

Chapter 4. EIR Assumptions and Methods

GENERAL ASSUMPTIONS

Equal Level of Analysis

This EIR discusses the four alternative land use scenarios at more or less equal levels of analytical detail. This is done to provide decision makers with the ability to weigh the relative environmental impacts of the alternatives and to select one of those alternatives for adoption. In keeping with Section 15146 of the State CEQA Guidelines, the level of specificity given these alternatives in the general plan EIR is not as detailed as it would be in an EIR prepared for one of the specific projects that might follow under a given alternative.

Nine major projects are examined in various combinations under the four alternatives. These projects are also analyzed at a more or less equal level of detail. This degree of analysis is sufficient to provide decision makers and the public with information that intelligently takes account of environmental consequences. As required under Section 15143 of the State CEQA Guidelines, the analysis focuses on the significant effects on the environment that may result from the major projects and how those effects relate to the overall impact expected to result from that alternative.

At the same time, there is additional detail available in the form of previous environmental documents for a number of the major projects discussed in the alternative scenarios, including the Nishi/Gateway, Covell Center property, and Sutter-Davis Hospital sites. For more information about those individual projects, the reader is directed to the "Summary of Project-Level EIRs" section below.

Baseline Year

As stated in the State CEQA Guidelines (Section 15125a), an EIR must describe the existing conditions in the vicinity of the proposed project. For each of the environmental resources assessed in this EIR, the description of existing conditions is included under the "Setting" heading in each chapter.

In describing existing conditions, it is necessary to establish a date at which these conditions exist. As stated in the State CEQA Guidelines (Section 15125a), existing conditions are normally assessed "at the time the notice of preparation is published". This section further states, "This

environmental setting will *normally* constitute the baseline physical conditions by which the lead agency determines whether an impact is significant. [emphasis added]”

Although the NOP for the General Plan was published in June 1999, the City has established that baseline physical conditions for this EIR were assessed as the conditions that existed in the planning area on January 1, 1998. The intent of CEQA is to establish a timeframe at which all existing conditions can be equally assessed. Due to the complex and comprehensive nature of the information that was collected to support the preparation of the General Plan update, this EIR, and the NOP for this project, it was necessary to establish an earlier timeframe for the baseline conditions.

Baseline Conditions and Alternative 1

In developing the General Plan update, the City prepared a document titled “Land Use Alternatives for the Davis General Plan Update EIR”. In this document, the City described existing conditions within the planning area and labeled this discussion as “Alternative 1”. Unlike Alternatives 2 through 4, Alternative 1 is not a “project alternative” as defined in CEQA. This means that it is not an alternative being proposed for consideration by the City Council because the City does not have the legal ability (due to existing vested rights) to limit development in the planning area to existing conditions. Alternative 1 was included in the early General Plan development as a way to track the existing conditions within the City. Therefore, impacts are not assessed for this alternative in this EIR. The analysis presented in this EIR assumes that Alternative 1 represents existing conditions.

Link Between Davis Technology Campus and Intervening Lands Sites

The Davis Technology Campus site and Intervening Lands site (shown in Figure 3-10), are under different ownership and control, and a coordinated land use and development phasing plan for the two areas has not been prepared by the Davis Technology Campus project proponent (and there is no project proponent in the Intervening Lands area). Although the City has a choice in selecting sites to be included in the General Plan, these two sites are seen as linked projects. The reason for showing these sites together is that the annexation and development of the more easterly Davis Technology Campus site alone, without coordination with the Intervening Lands site, would not promote logical and orderly development in accordance with state planning laws and county policies as described below.

State Government Code Sections 56000 et al. contain laws related to the purpose and guidelines for Local Agency Formation Commissions, which are mandated to discourage urban sprawl and encourage the orderly formation and development of local government agencies and jurisdiction boundary changes. Section 56001 states that “it is the policy of the state to encourage

orderly growth and development” and that “the logical formation and determination of city boundaries is an important factor in promoting the orderly development of urban areas.”

