

TABLE 2-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.15-2 Construction of the Proposed Project could result in the loss of vernal pool crustacean habitat.	S	<p>(c) The project applicant or their agent shall acquire all appropriate wetland permits prior to construction of the project. These permits include a Section 404 Wetlands Fill Permit from the U.S. Army Corp of Engineers, a Section 401 Water Quality Certification from the Regional Water Quality Control Board, and A Section 1601 Streambed Alteration Agreement from the California Department of Fish and Game.</p> <p>(d) The permits required above shall be obtained prior to the issuance of grading permits by the City.</p>	LS
		<p>4.15-2 (a) Prior to development or construction activities in the park, open space, or utility corridors, the project applicant shall conduct a survey of all grasslands affected by construction within the Specific Plan boundaries to determine if suitable habitat for vernal pool crustaceans is present. If no suitable habitat for these species is present, then no further mitigation would be required.</p> <p>(b) The project applicant may assume presence of listed vernal pool crustaceans and fully mitigate for any project related effects to that habitat, or they may have a qualified biologist survey the potential habitat following USFWS protocol to determine presence or absence of these species. If, through the surveys, it is determined that vernal pool crustaceans do not occupy the habitat, then no further mitigation would be required.</p>	LS

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	(c)	If it is either determined that vernal pool crustaceans occupy the habitat, or presence is assumed, then to the extent feasible, buffer areas shall be established such that any proposed development shall be at least 250 feet from the vernal pool crustacean habitat. Such areas shall be flagged, and encircled with an exclusionary fence. These areas shall be preserved in a conservation easement or other acceptable agreement with a USFWS approved agency (e.g., CDFG or a conservation organization such as the Solano Land Trust). Any such agreements shall be conducted in coordination with the USFWS.	
4.15-3 Construction of the Proposed Project could result in the loss of Swainson's hawk individuals (eggs, nestlings or juveniles), and other nesting raptors (birds-of-prey).	S	(d) If impacts on vernal pool crustaceans or their habitat are unavoidable, then formal consultation with the USFWS pursuant to Section 7 of FESA would be required. Specific mitigation measures would be developed as a part of the Section 7 Consultation, but may be accomplished through either onsite preservation and creation of vernal pool crustacean habitat, or payment into an off-site mitigation bank.	LS
	4.15-3 (a)	Project related disturbance to any active nest shall be avoided during the nesting season (March 1 through August 15). The project applicant shall retain a qualified biologist to conduct a pre-construction survey for nesting Swainson's hawk and other raptors within 0.5 mile of the development area. Surveys shall be conducted no more than 30 days prior to the commencement of construction related activities within the breeding season. If construction activities are to begin and end outside the breeding season for this species, then the pre-construction surveys shall not be required. If active Swainson's hawk or other raptor nests are discovered during the survey, then the project applicant shall consult with the City and CDFG, to develop appropriate avoidance and protection measures for the identified nest, including appropriate setbacks during the nesting season.	

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		<p>(b) In addition to the preconstruction surveys, routine monitoring of any known active nest sites within 0.5 miles of the development area shall be conducted by a qualified biologist throughout the nesting season, or until construction activities have ceased. The purpose of this monitoring is to document nesting activity and any signs of disturbance. The biologist shall submit to the City and CDFG a report of the findings that includes a summary of observations, nesting success and any protective measures that were implemented. If any known or suspected disturbance to nesting raptors is observed, then the biologist shall report the observation to the City/CDFG immediately and the parties shall take appropriate remedial steps, including temporary cessation of construction activities in the areas surrounding the nest. In addition, the project applicant shall have a qualified biologist conduct an environmental awareness training program for all construction personnel to inform them of their responsibilities regarding the protection of sensitive biological resources, including Swainson's hawk.</p> <p>(c.1) To address potential losses of Swainson's hawk foraging habitat, prior to the first residential building permit within the project, the project applicant shall pay to the city a mitigation fee to fund the acquisition of a conservation easement or easements covering lands suitable for foraging by Swainson's hawk.</p> <p>(c.2) Based upon the distance of the project site from known active Swainson's hawk nests, and the amount of open space already preserved around the project site, the amount of this fee shall be sufficient to fund the acquisition of easements covering mitigation lands at a ratio of approximately 0.5 acre for every acre of suitable foraging area within the planning area converted to other uses, together with an appropriate endowment for monitoring purposes, subject to consultation as described in Mitigation Measure 4.15-3(c.3).</p>	

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		<p>(c.3) The precise amount and location of mitigation lands shall be determined in consultation between the developer, the City and the department of fish and game. If mitigation lands (or a conservation easement covering the same) have not been acquired by the time of the first building permit, the city shall hold the project applicant's contribution in a separate, interest-bearing account until such time as the appropriate lands are identified through the consultation with CDFG and City and acquired by the City or preserved through other methods such as a suitable mitigation bank.</p> <p>(c.4) In the alternative, these amounts may be paid by the City into the Solano County HCP effort if and when it becomes approved.</p>	
<p>4.15-4 Construction of the Proposed Project could result in the loss of burrowing owl individuals (eggs, nestlings or juveniles).</p>	<p>S</p>	<p>4.15-4 (a) The project applicant shall hire a qualified biologist to conduct both nesting and wintering season surveys for burrowing owl to determine if the site is used by this species. The timing and methodology for the surveys are based on the CDFG/Burrowing Owl Consortium Survey Guidelines and are detailed below. CDFG may require that these surveys be repeated annually if project construction is expected to span over two or more years.</p>	<p>LS</p>

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		<p>Winter Season (December 1 through January 31)</p> <ul style="list-style-type: none"> Four site visits on separate days, 2 hours before to 1 hour after sunset or 1 hour before to 2 hours after sunrise. <p>Nesting Season (February 1 to August 31)</p> <ul style="list-style-type: none"> Four site visits on separate days, 2 hours before to 1 hour after sunset or 1 hour before to 2 hours after sunrise. At least two of the surveys shall be conducted during the peak nesting season between April 15 and July 15. <p>(b) In addition to the wintering and nesting season surveys, pre-construction surveys shall be conducted by an experienced biologist within 30-days prior to the start of work activities where land conversions are planned in known or suitable habitat areas. If construction activities are delayed for more than 30 days after the preconstruction surveys, then a new preconstruction survey will be required. All surveys shall be conducted in accordance with the CDFG/Burrowing Owl Consortium survey protocols (Burrowing Owl Consortium, 1993).</p> <p>(c) If burrowing owls are discovered in the Specific Plan area, the project applicant shall notify the City and CDFG. A qualified biologist shall implement a routine monitoring program and establish a fenced exclusion zone around each occupied burrow. No construction activities shall be allowed within the exclusion zone until such time that the burrows are determined to be unoccupied. The buffer zones shall be a minimum of 150 feet from an occupied burrow during the non-breeding season (September 1 through January 31), and a minimum of 250 feet from an occupied burrow during the breeding season (February 1 through August 31).</p>	

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4.15-5 Construction of the Proposed Project could result in loss of Valley elderberry longhorn beetles and their habitat.	S	<p>(d) The project applicant shall provide appropriate mitigation for project related effects on burrowing owl in consultation with CDFG. Mitigation can be conducted either onsite, or at an off-site location that is approved by the CDFG. Preference is for onsite within open space areas, if possible.</p> <p>(e) The CDFG shall be consulted regarding the implementation of avoidance or passive relocation methods. All activities that will result in a disturbance to burrows shall be approved by CDFG prior to implementation.</p>	LS
	4.15-5 (a)	<p>Prior to the approval of the Proposed Project, the project proponents shall conduct a project-specific survey for potential VELB habitat (elderberry shrubs). Any ground disturbing activities within 30 m of elderberry plants containing stems measuring 1.0 inch or greater in diameter at ground level shall conform to the following minimum avoidance measures:</p> <p>1) Applicants shall provide a minimum setback of at least 6 m from the drip line of each elderberry plant containing stems measuring 1.0 inch or greater in diameter at ground level. The setbacks shall be fenced and flagged to identify equipment and materials encroachment into the setback zone. Fire fuel breaks (disked land) may not be included within the 6 m setback. Where encroachment within the 20 m setback zone is unavoidable, the applicant shall provide compensatory mitigation at a 50 percent ratio of the standard requirements identified in Table 4.15-3.</p>	
	(b)		

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		<table border="1"> <thead> <tr> <th rowspan="2">Location/Stem Size*</th> <th rowspan="2">Exit Holes**</th> <th colspan="4">Elderberry Mitigation Ratios</th> <th rowspan="2">Associate d Native Plant Ratio</th> </tr> <tr> <th>Elderberry Seedling Ratio September 14***</th> <th>Elderberry Seedling Ratio March 15 to February 15 (2 x normal ratio)</th> <th>Elderberry Seedling Ratio June 15 to August 31 (2.5 x normal ratio)</th> <th></th> </tr> </thead> <tbody> <tr> <td>Stems ≥1" & < 3"</td> <td>No</td> <td>2:1</td> <td>4:1</td> <td>5:1</td> <td>1:1</td> </tr> <tr> <td></td> <td>Yes</td> <td>4:1</td> <td>8:1</td> <td>10:1</td> <td>2:1</td> </tr> <tr> <td>Stems ≥3" & <5"</td> <td>No</td> <td>3:1</td> <td>6:1</td> <td>8:1</td> <td>1:1</td> </tr> <tr> <td></td> <td>Yes</td> <td>6:1</td> <td>12:1</td> <td>15:1</td> <td>2:1</td> </tr> <tr> <td>Stems ≥5"</td> <td>No</td> <td>4:1</td> <td>8:1</td> <td>10:1</td> <td>1:1</td> </tr> <tr> <td></td> <td>Yes</td> <td>8:1</td> <td>16:1</td> <td>20:1</td> <td>2:1</td> </tr> </tbody> </table> <p>* Ratios are shown for elderberry occurring in existing or historic riparian situations. Ratios for elderberry in non-riparian situations are 50 percent of the standard ratio. ** The presence of exit holes in a stem, bush, or contiguous clump applies to the entire site *** No removal of elderberry is allowed between March 15 and June 15, except in cases of isolated bushes greater than 0.5 mile removed from other suitable valley elderberry longhorn beetle habitat and there is no sign of use (exit holes).</p>	Location/Stem Size*	Exit Holes**	Elderberry Mitigation Ratios				Associate d Native Plant Ratio	Elderberry Seedling Ratio September 14***	Elderberry Seedling Ratio March 15 to February 15 (2 x normal ratio)	Elderberry Seedling Ratio June 15 to August 31 (2.5 x normal ratio)		Stems ≥1" & < 3"	No	2:1	4:1	5:1	1:1		Yes	4:1	8:1	10:1	2:1	Stems ≥3" & <5"	No	3:1	6:1	8:1	1:1		Yes	6:1	12:1	15:1	2:1	Stems ≥5"	No	4:1	8:1	10:1	1:1		Yes	8:1	16:1	20:1	2:1	
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		<p>2) Construction contractors will be briefed on the need to avoid damaging the elderberry plants and the possible penalties for not complying with these requirements.</p> <p>3) Work crews will be instructed about the status of the beetle and the need to protect its elderberry host plant.</p> <p>4) No insecticides, herbicides, fertilizers, or other chemicals that might harm the beetle or its host plant will be used in the buffer areas, or within 30 m of any elderberry plant with one or more stems measuring 1.0 inch or greater in diameter at ground level.</p>																																																

