during the pre- application project design phase. In addition, prior to County approval of any future plan area subdivision or other discretionary development application, the project proponent shall submit a <i>biological resources</i> <i>assessment report</i> prepared by a qualified biologist <u>in</u> <u>accordance with DFW, CNPS, USFWS, or</u> <u>NOAA/NMFS survey protocols and guidelines</u> , for County review and approval. The <i>biological resources</i> <i>assessment report</i> shall contain a focused evaluation of project-specific impacts on biological resources, including any protocol level surveys for biological resources that have been performed as may be necessary for temporary and indirect impacts, as well as all related biological impact avoidance, minimization, and compensatory mitigation measures included in the project. If the assessment results in a determination that: (a) no oak woodland area, potentially jurisdictional wetland area, or riparian	Individual project applicants (must demonstrate compliance to County satisfaction).	MGV Conservancy Design Review Committee and County.	Prior to any subdivision or other discretionary approval.		

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environmental degradation that has previously occurred. Nevertheless, based on the evaluation of biological resources occurring or potentially occurring within or in the vicinity of the DSP-designated development areas by the EIR consulting biologist, it has been determined that future individual development projects undertaken in accordance with the DSP may result in potential site-specific impacts on biological resources including sensitive vegetation and aquatic communities, special-status plant species, and special-status wildlife species, due to future individual project-level residential, commercial and mixed- use development, landscaped parkland construction, active open space land uses, and associated road and utility/infrastructure construction activities. This possibility represents a <b>potentially significant impact</b> .	habitat or other stream features would be affected; and (b) no special-status plant or animal species habitat known to occur or potentially occur on or in the vicinity of the project would be affected; no further mitigation would be necessary. If the assessment results in a determination that one or more of these features would be affected, the assessment shall identify associated avoidance, minimization, and/or compensatory mitigation measures shall be consistent with the requirements of corresponding Mitigation 6-2 through 6-13 which follow in this EIR chapter, as well as all other applicable state and federal laws and regulations. Prior to project approval, the County shall also confirm that project-level development has received the necessary permits, approvals, and determinations from applicable biological resource agencies as identified under Mitigations 6-2 through 6-13 which follow. Implementation of these measures would reduce the potential impact to a <b>less-than-significant level</b> .					
Impact 6-2: Potential Conflict with Solano County Multispecies Habitat Conservation Plan. The Draft Specific Plan includes substantial measures intended to minimize potential conflicts between future individual developments undertaken under the Specific Plan with the policies of the Bureau of Reclamation and Solano County Water Agency's Administrative Draft Solano County Multispecies Habitat Conservation Plan (HCP). Nevertheless, if future individual project-level development undertaken under the Specific Plan includes aspects, or proposes special-status species impact avoidance, minimization and/or compensatory mitigation measures, that are not consistent with the HCP as ultimately adopted, the individual project would conflict with the provisions of an adopted Habitat Conservation Plan. This possibility represents a <b>potentially significant impact</b> .	<b>Mitigation 6-2.</b> The County shall ensure that, prior to construction, project-level applicants implement (a) multispecies impact avoidance, minimization and compensatory mitigation measures consistent with the Solano HCP (even if the individual project-level application does not require a jurisdictional approval from an HCP implementing agency such as the SCWA, City of Fairfield Municipal Water, or SID); or (b) comparable measures approved by applicable resource agencies. This measure would reduce the potential impact to a <b>less-than-significant level</b> . [Note: This mitigation measure is intended to incorporate the final HCP, once adopted.]	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		
Impact 6-3: Impact on Oak Woodlands. The Draft Specific Plan includes land use and circulation configurations and associated measures intended to avoid or minimize potential impacts on existing oak woodlands. Nevertheless, future individual project-level development undertaken in accordance with the Specific Plan may result in direct, temporary and/or indirect impacts on oak woodland communities, representing a <b>potentially significant impact</b> .	<b>Mitigation 6-3.</b> Prior to approval of future individual, site-specific development projects within the plan area, the project proponent shall submit an <i>oak woodland management plan</i> , prepared by a trained arborist or forester, which is consistent with the requirements of the Specific Plan and this EIR (see below). The <i>oak woodland management plan</i> may be integrated into the <i>biological resources assessment report</i> (see <i>Mitigation</i> 6-1). Direct impacts on oak woodland shall be mitigated by	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		

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	<ul> <li>(a) conservation of oak woodland through the proposed Transfer of Development Rights program (or other method if necessary) at a minimum of a 1:1 ratio by acreage, and (b) replanting of removed heritage oaks at a 1:1 ratio. Transplantation of existing oaks would not require compensatory mitigation, unless subsequent monitoring shows that the transplanted oak has not survived the process.</li> <li>Implementation of this measure, combined with the detailed mitigation provisions included in the Specific Plan (see below), would reduce the potential impact to a less-than-significant level.</li> </ul>					
Impact 6-4: Impacts on Riparian Communities. The Draft Specific Plan includes land use and circulation configurations and associated measures intended to avoid or minimize potential impacts on Green Valley Creek and Hennessey Creek riparian communities. Nevertheless, future, individual project-level development undertaken in accordance with the Specific Plan may result in direct, temporary, indirect impacts on riparian communities in the plan area, representing a potentially significant impact.	<ul> <li>Mitigation 6-4. Proponents of projects that have been determined through <i>Mitigation 6-1</i> (biological resource assessment report) to involve potential impacts on riparian vegetation communities shall:</li> <li>(a) contact the California Department of Fish and Wildlife (CDFW) to determine whether a Lake and Streambed Alteration Agreement is necessary; and</li> <li>(b) provide a detailed description of the potential riparian habitat impacts and proposed mitigation program to the Regional Water Quality Control Board (Water Board) as part of the project's Water Quality Certification application.</li> <li>Final mitigation for direct and permanent impacts on riparian vegetation/habitat would be subject to <i>jurisdictional agency approval</i>-i.e., approval by the CDFW and Water Board. (The term "jurisdictional agency" as used throughout the mitigation program description in this EIR chapter refers to the federal and state resource agencies with authority pertaining to the subject impacti.e., the applicable combination of USFWS, <u>NOAA</u>. Corps, CDFW and/or Water Board, based on the jurisdictional authorities described in EIR Sections 6.2.2 and 6.2.3.)</li> <li>Mitigation shall include: (a) no net loss of riparian habitat, measured by acreage, either onsite or at an approved mitigation bank; and (b) replanting riparian vegetation in preserved riparian areas at the jurisdictional agency-established minimum ratio as measured by acreage, either onsite or at an approved mitigation bank. Temporary impacts on riparian habitat may be mitigated by replanting of riparian vegetation at the jurisdictional agency-established minimum ratio. Preserved riparian habitat areas shall be protected in perpetuity by a conservation easement. <u>The entire</u> lengths of Hennessey Creek and Green Valley Creek</li> </ul>	Individual project applicants (must demonstrate compliance to County satisfaction). MGV County Service Area or Solano Irrigation District.	County.	Prior to any subdivision or other discretionary approval. Ongoing inspection/ monitoring of operations.		

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		in the Specific Plan area (preserved riparian habitat areas) shall be protected in perpetuity by conservation easements, except along road crossings or other areas as may be required to be exclude from the conservation easements by the state or federal agencies. Theses easements shall be managed, in part, for						
1		wildlife habitat. New development lot lines, the edges of cultivated agricultural fields in preserved lands, and all new groundwater wells shall be set back from preserved riparian corridors by a minimum of 50 feet from tributaries and a minimum of 100 feet from Green Valley Creek and lower Hennessey Creek and may be						
		subject to state or federal agency recommendations. The potential for introduction of invasive species into riparian communities shall be minimized through use of the planting palettes recommended in the Specific Plan, or a comparable palette approved by the authorized jurisdictional agencies. The use of native						
		plants shall be encouraged. Invasive species shall be discouraged on all conservation easements, including but not limited to tamarisk ( <i>Tamarix ramosissima</i> ) and Russian olive ( <i>Elaeagnus angustifolia</i> ), eucalyptus, giant reed, pepper grass, Himalayan blackberry, and palm trees. Conifers and Eucalyptus shall be discouraged.						
		To provide additional direct mitigation for project impacts on Hennessey Creek riparian vegetation, and potential indirect, in-kind mitigation for riparian impacts elsewhere in the plan area, a <i>Hennessey Creek</i> <i>conceptual restoration plan</i> shall be prepared. This conceptual restoration plan shall be prepared to jurisdictional agency satisfaction prior to final approval of any future plan area subdivision map or other discretionary approval involving direct impacts on Hennessey Creek riparian communities, or impacts on riparian communities elsewhere in the plan area that may be subject to in-kind mitigation.						
		Any future public access trails developed along the riparian corridors of Hennessey and Green Valley Creeks shall be managed to avoid, minimize, or mitigate impacts to protected species. Boardwalks and prohibitions on dogs off leash may be required in areas to avoid damage to sensitive vegetation. 2014 RRDEIR Mitigation Measure 16-1 (Water Master Plan that identifies well locations and depths) and Mitigation Measure 16-2a (well design process to avoid						

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	interference between new wells and surface waters) shall be implemented to provide for avoidance of any potential interference between new plan wells and surface streams.					
	<i>Mitigation Measure 16-2b</i> shall also be required, as updated herein, if monitoring required in <i>Mitigation</i> <i>Measure 16-2a</i> identified drawdown of surface water in Green Valley Creek.					
	<i>Mitigation Measure 16-2b:</i> If, in the unlikely event that ongoing monitoring conducted as part of the well design plan or water supply Option B or Option C1 operation reveals potentially significant drawdown may be occurring in surface waters or existing wells in the vicinity of the new project wells, some or all of the following measures to mitigate those impacts will be implemented by the CSA or SID until subsequent monitoring shows that drawdown is not adversely affecting surface waters or operations of existing wells to the satisfaction of the County Division of Environmental Health:					
	<ul> <li>lowering existing pumping equipment within the well structure in affected well(s),</li> </ul>					
	<ul> <li>deepening or replacing the affected well(s),</li> <li>altering the amount or timing of pumping from the project well (i.e., shifting some pumpage to another project well and/or drilling a supplemental project well) to eliminate the adverse impact,</li> </ul>					
	<ul> <li>providing replacement project well(s), and/or</li> <li>providing a water supply connection for the property/uses served by the affected well(s) to the Option B or Option C1 water supply system, sufficient to provide the property/uses with a substantially similar quality of water and the ability to use water in substantially the same manner that they were accustomed to doing if the project had not existed and caused a decline in water levels of their wells.</li> <li>These measures would reduce the potential impacts to riparian communities to a less-than-significant level.</li> </ul>					
Impact 6-5: Impact on Wetlands, Streams, and Ponds. The Draft Specific Plan includes land use and circulation configurations and associated measures	<b>Mitigation 6-5.</b> Proponents of projects that have been determined through <i>Mitigation 6-1</i> (biological resources assessment report) to involve potential impacts on	Individual project applicants (must demonstrate	County.	Prior to any subdivision or other		