The Yolo County Local Agency Formation Commission (LAFCO) has adopted Standards for Evaluation of Proposals that include the policies that the location of boundary lines should promote the preservation of agricultural land and avoid operational problems. (Note: This standard is reinforced by the County’s adopted agricultural land preservation policies.) Standard 7E states, “Boundaries which create islands, strips, or corridors are disfavored.” Standard 4 states, “In evaluating a proposal, the Commission shall consider not only the present service needs of the area under consideration, but shall also consider future services which may be required to take care of future growth or expansion.”

Urban Reserve and Agricultural Designations

The designations of Urban Reserve and Agricultural are used in a number of places on the General Plan map alternatives. Urban Reserve is used in the General Plan to “identify land for potential urban development after full development of the lands designated for urban uses on the General Plan Map or after the next revision of the Davis General Plan.” Under Urban Reserve, the only allowable use is agricultural. Under the Agricultural designation, the intent is to “protect valuable natural resources such as prime agricultural land and wildlife habitat. . . .” Under this designation, the allowable uses are all agriculturally related.

In the assessment of General Plan map alternatives, lands designated as Urban Reserve or Agricultural are both assumed to be used for agricultural purposes. For lands designated Urban Reserve, this assumes that lands designated for urban uses will not be fully developed within the time horizon of this General Plan (year 2010).

Buildout to Year 2010

The General Plan EIR assumes that all of the areas designated for urban development will not be fully utilized by the year 2010 (the planning horizon for the proposed General Plan). Chapter 3, “Project Description”, provides a summary of the buildout levels assumed under each of the General Plan map alternatives.

Inclusion of EIR Mitigation Measures in General Plan Update

In Chapters 5A through 5J and Chapter 6, a number of mitigation measures are proposed to avoid or reduce the adversity of significant environmental effects of the General Plan update and junior high school site acquisition. It is assumed in this EIR that all mitigation measures included

in the certified final EIR will be incorporated as policies, standards, or actions in the final General Plan update adopted by the City.

CEQA Compliance for General Plan Update and Acquisition of a New Junior High School Site

As stated in Chapter 1, “Introduction”, this EIR is a joint environmental document that is designed to assess the environmental impacts associated with two related projects. The first project is the City’s General Plan update. As described in Chapter 1, this EIR has been designed to function as a program-level EIR for this project. For environmental review of the General Plan update, the City will be the CEQA lead agency. The second project covered by this EIR is the acquisition of a new junior high school site by the DJUSD. As described in Chapter 1, this EIR has been designed to function as a project-level EIR for this project. For environmental review of the site selection and acquisition project, the DJUSD will be the CEQA lead agency.

The school district’s proposed project includes acquisition of a site referred to as the “Signature Site” in the General Plan update. This preferred project location has been included in this EIR as part of Alternatives 4 and 5. This assessment, as well as the detailed school site alternatives assessment contained in Chapter 6, “School Site Alternatives” of this EIR, comprises a project-level EIR for purposes of site acquisition by the DJUSD.

SUMMARY OF PROJECT-LEVEL EIRS

Three of the proposed sites being studied as part of the General Plan map alternatives have had previous EIRs prepared for them. The information in these EIRs was reviewed as part of the preparation of the General Plan EIR. The analysis contained in these EIRS was in some cases not directly applied to the impacts being evaluated. This is due to the difference in focus between the programmatic nature of the General Plan and the project specific nature of these project EIRs (see the “Equal Level of Analysis” section, above).

In order to provide the reader with a better understanding of the project-level impacts related to these sites, a summary of impacts has been prepared. The information that follows was summarized directly from the text of the three project-level EIRs that follow.

Covell Center Project

The Covell Center project, which did not proceed to hearings, proposed development on 386 acres at the northwest corner of Covell Boulevard and Pole Line Road, north of the City limits. The project site was zoned Agricultural General (A-1) and Limited Industrial (M-L). The application

included requests for a general plan amendment, rezoning and preliminary planned developed (PD), and annexation to the City of Davis to develop the site as a mixed-use development project. The project consisted of the following elements:

- 688 residential units on 174.8 acres (583 single-family units, 105 multifamily units);
- 85.5 acres of active recreational uses, including a 76.9-acre sports complex and two parks covering 8.6 acres;
- 79.7 acres of open space, including habitat, drainage areas, greenbelts, buffer areas, and landscaping along major streets; and
- 46 acres of commercial/office/industrial uses, including 27 acres of business park/office uses, 12 acres of service commercial/light industrial uses, 4.5 acres of recreation commercial uses, and 2.5 acres for a fire station.