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<p>4.15-6 Construction of the Proposed Project could result in the loss of western pond turtles or their habitat.</p>	<p>S</p>	<p>5) Mowing of grasses/ground cover will only occur from July through April to reduce fire hazard. No mowing should occur within 1.5 m of elderberry plant stems. Mowing must be done in a manner that avoids damaging plants (e.g., avoid stripping away bark through careless use of mowing/trimming equipment).</p> <p>6) Trimming of elderberry stems less than 1 inch in diameter may occur between September 1 and March 14. The recommended period for trimming is between November through the first two weeks in February when the plants are dormant and after they have lost their leaves.</p> <p>(c) In cases where removal of elderberry shrubs or their stems measuring 1-inch or greater (removal or trimming) is unavoidable, these impacts shall be compensated for through mitigation. Mitigation shall include salvaging and planting the affected elderberry shrubs and planting additional elderberry shrubs and associated native riparian plants according to the ratios specified in the following table. Mitigation planting shall occur, to the maximum extent practicable, in areas adjacent to the impact area and/or located to fill in existing gaps in riparian corridors.</p>	<p>LS</p>
	<p>4.15-6 (a) (b) (c)</p>	<p>Implement Mitigation Measure 4.15-1(a). If disturbance would occur within a perennial stream or other water body, a qualified biologist shall be retained to monitor the presence of western pond turtle in the active construction area. If individual western pond turtles are observed that may be in harms way, then construction activities shall cease until the biologist can move the turtle to a safe location. Buffer zones shall be established along areas of potential habitat for western pond turtle (i.e., perennial drainages) at a minimum of 50 feet from the top of stable bank pursuant to</p>	

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<p>4.15-7 Construction of the Proposed Project could result in the loss and degradation of rare plant populations.</p>	<p>S</p>	<p>guidance contained in the City's General Plan and wetland mitigation guidelines. Mitigation measures that have been proposed for addressing effects to wetlands, drainages and riparian corridors will concurrently facilitate the avoidance and/or minimization of effects on western pond turtle.</p> <p>The project applicant shall retain a qualified biologist to conduct focused preconstruction surveys within the project site and off-site areas proposed for infrastructure development for special status plant species that could potentially occur in the Specific Plan area during the appropriate time of year (March through May). If none of these species are located during the surveys, no further mitigation would be required.</p> <p>If any special-status plants are found to be present in the Specific Plan area, those plants shall be avoided to the greatest extent feasible. Habitats that support special-status plants that can be avoided shall be flagged and encircled with orange construction fencing to protect them from disturbance during construction of the project. These areas shall be preserved in perpetuity through conservation easements with an appropriate agency, and shall have appropriate buffer zones between their boundaries and areas of development. These buffers shall be a minimum of 250 feet if development is down slope of the special-status plant population and 500 feet if development is upslope of the plant population.</p>	<p>LS</p>

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	(c)	<p>If the special-status plant population cannot be avoided, then the project applicant shall provide mitigation for the loss of the population in consultation with either CDFG or USFWS as appropriate. Mitigation could be accomplished through the acquisition of off-site habitat that supports the affected species, or through purchase of mitigation credits at an established mitigation bank that has appropriate habitat for the species. Selection of mitigation sites shall be conducted in consultation with the City, CDFG, CNPS and/or USFWS. Selection of the mitigation site will be subject to the approval of the above agencies. The ratio for off-site mitigation shall be at 2:1 for each acre affected.</p> <p>As a part of either off-site mitigation option, the project applicant shall retain a qualified biologist to collect seed directly from the plants (during the appropriate season), or from the soil containing the seed bank and transplanting of existing plants. Additionally, a Rare Plant Mitigation and Monitoring Plan shall be developed. If mitigation is to occur at an established mitigation bank, seed collection, transplanting and development of the Mitigation and Monitoring Plan typically becomes the responsibility of the mitigation bank as a part of the agreement that the project applicant enters into with the mitigation bank.</p>	NA
<p>4.15-8 Construction of the Proposed Project would result in the loss of oak woodland/savannah, individual oak trees, and other protected trees.</p>	LS	4.15-8 None required	NA
<p>4.15-9 Construction of the Proposed Project could result in the loss of Riparian habitat.</p>	S	<p>4.15-9 (a) The project shall be designed to avoid disturbance to riparian habitat and the drainages that support the habitat. CDFG guidelines call for minimum 100 foot buffers from edge of riparian vegetation, however, smaller buffers can be allowed on a case by case basis.</p>	LS

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		(b) If disturbance to riparian vegetation is unavoidable, the project applicant shall retain a qualified habitat restoration specialist to develop and implement a Riparian Habitat Mitigation Plan. The goal of the plan is to offset the loss of existing riparian vegetation by establishing replacement riparian vegetation at a ratio of at least 1:1. This compensatory habitat is intended to replace wildlife habitat and hydrologic values either onsite or at an off-site location as approved by the agencies. The details of the Riparian Habitat Mitigation Plan shall be the result of negotiations with the City and the CDFG, but will likely include planting of oaks, walnut, willows and cottonwoods as well as a number of understory species common to the region. It may also include measures to reconfigure channelized drainages such that they have a more naturally meandering pattern. Monitoring of the mitigation habitat shall be conducted by a qualified biologist twice a year for at least five years. A draft of the plan shall be submitted to the Corps, CDFG, RWQCCB and the City for review and approval prior to implementation.	
4.15-10 Construction of the Proposed Project could result in the loss of nesting loggerhead shrike and white-tailed kite that are protected by the CDFG.	S	<p>4.15-10 (a) Prior to construction, the applicant shall retain a qualified biologist to conduct a nesting survey for loggerhead shrike and protected raptors throughout the development area. If necessary, this survey will be repeated during the construction period. Locations of any active nests shall be mapped and reported to CDFG and the City.</p> <p>(b) The project applicant shall develop, in consultation with CDFG, appropriate protection measures to ensure that all identified active nests are protected. These measures shall include monitoring by a qualified biologist through the nesting season or until construction ends (whichever comes first). Additionally, protective measures may include establishment of clearly marked avoidance areas around active nests, prevention of removal of shrubs/trees containing nests during the nesting season.</p>	LS

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		(c) The project applicant shall retain a qualified biologist to conduct an environmental awareness training session for all construction personnel to inform them of their responsibilities regarding the protection of sensitive resources. This training program shall include specific information to enable them to avoid disturbance to loggerhead shrike and protected raptors.	
5.1 Cumulative Impacts			
5.1-1 Cumulative development, including the Proposed Project, would result in the conversion of Important Farmland (Prime and Unique) to developed uses.	S/C	5.1-1 None available.	C
5.1-2 Cumulative development, including the Proposed Project, would contribute to the increased demand for parks and recreational facilities.	LS	5.1-2 None required.	NA
5.1-3 The Proposed Project would contribute to a cumulative alteration of aesthetic characteristics of the Lower Lagoon Valley region of Vacaville by increasing urban development in existing rural and undeveloped natural areas.	S/C	5.1-3 None available.	C
5.1-4 Cumulative development, including the Proposed Project, could contribute to an increase in nighttime lighting and overall light in this area of the City.	S/C	5.1-4 Implement Mitigation Measures 4.4-3(a) through 4.4-3(c).	C
5.1-5 Cumulative traffic, including the Proposed Project, would result in further reductions in volume-to-capacity ratios at the Alamo Drive and Merchant Street intersection in the AM peak hour and at the North Texas Street/Manuel Campos Parkway intersection in 2025 in the AM and PM peak hours.	S/C	5.1-5 (a) Construct the new intersection at North Texas Street and Manuel Campos Parkway with an additional northbound right-turn lane, two westbound left-turn lanes and a shared left-through lane, and one eastbound shared through-right-turn lane and one exclusive right-turn lane. Signalize the intersection. (b) Construct the California Drive overcrossing over I-80, connecting Marshall Road with Cherry Glen Road, as called for in the Vacaville General Plan.	C

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5.1-6 Cumulative traffic, including the Proposed Project, would result in further reductions in V/C ratios on the eastbound I-80 freeway segment between the Alamo Drive overcrossing and the Cherry Glen/Peña Adobe overcrossing in the PM peak hour in 2025.	S/C	5.1-6 Widen eastbound I-80 between the Alamo Drive overcrossing and the Cherry Glen / Peña Adobe Road overcrossing by 12 feet, by adding an auxiliary lane in the existing shoulder area and relocating the shoulder into the adjacent right-of-way. Construct a retaining wall as part of relocating the shoulder.	C
5.1-7 Cumulative traffic, including the Proposed Project, would result in further reductions in V/C ratios on the Alamo Drive / Merchant Street ramps to I-80 in the AM and PM peak hours.	S/C	5.1-7 (a) Implement Mitigation Measure 5.1-6 to add an eastbound lane to I-80 between the Cherry Glen / Peña Adobe overcrossing and the Alamo Drive overcrossing, and, in addition, widen the Alamo Drive / Merchant Street eastbound off-ramp by 12 feet to two lanes and add a new lane at the ramp intersection with Alamo Drive and Merchant Street to accommodate the new ramp lane. (b) Implement Mitigation Measure 4.5-3(b) to widen the I-80 freeway to add a westbound lane between Alamo Drive and North Cherry Glen Road, and construct a retaining wall adjacent to the freeway. In addition, widen the westbound on-ramp at Alamo Drive/Merchant Street to two traffic lanes.	C
5.1-8 Cumulative traffic, including the Proposed Project, would further reduce the V/C ratio at the diverge from I-80 to the Alamo Drive / Merchant Street off-ramp.	S/C	5.1-8 Implement Mitigation Measure 5.1-6 to add an eastbound lane on I-80 between Alamo Drive and Cherry Glen/Peña Adobe Road.	C
5.1-9 Cumulative development, including the Proposed Project, could generate increased air pollutant emissions that could impair implementation of the Clean Air Plan.	S/NC	5.1-9 None required.	NA
5.1-10 Cumulative development, including the Proposed Project, would include new sources of toxic air contaminants.	LS	5.1-10 None required.	NA
5.1-11 Cumulative development, including the Proposed Project, would increase vehicle trips and would result in increased noise levels.	S/NC	5.1-11 None required.	NA

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5.1-12 Cumulative development, including the Proposed Project, would contribute to increased flows throughout many areas of the wastewater collection system that could result in required improvements to existing wastewater collection system facilities.	LS	5.1-12 None required.	NA
5.1-13 Cumulative development, including the Proposed Project, would increase flow to the Easterly Wastewater Treatment Plant.	LS	5.1-13 None required.	NA
5.1-14 Cumulative Development, including the Proposed Project, would result in an increased demand for electrical and natural gas supplies and distribution infrastructure.	LS	5.1-14 None required.	NA
5.1-15 Cumulative development, including the Proposed Project, would increase the demand for cable television service and could result in the need for additional distribution infrastructure.	LS	5.1-15 None required.	NA
5.1-16 Cumulative development, including the Proposed Project, would require the need for additional police personnel to maintain the standard level of police protection services.	LS	5.1-16 None required.	NA
5.1-17 Cumulative development, including the Proposed Project, would require the need for additional fire services to maintain the current level of services.	LS	5.1-17 None required.	NA
5.1-18 Cumulative development, including the Proposed Project, would increase the amount of solid waste disposed of at B&J Landfill and could decrease capacity at the landfill.	LS	5.1-18 None required.	NA