	RELATED MITIGATION MEASURE	MONITORING			VERIFICATION	
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intended to avoid or minimize potential impacts on existing wetlands, streams and ponds. Nevertheless, future, individual project-level development undertaken in accordance with the Specific Plan may result in direct, temporary, and/or indirect impacts on wetlands, streams, and ponds in the plan area, representing a <b>potentially significant impact</b> .	<ul> <li>wetlands, streams and ponds shall:</li> <li>(a) contact the California Department of Fish and Wildlife (CDFW) to determine whether a Lake and Streambed Alteration Agreement is necessary; and</li> <li>(b) submit a Section 404 permit application to the U.S. Army Corps of Engineers (Corps) and a Water Quality Certification application to the Regional Water Quality Control Board (Water Board). A jurisdictional Section 404 delineation must be approved by the Corps before permits can be issued by the above-listed agencies.</li> <li>Final mitigation for direct and temporary impacts on wetlands, streams, and ponds shall be subject to the approval of the CDFW and Water Board. Mitigation for direct impacts shall include a minimum ratio, measured by acreage, either onsite or at an approved mitigation bank; and (b) creation of wetland, stream, and/or pond habitat in preserved areas at the jurisdiction agency-established minimum ratio, either onsite or at an approved mitigation bank. Onsite preserved habitat in preserved areas at the jurisdiction agency-established minimum ratio, either onsite or at an approved mitigation bank. Onsite preserved habitat in preserved lands shall be set back from preserved wetlands, streams, and ponds by a minimum of 50 feet from tributaries and a minimum of 100 feet from Green Valley Creek and lower Hennessey Creek.</li> <li>New and expanded road crossings over streams shall be designed and constructed to minimize disturbance to the stream channel by the use of measures such as clear span bridges or arch span culverts when feasible, and minimizing the number and area of footings placed in and at the margins of stream channels.</li> <li>The Hennessey Creek conceptual restoration area (see <i>Mitigation 6-4</i>) shall be made available to provide for mitigation of direct impacts on Hennessey Creek riparian impacts elsewhere in the plan area.</li> <li>As indicated in <i>Mitigation 6-4</i>, the potential for introduction of invasive species shall be minimized through use of the planting palettes a</li></ul>	compliance to County satisfaction). MGV County Service Area or Solano Irrigation District.		discretionary approval. Ongoing inspection/ monitoring of operations.		

			MONITORING		VERIFICA	TION
IDENTIFIED IMPACT	RELATED MITIGATION MEASURE	Implementation Entity	Monitoring and Verification Entity	Timing Requirements	Signature	Date
	2014 RRDEIR Mitigation Measure 16-1 (Water Master Plan that identifies well locations and depths), <i>Mitigation Measure 16-2a</i> (well design process to avoid interference between new wells and surface waters), and <i>Mitigation Measure 16-2b</i> (adaptive management of groundwater wells), shall be implemented to provide for avoidance of any potential interference between new Plan wells and surface streams. These measures would reduce the potential impact to a <b>less-than-significant level</b> .					
Impact 6-6: Impact on Special-Status Plant Species Observed or Known to Occur in the Plan Area. Development undertaken in accordance with the Specific Plan may result in direct, temporary, or indirect impacts on one special-status plant species observed or known to occur in the plan area, Northern California black walnut, which is a California Native Plant Society (CNPS) List 1B species. This possibility represents a <b>potentially significant impact</b> .	Mitigation 6-6. Prior to approval of future individual project-level development plans in the plan area, the potential for occurrence of special-status plant species in the proposed project area should be evaluated under <i>Mitigation 6-1</i> (biological resources assessment report requirements) by a qualified professional biologist and based on the information provided by this EIR and other appropriate literature resources. If suitable habitat for special-status plant species is present in the proposed project area, protocol-level special-status plant surveys shall be conducted during the appropriate blooming period by a qualified professional biologist. The results of the report shall be provided as part of a protocol-level <i>special-status plant species are found during protocol-level special-status plant species survey report</i> , or integrated into other biological documentation. If special-status plant species survey report shall provide a discussion of avoidance, minimization, and mitigation measures as appropriate for each species is not feasible, the special-status plant species shall be transplanted to suitable habitat areas using techniques most suited for the species based on best available science. This may include seed collection, transplantation, or other appropriate methods depending on the observed plant species. Port. If special-status plant species populations could be affected by changes in hydrology as a result of the proposed project, measures such as establishment of appropriate buffers and/or changes to grading contours (if feasible) shall be recommended to maintain preserved and avoided plant species populations.	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		

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	The potential for introduction of invasive species shall be minimized through use of planting palettes recommended in the Specific Plan or a comparable palette approved by the authorized jurisdictional agencies. The use of native plants is encouraged. Construction activities shall disturb the minimum area necessary to complete construction work and disturbed areas seeded with a mix containing native species as soon as possible following disturbance. Construction equipment shall be kept clean of vegetative material, and construction traffic shall be restricted to those areas necessary to complete construction. Implementation of these measures to the satisfaction of the listing jurisdictional agency would reduce the potential impact to a <b>less-than-significant level</b> . The listing jurisdictional agency is the federal, state and/or local agencyi.e., the USFWS, or CDFW, CNPS, or Countythat has recognized (i.e., listed) the species as a special status species deserving special consideration because of its rarity or vulnerability.					
Impact 6-7: Impacts on Special-Status Plant Species with Potential Habitat in the Plan Area. Development undertaken in accordance with the Specific Plan may result in direct, temporary or indirect impacts on special-status plant species that have not yet been observed or are not yet known to occur, but could potentially occur, based on habitat conditions in the plan area, including CNPS List 1B species (Alkali milk-vetch, Big-scale balsamroot, Big tarplant, Narrow- anthered California brodiaea, Mt. Diablo fairy lantern, Tiburon paintbrush, Holly-leaved ceanothus, Pappose tarplant, Western leatherwood, Adobe lily, Diablo helianthella, Brewer's westernflax, Robust monardella, Baker's navarretia, Snowy Indian clover, and Saline clover) and CNPS List 2 species (Dwarf downingia, Rayless ragwort, and Oval-leaved viburnum). This possibility represents a <b>potentially significant impact.</b>	Mitigation 6-7. Implement <i>Mitigation 6-6</i> . Implementation of this measure as a condition of future individual discretionary project approvals, to the satisfaction of the listing jurisdictional agency (CDFW), would reduce this potential impact to a <b>less-than-</b> significant level.	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		
Impact 6-8: Impacts on Special-Status Wildlife Species Observed or Known to Occur in the Plan Area. Development undertaken in accordance with the Specific Plan may result in direct, temporary or indirect impacts on special-status wildlife species observed or known to occur in the plan area, including CDFW Species of Special Concern (Loggerhead Shrike, Grasshopper Sparrow, and Western Pond Turtle), a USFWS Bird of Conservation Concern (Lewis's Woodpecker), a Federal Threatened Species	<b>Mitigation 6-8.</b> The <i>biological resources assessment</i> <i>reports</i> submitted by applicants for project-level developments in the plan area shall evaluate the potential for special-status wildlife species to occur in the proposed project areas and shall identify appropriate avoidance, minimization and/or compensatory measures. In accordance with <i>Mitigation</i> <i>6-2</i> , the <i>biological resources assessment reports</i> shall refer to the anticipated Solano HCP for appropriate avoidance and minimization measures. Impacts on	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		

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(Steelhead) and a CDFW Protected Species (Monarch Butterfly). This possibility represents a <b>potentially</b> <b>significant impact</b> .	avian species protected by the Migratory Bird Treaty Act (MBTA) shall be avoided through preconstruction breeding bird surveys and avoidance of occupied nests. Implementation of this measure as a condition of individual discretionary project approval, to the satisfaction of the listing jurisdictional agency(ies), would reduce this potential impact to a <b>less-than- significant level</b> .					
Impact 6-9: Impacts on Special-Status Wildlife Species with Potential Habitat in the Plan Area. Development undertaken in accordance with the Specific Plan may also result in direct, temporary or indirect impacts on special-status species that have not yet been observed or are not yet known to occur, but could potentially occur, based on habitat conditions in the plan area, including CDFW Species of Special Concern (Pallid Bat, various Western Bat species, American Badger, and Northern Harrier), CDFW Fully Protected Species (Golden Eagle and White-Tailed Kite), State Threatened Species (Swainson's Hawk) and a USFWS Bird of Conservation Concern (Golden Eagle). This possibility represents a <b>potentially significant impact</b> .	Mitigation 6-9. Implement <i>Mitigation 6-8</i> . Implementation of this measure as a condition of future individual discretionary project approvals, to the satisfaction of the listing jurisdictional agency (CDFW), would reduce this potential impact to a <b>less-than-</b> significant level.	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		
Impact 6-10: Impact on Loggerhead Shrike, Lewis's Woodpecker, Grasshopper Sparrow and Other Protected Bird Species. Future, individual project- level development undertaken in accordance with the Specific Plan may result in direct, temporary, and/or indirect impacts on nesting and foraging habitat for protected bird species known to occur in the plan area, including Loggerhead Shrike, Lewis's Woodpecker, and Grasshopper Sparrow, as well as other special- status and Migratory Bird Treaty Act-protected bird species with the potential to occur in the plan area, representing a <b>potentially significant impact</b> .	Mitigation 6-10. If construction or other disturbance to suitable nesting habitat for these and other potential special-status bird species is conducted between February 1 and August 31, pre-construction breeding bird surveys shall be conducted by a qualified biologist no later than 30 days prior to the anticipated start of construction. Construction and removal of suitable nesting vegetation may be initiated without pre- construction surveys if removal and disturbance of suitable nesting habitat is conducted between September 1 and January 31. If breeding birds are observed during pre-construction surveys, disturbance to active nests shall be avoided by establishment of a buffer between the nest and construction activities. Appropriate buffer distances are species- and project-specific but shall follow the guidelines of the ADHCP: for example, a minimum of 500 feet would be required for Swainson's Hawk and a minimum of 250 feet for Special Management Species (Loggerhead Shrike, Grasshopper Sparrow, and Tricolored Blackbird). For all other special-status bird species, a minimum buffer distance of at least 50 feet shall be required. The <i>biological resources assessment reports</i> required under <i>Mitigation 6-1</i> for all individual discretionary	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		

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		development projects in the plan area shall contain analysis of measures that would be used by a proposed development project to minimize and avoid potential indirect impacts on special-status bird species. Implementation of these measures would reduce the potential impact to a <b>less-than-significant level</b> .						
Impact 6-11: Impact on Call and Western Pond Turtle. F discretionary project-specific in accordance with the Speci direct, temporary, and/or indi red-legged frog and western habitat for this species, repre- significant impact.	tutre individual development undertaken fic Plan may result in rect impacts on California pond turtle and suitable	Mitigation 6-11. The presence of suitable aquatic and all dispersal habitat for California red-legged frog (CRLF) and Western Pond Turtle (WPT) shall be evaluated by a qualified biologist as part of the <i>biological resources assessment report</i> required under <i>Mitigation 6-1.</i> Projects containing suitable aquatic habitat for CRLF and WPT shall provide an analysis of potential impacts, along with avoidance, minimization, and mitigation measures for potential impacts on CRLF and WPT. If take of CRLF would occur, the project may seek take coverage through the Solano HCP if approved, and implement avoidance, minimization, and mitigation measures consistent with the Solano HCP. If the Solano HCP is not yet approved, projects shall consult with USFWS in accordance with ESA. Avoidance, minimization, and mitigation measures, consistent with the draft Solano HCP, shall be imposed to ensure no net loss of habitat or individuals. Measures may include protection of habitat to be retained on site during construction, worker awareness training, timing of project activities to avoid destruction of egg masses, and purchase of conservation credits at a USFWS- approved conservation bank to compensate for the loss of habitat or individuals. Direct impacts on WPT and CRLF habitat shall be mitigated through implementation of the mitigation measures described above for wetlands, streams, and ponds (Mitigation Measure 6-5). Indirect hydrology and water quality impacts on WPT shall be mitigated through implementation of mitigation measures recommended in Chapter 11, Hydrology and Water Quality, of the 2009 DEIR. It is recommended that final <u>Final</u> avoidance, minimization, and mitigation measures shall be developed in consultation with CDFW and/orthe appropriate agencies and shall be consistent with the measures outlined in the anticipatedset forth in the Solano HCP <u>, as finalized and as may be amended</u> . Project-level development shall maintain the recommended riparian corridor widths (see Mitigation	Individual project applicants (must demonstrate compliance to County satisfaction). MGV County Service Area or Solano Irrigation District.	County.	Prior to any subdivision or other discretionary approval. Ongoing inspection/ monitoring of operations.			