The environmental documents relating to the Covell Center project that were used as source information for the Davis General Plan EIR were the draft EIR, supplemental information recirculated after publication of the draft EIR (including new information about the sports complex; schools; traffic and circulation; noise; air quality; hydrology, drainage, and water quality; vegetation, wildlife, and wetlands; and alternatives), and the final EIR. The EIR for this project was never certified.

Significant Impacts

The following impacts of the Covell Center project were considered significant before mitigation and can be reduced to a less-than-significant level with mitigation.

Land Use, Agriculture, and General Plan Consistency

- Conflict between adjacent agricultural and proposed residential land uses
- Conflict between residential and recreational uses
- Changes in offsite views
- Potential inconsistency with the City of Davis General Plan Map and Open Space Element Map designating a neighborhood greenbelt across the project site
- Consistency with the Open Space Element of the City of Davis General Plan regarding the Davis Greenbelt

Public Services

- Need for two full-time additional law enforcement officers, a patrol vehicle, and part-time support personnel
- Increased demand for police access and surveillance
- Need for fire service infrastructure, including an onsite water system, fire hydrants, and signal control devices
- Increase in fire prevention workload, resulting in the need for more fire inspections
- Increased demand for fire protection
- Demand for 819,650 gallons per day of water, which could peak to 1,639,300 gallons per day during summer
- Need for water mains and wells to provide adequate water and fireflow in the event of a fire
- Need for onsite system of sewer mains throughout the project site

Traffic and Circulation

- Addition of traffic volume to the intersection of Mace Boulevard and I-80 westbound ramps, which is operating at LOS F
- Degradation of level of service at the intersection of Pole Line Road and Covell Boulevard
- Inadequate capacity on Covell Center Boulevard between Covell Boulevard and Picasso Avenue
- Safety concerns resulting from detours
- Potential conflicts as a result of the proposed relocated Fire Station 1 on Covell Boulevard
- Lack of emergency access to the 47-acre parcel north of the existing Hunt-Wesson Cannery
- Degradation of Saturday level of service at the intersection of Covell Boulevard and Pole Line Road under existing plus project: tournament conditions at sports complex

- Potential for the parking demand to exceed the parking supply for the sports complex

Noise

- Exposure of onsite and offsite residences to construction noise
- Exposure of the onsite fire station to Hunt-Wesson Cannery noise
- Exposure of onsite residences to City of Davis Police Department Pistol Range noise
- Exposure of onsite residences to noise from traffic on Pole Line Road
- Exposure of onsite residences to noise from the Blue Max Kart Club
- Exposure of new onsite residences to noise from the sports complex with the potential to generate complaints
- Exposure of onsite residences to excessive noise levels from truck traffic on Covell Boulevard

Air Quality

- Long-term increase in carbon monoxide concentrations because of the operation of motor vehicles under existing plus project conditions

Geology and Soils

- Increased soil erosion during construction

Hydrology, Drainage, and Water Quality

- Short-term water quality degradation during construction
- Long-term water quality degradation attributable to urban runoff
- Use of underlying groundwater for municipal or other supply creating a potential public health hazard or negatively influencing conditions of the water table aquifer
- Potential interference with hazardous materials cleanup programs

- Relocation of Channel A with potential for intercepting existing water table aquifer contamination

Vegetation, Wildlife, and Wetland Resources

- Loss of 386 acres of special-status plant and wildlife species habitat
- Loss of one or two mature valley oak trees in the southeastern portion of the project site
- Loss of 3.2 acres of seasonal wetlands
- Loss or disturbance of 2 acres of woody riparian habitat
- Creation of potential mosquito habitat in the stormwater basin and wildlife habitat area
- Potential impacts on wildlife using the wildlife habitat basin
- Cumulative vegetation, wildlife, and wetland resource impacts

Cultural Resources

- Possible impacts on unknown cultural resources during construction
- Possible impacts to unknown cultural resources associated with monument

Significant and Unavoidable Impacts

The analysis for the Covell Center project concluded that the following impacts were significant and unavoidable.