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5.1-19 Cumulative development, including the Proposed Project, would contribute to increased water demands throughout many areas of the existing water distribution system that could result in required improvements to existing water distribution system facilities.	LS	5.1-19 None required.	NA
5.1-20 Cumulative development, including the Proposed Project, would increase the total water demand city-wide.	LS	5.1-20 None required.	NA
5.1-21 Cumulative development, including the Proposed Project, could increase runoff that could exceed the capacity of existing drainage facilities resulting in localized flooding.	S/C	5.1-21 Implement Mitigation Measures 4.11-1(a) through 4.11-1(c).	NC
5.1-22 Increased runoff generated by cumulative development, including the Proposed Project, could result in sedimentation and increased levels of urban contaminants, which could affect receiving water quality in the Ulatis Creek Watershed.	S/C	5.1-22 Implement Mitigation Measures 4.11-3(a) through 4.11-3(f).	NC
5.1-23 Cumulative development, including the Proposed Project, would result in increased exposure of people or structures to potential risks caused by earthquake activity, including strong groundshaking and seismic-related ground failures such as liquefaction and earthquake-induced landslides.	S/C	5.1-23 Implement Mitigation Measure 4.12-1(a) and (b).	NC
5.1-24 Cumulative development, including the Proposed Project, could expose people to unidentified soil or groundwater.	LS	5.1-24 None required.	NA

LS = Less than Significant S = Significant STSU = Short-term Significant and Unavoidable PS = Potentially Significant NA = Not Applicable
 SU = Significant and Unavoidable STS = Short-term Significant NC = Not Considerable C = Considerable

TABLE 2-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
5.1-25 Cumulative development, including the Proposed Project, could result in cumulative impacts from increased risk related to the storage, uses, and disposal of hazardous materials.	LS	5.1-25 None required.	NA
5.1-26 Cumulative development, including the Proposed Project, could result in a cumulative increase in hazardous materials transportation in the area, which could expose greater numbers of people to increased risks in the event of an inadvertent release or spill.	LS	5.1-26 None required.	NA
5.1-27 Cumulative development, including the Proposed Project, would result in a cumulative increase in the number of people and structures which could be exposed to wildland fires.	S/NC	5.1-27 None required.	NA
5.1-28 Cumulative development, including the Proposed Project, could result in the disturbance of previously identified or unidentified prehistoric sites or historic archaeological features, paleontological resources or previously unidentified human remains.	S/C	5.1-28 Implement Mitigation Measures 4.14-1, 4.14-2, 4.14-4, 4.14-6.	C
5.1-29 Cumulative development, including the Proposed Project, could adversely contribute to the cumulative loss of regional wildlife and habitat.	S/C	5.1-29 Implement Mitigation Measures 4.15-1 through 4.15-10.	NC

LS = Less than Significant S = Significant STSU = Short-term Significant and Unavoidable PS = Potentially Significant NA = Not Applicable
 SU = Significant and Unavoidable STS = Short-term Significant NC = Not Considerable C = Considerable

**3. LIST OF AGENCIES AND PERSONS
COMMENTING**

3. LIST OF COMMENTORS

The following agencies, organizations and individuals submitted letters that contained comments on the Draft EIR. Letter 82 contains the transcript from the public hearing held on March 16, 2004. Letter 83, from David A. Guterrez, Acting Chief, Division of Safety of Dams, Department of Water Resources was received after the close of the comment period; however, a response is provided.

- Letter 1: Terry Roberts, Director, State Clearinghouse
- Letter 2: Karol Enferadi, Engineering Associate, State Water Resources Control Board
- Letter 3: Dennis J. O'Bryant, Acting Assistant Director, California Department of Conservation
- Letter 4: Karol Enferadi, Engineering Associate, State Water Resources Control Board
- Letter 5: Steve Shaffer, Director, Office of Agricultural and Environmental Stewardship
- Letter 6: Timothy C. Sable, District Branch Chief, Department of Transportation
- Letter 7: Ronald E. Glas, Principle Planner, Solano County Airport Land Use Commission
- Letter 8: Roger L. Reynolds, Summers Engineering Inc., Solano Irrigation District
- Letter 9: Daniel P. O'Brien, Associate Air Quality Planner, Yolo-Solano Air Quality Management District
- Letter 10: Sean P. Quinn, Director, Fairfield Department of Planning and Development
- Letter 11: Michael G. Yankovich, Solano County Department of Environmental Management
- Letter 12: Paul Wiese, Acting Transportation Director, Solano County Transportation Department
- Letter 13: Dan Christians, Assistant Executive Director/Director of Planning, Solano Transportation Authority
- Letter 14: Leigh A. Coop, Director of Facilities, Vacaville Unified School District
- Letter 15: Brent Schoradt, Solano-Napa Field Representative, Greenbelt Alliance
- Letter 16: Kenneth Browne, Chair, Solano Group, Sierra Club
- Letter 17: Brent Schoradt, Solano-Napa Field Representative, Greenbelt Alliance
- Letter 18: Mary Shaw, California Native Plant Society
- Letter 19: Cynthia Wilkerson, California Species Associate, Defenders of Wildlife
- Letter 20: Rod Neubert
- Letter 21: Laurel Olson, Rita Artig, Marjorie Olsen
- Letter 22: Ellie Burch
- Letter 23: Robert Casillo
- Letter 24: Marian Conning, Peaslee DuMont, Alexis Koefed
- Letter 25: Kristen Escher
- Letter 26: David Neivelt, Sam Allen
- Letter 27: Katherine Caldwell
- Letter 28: Kate Hitchcock
- Letter 29: Sandra K. Harris
- Letter 30: Elizabeth Knight
- Letter 31: Vicki Hopkins
- Letter 32: Linda L. Markiewitz
- Letter 33: Ted Swiecki

Letter 34: Del Berg
Letter 35: Jose Freeman
Letter 36: Aileen Williamson
Letter 37: Marian Conning
Letter 38: Lisa Rosenkild
Letter 39: Aileen Williamson
Letter 40: John R. Bowman
Letter 41: Roberto Valdez, Jr.
Letter 42: Roberto Valdez, Earl Campini
Letter 43: Roberto Valdez, Earl Campini
Letter 44: John Foster
Letter 45: Beth Franks, Peter Franks
Letter 46: Brian McEvilly
Letter 47: Kami McBride
Letter 48: Ellen Tucker
Letter 49: Jose Freeman
Letter 50: Gerhard Berger
Letter 51: James DeKloe
Letter 52: Steven L. Goetz
Letter 53: Sandy Harris
Letter 54: Sandy Harris
Letter 55: Sandy Harris
Letter 56: Sandy Harris
Letter 57: Michael Rosenberger, Brook Rosenberger
Letter 58: Ann Dow
Letter 59: Sandy Harris
Letter 60: Sandy Harris
Letter 61: Ellen Brown
Letter 62: Elissa A. DeCaro
Letter 63: Joy Graham
Letter 64: Shirley Jensen
Letter 65: James Knight
Letter 66: Ted Swiecki
Letter 67: Richard Tietze
Letter 68: Richard Tietze
Letter 69: Richard Tietze
Letter 70: Richard Tietze
Letter 71: Deb Campbell
Letter 72: Tom Campbell
Letter 73: Keith Conning
Letter 74: Marian Conning
Letter 75: Denise Peavy
Letter 76: Peaslee F. Dumont
Letter 77: Lawrence Ewing
Letter 78: Jacqueline Pelton
Letter 79: James Rathke, Patricia Rathke
Letter 80: Ted Swiecki
Letter 81: Roberto Valdez
Letter 82: Oral comments from March 16, 2004 Planning Commission
Letter 83: David A. Guterrez, Acting Chief, Division of Safety of Dams, Department of Water Resources

4. COMMENTS AND RESPONSES



Arnold
Schwarzenegger
Governor

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



Jan Boel
Acting Deputy
Director

April 20, 2004

LETTER 1

Fred Buderl
City of Vacaville
650 Merchant Street
Vacaville, CA 95688-6908

Subject: Lower Lagoon Valley Project
SCH#: 2003032063

Dear Fred Buderl:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on April 19, 2004, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts
Director, State Clearinghouse

Enclosures
cc: Resources Agency

**Document Details Report
State Clearinghouse Data Base**

SCH# 2003032063
Project Title Lower Lagoon Valley Project
Lead Agency Vacaville, City of

Type EIR Draft EIR
Description The Lower Lagoon Valley Specific Plan (Specific Plan or Proposed Project) is located in Solano County in the southwestern portion of the City, in the City's Sphere of Influence (SOL). The approximately 2,354 acre Specific Plan area includes 736-acre residential/recreational community with 1,225 single-family homes and 100 attached town homes (1,325 total dwelling units), a K-6 public school or a K-8 private school, a 213 acre championship-style golf course with a clubhouse, and neighborhood park spaces throughout the development area.

Lead Agency Contact

Name Fred Buderl
Agency City of Vacaville
Phone 707 449-5307 **Fax**
email
Address 650 Merchant Street
City Vacaville **State** CA **Zip** 95688-6908

Project Location

County Solano
City Vacaville
Region
Cross Streets Riviera Road, Lagoon Valley Road
Parcel No. 128-040-07thru14,17,18,21;128-050-070;167-020-110,120;167-030-2,3,4,5,6,8
Township **Range** **Section** **Base**

Proximity to:

Highways I-80/Lagoon Valley Road
Airports Nut Tree
Railways
Waterways Laguna Creek, Lagoon Lake, Alamo Creek
Schools Alamo Elementary
Land Use Vacant open land and agricultural commercial uses, City Park/Commercial, Business Park, Open Space, Public Facility, Open Space, Golf Course Residential/Highway Commercial, Business Park, Estate Residential, Hillside Agriculture, Public Park

Project Issues Agricultural Land; Air Quality; Archaeologic-Historic; Drainage/Absorption; Flood Plain/Flooding; Geologic/Seismic; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Growth Inducing; Landuse; Cumulative Effects

Reviewing Agencies Air Resources Board, Major Industrial Projects; Caltrans, District 4; Department of Conservation; Office of Historic Preservation; Department of Housing and Community Development; Native American Heritage Commission; Department of Parks and Recreation; Regional Water Quality Control Bd., Region 5 (Sacramento); Resources Agency; State Lands Commission; State Water Resources Control Board, Division of Water Quality; Department of Fish and Game, Region 3; California Highway Patrol; Department of Food and Agriculture

Date Received 02/20/2004 **Start of Review** 02/20/2004 **End of Review** 04/19/2004

COMMENT LETTER 1: Office of Planning and Research

Response to Comment 1-1:

Comment noted. This letter, from the Governor's Office of Planning and Research, notes that the Draft EIR has been distributed to the appropriate state agencies for their review and comment. Agencies to which the Draft EIR was distributed included: Department of Fish & Game, Department of Parks and Recreation, Regional Water Quality Control Board, Native American Heritage Commission, State Office of Historic Preservation, California Air Resources Board, Office of Safety of Dams and the State Department of Toxic Substances Control. The City notes that the document was also sent to the following Federal agencies: US Army Corps of Engineers, US Fish and Wildlife Service, and US Environmental Protection Agency.



Terry Tamminen
Secretary for
Environmental
Protection

State Water Resources Control Board

Division of Water Rights

1001 I Street, 14th Floor ♦ Sacramento, California 95814 ♦ 916.341.5300
Mailing Address: P.O. Box 2000 ♦ Sacramento, California 95812-2000
FAX: 916.341.5400 ♦ www.waterrights.ca.gov



Arnold Schwarzenegger
Governor

MAR - 9 2004

COMMUNITY DEVELOPMENT DEPT.