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	Measure 6-4) as mitigation for indirect impacts on wetlands, streams, and ponds due to changes in water quality runoff as well as groundwater drawdown. 2014 RRDEIR Mitigation Measure 16-1 (Water Master Plan that identifies well locations and depths), Mitigation Measure 16-2a (well design process to avoid interference between new wells and surface waters), and Mitigation Measure 16-2b (adaptive management of groundwater wells), shall be implemented to provide for avoidance of any potential interference between new plan wells and surface streams. These-Implementation of these measures would reduce the potential impact to a <b>less-than-significant level</b> .					
Impact 6-12: Impact on Steelhead. The Draft Specific Plan includes land use and circulation configurations and associated measures intended to avoid or minimize potential direct and indirect impacts on plan area streams and stream habitats. Nevertheless, future individual project-specific discretionary development undertaken in accordance with the Specific Plan may result in direct, temporary, and/or indirect impacts on Steelhead in Green Valley Creek, a Federal Threatened Species, representing a <b>potentially significant impact</b> .	Steelhead are present in Green Valley Creek. Some have reported observations of Chinook salmon in Green Valley Creek as recently as winter or spring of	Individual project applicants (must demonstrate compliance to County satisfaction). MGV County Service Area or Solano Irrigation District.	County.	Prior to any subdivision or other discretionary approval. Ongoing inspection/ monitoring of operations.		

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	<ul> <li>analysis of temperature, water flow, and water quality surveys (i.e., data pH, conductivity, sedimentation, and dissolved oxygen) as determined by the biologist. These types of measurements shall be done as recommended by a qualified fisheries biologist that specializes in salmonids. County shall ensure that these measurements are ongoing and a part of an adaptive management plan for salmonids.</li> <li>Best Available Science shows harm to salmonids and amphibians from various known chemicals. Accordingly, County shall encourage a no-spray zone for chemicals known to be problematic for salmonids and amphibians for at least 1,000 feet from any creek, stockpond, or wetland in the Plan area for the following chemicals: chlorpyrifos, diazinon, malathion, carbaryl, carbofuran, methomyl, bensulide, dimethoate, ethroprop, methidathion, naled, phorate, phosmet, 2,4-D, chlorothalonil, diuron, oryzalin, pendimethalin, and trifluralin, 1,3-D (Telone), Bromoxynil (Bronate), Diflubenzuron (Dimilin), Fenbutatin-oxide (Vendex/Promite), Prometryn (Caparol/Vegetable Pro), Propargite (Comite/Omite), Racemic metholachlor (MeToo-Lachlor, Parallel, Stalwart, acephate, azinphosmethyl, carbaryl, dicofol, disulfoton, endosulfan, esfenvalerate, fenamiphos, glyphosate, malathion, mancozeb, methamidophos, methoprene naled paraquat, permethrin, phosmet, polycyclic aromatic hydrocarbons, pyrethrins, rotenone, strychnine, triclopyr and trifluralin.</li> <li>Organic agricultural practices in accordance with USDA standards shall be encouraged.</li> <li>Project-level development shall maintain the recommended riparian corridor widths (see <i>Mitigation Measure 6-4</i>) as mitigation for indirect impacts on wetlands, streams, and ponds due to changes in water quality runoff as well as groundwater drawdown.</li> <li>2014 RRDEIR Mitigation Measure 16-1 (Water Master Plan that identifies well locations and depths), <i>Mitigation Measure 16-2a</i> (well design process to avoid interference between new wells and surface waters), a</li></ul>					

			MONITORING		VERIFICATION	
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Impact 6-13: Impact on Wildlife Habitat Corridors and Linkages. Compared to other forms of development, the cluster development patterns proposed by the Specific Plan would greatly reduce the potential impact on habitat corridors and linkages, and the proposed preservation of large open space areas would help preserve opportunities for wildlife habitat use and movement. Nevertheless, future individual discretionary project-level development undertaken pursuant to the Specific Plan has the potential to impact wildlife habitat corridors and linkages, through the introduction of barriers to wildlife movement in the form of wider roads with increased traffic and increased development and human presence, representing a <b>potentially significant impact</b> .	<ul> <li>Mitigation 6-13. The Solano HCP identifies wildlife habitat corridors and linkages in the Plan area. As part of the biological resources assessment report required under Mitigation 6-1, each project undertaken pursuant to the Specific Plan shall include <u>avoidance</u>, minimization, and mitigation measures for potential impacts on wildlife corridors. Measures may vary based on project location, project design, and habitat types present.</li> <li>Project-level developments shall maintain the limits of development specified in the Specific Plan to provide adequate buffers for habitat corridors in consultation with state and federal listing agencies. Stream setbacks specified in Mitigation 6-4, and as may be modified after consultation with state and federal listing agencies, shall be implemented to maintain adequate corridor widths in riparian areas to allow for movement of wildlife.</li> <li>Implementation of these measures would reduce the potential impact to a less-than-significant level.</li> </ul>	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		
Impact 6-14: Cumulative Impact on Biological Resources. Development in the Specific Plan area, in combination with other future development elsewhere in the county and subregion, could contribute to cumulative biological resources impacts, including cumulative losses of special-status species, Heritage Trees, and other vegetation and wildlife. These cumulative impacts have been considered in the preparation and adoption of the Solano County General Plan and County-certified General Plan EIR, as well as in similar documents prepared for and adopted in other jurisdictions. The Specific Plan's potential contribution to cumulative effects on biological resources would represent a <b>potentially significant cumulative impact</b> .	<b>Mitigation 6-14.</b> The County shall ensure that <i>Mitigations 6-1</i> through <i>6-13</i> above are implemented. With successful implementation of these measures, the Specific Plan's contribution to the cumulative biological resources impact would be reduced to a <b>less-than-significant level</b> .	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		
Impact 6-15: Cumulative Impact on Riparian and Aquatic Biological Resources due to Groundwater Extraction under Water Supply Option B or Option C1. Cumulative impacts on biological resources were addressed in the original 2009 DEIR in Impact 6-14. With regard to such impacts from groundwater use, specifically, extraction of groundwater to serve the Specific Plan under Water Supply Option B or Option C1, in combination with groundwater pumping from existing and future development in Middle Green Valley, could contribute to cumulative indirect effects	<b>Mitigation 6-15.</b> The County shall ensure that <i>Mitigation Measures 6-4, 6-5, 6-11, 6-12, 16-1, 16-2a,</i> <i>and 16-2b</i> are implemented. With successful implementation of these measures, the Specific Plan's contribution to the cumulative riparian and aquatic biological resource impacts would be <b>less than</b> <b>cumulatively considerable.</b>	Individual project applicants (must demonstrate compliance to County satisfaction). MGV County Service Area or Solano Irrigation District.	County.	Prior to any subdivision or other discretionary approval. Ongoing inspection/ monitoring of operations.		

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from groundwater pumping on riparian and aquatic biological resources. If pumping from multiple wells were to combine to create substantial drawdown such that the water table were to drop below levels sufficient to support riparian vegetation, or below levels sufficient to maintain surface water flows that support fish and aquatic species, this would represent a <b>potentially</b> <b>significant cumulative impact.</b>						
CLIMATE CHANGE						
<ul> <li>Impact 7-1: Specific Plan-Related and Cumulative Increase in Greenhouse Gas Emissions.</li> <li>Construction and ongoing operation of Specific Plan- facilitated development would result in a net increase in carbon dioxide and other greenhouse gas emissions.</li> <li>The Specific Plan contains guidelines and principles for encouraging energy efficiency in new development within the plan area. In addition, Specific Plan- facilitated new building construction and other improvements would be required to meet California Energy Efficiency Standards for Residential and Nonresidential Buildings, helping to reduce associated future energy demand and associated Specific Plan contributions to cumulative regional greenhouse gas emissions.</li> <li>Nevertheless, conservatively assuming construction emissions of 66 to 1,443 tons per year and an estimated ongoing "worst case" net increase in greenhouse gas emissions of approximately 10,779 metric tons per year (or 6.65 metric tons per year per capita), the proposed Specific Plan could be expected to result in a significant project and cumulative global climate change impact.</li> </ul>	<ul> <li>Mitigation 7-1. The proposed Specific Plan contains measures to encourage energy efficiency in new Specific Plan-facilitated development. To further ensure that the proposed Specific Plan facilitates growth in a manner that reduces the rate of associated greenhouse gas emissions increase, discretionary approvals for Specific Plan-related individual residential, commercial, agricultural, and public services projects in the Specific Plan area shall be required to comply with the Climate Action Plan to be developed and adopted by the County. In the interim, Specific Plan-related discretionary approvals shall incorporate an appropriate combination of the following greenhouse gas emissions reduction measures (from Table 7.3):</li> <li>features in the project design that would accommodate convenient public transit and promote direct access for pedestrians and bicyclists to major destinations;</li> <li>adoption of a project design objective for residential and commercial buildings to achieve Leadership in Energy and Environmental Design (LEED) New Construction "Silver" Certification or better, in addition to compliance with California Code of Regulations Title 24 Energy Efficient Standards;</li> <li>planting of trees and vegetation near structures to shade buildings and reduce energy requirements for heating and cooling;</li> <li>preservation or replacement of existing onsite trees;</li> <li>construction and demolition waste recycling (see Mitigation 16-12 of this EIR); and</li> <li>preference for replacement of project exterior lighting, street lights and other electrical uses with energy efficient bulbs and appliances.</li> </ul>	Individual project applicants (must demonstrate compliance to County satisfaction).	MGV Conservancy Design Review Committee and County.	Prior to any subdivision or other discretionary approval.		