Land Use, Agriculture, and General Plan Consistency

- Conversion of 386 acres of agricultural and undeveloped land to urban uses
- Exposure of residents, business owners, and fire personnel to odors from the Hunt-Wesson Cannery
- Cumulative conversion of agricultural and undeveloped land to urban uses

Population, Employment, and Housing

- Cumulative increase in population, employment, and housing

Public Services

- Generation of 484 students (300 elementary, 104 junior high, and 80 senior high school) and need for additional schools

Traffic and Circulation

- Addition of traffic volume to Pole Line Road between Fifth Street and East Eighth Street, which is operating at LOS F
- Degradation of level of service on F Street between East Eighth Street and Covell Boulevard
- Increased bicycle impacts
- Increased conflicts between motor vehicles and pedestrians
- Increased impacts on Davis schools
- Increased delay at the Hunt-Wesson truck access
- Degradation of Saturday level of service on Covell Boulevard between Anderson Road and F Street and on Pole Line Road between Loyola Drive and Covell Boulevard under future year conditions
- Cumulative traffic circulation impacts
- Cumulative bicycle/pedestrian and student safety impacts

Noise

- Exposure of onsite residential land uses to Hunt-Wesson Cannery noise with the potential to generate complaints
- Exposure of offsite residences to cumulative traffic noise
- Cumulative increases in traffic noise exposure

Air Quality

- Short-term increase in PM10 emissions because of construction equipment operation
- Short-term increase in ROG and NOx emissions because of construction equipment operation
- Long-term increase in ROG, NOx, and PM10 emissions because of the operation of motor vehicles and residential pollutant sources under existing plus project conditions
- Long-term increase in ROG, NOx, and PM10 emissions because of the operation of motor vehicles and residential pollutant sources under existing plus design option conditions
- Long-term increase in ROG, NOx, and PM10 emissions because of the operation of motor vehicles and residential pollutant sources under the future with project conditions
- Long-term increase in ROG, NOx, and PM10 emissions because of the operation of motor vehicles and residential pollutant sources under the future plus design option conditions
- Cumulative air quality impacts

Geology and Soils

- Conversion of approximately 386 acres of prime and unique farmlands to urban uses

Areas of Controversy

The following areas of controversy relating to the Covell Center project were identified during the public review and comment period for the proposed project (as reflected in the final EIR):

- the consistency of the project with the general plan,
- the need for the sports complex,
- potential impacts on adjacent agricultural uses,
- exposure of new residents to noise and odor impacts from the Hunt-Wesson Cannery,
- the effect of proposed additional neighborhood commercial uses on the existing market in Davis, and

- the cumulative effect of the Covell Center project and the adjacent Wildhorse project, particularly traffic impacts associated with both projects.

Sutter-Davis Hospital/Head Properties

Sutter-Davis Hospital and Head Properties proposed to develop two adjacent projects on 65 acres in the northwest corner of State Highway 113 and West Covell Boulevard. The projects were approved by the Davis City Council in 1993. Although the projects were distinct, they were analyzed together in an EIR. The key elements of each project are described below:

- **Sutter-Davis Hospital:** The existing hospital was relocated from County Road 99D north of West Covell Boulevard to a 57-acre site due east. The project required a General Plan amendment to change the site's designation to Public/Semi-public, rezoning to Planned Development, and annexation to the City. The hospital project consisted of 221,500 gross square feet of hospital building space (approximately 100 acute-care beds and approximately 90 skilled nursing beds), two medical office buildings totaling 66,000 gross square feet, and 705 parking spaces, all of which occupy approximately 20 acres. Seven acres of the site were dedicated as part of the Davis Greenbelt for use as buffer, agriculture, and drainage land; the remaining 30 acres remained in agricultural use with a General Plan designation of Urban Reserve.
- **Head Properties:** The 7.8-acre Head Properties site, located adjacent to the Sutter-Davis Hospital site, required a General Plan amendment to Highway/Service commercial, and rezoning to Community-Highway. No specific uses were proposed for the site; the EIR evaluated a maximum buildout scenario of 135,900 gross square feet of building space for highway commercial uses and 455 parking spaces.