Fred Buderl, Project Manager
City of Vacaville
Community Development Department
650 Merchant Street
Vacaville, CA 95688

MAR 10 2004

CITY OF VACAVILLE

Dear Mr. Buderl:

REVIEW OF DRAFT ENVIRONMENTAL IMPACT REPORT LOWER LAGOON VALLEY SPECIFIC PLAN (SCH 2003032063)

This letter is in regards to your draft Environmental Impact Report Lower Lagoon Valley Specific Plan (SCH 2003032063) dated February 20, 2004, received by the State Water Resources Control Board (SWRCB), Division of Water Rights (Division). The document states that you intend to convert 2,354 acres of existing grassland to residential, commercial, and recreational uses. The Specific Plan includes the 388-acre Lagoon Valley Regional Park and 1,066 acres of open space.

The City of Vacaville is contemplating several water right actions. The domestic water for the project is from the State Water Project, the North Bay Aqueduct and 11 groundwater wells. The Division is responsible for the administration of all appropriative water rights in California initiated after 1914, commonly referred to as "post-1914 appropriative rights." Lagoon Lake has an appropriative right under licensed Application 25782.

The draft EIR does not recognize potential water right issues in the Parks and Recreation discussion about Lagoon Lake. Lagoon Lake is a surface impoundment licensed for the purpose of recreation and wildlife enhancement uses. License conditions limit the water collected only to the water necessary to keep the storage reservoir full by replacing water lost by evaporation and seepage, and to refill if emptied for necessary maintenance or repair.

Please note that any changes of the point of diversion, place of use, and/or purpose of use for Lagoon Lake must be accomplished by petition for change and are subject to Division approval. Unauthorized uses or increases to the authorized storage capacity violate Water Code section 1675 and may be cause for enforcement action including imposition of Administrative Civil Liability fines.

2-1

MAR - 9 2004

The adequacy of the projected water supply for the proposed project is not described. An analysis to demonstrate that adequate water resources exist for the proposed development must be presented regardless of whether Vacaville intends to use surface or groundwater resources, or rely on water contracts. Your environmental document must provide a water availability analysis demonstrating resources sufficient for all needs during the time of use for wet, normal and dry water year types, including monthly data.

2-2

The draft EIR focuses on water supply contracts and does not address the extent to which environmental resources, i.e. fish and wildlife, would be affected by the incremental increase of water use over baseline conditions for the proposed changes in the streams from which the contract water is obtained. If an environmental document has been prepared that discloses the impacts of full contract deliveries, it should be cited. Any court orders that affect fish flows should also be cited.

2-3

The draft EIR states the availability of contracted water sources under reduced supply condition on page 4.10-2. It also states that if one source is limited or poor quality, then use from other sources can increase. Reduced supply may not be a local phenomenon; a low rainfall year may impact all water resources.

2-4

Thank you for the opportunity to review this project. Please contact me directly at (916) 341-5361 if you have any questions or would like to discuss the issues described in this letter.

Sincerely,



Karol Enferadi
Engineering Associate
Watershed Unit #3

COMMENT LETTER 2: State Water Resources Control Board**Response to Comment 2-1:**

As stated on pages 1-2 and 1-3 in Chapter 1 Introduction, in 2002 the City approved a Conditional Use Permit for on-going operations and use of Lagoon Valley Regional Park, including the Lagoon Valley Lake Management Plan. A separate environmental document was prepared and adopted that evaluated impacts and presented mitigation measures associated with the Conditional Use Permit. As part of a separate process the City is initiating studies to update the Lagoon Valley Regional Park Master Plan. Neither those studies nor that planning effort are complete at this time, thus it would be speculative for them to be evaluated in this EIR. No modifications to lake operations are included as part of this project. A separate environmental review process will be undertaken to evaluate any impacts once the draft Master Plan has been proposed.

As further described in the Draft EIR, because of the close proximity of the Park to the proposed development and the fact that the proposed Development Agreement requires the applicant to contribute \$4 to \$5 million to the City for park-related and other purposes, the EIR does include a program level environmental review based on what is known to date about the future Master Plan update. Should any work be proposed that does require permits from the State Water Resources Control Board, the City or developer would obtain those necessary permits prior to work being done. The City also acknowledges that it must act pursuant to its existing permit for operating the lake.

Response to Comment 2-2:

The adequacy of projected water supply is fully described in Section 4.10, Water Supply, of the Draft EIR, in Appendix H, Water Supply Investigation, Lower Lagoon Valley Project, and in the separate SB610 Water Supply Assessment Report for Lower Lagoon Valley, Southtown, and Rice McMurtry, dated January, 2004. The Draft EIR and Appendix documents were delivered to the State Clearinghouse on February 20, 2004. The SB610 report was sent to the commentor at her request on March 9, 2004. The SB610 report has also been available at the City's offices for public review and copying. The SB610 report was reviewed by the Vacaville City Council at a properly noticed public hearing on February 24, 2004 and adopted as an addendum to the City of Vacaville 2000 Urban Water Management Plan. The SB610 report is included in Appendix A of this document.

Response to Comment 2-3:

This comment addresses the potential environmental effects of water supply contracts. The City is not the lead agency for water supply contracts, which are obtained from other governmental agencies. In any case, the Water Supply Investigation (Appendix H of the Draft EIR) demonstrates that the Proposed Project would not require changes to any existing water supply contracts or require any new contracts. Therefore, the potential impacts about which the comment speculates would not be impacts of the Proposed Project.

Response to Comment 2-4:

This comment correctly notes that reduced supply conditions may affect all water sources. The City has considered the potential for multiple dry years, as required for an adequate SB 610 water supply analysis, and has concluded that adequate supply would exist under these

circumstances. Please see the Water Supply Investigation included as Appendix H of the Draft EIR and the SB610 Water Supply Assessment Report, included as Appendix A of this document.



DEPARTMENT OF CONSERVATION
STATE OF CALIFORNIA

March 25, 2004

Mr. Fred Buderer, Project Manager
City of Vacaville
650 Merchant Street
Vacaville, CA 95688

RECEIVED

MAR 29 2004

CITY OF VACAVILLE
PLANNING DIVISION

DIVISION OF
LAND RESOURCE
PROTECTION

801 K STREET
SACRAMENTO
CALIFORNIA
95814

PHONE
916/324-0850

FAX
916/327-3430

INTERNET
consrv.ca.gov

ARNOLD
SCHWARZENEGGER
GOVERNOR

Dear Mr. Buderer:

Subject: Draft Environmental Impact Report (DEIR) for the Lower Lagoon
Specific Plan SCH# 2003032063

The Department of Conservation's Division of Land Resource Protection (Division) monitors farmland conversion on a statewide basis and administers the California Land Conservation (Williamson) Act and other agricultural land conservation programs. We commented on the Notice of Preparation for this project in our letter of April 10, 2003, and now offer the following comments on the DEIR with respect to the project's potential impacts on agricultural land.

The proposed project involves General Plan Amendments, Rezoning, Specific Plan and a development agreement for a 2,354-acre subject area. The Specific Plan would accommodate development of a 736-acre residential community, a 90-acre business village, a 213-acre golf course, 388-acre Lagoon Valley Regional Park and 1,066 acres of open space/hillside agriculture area. Proposed land uses for the area include residential (1,325 dwelling units), commercial, public and private schools, golf course, and park. The DEIR notes that implementation of the project will result in conversion of Prime Farmland and Unique Farmland. The loss of this land and the project's cumulative impacts on agricultural land are both identified as less than significant due to land use policies and design guidelines that minimize incompatibility, and any potential internal land use incompatibilities with existing agricultural land, grazing land and agricultural hillsides. Although the direct conversion of agricultural land is often deemed to be an unavoidable impact by CEQA analyses, mitigation measures must nevertheless be considered.

3-1

As noted in our previous letter, the Division has compiled an annotated listing of approximately 30 "conservation tools" that have been used to conserve or mitigate project impacts on agricultural land. The purchase of agricultural land conservation easements is considered one form of

3-2

Mr. Fred Buderl
March 25, 2004
Page 2 of 2

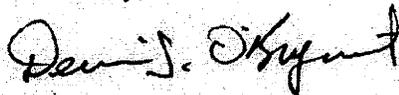
compensation for the farmland lost due to project implementation. Although it does not create new farmland for each acre of farmland lost, it does provide a means for landowners to keep their land in agricultural use.

Information about conservation easements is available on the Department's website, or by contacting the Division at the address and phone number listed below. The Division's website address is:

<http://www.conservation.ca.gov/DLRP/>

Thank you for the opportunity to comment on the DEIR. If you have questions on our comments, or require technical assistance or information on agricultural land conservation, please contact the Division at 801 K Street, MS 18-01, Sacramento, California 95814; or, phone (916) 324-0850.

Sincerely,



Dennis J. O'Bryant
Acting Assistant Director

cc: Suisun RCD
2544 Grizzly Island Road
Suisun City, CA 94585

Solano County RCD
1170 N. Lincoln Ste. 110
Dixon, CA 95620

3-2
Cont.

COMMENT LETTER 3: Department of Conservation**Response to Comment 3-1:**

The commentor is not correct that the Draft EIR finds farmland conversion impacts to be less – than-significant (see Impact 4.2-6 in Section 4.2). In 1990, the City certified an EIR for the currently approved land use plans in the Lower Lagoon Valley. Impacts to agricultural and open space lands were quantified. The agricultural production potential of the valley was determined to be compromised by particular physical conditions including the presence of high levels of naturally occurring boron in the ground water which would affect agricultural production. In addition, the amount of higher quality farmland was contained in relatively small, discontinuous patches within the valley, which made agricultural production less likely.

The Lower Lagoon Valley Specific Plan Draft EIR notes that the conversion of Important Farmland to urbanized uses will impact approximately 70 acres. Another 171 acres of agricultural production will be replaced elsewhere with the relocation of the Hines Nursery. The City, upon annexation of the Specific Plan area in 1990, required the dedication of open space / agricultural lands on a 1:1 basis for the development proposed at that time. This open space land was dedicated to the City in order to implement this mitigation measure, and is currently City-owned lands on the hills within the proposed Specific Plan area.

In addition, the proposed Specific Plan will require dedication of an additional 15-20 acres of open space land within this project area, to add to that area previously dedicated to the City. Finally, the Specific Plan and Development Agreement require the developer to provide a “Community Benefit Contribution” to the City to provide for the improvement of Lagoon Valley Park, including the purchase of additional open space lands within the City’s planning area. The proposed terms of the Development Agreement would require designating a minimum of \$1.0 million for the purchase/conservation of lands suitable for Swainson’s Hawk foraging habitat in order to accomplish the mitigation for this foraging habitat loss (see Mitigation Measure 4.15-3). The City anticipates that the most likely lands qualifying for conservation for this purpose will be agricultural lands, and that therefore, the Specific Plan incorporates appropriate measures to reduce the effect of agricultural land conversion.

The last paragraph on page 4.2-15 is revised to read as follows:

The City’s General Plan included the adoption of the “Agricultural Service Area” (ASA), which is intended to mitigate impacts on Prime Farmland within the City’s 100 square mile planning area by providing a definite geographic limit to urbanization.¹ Additionally, pursuant to the 1990 Policy Plan approval, the then-owner set aside more than 1,000 acres of land as permanent open space, which was intended to accomplish a 1:1 mitigation for agricultural and open space land conversion. That set aside land included both farmland or potential farmland and open space lands. ~~However, there are no feasible mitigation measures available to mitigate the loss of Important Farmland; therefore, Nonetheless, the small~~

-
1. City of Vacaville (Lead Agency), *Lower Lagoon Valley Development Project* (State Clearing house No. 90030075), prepared by Blayney-Dyett, Urban & Regional Planners, Angus McDonald & Associates, Camp, Dresser & McKee, Environmental Science Associates, Darwin Meyers Associates, Mark Thomas & Company, Nolte & Associates, TJKM Transportation Planners, Charles Slater & Associates, Consultants in Acoustics, Charles Slaymaker, Ph.D. Consulting Archaeologist, West & Associates, August 1990, Exhibit “A”: Finding of Fact, Statements of Overriding Consideration and Mitigation Monitoring Plan: Environmental Impact Report of the Proposed Lower Lagoon Valley Policy Plan, Page 50.

amount of prime farmland on the Proposed Project site would not be directly preserved, and the existing mitigation, while substantial, does not decrease the Project's impact on loss of Farmland to a less than significant level.—The impact remains *significant and unavoidable*.