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	Plan-related greenhouse gas emissions impacts. However, because the effectiveness of this mitigation program in reducing the Specific Plan-related contribution to cumulative greenhouse gas emissions in the region cannot be reasonably quantified, it has been determined that the Specific Plan, when combined with anticipated overall cumulative development in the region as a whole, would potentially produce a substantial net increase in greenhouse gas emissions, representing a <b>significant unavoidable</b> <b>project and cumulative climate change impact.</b>					
CULTURAL, HISTORIC AND PALEONTOLOGICAL	RESOURCES	-	-			-
Impact 8-1: Disturbance of Archaeological Resources. The Draft Specific Plan (DSP) neighborhood and open lands framework (DSP sections 3.2.1 and 3.2.2), streetwork (DSP section 3.4.3) and associated environmental stewardship objectives (DSP section 3.3.4) have been formulated with the intent to preserve and protect archaeological resources. The DSP proposes development of housing, community/public service uses, "agricultural tourism uses," and neighborhood commercial uses clustered around four neighborhoods, with the remaining 78 percent of the plan area preserved as open land. The DSP-proposed Green Valley Conservancy, a non-profit conservation organization, would oversee these preserved areas. Nevertheless, DSP-designated development and agricultural areas have the substantial potential to contain buried or obscured prehistoric cultural resources, as verified by the EIR consulting archaeologist. Agricultural activities and grading activities associated with future individual development projects undertaken in accordance with the DSP may disturb existing unrecorded sensitive archaeological resources in the plan area. This possibility represents a <b>potentially significant impact</b> .	<b>Mitigation 8-1.</b> During the County's normal project- specific environmental review (Initial Study) process for all future, discretionary, public improvement and private development projects in the Specific Plan area, the County shall determine the possible presence of, and the potential impacts of the action on, archaeological resources, based on the information provided by this EIR. For projects involving substantial ground disturbance, the individual project sponsor or environmental consultant shall be required to contract with a qualified archaeologist to conduct a determination in regard to cultural values remaining on the site and warranted mitigation measures. In general, to make an adequate determination, the archaeologist shall conduct a preliminary field inspection to (1) assess the amount and location of visible ground surface, (2) determine the nature and extent of previous impacts, and (3) assess the nature and extent of potential impacts. Such field inspection may demonstrate the need for some form of additional subsurface testing (e.g., excavation by auger, shovel, or backhoe unit), or, alternatively, the need for onsite monitoring of subsurface activities (i.e., during grading or trenching). To complete the inventory of prehistoric cultural resources, mechanical testing is recommended in areas adjoining Hennessey Creek and Green Valley Creek where ground disturbance may be proposed. In addition, evaluative testing may be necessary to determine whether a resource is eligible for inclusion on the California Register of Historic Places. If a significant archaeological resource is identified through this field inspection process, the County and project proponent shall seek to avoid damaging effects on the resource. Preservation in place to maintain the relationship between the artifact(s) and the	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Ongoing inspection/ monitoring during construction.		

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	archaeological context is the preferred manner of mitigating impacts on an archaeological site. Preservation may be accomplished by:					
	<ul> <li>planning construction to avoid the archaeological site;</li> </ul>					
	<ul> <li>incorporating the site within a park, green space, or other open space element;</li> </ul>					
	<ul> <li>covering the site with a layer of chemically stable soil; or</li> </ul>					
	<ul> <li>deeding the site into a permanent conservation easement (e.g., an easement administered by the proposed Green Valley Conservancy).</li> </ul>					
	When in-place mitigation is determined by the County to be infeasible, a <i>data recovery plan</i> , which makes provisions for adequate recovery of culturally or historically consequential information about the site, shall be prepared and adopted prior to any additional excavation being undertaken. Such studies shall be submitted to the California Historical Records Information System (CHRIS). If Native American artifacts are indicated, the studies shall also be submitted to the Native American Heritage Commission. Identified cultural resources shall be recorded on form DPR 422 (archaeological sites). Mitigation measures recommended by these two groups and required by the County shall be undertaken, if necessary, prior to resumption of construction activities.					
	A <i>data recovery plan</i> and data recovery shall not be required if the County determines that testing or studies already completed have adequately recovered the necessary data, provided that the data have already been documented in another EIR or are available for review at the CHRIS (CEQA Guidelines section 15126.4[b]).					
	In the event that subsurface cultural resources are otherwise encountered during approved ground- disturbing activities for a plan area construction activity, work in the immediate vicinity shall be stopped and a qualified archaeologist retained to evaluate the finds following the procedures described above.					
	If human remains are found, special rules set forth in State Health and Safety Code section 7050.5 and CEQA Guidelines section 5064.5(e) shall apply.					
	Implementation of this measure would supplement the County's existing General Plan policies and implementation programs and would reduce this					

		Ι	MONITORING		VERIFICATION	
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	impact to a less-than-significant level.					
Impact 8-2: Destruction/Degradation of Historic Resources. The planning process for the Draft Specific Plan (DSP) included consideration of the Secretary of the Interior's standards and other provisions for protecting historic resources. In addition, the 55 existing housing units in the plan areasome of which represent historic-period resourceswould not be affected by DSP-facilitated neighborhood and infrastructure framework. Nevertheless, future project- specific development in accordance with the Specific Plan may result in substantial adverse changes in the significance of one or more individual potentially significant historic properties in the plan area. If a historic resource were the subject of a future, site- specific development proposal, substantial adverse changes that may potentially occur include physical demolition, destruction, relocation, or alteration of one or more of these identified resources, such that the resource is "materially impaired." A historic resource is considered to be "materially impaired" when a project demolishes or materially alters the physical characteristics that justify the determination of its significance (CEQA Guidelines section 15064.5[b]). Such an adverse change to a CEQA-defined historic resource would constitute a potentially significant impact.	<ul> <li>Mitigation 8-2. Generally, for any future discretionary action within the Specific Plan area that the County determines through the CEQA-required Initial Study review process may cause a "substantial adverse change" to an identified historic resource, the County and applicant shall incorporate measures that would seek to improve the affected resource in accordance with either of the following publications:</li> <li>The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings; or</li> <li>The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.</li> <li>In accordance with the recommendations of the Holman &amp; Associates cultural resources inventory, evaluation of the affected resource shall include consideration of (a) the research potential of the property type, (b) the total number of similar resources in the Specific Plan area and potential impacts on the plan area as a whole, and (c) the preservation and study priorities identified in the Holman &amp; Associates inventory. Each site shall be formally recorded on State of California primary record forms (form DPR 523) and applicable attachments. Recording shall consolidate as many of the structures and features as possible into one site (i.e., record form) where there is a clear historical association, despite the frequent dispersal of features across the plan area.</li> <li>Successful incorporation of these measures would supplement the County's existing General Plan policies and implementation programs and would reduce the impact to a less-than-significant level (CEQA Guidelines section 15126.4(b)). This mitigation shall be made enforceable by its incorporation into the Specific Plan as a County-adopted requirement to be implemented through subsequent development-specific permits, conditions, agreements, or other measures, pursuant to CEQA Guidelines section 15064.5(b)(3-5). For a</li></ul>	County (CEQA- required Initial Study responsibility) and individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to issuance of grading or building permit.		

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	thereby requiring a project-specific EIR (CEQA Guidelines section 15064.5[a] and [b]). In these instances, potentially significant standing structures and/or features shall be evaluated by a qualified architectural historian familiar with the region and its resources. The County shall use this information to formulate a mitigation plan for the resource, including avoiding the structure or feature or moving it to another location and/or donating some features or samples of artifacts to local historical guilds for public interpretation and permanent curation. If standing structures would be moved or destroyed, potential subsurface impacts and the presence/absence of below-ground features, such as buried foundations and filled-in privies and wells, shall be evaluated and addressed. While existing archival information may be sufficient to address applicable research issues for some resources, focused documentary research and/or oral histories may be required to develop an appropriate contextual framework for interpretation and evaluation of other resources.					
Impact 8-3: Destruction/Degradation of Paleontological Resources. Development facilitated by the Specific Plan could disturb existing known or unrecorded paleontological resources in the plan area. This possibility represents a <b>potentially significant</b> impact.	<b>Mitigation 8-3.</b> During the County's normal project- specific environmental review (Initial Study) process for all future, discretionary public improvement and private development projects in the Specific Plan area, the County shall determine the possible presence of, and the potential impacts of the action on, paleontological resources. For projects involving substantial ground disturbance, the County shall require individual project applicants to carry out the following measures: (1) Education Program. Project applicants shall implement a program that includes the following elements:	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Ongoing inspection/ monitoring during construction.		
	<ul> <li>Resource identification training procedures for construction personnel;</li> <li>Spot-checks by a qualified paleontological monitor of all excavations deeper than seven feet below ground surface; and</li> <li>Procedures for reporting discoveries and their geologic content.</li> <li>(2) Procedures for Resources Encountered. If subsurface paleontological resources are encountered, excavation shall halt in the vicinity of the resources and the project paleontologist shall evaluate the resource and its stratigraphic context. The monitor shall be empowered to temporarily halt or redirect construction activities to ensure avoidance of adverse impacts on</li> </ul>					

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	paleontological resources. During monitoring, if potentially significant paleontological resources are found, "standard" samples shall be collected and processed by a qualified paleontologist to recover micro vertebrate fossils. If significant fossils are found and collected, they shall be prepared to a reasonable point of identification. Excess sediment or matrix shall be removed from the specimens to reduce the bulk and cost of storage. Itemized catalogs of material collected and identified shall be provided to the museum repository with the specimens. Significant fossils collected during this work, along with the itemized inventory of these specimens, shall be deposited in a museum repository for permanent curation and storage. A report documenting the results of the monitoring and salvage activities, and the significance of the fossils, if any, shall be prepared. The report and inventory, when submitted to the lead agency, shall signify the completion of the program to mitigate impacts on paleontological resources. Implementation of this measure would reduce the impact to a <b>less-than-significant level</b> .					
GEOLOGY AND SOILS		<u> </u>				
Impact 10-1: Landslide and Erosion Hazards. The Specific Plan would allow development in areas that may be subject to landslide and erosion hazards, representing a potentially significant impact.	<b>Mitigation 10-1.</b> At County discretion and consistent with Solano County General Plan policies HS.P-12 through HS.P-15 and HS.P- 17 and implementation programs HS.I-21 and HS.I-22, future subdivision and other discretionary development approvals may be subject to <i>detailed</i> , <i>design-level geotechnical</i> <i>investigations</i> that include analysis of landslide and erosion hazards and recommend stabilization measures. The County may also require preparation of Preliminary Grading Plans and/or Preliminary Geotechnical Reports, prepared by a licensed Engineering Geologist, before approval of specific developments within the plan area. Under this existing County authority, the investigating Engineering Geologist may be required to determine the extent of any necessary landslide remediation and supervise remediation activities during project construction to ensure that any existing or potential future landslides are fully stabilized. Mitigation measures (e.g., soil replacement, setbacks, retaining walls) shall be required as needed to protect against damage that might be caused by slope failure. Required compliance with these existing Solano County policies, implementation programs and development review	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		