Key issues analyzed in the EIR were air quality, drainage and flooding, plant and animal life, noise, land use, housing, transportation and circulation, public services and utilities, aesthetics, cultural resources, natural resources, human health, and risk of upset. The City's initial study determined that energy, recreation, and population need not be evaluated in the EIR. The Davis General Plan EIR was prepared using information from the draft EIR.

Significant Impacts

The following impacts of the Sutter-Davis Hospital/Head Properties project were considered significant before mitigation and can be reduced to a less-than-significant level with mitigation.

Land Use

- Potential incompatibility between patient health and agricultural activities: possible unacceptable risk to hospital patient and staff health from application of pesticides or herbicides on adjacent agricultural properties
- Potential incompatibility between patient health and agricultural activities: possible real and perceived risk to hospital patient health from dust generated by machinery operations and agricultural burning on adjacent agricultural properties

Transportation and Circulation

- Cumulative traffic impacts on the West Covell Boulevard intersections with southbound State Highway 113 ramps, northbound State Highway 113 ramps, Sycamore Lane, and County Road 99D and the County Road 99D/County Road 29 intersection during a.m. or p.m. peak hours under scenarios 1, 2, and 7
- Lack of currently developed access for pedestrians and bicyclists

Air Quality

- Generation of fugitive dust, including PM10, hydrocarbons, and exhaust, in a nonattainment area for ozone
- Potential incompatibility between patient health and agricultural activities

Biological Resources

- Direct conversion of 27.8 acres of potential foraging habitat for the state-listed Swainson's hawk to developed uses, and contribution to a cumulative loss of potential Swainson's hawk foraging habitat in Yolo County
- Possible loss of a Swainson's hawk breeding territory and disturbance of nesting Swainson's hawks
- Possible displacement of a small resident burrowing owl population
- Relocation of onsite and offsite portions of the Covell Drain, which provides potential habitat for the state-listed giant garter snake

- Possible impacts on features subject to Section 404 of the federal Clean Water Act and/or Sections 1601-1603 of the Fish and Game Code

Hydrology/Flooding/Water Quality

- Possible water quality degradation in Willow Slough, Yolo Bypass, and/or other downstream receiving bodies from soil disturbance, grading, and related construction activities
- Possible water quality degradation in the Covell Drain, Willow Slough, and/or other downstream receiving bodies from runoff from developed surfaces
- Placement of hospital access streets, intersections, driveways, parking, and heliport within the 100-year floodplain
- Increased surface runoff peak flows and runoff volumes, which would contribute to onsite or offsite flooding if not controlled, leading to worsening of existing onsite and downstream flooding or creation of new localized areas of flooding on or adjacent to the site
- Decreased onsite flood storage capacity and interruption and redirection of overland flows, potentially increasing the area, depth, and/or time of inundation on adjoining lands
- Decreased floodwater storage; interruption and redirection of overland flows; and potential increase in the area, depth, and/or time of inundation on existing floodplains and adjacent land resulting from encroachment on the 100-year floodplain

Aesthetics

- Potential highway/commercial development would increase daytime glare reflected from parking areas adjacent to hospital.
- Increase in nighttime lighting from parking areas at the Head Properties site that could be disruptive to inpatients of hospital rooms facing the commercial development.
- Substantial increase in daytime glare reflected from parking areas at the Head Properties site that could be disruptive to patients and staff at the hospital in rooms facing the commercial development.

Public Health and Safety

- Crop spraying near site could expose workers and patients to pesticides and herbicides.

Cultural and Historic Resources

- Loss or degradation of unknown potentially significant buried cultural resource sites

Growth-Inducing Impacts

- Removal of several infrastructure barriers to growth within the primary study area through the extension onto the sites of infrastructure for domestic water service, wastewater collection, electricity and natural gas, and improved roadways

Significant and Unavoidable Impacts

The analysis for the Sutter-Davis Hospital/Head Properties project concluded that the following impacts were significant and unavoidable.