Response to Comment 3-2:

See Response to Comment 3-1 that addresses the conversion of Farmland. The City appreciates the information provided by the commentor regarding farmland conservation tools.



Terry Tamminen
Secretary for
Environmental
Protection

State Water Resources Control Board

Division of Water Rights

1001 I Street, 14th Floor • Sacramento, California 95814 • (916) 341-5300
Mailing Address: P.O. Box 2000 • Sacramento, California • 95812-2000
FAX (916) 341-5300 • Web Site Address: <http://www.waterrights.ca.gov>



Arnold Schwarzenegger
Governor

APR 01 2004

Fred Buderl, Project Manager
City of Vacaville
Community Development Department
650 Merchant Street
Vacaville, CA 95688

COMMUNITY DEVELOPMENT DEPT.

APR - 2 2004

CITY OF VACAVILLE

Dear Mr. Buderl:

**REVIEW OF DRAFT ENVIRONMENTAL IMPACT REPORT LOWER LAGOON VALLEY
SPECIFIC PLAN (SCH 2003032063) AND SB 610 WATER SUPPLY ASSESSMENT
REPORT FOR LOWER LAGOON VALLEY, SOUTHTOWN, AND RICE MCMURTRY**

On March 16, 2004, the Division of Water Rights (Division) received a copy of the SB 610 Assessment Report in response to the Division's letter dated March 10, 2004 that questioned the adequacy of projected water supply for the proposed Lower Lagoon Valley Specific Plan. Division staff has reviewed the SB 610 Assessment Report and find that it mischaracterizes the availability of water supplies from SID in single dry and multiple dry years.

Tables 26 and 27 and text discussion on page 27 suggest that 100 percent of the surface water entitlement is available to the City of Vacaville. Division staff disagrees. Section 8 of the contract between Solano County Water Agency and the City of Vacaville stipulates that a water shortage may occur in any year due to physical causes or drought, and that the total quantity of water may be less than the contract amount. Contract shortages are in proportion to the contractual amount.

The SB 610 Report statement and any EIR discussion regarding the long-term reliability for the Solano project should be revised to indicate that this source is subject to cutbacks during dry years similar to the State Water Project source.

Thank you for the opportunity to review this project. Please contact me directly at (916) 341-5361 if you have any questions or would like to discuss the issues described in this letter.

Sincerely,

Karol Enferadi
Engineering Associate
Watershed Unit #3

COMMENT LETTER 4: SWRCB

Response to Comment 4-1:

The City concurs that the agreement between the Solano County Water Agency and the City of Vacaville allows for the reduction in the supply of Solano Project water to the City. However, per the SB 610 analysis, these reductions would not result in a water shortage for the Proposed Project, even if all of the Solano Project water were unavailable (see Appendix A of this document, Tables 24 and 28).

State of California

COMMUNITY DEVELOPMENT DEPT.

Memorandum

APR 20 2004

To: State Clearinghouse
Governor's Office of Planning and Research

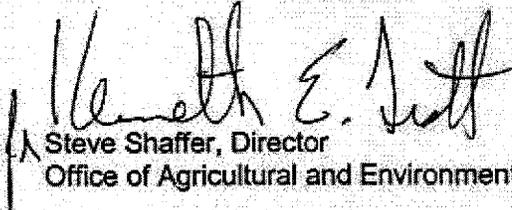
Date: April 16, 2004

CITY OF VACAVILLE

Mr. Fred Buderl
City of Vacaville
650 Merchant Street
Vacaville, CA 95688-6908

Place: Sacramento

Phone: (916) 657-4956



From: Department of Food and Agriculture

Steve Shaffer, Director
Office of Agricultural and Environmental Stewardship

Subject: Draft Environmental Impact Report (DEIR) for the Lower Lagoon Valley Specific Plan
SCH #2003032063

The California Department of Food and Agriculture (CDFA) has reviewed the DEIR for the proposed Lower Lagoon Valley Specific Plan. The Department's mission is to promote and protect California agriculture, including the natural resources upon which agriculture depends. Included in this mission is the protection of livestock populations, consumers, and California's economy from catastrophic animal diseases. Based on these responsibilities and our associated expertise, we offer the following comments on the DEIR.

The project is a 2,354-acre specific plan for residential development, parks, schools, businesses and other commercial development. The project is located immediately south of Interstate 80 within the southwest corner of the City of Vacaville's sphere of influence.

Agricultural Land Resources

The DEIR reports a significant environmental impact on agricultural resources as a result of the project's conversion of 232 acres of Prime and Unique Farmland (as defined by the California Department of Conservation's Farmland Mapping and Monitoring Program's Important Farmland Series maps). Further, the DEIR concludes that the impact on agricultural land is unavoidable and that no mitigation measures are available to avoid, lessen or compensate for the impact.

CDFA recommends that an additional alternative be considered for the alternatives analysis, one that lessens or avoids project impacts on Prime and Unique Farmland through a reconfiguration of the project's layout. For example, could the integration of compatible agricultural land uses as buffers between incompatible uses, or to provide an urban greenbelt, be a feasible component of the project's design?

Also, we recommend that consideration be given to the use of an impact fee as mitigation for the project's agricultural land conversion impacts. Several cities and counties now rely on agricultural land conversion mitigation fees to at least partially mitigate for the loss of agricultural land to urbanization, the City of Davis providing one nearby example. In the case of Davis, the fee is used as an alternative to the dedication of an agricultural land conservation easement over an equivalent quantity and quality of agricultural land as that being converted by a project. If the developer opts to pay a mitigation fee, it is used by the City to acquire the compensatory agricultural land conservation easements.

5-1

5-2

Where easements are not feasible, the fees could be used to enhance those agricultural activities that remain in the project area or elsewhere in the greater Vacaville area consistent with the City's general plan. Such enhancements could include market development, promotion of direct marketing opportunities, public education about local agriculture, improvements in local agricultural infrastructure, etc. The City of Brentwood has considered something akin to the latter option whereby mitigation fees would be used to fund research and education in support of the local agricultural industry. This is an idea that has also been implemented in the City of Carlsbad in the form of the Carlsbad Agricultural Research and Grants Program, established through the collaboration of the local Resource Conservation District and the State Coastal Conservancy.

5-2 Cont.

We concur that the cumulative loss of agricultural land from the project is significant. We recommend that the analysis of cumulative impacts include, in addition to a retrospective component, a documentation of current and foreseeable projects that will convert agricultural land in the greater Vacaville area. Further, we recommend that the retrospective component of the analysis include more than a two-year period. The Department of Conservation's Farmland Conversion Reports now document nearly 20 years of agricultural land conversions for most of the State, including Solano County.

5-3

CDFA recommends the consideration of mitigation measures to address the cumulative impacts of the project on agricultural land. We refer you to the previous paragraph of potential mitigation measures that could be considered.

5-4

Hazards and Human Health

The DEIR responds to public comments made with respect to the potential human health impacts of the project from an historic "anthrax outbreak" in cattle within the vicinity of the project site. Our review found the DEIR's response to the concern to be accurate. In addition to the text provided in the DEIR on page 4.13-5, we offer the following information.

Anthrax has an almost worldwide distribution. It has been seen in every county in California with the possible exception of San Francisco. It is almost certainly endemic in the State's valleys. The *Bacillus anthracis* spores are somewhat resistant to heat, cold, chemical disinfectants, and long dry periods. The spores are reported to survive for years in the environment.

5-5

Some people have expressed concern with the possible infectivity of soil anthrax spores. In California, in spite of the wide use of burning to clear ground, and thousands of hours spent by workers in the dust of land leveling activities, no known cases of anthrax have ever been confirmed in humans or animals as a consequence of such airborne or fire-borne spores.

State Clearinghouse
Mr. Fred Buderl
April 16, 2004
Page Three

Housing development throughout the state has occurred in locations where anthrax burials and burning have previously taken place. However, no cases of anthrax in humans have resulted from these activities. The human risk to anthrax infection from development of land with a history of anthrax spores should be considered extremely low.

↑
5-5 Cont.
■

Thank you for the opportunity to review and comment on the DEIR. If you have questions on our comments, or require information or assistance in responding to them, please call me at (916) 657-4956.

cc: Susan Cohen, Agricultural Commissioner
Solano County

Dr. Kenneth L. Thomazin, DVM
California Department of Food and Agriculture

COMMENT LETTER 5: Department of Food and Agriculture**Response to Comment 5-1:**

Chapter 6 of the Draft EIR evaluates a range of alternatives to the Proposed Project, including a No Project/No Development Alternative that would result in the project remaining in its current condition. See also Responses to Comments 3-1, 3-2, and 5-2 through 5-5. In particular, Response to Comment 3-1 provides information the substantial farmland impact mitigation measures included in the Proposed Project and recommended in the Draft EIR.

Response to Comment 5-2:

Within the proposed Specific Plan area, the land currently in agricultural production is the Hines Nursery property. This use would be relocated and so the Project would not reduce existing agricultural production and contribution to the regional agricultural economy.

The City has previously addressed the impact of urbanization and agricultural land conversion in Lower Lagoon Valley through its General Plan and prior land use agreements associated with the designation of this area for urban growth in 1990. The 1990 Policy Plan approval required the then-owner of the property to set aside more than 1,000 acres in a permanent conservation easement.

The City's General Plan includes a specific policy identifying the need for an Urban Service area and an Agricultural Service area. The Specific Plan area is within the adopted Urban Service area identified on Figure 2-3 of the General Plan.

See also Response to Comment 3-1.

Response to Comment 5-3:

The cumulative impact of the conversion of agricultural land was addressed in Impact 5.1-1 on page 5.1-2 of the Draft EIR. See also Responses to Comments 3-1 and 5-2. The Urban Services Boundary was intended to mitigate long term effects of loss of agricultural land by providing some certainty regarding this issue. To implement this policy, the City entered into a 1995 Water Services agreement with the Solano Irrigation District, to ensure that water for urban services will only be provided within the Urban Services Boundary and, conversely, to allow planning for adequate agricultural water supplies and agricultural land conservation outside of that boundary. The proposed Specific Plan development area is entirely within the adopted Urban Services Boundary.

Response to Comment 5-4:

See Response to Comment 3-1 that addresses the inclusion of Mitigation Measures for the conversion of farmland.

Response to Comment 5-5:

The City would like to thank the commentor for providing more information on anthrax in California and confirming the accuracy of information on anthrax issues presented in the Draft EIR. The comment letter states that there are no reports of infections of persons from soil-borne anthrax in California and concludes that the risk of anthrax infection in humans from

development on land with previous history of anthrax spores is extremely low. This comment is noted and will be forwarded to the decision makers for their consideration.