	RELATED MITIGATION MEASURE	MONITORING			VERIFICATION	
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	procedures to the satisfaction of the County would reduce the potential effects of landsliding and soil erosion to a <b>less-than-significant level</b> .					
Impact 10-2: Expansive Soil Hazards. Most of the areas proposed for development under the Specific Plan have "moderate" to "high" shrink-swell potential. The plan area's moderately to highly expansive soils would be expected to undergo repeated cycles of shrinking and swelling in response to changes in soil moisture. Utility lines, road and building foundations, and sidewalks and concrete flatwork constructed on top of naturally occurring expansive soils, or based on fills that contain a high percentage of expansive soils, would be subject to long-term damage, representing a <b>potentially significant impact</b> .	<b>Mitigation 10-2.</b> The <i>detailed</i> , <i>design-level</i> <i>geotechnical investigations</i> required at the County's discretion (see <i>Mitigation 10-1</i> ) shall include analysis of expansive soil hazards and shall recommend warranted stabilization measures. The individual project Engineering Geologist shall inspect and certify that any expansive soils underlying individual building pads and all roadway subgrades have been either removed or amended in accordance with County- approved construction specifications, or shall make site-specific recommendations for grading, drainage installation, foundation design, the addition of soil amendments, and/or the use of imported, non- expansive fill materials, as may be required to fully mitigate the effects of weak or expansive soils and prevent future damage to project improvements. These recommendations shall be reviewed and approved by a County-retained registered geologist and incorporated into a report to be included with each building permit application and with the plans for all public and common area improvements. Implementation of these measures to the satisfaction of the County, combined with conformance with standard Uniform Building Code and other applicable regulations, would reduce the potential effects of expansive soils to a <b>less-than-significant level</b> .	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		
Impact 10-3: Groundwater Impacts. Mass grading, construction of cuts and fills, redirection of existing drainage patterns, and installation of landscaping irrigation as part of future development allowed by the Specific Plan could affect existing patterns of groundwater flow in the plan area, resulting in slope instabilities that would represent a <b>potentially</b> <b>significant impact.</b>	<b>Mitigation 10-3.</b> Onsite drainage systems shall be regularly maintained to ensure that storm water runoff is directed away from all slope areas. Educational materials that discourage overwatering in landscaped areas shall be furnished to all future lot owners and property managers at the time of purchase and periodically thereafter (perhaps by inclusion with water or tax bills), as part of an effort to control groundwater seepage. Implementation of these measures to the satisfaction of the County would reduce this potential effect to a <b>less-than-significant level</b> .	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		
HYDROLOGY AND WATER QUALITY	·	•	•			
Impact 11-1: Construction-Period Impacts on Water Quality. Surface water pollutants associated with Specific Plan-facilitated construction activity, including soil disturbance associated with grading activities,	<b>Mitigation 11-1.</b> The County shall ensure that the developer of each future Specific Plan-facilitated discretionary development in the plan area complies where applicable with all current state, regional, and	Individual project applicants (must demonstrate compliance to	County.	Prior to any subdivision or other discretionary		

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could significantly degrade the quality of receiving waters in Hennessey Creek, Green Valley Creek and, ultimately, Suisun Bay, representing a <b>potentially</b> <b>significant impact.</b>	County water quality provisions, and in particular, complies with the process of development plan review established in the County's Storm Water Management Plan (SWMP), and associated County NPDES permit issuance requirements instituted to address short-term and long-term water quality issues, including construction period activities. Implementation of this requirement would reduce this impact to a <b>less-than- significant level</b> .	County satisfaction).		approval.		
Impact 11-2: Ongoing Impacts on Water Quality. Ongoing activities associated with project-facilitated development could increase the level of contaminants in receiving waters. Sources of pollutants could include (a) runoff from new roadways, parking areas, and other paved areas; (b) increased soil disturbance, erosion and sedimentation in surface waters due to expanded and new agricultural activities; and (c) herbicides, pesticides, and fertilizers used in expanded and new agricultural activities and new domestic landscaping. These factors could combine to significantly reduce drainage channel capacities and degrade the quality of receiving waters in Hennessey Creek, Green Valley Creek, and ultimately, Suisun Bay, representing a <b>potentially significant impact.</b>	<b>Mitigation 11-2.</b> As a condition of future discretionary development approvals in the plan area, the County shall ensure that developers comply with applicable Solano County Storm Water Management Plan and NPDES permit requirements, including implementation of erosion and sediment control measures for farming activities in accordance with Solano County storm water management requirements and best management practices. In addition, as recommended in the County General Plan under Implementation Program RS.I-67, the minimum riparian buffer width to protect water quality and ecosystem function shall be determined according to existing parcel size. For parcels more than 2 acres in size, a minimum 150- foot development setback shall be provided. For parcels of 0.5-2.0 acres, a minimum 50-foot setback shall be provided. For parcels less than 0.5 acre a minimum 20-foot setback shall be provided. Exceptions to these development on the parcel entirely outside of the setback is infeasible or would have greater impacts on water quality and wildlife habitat. Implementation of this measure would reduce the impact to a <b>less-thansignificant level</b> .	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		
Impact 11-3: Flooding Impacts. For the most part, the Specific Plan-designated development areas avoid identified creek and dam failure inundation areas. Nevertheless, a limited number of Specific Plan- designated Agricultural-Residential (5-acre minimum lots), Rural Farm (1 to 5 acres per unit) and Rural Neighborhood (1 to 4 units per acre) land use designations in the proposed Elkhorn, Nightingale and Three Creeks neighborhoods overlap the Solano County General Plan-identified Lakes Madigan & Frey Dam Inundation Area and Green Valley Creek 100- year flood zone, the latter as mapped by the Federal Emergency Management Agency (FEMA) flood	<b>Mitigation 11-3.</b> As a condition of future residential subdivision and other discretionary development approvals in these particular areas, the County shall ensure that project-specific applications comply with Solano County General Plan policies and requirements related to flood hazard protection, including policies HS.P-5 (appropriate elevation and flood proofing), HS.P-7 (mitigation requirements to bring risks from dam failure inundation to a reasonable level), and HS.I-11 (applicant-prepared engineering report requirements for new development for human occupancy in designated dam failure inundation areas). Implementation of this measure would reduce	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		

	RELATED MITIGATION MEASURE	MONITORING			VERIFICATION	
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insurance rate map (FIRM) program. Since there are as yet no specific development proposals associated with these residential land use designations, direct flooding impacts cannot be determined. Nevertheless, these Specific Plan-designated residential development area overlaps could potentially result in the placement of housing within a dam failure inundation zone or 100-year flood hazard area, with associated risks to public safety and property damage, and could result in the placement of structures in the flood zone which would impede or redirect flood flows. These possible effects represent a <b>potentially</b> <b>significant environmental impact.</b>	the impact to a <b>less-than-significant level.</b>					
NOISE						
Impact 13-1: Impact of Green Valley Road Traffic Noise on Specific Plan-Facilitated Residential Development. The Draft Specific Plan (DSP) designated neighborhood framework (DSP section 3.2.1) has been formulated with the intent to separate noise sensitive land uses from Green Valley Road. Nevertheless, DSP-designated residential development in the Three Creeks Neighborhood along Green Valley Road may be exposed to traffic noise that exceeds "normally acceptable" levels established by the Solano County General Plan (i.e., noise greater than 60 dBA Ldn), representing a <b>potentially</b> significant impact.	<ul> <li>Mitigation 13-1. For project-specific residential development proposals on sites adjoining Green Valley Road, the County shall require applicants to conduct site-specific noise studies that identify, to County satisfaction, noise reduction measures that would be included in final design to meet State and County noise standards. These measures may include the following:</li> <li>Minimizing noise in residential outdoor activity areas (i.e., ensuring that noise levels would be below 65 dBA L<sub>dn</sub>) by locating the areas at least 50 feet from the center line of Green Valley Road and/or behind proposed buildings.</li> <li>Providing air conditioning in all houses located within 100 feet of Green Valley Road so that windows can remain closed to maintain interior noise levels below 45 dBA L<sub>dn</sub>.</li> <li>Implementation of these measures would reduce the impact to a less-than-significant level.</li> </ul>	Individual project applicants (must demonstrate compliance to County satisfaction).	MGV Conservancy Design Review Committee and County.	Prior to any subdivision or other discretionary approval.		
Impact 13-2: Effect of Proposed Noise-Generating Land Uses on Noise-Sensitive Land Uses. Noise- generating land uses facilitated by the Draft Specific Plan, such as agricultural activities, commercial uses, and the possible fire station and wastewater treatment plant, may expose noise-sensitive uses such as housing, recreational areas, and the possible future onsite school to noise and/or vibration. Possible noise exposure exceeding State and Solano County standards represents a <b>potentially significant impact</b> .	<b>Mitigation 13-2.</b> New noise-generating uses facilitated by the Specific Plan shall be subject to the noise compatibility guidelines, standards, policies, and implementation programs established by the Solano County General Plan. In accordance with General Plan Implementation Program HS.I-67, noise analysis and acoustical studies shall be conducted for proposed noise-generating uses, as determined necessary by the County, and noise abatement measures shall be included to County satisfaction to ensure compliance with applicable guidelines and standards. In addition, new noise-sensitive uses developed adjacent to noise-generating uses shall be designed to	Individual project applicants (must demonstrate compliance to County satisfaction).	MGV Conservancy Design Review Committee and County.	Prior to any subdivision or other discretionary approval.		

	RELATED MITIGATION MEASURE	MONITORING			VERIFICATION	
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	control noise to meet the noise compatibility guidelines, standards, policies, and implementation programs established by the Solano County General Plan. In accordance with General Plan Implementation Program HS.I-67, noise analysis and acoustical studies shall be conducted for proposed noise-sensitive uses, as determined necessary by the County, and noise attenuation features shall be included to ensure compliance with applicable guidelines and standards. Implementation of these measures would reduce this impact to a <b>less-than-significant level</b> .					
Impact 13-3: Specific Plan-Facilitated Construction Noise. Existing and future rural residential and other potential noise-sensitive land uses throughout the Specific Plan area could be intermittently exposed to noise from Specific Plan-facilitated future, project- specific construction activity, representing a <b>potentially</b> significant impact.	<ul> <li>Mitigation 13-3. To reduce noise impacts from Specific Plan-related construction activities, the County shall require future project-specific discretionary developments to implement the following measures, as appropriate:</li> <li><i>Construction Scheduling.</i> Ensure that noise-generating construction activity is limited to between the hours of 7:00 AM to 8:00 PM, Monday through Friday, and that construction noise is prohibited on Saturdays, Sundays, and holidays.</li> <li><i>Construction Equipment Mufflers and Maintenance.</i> Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.</li> <li><i>Equipment Locations.</i> Locate stationary noise-generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project site.</li> <li><i>Construction Traffic.</i> Route all construction-related heavy truck traffic in residential areas where feasible.</li> <li><i>Quiet Equipment Selection.</i> Use quiet construction equipment, particularly air compressors, wherever possible.</li> <li><i>Noise Disturbance Coordinator.</i> For larger construction projects, designate a "Noise Disturbance Coordinator" who would be responsible for responding to any local complaint about construction noise. The Disturbance Coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and institute reasonable measures to correct the</li> </ul>	Individual project applicants (must demonstrate compliance to County satisfaction).	MGV Conservancy Design Review Committee and County.	Prior to any subdivision or other discretionary approval.		