STATE OF CALIFORNIA — BUSINESS, TRANSPORTATION AND HOUSING AGENCY

ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION

P. O. BOX 23660
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CITY OF VACAVILLE
PLANNING DIVISION



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April 19, 2004

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SCH 2003032063

Mr. Fred Buderl
Project Manager
City of Vacaville
Community Development Department
650 Merchant Street
Vacaville, CA 95688

Dear Mr. Buderl:

Lower Lagoon Valley Specific Plan – Draft Environmental Impact Report

Thank you for including the California Department of Transportation (Department) in the environmental review process for the proposed project. We have examined the Draft Environmental Impact Report (DEIR) for the Lower Lagoon Valley Specific Plan and have the following comments to offer:

Comments refer to Technical Appendix D "Traffic Impact Analysis" and also apply to corresponding sections of the DEIR.

1. Page 16, Paragraph 2: Intersection Analysis

- Please refer to the Department's "Guide for the Preparation of Traffic Impact Studies", Section V "Traffic Impact Analysis Methodologies" for general guidelines. The guide can be accessed from the following webpage: <http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/reports/tisguide.pdf>. The document appears not to use these methodologies. 6-1
- As noted in the document, the study intersections were evaluated using the methodology from Transportation Research Board's Intersection Capacity Utilization (ICU) Method from Circular 212. The Level Of Service (LOS) corresponding to volume-to-capacity ratios (V/C) were applied to both signalized and unsignalized intersections. It is our understanding that Circular 212 uses V/C ratios to define signal intersection LOSs, but reserve capacity to define unsignalized intersection LOS. However, the proposed project requires an analysis of current and future traffic to determine the effect of proposed access points. The study should use the Highway Capacity Manual (HCM) analysis procedures according to the Federal Highway Administration memo dated August 24. 6-2

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April 19, 2004
Page 2

2001. We recommend intersection analyses using HCM 2000 analysis procedures according to FHWA policy.

6-2
Cont.
6-3

- The traffic impact analysis includes various closely spaced signalized intersections. The analyses for those intersections should consider potential spill-back effects from the downstream intersection on the upstream intersection. In the document, it appears that potential spill-back effects have not been considered.

2. Page 38, Table 14 and Page, 60 Table 24

- Various scenarios in the future year 2025 show LOS F ($V/C > 1$) along freeway segments on Route 80, which indicate traffic demands exceed capacities for those segments. A bottleneck (or bottlenecks), which operates "at capacity", would develop in those segments. The bottleneck will constrain traffic entering downstream roadway sections and cause congestion on upstream roadway sections. Consequently, on and off-ramp traffic volumes would be affected by the bottleneck. In order to accurately address impacts of proposed projects, bottleneck locations within the study limits should be identified first and their impacts assessed.

6-4

- In reality, because an "at capacity" bottleneck section exists and constrains traffic entering downstream sections, the maximum traffic volume of the downstream sections would be the same as the volumes in this bottleneck section, and maximum V/C ratios would be 1. Segments upstream of that bottleneck would operate at LOS F. The results shown on the Tables do not reflect these characteristics.

6-5

3. Page 24, Figure 6 and Page 31, Figure 7

- Some of the intersections showing the existing plus approved traffic volumes are lower than the existing traffic volumes. Please explain.

6-6

4. Page 21, Model Runs and Revisions to Model Files

- Substantial peak hour trips are reassigned from various intersections to the freeway segment as noted in the document. We believe that the freeway segments would congest during peak hours in the future condition, and additional traffic would have a very difficult time entering the freeway. Reassigning trips to the freeway segments appear unreasonable and may undermine impacts to those intersections.

6-7

- We are not familiar with the Vacaville traffic model so we can't really judge if it is appropriate for this use or if it has been used correctly. We request a Solano Congestion Management Program modeling run for the impact to Interstate 80. This would presumably use the Solano County Traffic Model and would give us much more confidence in the projections of traffic impacts for this project.

6-8

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Page 3

5. Page 4.5-12, Local General Plan

- We concur with the establishment of a "...transportation mitigation fee for the purpose of funding the project's fair share of off-site area-wide improvements including fair share contributions toward improvements, as identified in the Traffic Impact Analysis (Appendix D) for this EIR, including fair share contributions toward improvements that are under the control of other jurisdictions, such as Caltrans."

6-9

Mitigation measures should consider highway and non-highway improvements and services. Special attention should be given to the development of alternate solutions to circulation problems that do not rely on increased highway construction.

6-10

All mitigation measures proposed should be fully discussed, including financing, scheduling, implementation responsibilities, and lead agency monitoring.

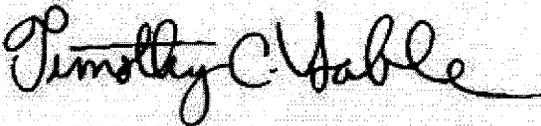
Encroachment in State Right of Way

An encroachment permit will be required for any work or traffic control within the State right-of-way (ROW). To apply for an encroachment permit, submit a completed encroachment permit application, environmental documentation, and five (5) sets of plans (in metric units) which clearly indicate State ROW to the address at the top of this letterhead, marked ATIN: Sean Nozzari, Office of Permits.

6-11

Should you require further information or have any questions regarding this letter, please call Lisa Carboni of my staff at (510) 622-5491.

Sincerely,



TIMOTHY C. SABLE
District Branch Chief
IGR/CEQA

c: Scott Morgan (State Clearinghouse)

COMMENT LETTER 6: Department of Transportation**Response to Comment 6-1:**

The comment's reference to Caltrans' "Guide to the Preparation of Traffic Studies, Section V - Traffic Impact Methodologies" is noted. In the traffic analysis for the Specific Plan EIR, however, the City used its standard methodology for analyzing intersection capacity, traffic volumes and level of service projections. As lead agency, it is within the City's discretion to determine the appropriate methodology for analysis, and Vacaville typically uses its model when analyzing projects for which it is the lead agency. Caltrans' methodologies are not required for this analysis because the Project is not within Caltrans' jurisdiction. The City acknowledges that a traffic study supporting a project within Caltrans' jurisdiction would be required to use Caltrans' methodologies. Based on its experience with its own methodology, the City believes that the methodology used in the Specific Plan EIR provides appropriate planning level analysis and results in an accurate traffic analysis.

For freeway ramp and segment facilities that are in Caltrans jurisdiction, the HCM methodologies Caltrans recommends were applied. These ramps, roadway segments and freeway segments were evaluated using a planning level volume to capacity ratio approach, and the volume to capacity LOS criteria of the 1985 HCM. Ramp merge and diverge areas were evaluated using the operations methodology of the 2000 HCM. This was done to evaluate the operational characteristics of merge and diverge locations which cannot be specifically evaluated using the planning level volume to capacity ratio approach.

For signalized intersections, capacity analysis known as Intersection Capacity Utilization (ICU) was used. This methodology is consistent with the City of Vacaville General Plan and Land Use and Development Code's policies directing traffic impacts assessment to be based on the Planning Method of Signalized Intersection Analysis. This method is similar to methods described in Transportation Research Board Transportation Research Circular 212. This application has been found to be a conservative approach to provide an analysis of projected volumes, and therefore intersection impacts, and to support a direct comparison of results over time and from existing to existing plus project conditions. At the time signals are designed or operations are evaluated, the City utilizes HCM methodology to develop signal operations. Comparisons of those results to analyses done using the ICU method that the City favors, routinely find that the HCM analysis results in less conservative conclusions than the ICU methodology does. In other words, the ICU methodology the City used in the Draft EIR generally results in a more conservative or "worst case" scenario. Accordingly, the City believes that the use of its model and regular methodologies for the Draft EIR resulted in an accurate assessment of potential project impacts and the necessity and effectiveness of mitigation measures.

Indeed, it is industry practice at this time to utilize ICU/Circular 212 analysis methodology for planning studies such as an EIR, and to utilize HCM methodologies only for actual design and operations analyses for proposed highway projects. The Solano County Congestion Management Plan allows jurisdictions to choose between the two types of methodologies. Recent Caltrans Project Study Reports on projects in Solano County have been prepared using Circular 212 methodologies, and Caltrans has accepted these as appropriate. Caltrans has reviewed and approved recent Project Study Reports for overcrossing projects in the City utilizing Planning Method of Signalized Intersection Analysis.

Utilization of Circular 212 methodologies provides a conservative methodology for signalized intersection analysis. It is based on one main assumption, namely lane capacity. HCM signalized analysis is based on timing phasing and other assumptions that can be manipulated to skew results. Lane capacities can only be changed by actual construction. The need to provide HCM analysis for planning studies is a new policy and the City will be evaluating the application of HCM methodologies as part of local policy. Such application is not required for this Project, however, as explained above.

Response to Comment 6-2:

See Response to Comment 6-1 describing the basis for using a Circular 212 (Intersection Capacity Utilization) methodology for the analysis of signalized intersections in the Draft EIR.

Response to Comment 6-3:

Existing and planned intersections in the Proposed Project area have distances between adjacent intersections of greater than 600 feet generally. The one notable exception is the intersections of Lyons road and the Westbound Interstate 80 Ramps, which are approximately 250 feet apart. Accordingly, the spillback effects about which the commentor expresses concern would not be expected to occur any but possibly that one intersection. City policy is to provide planning level analysis of intersections, and to evaluate and mitigate impacts such as spillback via operational analysis done during the design of signals and other roadway features. This policy was applied in the Draft EIR's analysis, and spillback will be addressed as part of the specific final design of any signalized intersections that may be closely spaced enough to experience spillback effects. Moreover, the intersections included in the Specific Plan as currently proposed are already designed to allow for adequate spacing and avoid spillback effects. Any remaining effects of this type will be addressed through final design and signal timing.

Response to Comment 6-4:

The comment notes that various scenarios in 2025 show LOS F ($V/C > 1$) along I-80 freeway segments leading to bottleneck conditions constraining traffic entering downstream roadway sections. The City's regular methodology, which it applied here, is to allow the traffic modeling to distribute traffic to the freeway without forcing it to cut-off distribution when V/C ratio reaches capacity ($V/C = 1$). This avoids artificial minimization of impacts that occurs from such a cut-off, and instead allows travel delay (including V/C ratios of one or greater) to influence distribution of traffic, e.g., drivers exiting the freeway or finding alternative routes during bottleneck conditions. This methodology that the City used thus provides a worst-case analysis for freeway impacts because it is not artificially constrained by the model design. Accordingly, it provides a conservative basis to determine the need for additional freeway lanes or other mitigation. This allows the traffic study to consider regional effects on traffic around the freeway from bottleneck conditions, as well as any potential mitigation that may be required for such impacts, to the extent the proposed project contributes to them. Mitigating the overall problem of poor levels of service on Bay Area freeways is well beyond the scope of any project or EIR. The City, however, is participating in an I-80 corridor study with the Solano Transportation Authority that defines bottlenecks and the facilities needed to mitigate them. The STA corridor study of Interstate 80 reviews corridor operations from the "constrained" perspective referenced by the commentor. Such a constrained analysis is a valuable operational tool to identify the appropriate phasing for future capacity improvements. The Draft EIR reviews I-80 operational characteristics from an unconstrained planning level approach. These bottlenecks require

regional and state participation to address them. The City will continue to work with STA to determine the means to fund and implement mitigation to address bottlenecks on Interstate 80. The Proposed Project will provide a substantial contribution equal to the City's current traffic mitigation fee to mitigate its transportation impacts, of which a portion would be allocated to a "fair share contribution for regional roadways such as I-80, and that contribution may be used to fund projects ultimately derived by STA and Caltrans as solutions to the regional traffic problems on I-80 and similar facilities. See Response to Comment 6-8 for more information on the Project's fair share contribution toward freeway improvements.

Response to Comment 6-5:

See Response to Comment 6-4.