	RELATED MITIGATION MEASURE	MONITORING			VERIFICATION	
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	<ul> <li>problem. Conspicuously post a telephone number for the Disturbance Coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule. (The County should be responsible for designating a Noise Disturbance Coordinator and the individual project sponsor should be responsible for posting the phone number and providing construction schedule notices.)</li> <li>Implementation of these measures would reduce this impact to a less-than-significant level.</li> </ul>					
Impact 13-4: Specific Plan-Facilitated and Cumulative Traffic Noise Impacts on Green Valley Road. Traffic from Specific Plan-facilitated development would increase traffic noise levels on Green Valley Road by 3 to 4 dB above existing levels. While the Specific Plan-related traffic noise increase alone would not represent a significant impact, its contribution to the cumulative traffic noise increase on Green Valley Road south of Eastridge Drive would represent a significant cumulative impact.	<b>Mitigation 13-4.</b> To reduce the traffic noise increase along Green Valley Road, the County should consider the use of noise-reducing pavement, along with traffic calming measures (which could achieve noise reductions of approximately 1 dBA for each 5 mile-per- hour reduction in traffic speed). These measures may not be feasible, however, and may not be directly applicable to the Specific Plan, particularly since the segment of Green Valley Road where the highest traffic noise increase is expected (the northbound segment south of Eastridge Drive) is not within the Specific Plan area. The Specific Plan's contribution to the cumulative traffic noise increase along Green Valley Road is therefore considered a <b>significant</b> <b>unavoidable impact</b> .	County.	County.	None.		
PUBLIC HEALTH AND SAFETY						<u> </u>
Impact 15-1: Future Storage and Use of Agricultural Chemicals. In all four Draft Specific Plan-designated neighborhoods, the plan would permit residential development adjoining agricultural uses, some of which may store and/or use pesticides or other hazardous substances. Agricultural uses allowed by the Draft Specific Plan would also adjoin certain offsite residential areas, such as the upper Green Valley neighborhood north of the Specific Plan area and the Hidden Meadows subdivision south of the plan area. In addition, in the proposed Nightingale Neighborhood, the Specific Plan would also allow development of an elementary school in the northwestern corner of the neighborhood, close to but not adjoining agricultural areas. The potential exposure of residents or other site occupants to pesticides or other hazardous substances used in agriculture would represent a <b>potentially significant impact</b> .	<b>Mitigation 15-1.</b> As an amendment to the proposed Specific Plan (Policy OL-11) and/or as part of the proposed Resource Management Plan and/or Agricultural Business Plan, the County shall require a minimum 200-foot-wide buffer between residential and school uses and locations on agricultural properties within and adjoining the Specific Plan area where agricultural pesticides or other hazardous substances may be stored or used. In addition, the County shall ensure that agricultural operators within the Specific Plan area comply with all applicable local, state, and federal regulations regarding hazardous materials, including Solano County General Plan provisions, Solano County Code requirements, and the permitting processes of the Solano County Department of Resource Management and Solano County Agriculture Department. These measures would reduce the impact to a <b>less-than-significant level</b> .	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		

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Impact 15-2: Hazardous Materials from Proposed Onsite Wastewater Treatment Plant (Wastewater Options B and C). Operation of the proposed wastewater treatment plant within the Specific Plan area under proposed Wastewater Option B (Onsite Treatment) and Wastewater Option C (Fairfield-Suisun Sewer District Connection/ Onsite Treatment Combination) would involve regular handling, use, and disposal of hazardous materials and wastes during the course of normal operations. In addition, the onsite wastewater treatment plant would create the potential for release of raw or treated sewage or other stored hazardous materials through mishandling or an emergency situation. These potential hazards would represent a <b>potentially significant impact</b> .	<b>Mitigation 15-2.</b> Implement <i>Mitigation 16-5.</i> In addition, after the wastewater treatment plant and associated collection system have been installed, the County shall confirm that a full environmental regulatory compliance review has been conducted to verify that, based on the actual equipment stalled and specific quantities of hazardous materials handled, used, and disposed, the facility is operating in compliance with applicable environmental laws and regulations. These measures would reduce the impact to a <b>less-than-significant level</b> .	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		
PUBLIC SERVICES AND UTILITIES		•				
Impact 16-1: Water Supply Adequacy to Meet Project Domestic DemandsOption B (Onsite Groundwater). The proposed Specific Plan would result in an increased demand for water supplies. Studies indicate that sufficient groundwater supplies are available to meet existing and projected future demands in addition to the proposed project through 2035 under all water year types (e.g., normal, single- dry, and multiple-dry years). However, without implementation of established County and State water system regulations and review procedures, this would be a <b>potentially significant impact</b> related to adequacy of water supply.	<ul> <li>Mitigation 16-1a: Prior to subdivision map approval, a Water Master Plan for water supply Option B shall be prepared that describes engineering specifications and other related components necessary for completion of established County and State well and public water system permitting requirements and review procedures. The Water Master Plan shall be approved by Solano County.</li> <li>The Water Master Plan shall contain as one of its components engineering specifications including, but not limited to:</li> <li>well locations and depths;</li> <li>water pumping, filtration, and disinfection specifications; and</li> <li>water storage and distribution facilities and sizing.</li> <li>The Water Master Plan and its components shall be designed to provide water service only to the Specific Plan designated development areas, so as to preclude any growth-inducing impacts on adjoining designated agricultural and open space lands (pursuant to General Plan Housing Element Policy G.2).</li> <li>As part of the Water Master Plan process, the applicant shall obtain input from the Cordelia Fire Protection District to ensure that the plan meets District fire flow rate and duration standards (pursuant to General Plan Policies and Implementation Programs PF.I-35, PF.P-38, PF.P-39, HS.P-23, and HS.I-28).</li> <li>The Water Master Plan shall contain as one of its components the information required for application to</li> </ul>	MGV County Service Area or Solano Irrigation District.	County.	Under Water Supply Option B (Onsite Groundwater): Monitoring and reporting procedure shall be established to County satisfaction prior to approval of first subdivision map.		

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	the California Department of Public Health (CDPH) for a public water system initial operating permit, which requires demonstration that the proposed water system (including well, pumping, storage, and distribution components) meets State (including Title 22) requirements. The proposed operator of the public water system shall complete the CDPH public water system initial operating permit issuance process. (It is anticipated that the County Services Area [CSA] will need to have been formed prior to or as part of preparation of the Water Master Plan, including completion of the applicable LAFCO review process, for the Water Master Plan to be able to describe the technical, managerial, financial, and other information that the CDPH permit process requires.)					
	The Water Master Plan shall contain as one of its components the information required for application to the County Environmental Health Services Division for well permits to construct the public water system wells. The applicant or operator shall complete the County well construction permit issuance process.					
	<b>Mitigation 16-1b</b> : Prior to subdivision map approval, the County shall comply with the statutory requirements of SB 221 (Government Code Section 66473.7), which includes preparation of a water supply verification to demonstrate with firm assurances that there is a sufficient water supply for the project.					
	Implementation of these measures would ensure that, under water supply Option B, the project would result in a <b>less-than-significant impact</b> related to adequacy of water supply.					
Impact 16-2: Project Domestic Water Facilities Impacts on Existing Wells and Stream Habitats Option B (Onsite Groundwater) and Option C1 (Solano Irrigation District [SID] Surface Water and Onsite Groundwater). Implementation of water supply Option B or Option C1 would involve the extraction of groundwater from the aquifer system in the Suisun- Fairfield Valley Groundwater Basin via the use of at least three new groundwater wells (or at least one well under Option C1). Under water supply Options B or C1, placement and use of at one or more new groundwater wells could, if improperly placed, contribute to underperformance or failure of existing nearby	<ul> <li>Mitigation 16-2a: The wells under water supply Option B or Option C1 shall be designed to avoid any potential interference between new Plan wells and (1) other Plan wells, (2) existing nearby private wells, and (3) surface streams. A non-exclusive list of the tools and methods to be used to accomplish avoidance are: appropriate well siting, placement, and spacing; selection of well depths and of equipment for pumping and testing; and monitoring, including testing and monitoring wells.</li> <li>Based on available water supply, aquifer characteristics, post-project demand, and the number and location of existing wells and surface streams, it is</li> </ul>	MGV County Service Area or Solano Irrigation District.	County.	Under Water Supply Option B (Onsite Groundwater) or Option C1 (SID Surface Water and Onsite Groundwater): Prior to any subdivision or other discretionary		
domestic wells and could have substitig field by effects on stream hydrology or riparian habitat. Until the proposed well locations are identified and tested,	avoids adverse impacts on neighboring wells and surface streams.			approval. Ongoing inspection/		

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analyzed, and monitored, this impact would be potentially significant.	The well design process will also generate additional information in the future. The well design process shall precede, and under industry practice would precede, determination of the engineering specifications for well locations and depths. The engineering specifications for well locations and depths are required to be identified as part of the Water Master Plan specified under Mitigation 16-1a. The Water Master Plan is required to be prepared prior to subdivision map approval (a discretionary approval subject to CEQA). Additional information resulting from the well design process will therefore be available at a time when subsequent activities and approvals are later examined in light of this program EIR to determine whether an additional environmental document would then need to be prepared in conformance with the requirements of CEQA. At the latest, additional information resulting from the well design process would be available prior to subdivision map approval by the County, but for purposes of approval of CSA formation or issuance of an operating permit, Solano County Local Agency Formation Commission (LAFCO) or CDPH, respectively, may require some or all of the information resulting from the well design process to be available earlier. If the well design process generates new relevant factual information relating to Impact 16-2, that information will be generated at a time when it would be examined in conformance with CEQA's requirements for subsequent review following a program EIR. Implementation of this measure would provide for avoidance of any potential interference between new Plan wells and (1) other Plan wells, (2) existing nearby private wells, and (3) surface streams, such that any potentially significant effect would be reduced to a			monitoring of operations.		
	<ul> <li>less-than-significant level.</li> <li>Although Mitigation 16-2a would provide for avoidance sufficient to reduce Impact 16-2 to a less-thansignificant level, in response to public concerns expressed to the County regarding potential interference with private water supply wells the County would additionally implement the Mitigation Measure 16-2b in the unlikely event that groundwater pumping associated with the proposed project resulted in adverse effects to existing nearby wells.</li> <li>Mitigation 16-2b: If, in the unlikely event that ongoing monitoring conducted as part of the well design plan or water supply Option B or Option C1 operation reveals potentially significant drawdown may be occurring in</li> </ul>					

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	<ul> <li>existing wells in the vicinity of the new project wells, some or all of the following measures to mitigate those impacts will be implemented by the CSA or SID until subsequent monitoring shows that drawdown is not adversely affecting surface waters or operations of existing wells to the satisfaction of the County Division of Environmental Health:</li> <li>lowering existing pumping equipment within the well structure in affected well(s),</li> <li>deepening or replacing the affected well(s),</li> <li>altering the amount or timing of pumping from the project well (i.e., shifting some pumpage to another project well and/or drilling a supplemental project well) to eliminate the adverse impact,</li> <li>providing replacement project well(s), and/or</li> <li>providing a water supply connection for the property/uses served by the affected well(s) to the Option B or Option C1 water supply system, sufficient to provide the property/uses with a substantially similar quality of water and the ability to use water in substantially the same manner that they were accustomed to doing if the project had not existed and caused a decline in water levels of their wells.</li> </ul>					
Impact: SID System Adequacy to Meet Project Agricultural Irrigation DemandsOptions A (Municipal Connection), B (Onsite Groundwater), and C (SID Surface Water). The project would increase the demand for agricultural irrigation water, which would be supplied by SID, consistent with its current practice of supplying water for agricultural irrigation needs within its boundaries. Because SID has confirmed it has sufficient water supply to meet this increased demand, this impact would be less than significant.	Although this impact is determined appropriately to be less than significant in the Final EIR, in comments on the Notice of Preparation in 2009, SID indicated that a developer should expect that some additional facilities may be needed because the existing agricultural distribution system in the Plan Area may be serving at or near its capacity. SID also indicated that SID has a number of district development requirements concerning facilities, such as a requirement that a separate "turnout" be provided at the developer's expense for each newly created parcel that would receive agricultural water service within the District, a requirement that an SID inspector be onsite during system installation, and similar matters reflected below in Mitigation 16-2c. Including the following SID district development requirements within the requirements for the project will help ensure that any required facilities are prepared according to SID's requirements. Implementation of SID's district development requirements will further help to ensure that any	Individual project applicants (must demonstrate compliance to County satisfaction).	County	Under Water Supply Option A (Municipal Connection), Option B (Onsite Groundwater) or Option C (SID Surface Water): Prior to any subdivision or other discretionary approval.		

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	additional system features that may be needed will be provided in an appropriate manner.					
	Mitigation Measure 16-2c: Implement the following:					
	(1) SID will not serve any lands located outside the SID boundary. SID service to any lands within the plan area that are outside the existing SID boundary would require annexation to SID. Annexation of land to SID shall conform to the requirements of SID, USBR, and the Solano County Local Agency Formation Commission (LAFCO). For any proposed SID annexation, complete the additional analysis deemed necessary by SID to determine whether sufficient capacity is available to serve the proposed annexation area, and satisfy the other annexation requirements of SID, USBR, and LAFCO.					
	(2) Per SID Rules and Regulations, a separate water service (turnout) shall be provided to each newly created parcel within the district (i.e., with the current SID boundary or annexed plan area land) at the applicant/ developer's expense. SID and the applicant/ developer will need to determine how, if, and what type of service (agricultural irrigation or municipal landscape irrigation) each separate parcel is to receive. The applicant/developer may be required to pay to have SID's engineer perform an analysis of the existing system to determine if there is sufficient capacity to serve the proposed development.					
	(3) Landscape irrigation service to the proposed development would require the design and installation of a municipal-style water system. At a minimum, the applicant/ developer shall provide for a headworks pumping plant, either off one of SID's pipelines or off the USBR Green Valley Conduit, to provide pressurized service to each parcel of the development. Depending on anticipated demand and existing SID system capacity, the applicant/developer may be required to pay for any necessary upgrades to existing SID water facilities required to adequately serve all parcels of the development at the same times, since rotated water service deliveries are impractical and difficult to enforce on municipal-type systems.					
	(4) If additional SID agricultural service to the proposed development is required, the design and installation of individual turnouts to each parcel and a rotational service schedule would need to be					

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	determined and followed. At a minimum, the applicant/developer shall provide for pipelines and appurtenances to provide service to each parcel of the development. In addition, the applicant/developer may be required to pay for any necessary upgrades to existing SID water facilities required to adequately serve all parcels of the development at the same time, depending on the proposed demand and system capacity.					
	(5) All costs associated with the design and installation of any SID water extension system shall be at the expense of the applicant/ developer. SID shall review and approve the proposed system design prepared by the applicant/developer's engineer.					
	(6) System installation shall be to SID's standards. SID would require the applicant/ developer to sign a work order acknowledging and approving all costs associated with the review of the design and to have a SID inspector onsite during system installation.					
	(7) Arrangements satisfactory to SID shall be made for the design and construction of the new system before SID will approve a parcel map.					
	(8) The applicant/developer shall provide easements for all new pipelines and facilities that would be granted to SID, including all facilities up to and including individual lot meters.					
	(9) No permanent structures shall be allowed to be constructed over SID's existing rights-of-way, nor shall any trees be planted within 6 feet of the edge of any SID pipelines.					
	(10) SID pipelines shall not be located within any of the proposed residential lots.					
	<ul> <li>(11) Water that could be provided by SID is non-potable and not for human consumption, and cannot be treated onsite for potable uses. Therefore, before SID provides non-potable water service, the developer shall provide proof of an alternate source of potable water for the property. Since each parcel would be served with both potable and non-potable water, all lines and fixtures connected to SID's non-potable service shall be clearly marked "NON-POTABLE – DO NOT DRINK."</li> </ul>					
	(12) Upon completion of construction of non-potable service to the subject properties, land owners shall contact SID to establish water service accounts.					

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	(13) The SID certificate shall be added to all final parcel maps, subdivision maps, and improvements plans in the plan area, and SID shall review, approve, and sign all maps and plans.					
Impact 16-3: Project Construction Impacts on Existing SID, USBR, City of Fairfield, and City of Vallejo Facilities in the Plan AreaOptions A (Municipal Connection), B (Onsite Groundwater), and C (SID Surface Water). Construction activity associated with buildout under the proposed Specific Plan, including general development activity as well as Specific Plan-proposed water and wastewater facilities construction, may affect existing Solano Irrigation District (SID), U.S. Bureau of Reclamation (USBR), City of Fairfield, and City of Vallejo water easements and facilities in the plan area, representing a <b>potentially significant environmental impact</b> .	Mitigation 16-3: Plans for development contiguous to SID, USBR, City of Fairfield, and City of Vallejo easements and facilities, or roadway or utility crossings of these facilities, shall be submitted to and approved by these agencies prior to implementation. Any submittal to the USBR shall be through the SID. No permanent structures shall be located over or within these existing pipeline easements without an alternative route being offered at developer expense. Utility crossings shall provide a minimum of three feet of clearance between the utility and the pipelines. Proposals for roadway crossings of any of these pipes shall include an engineered stress analysis on the pipe to ensure the pipeline would withstand proposed roadway loadings. Residential lots shall not be located within SID, USBR, City of Fairfield, City of Vallejo easements. Wastewater lines and other facilities on residential lots shall be kept clear of SID and USBR easements. Any sewer lines crossing USBR facilities shall be installed in a secondary casing across the USBR right-of-way. The applicant/developer shall sign an "Agreement for Protection of Facilities" before the start of any construction on or contiguous to any SID or USBR facilities. The agreement shall be followed during construction damage to SID or USBR facilities, and the City of Fairfield or City of Vallejo would repair any construction damage to City facilities. Implementation of this measure would reduce this impact to a <b>less-than-significant level</b> .	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Under Water Supply Option A (Municipal Connection), Option B (Onsite Groundwater) or Option C (SID Surface Water): Prior to any subdivision or other discretionary approval.		
Impact 16-4: Potential Project Exceedance of FSSD Wastewater Treatment System CapacityOptions A (FSSD Connection) and C (FSSD Connection/Onsite Treatment Combination). Specific Plan wastewater treatment Option A would involve connection of the proposed Specific Plan development area to the Fairfield Suisun Sewer District (FSSD) via an existing City of Fairfield conveyance system. The proposed Specific Plan development program would generate an	<b>Mitigation 16-4:</b> The Specific Plan proposes establishment of a County Service Area (CSA) pursuant to California Government Code section 25210.1 et seq. to provide the financing and management for providing wastewater treatment services to the proposed Specific Plan development areas. Once approved, the CSA would be granted limited funding and management powers and the Board of Supervisors may act as the CSA board. The	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		

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estimated approximately 135 acre feet per year of wastewater treatment demand not specifically accounted for in current FSSD wastewater management planning, including the current FSSD Master Plan. The adequacy of the FSSD treatment plant, Cordelia Pump Station and associated City of Fairfield collection mains to accommodate the project contribution to anticipated cumulative future treatment demands has not been determined. The project-plus- cumulative demands for wastewater treatment may therefore exceed future City of Fairfield conveyance and FSSD treatment capacity, representing a <b>potentially significant project and cumulative</b> <b>environmental impact</b> .	<ul> <li>proposed CSA may issue general obligation bonds or revenue bonds to finance the necessary wastewater and other common infrastructure, which would be funded by development connection and user fees.</li> <li>Prior to County approval of any future residential subdivision map or substantive discretionary nonresidential development application in the plan area under wastewater treatment Options A or C, implement the following: <ol> <li>establish the Specific Plan-proposed County Services Area (CSA) for the development area;</li> <li>formulate and adopt the Specific Plan-proposed Wastewater Master Plan for the development area;</li> <li>establish agreement with the FSSD to serve the ultimate development area wastewater treatment need identified in the Wastewater Master Plan; and</li> <li>establish associated wastewater system connection and user fees sufficient to fund the ultimate development area wastewater treatment facility needs identified in the Wastewater Master Plan, including purchase of required FSSD treatment capacity and construction of associated sewer system infrastructure-e.g., onsite collection system, offsite parallel municipal sewer main installation, associated capacity upgrades to the Cordelia Pump station, etc. (CSA Responsibility).</li> </ol> </li> <li>Incorporation of these measures as Specific Plan policy would reduce this potential impact to a less-than-significant level.</li> </ul>					
Impact 16-5: Potential Project Inconsistency with State Tertiary Wastewater Discharge Standards Options B (Onsite Treatment) and C (FSSD Connection/Onsite Treatment Combination). Under proposed wastewater service Option B (onsite wastewater treatment system), Wastewater from the Specific Plan development areas would be collected and treated onsite using a local collection system similar to Option A, but instead of a connection to the FSSD, the collected wastewater would be conveyed to an onsite Membrane Bioreactor (MBR) package wastewater treatment plant that would treat the collected wastewater to tertiary recycled water standards. The tertiary treated wastewater would then be reused onsite for agricultural irrigation, ornamental landscaping irrigation, park and playing field landscaping irrigation, toilet flushing, and other	<ul> <li>Mitigation 16-5: Prior to County approval of any future residential subdivision map or discretionary non-residential development application in the plan area under wastewater treatment option B or C, implement the following:</li> <li>(1) establish the Specific Plan-proposed CSA for the Specific Plan development area;</li> <li>(2) formulate and adopt the Specific Plan-proposed Wastewater Master Plan for the proposed development areas (CSA responsibility);</li> <li>(3) establish associated wastewater system connection and user fees sufficient to fund ultimate Specific Plan development area wastewater treatment facility needs identified in the Wastewater Master Plan, including construction and ongoing operation, monitoring and maintenance of the onsite wastewater treatment</li> </ul>	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		

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jurisdictionally permitted uses. Although the Specific Plan proposes to treat all collected wastewater to County and State tertiary cycled water standards, until the Specific Plan proposed Master Wastewater Plan for Options B and C, including complete engineering specifications for the onsite treatment system, are completed to County satisfaction and the associated recycled wastewater reuse aspect is approved by the RWQCB and CDPH, it is assumed that Options B and C may not comply with the wastewater treatment water quality and environmental health protection standards, and ongoing monitoring and reporting requirements, administered by these two state agencies, representing a <b>potentially significant environmental impact</b> .	<ul> <li>and disposal system (CSA responsibility); and</li> <li>(4) complete the RWQCB Discharge Permit process for the proposed irrigation in designated areas, and CDPH permit procedures pursuant to CCR Title 22 standards for the proposed use of tertiary treated wastewater for irrigation (CSA responsibility).</li> </ul>					
Impact 16-6: Potential Project Inconsistencies with SID StandardsOptions B (Onsite Treatment) and C (FSSD Treatment Combination/Onsite Treatment). The Specific Plan proposes that, under wastewater treatment Options B or C, tertiary-treated wastewater would be reused onsite for agricultural and domestic irrigation purposes in conjunction with Solano Irrigation District (SID) water. The Solano Irrigation District (SID) may determine that delivery of tertiary effluent from the onsite MBR treatment plant via the existing SID conveyance system for agricultural and domestic irrigation purposes may be unsuitable for certain types of irrigation and therefore undesirable to the District. This proposed aspect of Wastewater treatment Options B and C may therefore be infeasible, representing a <b>potentially significant impact</b> .	<b>Mitigation 16-6:</b> In addition to compliance with California Department of Public Health (CDPH) and San Francisco Bay Regional Water Quality Control Board (RWQCB) groundwater and environmental health protection standards (see Mitigation 16-1-2), any project Wastewater Management Plan proposal to use SID conveyance or delivery components to supplement the project recycling system shall be designed to SID satisfaction or eliminated. One possible approach may involve SID delivery of raw water to a single point in the proposed CSA system, for plan area distribution by a CSA-operated distribution system. Formulation of this Wastewater Master Plan component to SID satisfaction would reduce this impact to a <b>less-than-significant level</b> .	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		
Impact 16-7: Project Impact on Fire Protection and Emergency Medical Services. Development in accordance with the Specific Plan may increase the demand for fire protection and emergency medical services sufficiently to create a need for new or altered facilities, representing a <b>potentially significant</b> impact.	Mitigation 16-7. Before approval of the first Tentative Subdivision Map application in the Specific Plan area, the County shall obtain written verification from the Cordelia Fire Protection District (CFPD) that either (1) the CFPD's need for a new fire station in the general vicinity has been met (e.g., by plans for a new station on the Rockville Trails Estates site), or (2) a new fire station is needed within the Specific Plan area. If the latter is verified, the County shall require plans for construction of a fire station within the plan area as a condition of Tentative Subdivision Map approval, and confirm that any necessary additional environmental review is conducted. Incorporation of these measures as Specific Plan policy would reduce the impact to a less- than-significant level.	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		