Response to Comment 6-6:

The comment notes that some "Existing Plus Approved Project" volumes are less than "Existing" volumes, and states that this is counter intuitive. This phenomenon occurs where the "Approved Projects" (projects other than that considered here that are approved) change the distribution of trips within the model from the "Existing" condition by changing the location or arrangement of "trip productions" and "trip attractions." The model seeks to balance these productions and attractions because local trips generally have two trip ends. Because a significant level of Approved Projects exists at this time (Table 1 of Technical Appendix D), this causes a noticeable redistribution of trips versus the Existing condition alone, regardless of the Proposed Project. The model thus accurately reflects the short-term condition against which the Proposed Project's impacts are measured. To ensure that the model's balancing feature is not misrepresenting actual conditions, the City validates model results annually by monitoring signalized and freeway ramp intersection annually. A significant effort is placed on calibrating and validating model volumes. As approved projects are added the location and amount of and use is added to dynamically evaluate productions and attractions and trip redistribution city-wide. Any overall anomaly caused by this redistribution is addressed through the annual monitoring and existing polices for proposed Project Specific Plan policies are implemented.) Because the redistribution of trips through an intersection, e.g., trips going straight to a new project instead of turning right and thus improving the intersection's capacity, can affect the level of service of that intersection, volume to capacity ratios may go down despite additional development being proposed and the trips associated with that development being added to the roadway network. This is generally a short-term condition, as reflected by the fact that this phenomenon has not occurred in the EIR's traffic study for the Existing Plus Project and the cumulative scenarios.

Response to Comment 6-7:

The reassignment of trips from ramp intersections back to the freeway was done for a situation where trips were routed by the traffic model to routes parallel with freeway between one off ramp and the very next on ramp. The City decided to override the model and reassign the trips to reflect typical driver behavior. The City believes the redistribution back to freeway better replicates trip distribution and best represents the potential impact of the Project on the freeway segments.

Response to Comment 6-8:

As explained in Response to Comment 6-1, the Vacaville traffic model makes every effort, including on-the-ground calibration, to use regionally consistent projections of regional traffic. Nonetheless, in response to this comment, the City will work with the Solano Transportation Authority to verify that the Project is included in future regional model runs so that impacts of this project are accounted for in future regional planning. The existing approved land use for the Lower Lagoon Valley (the 1990 Policy Plan) has been in the local land use database for over a decade, and is included in regional land use database and the STA model. The EIR certified in 1991 for the 1990 Policy Plan documented an expected trip generation for this area at 9,076 PM Peak hour trips. This is compared to the current EIR that projects approximately 2,800 trips for the Proposed Project. Likewise, any prior Congestion Management model runs did include this land use in its analysis in mid range projections since, as noted above, project approvals exist for a development at a much greater level of intensity than is currently proposed. Thus, contrary to the comment's assertion existing regional modeling efforts should have estimated Lagoon Valley's contribution to regional traffic based on current approvals that would have been expected to generate twice to three times the trip generation expected from the current project.

Response to Comment 6-9:

The City appreciates that the commentor concurs with the establishment of a transportation mitigation fee for the funding of "fair-share" contributions of off-site area-wide improvements. As explained in Section 4.5, the Proposed Project is recommended to make such a fair-share contribution. Additionally, the Specific Plan, particularly policies in Section 4.4, which state in part "[t]o the extent the Specific Plan development causes significant impacts at existing intersections and segments located outside the Specific Plan, Developers would participate in funding their proportionate fair share of the costs." The City will work with Caltrans to determine the allocation of these funds for improvements under Caltrans' jurisdiction.

Response to Comment 6-10:

Specific Plan Sections 4.6 (Transit) and 4.5 (Non-Vehicular Circulation Network) provide for the establishment of bus service in and to the Specific Plan Area, and require transit improvements, the implementation of Transportation System Management programs, and the provision of a comprehensive system of bikeways and trails.

The Draft EIR identifies significant impacts and proposes mitigation measures for all potentially significant traffic impacts. These measures include funding of transportation improvements, LOS monitoring and many other roadway improvements both in the Specific Plan Area and on freeway on- and off-ramp intersections. Impacts such as freeway mainline impacts, that are clearly beyond the scope of the Project or the City's ability to independently mitigate because they require a major regional solution such as freeway widening that the Project could never fund and that cannot be predicted in scope or successful implementation, are determined to be significant and unavoidable, even though mitigation is also required because the City cannot sufficiently conclude how those impacts could be mitigated, much less that they would be. The Mitigation Monitoring and Reporting Program will address the issues of financing, implementation responsibility, schedule and monitoring responsibility about which the comment raises concern.

Response to Comment 6-11:

The requirement and process for obtaining an encroachment permit for work within Caltrans' right-of-way is noted and is described in the Draft EIR. Obtaining an encroachment permit will be a condition of any approval that would create traffic impacts requiring mitigation that implicates the Caltrans' right-of-way.



Solano County
Airport Land Use Commission
470 Chadbourne Road, Suite 200
Fairfield, California 94534-9605
www.solanocounty.com

Planning Services Division
Phone: (707) 421-6765 / Fax: (707) 421-4805

John Foster
Chairman

March 15, 2004

Subject: Lower Lagoon Valley Specific Plan
Notice of Availability of Draft EIR

COMMUNITY DEVELOPMENT DEPT.

MAR 17 2004

CITY OF VACAVILLE

Fred Buderl
City of Vacaville
650 Merchant Street
Vacaville, CA 95688

Dear Mr. Buderl:

Thank you for providing me with the above notice. My comments are as follows:

- 1. DEIR sect. 4.2.3, Regulatory Setting, indicates that the policies of the Travis Air Force Base Land Use Compatibility Plan, Compatibility Zone D, are relevant to the project. It states that "limitations on the height of structures are the only compatibility factors within this zone". However, TALUP Table 2a (pg. 2-6) indicates that land uses posing hazards to flight are prohibited. These include physical hazards (tall objects), visual and electronic forms of interference with the safety of aircraft operations, and land use developments that may cause an increased attraction to birds.

7-1

In addition, it appears that the policies pertaining to the Height Review Overlay Zone of the TALUP may also be pertinent to the project, if any project components, such as water tanks or communication facilities, may be located in the Height Review Overlay Zone, and if so, these should be so noted and discussed in the Specific Plan and the DEIR. Table 2a indicates that airspace review by the ALUC is required for objects that exceed 35 feet in height.

7-2

- 2. Mitigation measure 4.2-5 states that if any structure over 200 ft. tall is proposed in the specific plan, ALUC review would be required to ensure compliance with ALCU guidelines. This section also states that building height in the Office/Building Village is limited to 60 feet in height by the specific plan.

7-3

In accordance with my previous comment, this section should also address limitations on visual and electronic forms of interference with the safety of aircraft operations, or land uses that may attract birds. Also, the height of any potential structures or facilities in the Height Review Overlay Zone.

I would also note that ALUC review cannot be considered a mitigation measure for potentially significant impacts. The ALUC can only make recommendations; it is the responsibility of the City to mitigate potential impacts.

7-4

3. Also, since this project involves the adoption by the City of a Specific Plan, the Solano County Airport Land Use Compatibility Review Procedures require that this project be submitted to the ALUC for a compatibility determination.

7-5

Sincerely yours,



Ronald E. Glas
Principal Planner

COMMENT LETTER 7: Solano County Airport Land Use Commission**Response to Comment 7-1:**

This comment indicates that there were additional ALUC policies that are relevant to the Proposed Project that were not included in the Draft EIR referring to the hazards to flight included in Table 2A of the Travis Air Force Base Land Use Compatibility Plan. Two policies pertain to this issue, Policy 2.5.3 and 2.5.6. Policy 2.5.6 *Other Flight Hazards* is not discussed below because it only pertains to land uses within 12,500 feet of the Travis Air Force runway. The Proposed Project is located approximately four miles (21,120 feet) from Travis Air Force Base, outside of the effect area of Policy 2.5.6.

With respect to Policy 2.5.3, the last paragraph on page 4.2-6 is revised to read as follows:

The following ~~policy~~ policies from the Travis Air Force Base Land Use Compatibility Plan is are relevant to the Proposed Project:

Section 2.1: Compatibility Zone Delineation

2.1.5: Compatibility Zone D – Zone D includes all other locations beneath any of the Travis Air Force Base airspace protection surfaces delineated in accordance with Federal Aviation Regulations Part 77. Limitations on the height of structures are the only compatibility factors within this zone.

2.5.3 Height Restriction Criteria – The basic criteria to be used in assessing whether objects may represent airspace obstructions are established by Part 77 of the Federal Aviation Regulations (FAR), *Objects Affecting Navigable Airspace*. In general, the height of objects in the vicinity of Travis Air Force Base shall be limited so as not to exceed the imaginary airspace surfaces defined for the airport in accordance with Part 77 criteria.

- (a) A simplified diagram of the FAR Part 77 surfaces for Travis Air Force Base is depicted in Figure 2C
- (b) In certain circumstances, objects may need to be restricted to heights less than the limits indicated by Figure 2C.
 - 1) In locations along portions of instrument approach procedure routes, restrictions of object heights to less than indicated by FAR Part 77 may be necessary so as not to impair the utilization of these procedures. The applicable criteria are set forth in the *United States Standard for Terminal Instrument Procedures* (TERPS). Review of objects relative to these criteria normally are conducted by the FAA as part of aeronautical studies. Independent ALUC review is not necessary; rather, the ALUC's function is to ensure compliance with the FAA recommendations.
 - 2) In other parts of the airport vicinity – especially where common visual flight routes cross areas of moderately high terrain – tall objects could pose airspace hazards even if they do not exceed FAR Part 77 limits. Based upon airport land use commissioners' knowledge of such locations, the ALUC may find lower height limits to be appropriate or may require objects to be obstruction marked and lighted. Input of Travis Air Force Base personnel should be sought with regard to any such cases that may be brought to the Commission's attention.
- (c) Objects may be permitted to exceed FAR Part 77 criteria under the following conditions.

- 1) On property over which the Air Force controls an easement, exceptions to the height limits shall be made only if Air Force grants a waiver to the restrictions.
- 2) In locations where the ground level exceeds or lies within 35 feet of a Part 77 horizontal or conical surface (the Height Review Overlay Zone), objects up to 35 feet in height are permitted. Taller objects may also be acceptable if they would be situated within 100 feet of other objects or high terrain having equal or higher elevation.
- 3) The ALUC may grant exceptions to other proposed objects if the FAA has completed an aeronautical study of the proposal and concluded that the object would not be a hazard to air navigation. Other factors, including the commissioners' knowledge of local airspace and the views of Travis Air Force Base personnel, shall also be taken into account in the Commission's decision to grant such exceptions.

2.5.4 Obstruction Marking and Lighting – In general, the need for marking and lighting of obstructions is determined by the Federal Aviation Administration as part of aeronautical studies conducted in accordance with FAR Part 77. Under most circumstances, when reviewing proposed structures that exceed the height criteria indicated in Policy 2.5.3, the Airport Land Use Commission is expected to abide by the FAA's conclusions regarding marking and lighting requirements. However, situations may arise in which the Commission, because of its particular knowledge of local airports and airspace, may reach a different determination than that of the FAA. In such instances, the Commission may determine either that a proposed structure is unacceptable or that it is acceptable only if marked and lighted. Any marking and lighting that the Commission may require shall be consistent with FAA standards as to color and other features.

Impact 4.2-5 on page 4.2-13 is revised to read as follows:

4.2-5 Development of the Proposed Project could conflict with adopted applicable land use plans, policies, or regulations.