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Impact 16-8: Project Impacts on Emergency Response, Evacuation, and Access. Development in accordance with the Specific Plan would cause traffic increases and congestion on Green Valley Road, possibly delaying emergency response and evacuation, representing a <b>potentially significant</b> impact.	<b>Mitigation 16-8.</b> Implement mitigation measures identified in chapter 17, Transportation and Circulation, to reduce the impacts of Specific Plan-related traffic on Green Valley Road and other local roads. In addition, before approval of each Tentative Subdivision Map in the Specific Plan area, the County shall obtain written verification from the CFPD and Cal-Fire that proposed emergency access provisions meet CFPD and Cal-Fire road design and emergency access standards and require any necessary changes as a condition of map approval. Incorporation of these measures as Specific Plan policy would reduce impacts on emergency response, evacuation, and access to a <b>less-than- significant level</b> .	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		
Impact 16-9: Project Wildfire Hazard Impact Ongoing. The Specific Plan would introduce residential (Rural Meadow, Rural Neighborhood and Agriculture-Residential) and residential/commercial (Rural Neighborhood/ Community Service) land within or adjacent to areas where wildland fire danger is "moderate" to "very high." Specific Plan-facilitated development within or abutting these areas would create an "urban/wildland interface," increasing the risk of wildland fires and associated needs for additional fire protection personnel and facilities. Failure to sufficiently reduce this urban/wildland interface fire hazard through appropriate fuel management and other fire suppression techniques and/or provide the necessary fire equipment access, emergency evacuation, and additional fire protection personnel and facilities, could result in substantial safety hazard and impair CFPD response time and evacuation efforts, representing a <b>potentially significant impact</b> .	Mitigation 16-9. Implement <i>Mitigation 16-7</i> and <i>Mitigation 16-8</i> . In addition, as a condition of Certificate of Occupancy approval, each individual discretionary development project in the Specific Plan area shall meet all applicable California Building Code and California Uniform Fire Code standards (including standards for building materials, construction methods, fire sprinklers, etc.) and all applicable State and County standards (including Solano County General Plan policies) for fuel modification and/or brush clearance in adjacent areas. Incorporation of these measures as Specific Plan policy would reduce the impact to a <b>less-</b> <b>than-significant level</b> .	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to County issuance of Certificate of Occupancy.		
Impact 16-10: Project Wildfire Hazards Construction Period. Construction in Specific Plan- designated development areas may involve handling and storage of fuels and other flammable materials, creating temporary fire hazards in the "urban/wildland interface" and representing a <b>potentially significant</b> <b>impact</b> .	<b>Mitigation 16-10.</b> As a condition of each Tentative Subdivision Map in the Specific Plan area, the County shall require that construction contractors conform to all applicable fire-safe regulations in applicable codes, including California Occupational Safety and Health Administration (OSHA) and local requirements for appropriate storage of flammable liquids and prohibition of open flames within 50 feet of flammable storage areas. Incorporation of these measures as Specific Plan policy would reduce the impact to a <b>less- than-significant level</b> .	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		
Impact 16-11: Impact of Specific Plan Proposed Trails on Bay Area Ridge Trail Plan. Unless	<b>Mitigation 16-11.</b> As a condition of each Tentative Subdivision Map in the Specific Plan area, the County	Individual project applicants (must	County.	Prior to any subdivision or		

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subsequent trail implementation plans are coordinated with the Bay Area Ridge Trail Council, proposed trails within the Specific Plan area may not meet Bay Area Ridge Trail standards, representing a <b>potentially</b> <b>significant impact</b> .	shall require written verification that the Bay Area Ridge Trail Council has reviewed and approved final trail design and construction to ensure that trails within the Specific Plan area comply with Bay Area Ridge Trail standards, as appropriate. Incorporation of this measure as Specific Plan policy would reduce the impact to a <b>less-than-significant level</b> .	demonstrate compliance to County satisfaction).		other discretionary approval.		
Impact 16-12: Project Construction-Period and Long-Term Solid Waste Impact on Landfills. Construction and operation of land uses proposed by the Specific Plan would generate solid waste that would require disposal at a landfill. While landfill capacity is currently expected to be adequate to serve this development, the situation could change over the life of the Specific Plan, particularly if the currently pending Potrero Hills Landfill expansion proposal is not approved before the scheduled landfill closure date of January 1, 2011. Any potential for inadequate landfill capacity or the potential need for new facilities would represent a <b>potentially significant impact</b> .	Mitigation 16-12. The project shall comply with Solano County General Plan policies and other provisions calling for source reduction and recycling in construction and ongoing operations. As a condition of each Tentative Subdivision Map in the Specific Plan area, the County shall require the applicant to provide written verification from the appropriate landfill operator that adequate landfill capacity is available to accommodate construction and operation of the project. In addition, the applicant shall be required to prepare and implement a recycling plan for the construction phase of the project. The recycling plan shall address the major materials generated by project construction and identify means to divert a portion of these materials away from the chosen solid waste landfill. Incorporation of this measure as Specific Plan policy would reduce the impact to a <b>less-than-significant</b> <b>level</b> .	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		
TRANSPORTATION AND CIRCULATION		ł	ł	•		1
Impact 17-1: Baseline Plus Project Impacts on Intersection Operations. The project would contribute significantly to baseline level of services impacts (i.e., intersection turning movement volumes) at the following local intersections during typical weekday peak hours: <i>Weekday AM Peak Hour:</i> (Intersection #9) Green Valley Road at the I-80 Westbound On-Ramp (project-generated traffic would exacerbate already unacceptable baseline operations [LOS F] by increasing the overall intersection traffic volume by more than one percent at this stop-sign controlled intersection) (Intersection #10) Green Valley Road at the I-80 Eastbound Ramps (project-generated traffic would exacerbate already unacceptable baseline operations	<ul> <li>Mitigation 17-1:</li> <li>(1) Baseline plus project impacts on this stop sign controlled intersection 5, Green Valley Road at Westlake Drive, would trigger the need for mitigation sufficient to bring project-plus-baseline operations back to LOS B and C in the AM and PM peak hours respectively. If the City of Fairfield determines in the future that a traffic signal is warranted at this intersection, the City and County shall agree on a fair-share portion of the signal installation cost to be assigned to the plan area, and the County shall identify an associated fair share per residential unit contribution as a condition of subsequent individual subdivision map approvals in the plan area.</li> <li>Implementation of this measure would reduce this particular intersection impact to a less-than-</li> </ul>	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		

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[LOS F] by increasing the overall intersection traffic volume by more than one percent at this signalized intersection) <i>Weekday PM Peak Hour:</i> (Intersection #5) Green Valley Road at Westlake Drive (project-generated traffic would result in an LOS change from C under baseline conditions to E under baseline plus project conditions at this stop sign controlled intersection) (Intersection #7) Green Valley Road at Business Center Drive (project-generated traffic would result in an LOS change from E under baseline conditions to F under baseline plus project conditions at this signalized intersection) (Intersection #9) Green Valley Road at the I-80 Westbound On-Ramp (project-generated traffic would exacerbate already unacceptable baseline operations [LOS F] by increasing the overall intersection traffic volume by more than one percent at this stop-sign controlled intersection) (Intersection #10) Green Valley Road at the I-80 Eastbound Ramps (project-generated traffic would result in an LOS change from E under baseline conditions to F under baseline plus project conditions at this signalized intersection) These project-generated intersection LOS changes would represent a <b>significant impact</b> .	<ul> <li>significant level.</li> <li>(2) For project impacts on intersections 7 and 9, the City and County shall agree on a proportionate fairshare of the cost of planned interim improvements to the Green Valley Road/I-80 interchange that have been identified by the City of Fairfield to be assigned to future subdivision and other discretionary development approvals in the plan area, including:</li> <li>At signalized intersection 7, Green Valley Road at Business Center Drive, improvement plans are being developed to allow for free right-turn movements on the northbound and southbound approaches to the intersection. The southbound free right-turn would also include construction of a separate right-turn lane for the southbound Green Valley Road approach to Business Center Drive.</li> <li>At unsignalized intersection 9, Green Valley Road at the I-80 Westbound on-ramp, the on ramp leg of the intersection is to be realigned to allow for the addition of a separate left-turn lane for these improvements, and the County shall agree on a fair-share cost to be assigned to the plan area for these improvements, and the County shall identify an associated fair share per residential unit contribution as a condition of subsequent individual subdivision map approvals in the plan area.</li> <li>(3) For project impacts on signalized intersection 10, Green Valley Road at the I-80 Eastbound Ramps, the planned reconstruction of the Green Valley Road/I-80 interchange would ultimately mitigate the anticipated AM and PM peak hour baseline plus project operational impacts; however, no feasible interim improvements to the interchange have been identified to mitigation measures identified above for intersections 7 and 9 would substantially reduce the amount of peak hour delay per vehicle at these two intersections 7 and 9 would substantially reduce the amount of peak hour otes than significant levels. The projected background plus project peak hour ratings at study intersectios 7, 9, and 10 would remain at LOS E or F. In addition, because</li></ul>					

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	intersections 5, 7 and 9 cannot be assured. Therefore, until the proposed City/County fair-share funding program for intersections 5, 7 and 9 is established, and the planned I-80/I-680/SR 12 Interchange Improvement Project (the planned reconstruction of the I-80/I-680/SR 12 and Green Valley Road interchange, as described in section 17.1.3 herein) is funded and implemented, the projected interim baseline plus project intersection impacts on intersections (5), (7), (9) and (10) are considered to be <b>significant and</b> <b>unavoidable</b> .					
Impact 17-2: Cumulative Plus Project Impacts on Intersection Operations. Under projected cumulative (2030) plus project conditions, the project would contribute significantly to further deterioration of traffic operations at intersection 5, Green Valley Road at Westlake Drive, in the PM peak hour, reducing operations from LOS C to LOS E. This intersection LOS change would represent a <b>potentially significant</b> cumulative impact.	<b>Mitigation 17-2:</b> The cumulative plus project condition at this intersection would not warrant installation of a traffic signal. It is recommended that this intersection remain in its current unsignalized condition, since the project-related significant delay would be limited to the left-turn movement at the side street (Westlake Drive) approach in the PM peak hour only, and alternative routes are available to motorists at this location. This impact is therefore considered to be <b>significant and unavoidable</b> .	Individual project applicants (must demonstrate compliance to County satisfaction).	County.	Prior to any subdivision or other discretionary approval.		