Travis Air Force Base (TAFB) Land Use Compatibility Plan

The Specific Plan falls within the boundaries of Zone D of the TAFB Land Use Compatibility Plan. The goals and policies under the Transportation Element of the City's General Plan and the TAFB Land Use Compatibility Plan focus on minimizing conflicts between TAFB and new development. Review by the Airport Land Use Commission (ALUC) of any project within the compatibility zones greater than 200 feet tall within Zone D is required by the TAFB Land Use Compatibility Plan to ensure compatibility; therefore, if any structure in the Specific Plan area is proposed to be over 200 feet tall review by the ALUC, or an expedited staff-level review, would be required for the Proposed Project. The Specific Plan also requires compliance with ALUC guidelines. The Specific Plan limits building height in the Office/Business Village to a maximum of 60 feet. Policy 2.5.3 Height Restriction Criteria would also restrict the height of structures. This policy contains additional criteria used in determining compatibility of proposed "airspace obstructions" with the ALUCP. Regardless of height a structure may be required to have marking and lighting to comply with FAA standards per Policy 2.5.4 Obstruction Marking and Lighting. These

determinations are made by the ALUC. In any case, given the height limits in the Specific Plan, the Project is not anticipated to conflict with any ALUP policies or requirements and the City believes that there are no incompatibility issues presented by the project. The Specific Plan does not change or revise any current regulatory process for the review of land uses within the Height Restriction Overlay Zone contained in the Travis AFB Land Use Compatibility Plan.

Response to Comment 7-2:

See Response to Comment 7-1 that addresses additional Height Review Overlay Zone policies that apply to the Proposed Project.

Response to Comment 7-3:

This comment addresses Mitigation Measure 4.2-5. There are no mitigation measures required under Impact 4.2-5. See also Response to Comment 7-1 that addresses additional Height Review Overlay Zone policies that apply to the Proposed Project.

Response to Comment 7-4:

This comment notes "ALUC review cannot be considered a mitigation measure. There are no mitigation measures in the Land Use section of the Draft EIR where ALUC policies are discussed. It is noted in Impact 4.2-5 of the Draft EIR that ALUC review is required for the Proposed Project on page 4.2-13 of the Draft EIR, see also Response to Comment 7-1 for amended text. In any case, compliance with applicable plans is substantial evidence supporting a conclusion that an impact is less than significant.

Response to Comment 7-5:

See Response to Comment 7-1 for amended text of Impact 4.2-5 found on page 4.2-13 of the Draft EIR, which notes that review of the Proposed Project by the ALUC is required to determine compatibility.

On April 16, 2004, the City of Vacaville submitted a request to the Solano County Airport Land Use Commission for a compatibility determination. Based on recent experience with other projects within the Travis ALUCP, the City expects the project to be determined consistent with the Compatibility Plan.

SUMMERS ENGINEERING, INC.

CONSULTING ENGINEERS

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April 1, 2004

APR - 5 2004

CITY OF VACAVILLE

Fred Buderl
Project Manager
City of Vacaville
Community Development Department
650 Merchant Street
Vacaville, CA 95688

Subject: Comments on Draft Environmental Impact Report – Lower Lagoon Valley Specific Plan

Dear Mr. Buderl:

As engineer for the Solano Irrigation District, Summers Engineering, Inc. (SEI) is commenting on the subject Draft EIR in regard to the proposed Solano Irrigation District non-potable water supply improvements. Following are our specific comments on the Draft EIR:

1. In September 2003, SEI provided a preliminary review of the Lower Lagoon Valley non-potable water supply capacity at the request of Nolte Associates, Inc. At that time the proposed improvements included a 210.7-acre golf course, a school at 12 acres, and a business park at 26.4 acres for a total development area of 249.1 acres. An estimated irrigation demand was provided to us based on an annual daily demand of 556,630 gallons. Using this information, we provided an estimate of the potential maximum hourly demand for the non-potable water supply system in the proposed Lagoon Valley Project. This was estimated at 1,314 gpm. On page 4.10-21, the acreage and demand information listed for the proposed project in Table 4.10-11 does not match up with the total acreage and irrigation demand provided to us at the end of the summer. The proposed development acreage and the estimated demand needs to be verified.
2. Figure 3-10, *Proposed Solano Irrigation District Improvements*, indicates the existing SID tank and proposed new non-potable water supply system improvements. Please note, the location shown for the existing SID tank is incorrect.
3. On Page 4.10-29, *Section 4.10-4, Development of the proposed project would require onsite, non-potable water distribution system improvements*, includes the statement that the "existing maximum hour non-potable flow for the proposed Lower Lagoon Valley Project is approximately 1,314 gpm". As stated in item 1 above, this was an estimate prepared based on information provided to Solano Irrigation District by Nolte Associates.

8-1

8-2

8-3

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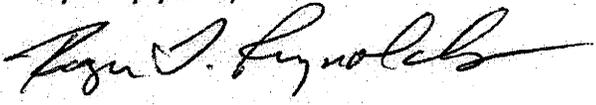
Mr. Fred Buder
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The acreage and proposed water demands to be supplied by SID, as summarized in Table 4.10-11, have apparently changed from what was previously reviewed and therefore, it is incorrect to state the estimated maximum hour non-potable flow for the Lower Lagoon Valley Project is approximately 1,314 gpm. The estimated demand flow tables need to be revised and corrected, as required, to develop the estimated maximum hour non-potable flow demand for the proposed Lower Lagoon Valley Project.

↑
8-3
Cont.

Please let us know if you have any questions.

Very truly yours,



Roger L. Reynolds

RLR/lee

Cc: Jim Daniels, Solano Irrigation District

COMMENT LETTER 8: SID (Summers Engineering)**Response to Comment 8-1:**

Table 4.10-11 shows the correct acreages as planned for the project land uses. Based on these acreage figures, the estimated maximum hour demand is 1,440 gpm.

Response to Comment 8-2:

The correct tank location is identified on Figure 4.10-9 of the Draft EIR.

Response to Comment 8-3:

The peak demand calculations for the Proposed Project will depend upon final designs for features of the project, including the golf course design, the irrigation system for the golf course, the exact extent of firebreak irrigation, and the final extent of street setback landscaping. Based upon the anticipated acreages for these features as identified for the Draft EIR, the peak demand was estimated at 1,440 gpm. However, this impact is categorized as a significant impact in the Draft EIR because it was recognized that final designs and irrigation demands may exceed the capacity of existing Solano Irrigation District facilities, and thus mitigation measures were required to establish the standards for review and compliance with the District's standards for the final project design. The potential for upgrading the Tooby pump station, for example, was recognized in the Draft EIR as potentially necessary for the final irrigation system design, if the existing service to the Hines Nursery proved to be unable to supply adequate peak demand flows.

Based upon this requirement, the applicant has continued to research the specific design requirements for the non-potable irrigation system. The annual water demand for the combined irrigation needs for the project landscape/firebreak/golf course areas may be as much as 829,004 gallons per day, based upon additional analysis of the project land uses. In this event, the applicant estimates that peak demand could be approximately 1,957 gpm, which would exceed the existing Hines system. The project may include specific irrigation system designs for the golf course that reduce this peak demand factor, by using golf course ponds as sources for peak irrigation water needs. However, the final system would require the approval of the City and the Solano Irrigation District, to ensure adequate non-potable water delivery systems. As noted in Mitigation Measure 4.10-4, additional improvements to the existing non-potable water distribution system may be required by the Solano Irrigation District, after the proposed system improvements are designed based on a final land use plan. These additional improvements could include, if required by the District and City, upgrades to the Tooby pump station to enable additional water distribution during times of peak irrigation demand. With the implementation of Mitigation Measure 4.10-4, this impact is reduced to a less-than-significant level.

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Fred Buderl
 City Planner
 City of Vacaville
 650 Merchant Street
 Vacaville, California 95688-6908

April 8, 2004

Subject: Lower Lagoon Valley Environmental Impact Report (EIR) Comments

Dear Mr. Buderl,

The Yolo-Solano Air Quality Management District appreciates receipt of the above reference document for review and comment. The EIR includes a comprehensive evaluation of project's impacts to air quality as requested by the District's Notice of Preparation comment letter.

However, the EIR includes some mitigation measures where the District recommends changes. Below includes the recommended Best Available Control Measures to reduce fugitive dust emissions from construction activities. Strict enforcement of these measures would effectively reduce fugitive dust emission to a less than significant level. We recommend replacing the text in mitigation measure 4.6-1 (a) with the following tables.

9-1

Table 1 Best Available Fugitive Dust Control Measures	
Fugitive Dust Source Category	Control Actions
Earth-moving	1. Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216; two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations. For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.
Disturbed surface areas (except completed grading areas)	2a/b. Apply dust suppression in a sufficient quantity and frequency to maintain a stabilized surface; any areas which cannot be stabilized, as evidenced by wind driven dust, must have an application of water at least twice per day to at least 80 percent of the unstabilized area.
Disturbed surface areas –completed grading areas	2c. Apply chemical stabilizers within 5 working days or grading completion; OR 2d. Take action 3a or 3c specified for inactive disturbed surface areas.
Inactive disturbed surface areas	3a. Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible due to excessive slope or other safety conditions; OR 3b. Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR 3c. Establish a vegetative ground cover within 21 days after active operations have ceased; ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR 3d. Utilize any combination of control actions 3a, 3b and 3c such that, in

Table 1 Best Available Fugitive Dust Control Measures	
	total, they apply to all inactive disturbed surface areas.
Unpaved roads	4a. Water all roads used for any vehicular traffic at least once per every two hours of active operations; OR 4b. Water all roads used for any vehicular traffic once daily and restrict vehicle speed to 15 mph; OR 4c. Apply chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.
Open storage piles	5a. Apply chemical stabilizers; OR 5b. Apply water to at least 80 percent of the surface areas of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR 5c. Install a three-sided enclosure with walls with no more than 50 percent porosity that extend, at a minimum, to the top of the pile.
Track-out control	6a. Pave or apply chemical stabilization at sufficient concentration and frequency to maintain a stabilized surface starting from the point of intersection with the public paved surface, and extending for a centerline distance of at least 100 feet and width of at least 20 feet; OR 6b. Pave from the point of intersection with the public paved road surface, and extending for a centerline distance of at least 25 feet and a width of at least 20 feet, and install a track-out control device immediately adjacent to the paved surface such that exiting vehicles do not travel on any unpaved road surface after passing through the track-out control device.
All categories	7. Any other control measures approved by the District where necessary.
Table 2 Best Available Fugitive Dust Control Measures for High Wind Conditions*	
Fugitive Dust Source Category	Control Measures
Earth moving	1A. Apply water to soil not more than 15 minutes prior to moving such soil.
Disturbed surface areas	0B. On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR 1B. Apply chemical stabilizers prior to a wind event; OR 2B. Apply water to all unstabilized disturbed areas 3 times per day; if there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per days; OR 3B. Take the actions specified in Table 1, Item 3c; OR 4B. Utilize any combination of control actions specified in Table 2, Items 1B, 2B and 3B, such that, in total, they apply to all disturbed surfaced areas.
Unpaved roads	1C. Apply chemical stabilizers prior to a wind event; OR 2C. Apply water twice per hour during active operation.
Open storage piles	1D. Apply water twice per hour; OR 2D. Install temporary coverings.
Paved road track-out	1E. Cover all haul vehicles; OR 2E. Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for operation on both public and private roads.
All categories	1F. Any other control measures approved by the District.
* High wind conditions means when gusts exceed 25 mph. Source: SCAQMD Rule 403, Tables 1, 2, & 3.	