Land Use

- Conversion of the project sites to urban uses, resulting in the loss of about 28 acres of existing de facto open space
- Irreversible removal of approximately 20 acres of Prime Farmland from agricultural production
- Conversion of adjacent agricultural lands to nonagricultural uses

Transportation and Circulation

- Increased traffic on County Road 99D and West Covell Boulevard, with both existing traffic and cumulative traffic growth

Air Quality

- Increased ambient air pollutant concentrations, primarily from motor vehicle traffic, in a nonattainment area for ozone
- Increased emissions of ozone precursors (hydrocarbons and NOx) in a nonattainment area for ozone

Aesthetics

- Obstruction of existing views from State Highway 113 along about 0.6 mile where the highway is above grade

Public Health and Safety

- Contribution to increased hazardous waste generation when demand for hazardous waste disposal already exceeds supply
- Contribution to increased generation of low-level radioactive waste in California when serious disposal problems already exist

Growth-Inducing Impacts

- Substantial concentration of net new employee population in the area relative to the current population in the immediate site vicinity

Gateway/Olive Drive Specific Plan

The Gateway/Olive Drive Specific Plan was a major planning and design effort focusing on 165 acres at the “gateway” to Davis at I-80 and Richards Boulevard. The specific plan, proposed by the City of Davis and Arboretum Partners (owners of the 44-acre Nishi/Gateway site) had three primary purposes:

- to establish a comprehensive set of policies, guidelines, and implementation strategies for promoting, guiding, and regulating growth in the Gateway/Olive drive area;
- to help designers and builders to develop projects that would be consistent with the community’s desire and needs; and
- to guide City staff members and decision makers in reviewing project proposals.

The plan was adopted by the Davis City Council in 1996.

The area encompassed by the Gateway/Olive Drive Specific Plan includes several major undeveloped properties (the largest of which is the Nishi/Gateway site), an established residential community (the Olive Drive neighborhood), established businesses, and the functional and visual gateway to the city core. The specific plan area contains the city’s multimodal transportation center (the old Southern Pacific Railroad depot), the Aggie Village residential/commercial site (owned by UC Davis), a light industrial area on West Olive Drive between Putah Creek and Richards Boulevard, and the Olive Drive neighborhood (an older, established neighborhood of small homes and cottages with pockets of commercial, retail, and light industrial development). When the specific plan was proposed, Olive Drive was identified as a subarea in the City’s redevelopment plan, the Nishi/Gateway site was in agricultural use, and the university’s property was undeveloped except for a lab and parking lot. One goal of the specific plan process was to achieve consistency

between the Gateway/Olive Drive Specific Plan, the Draft Core Area Specific Plan, and the Davis General Plan.

An initial study prepared on the specific plan identified water and hydrology, light and glare, natural resources, public health risk, and energy as issues that would have less-than-significant impacts on the environment and required no further analysis. Issues that were less than significant after mitigation were earth, soils, and geology; plant life; and cultural resources. These issues were not analyzed in detail in the EIR prepared on the specific plan, although information was included in an appendix to that document.

The draft EIR on the Gateway/Olive Drive Specific Plan analyzed the environmental effects of the plan with regard to land use and planning compatibility, public services, utilities, visual/scenic resources, traffic/circulation, air quality, noise, biological resources, historic resources, and magnetic and electric fields. The draft EIR was used as a source for preparing the Davis General Plan EIR.

Significant Impacts

The following impacts of the Gateway/Olive Drive Specific Plan were considered significant before mitigation and can be reduced to a less-than-significant level with mitigation.

Public Services

- Increase in demand on fire protection services

Visual/Scenic Resources

- Alteration of the existing character of the project area through individual structures and possible incompatibility with surrounding visual features

Traffic/Circulation

- Worsened levels of service during the a.m. and p.m. peak hours at various intersections
- Continued exceedance of traffic capacity on Richards Boulevard daily and during peak hours
- Worsened levels of service in 2010 with the buildout of the general plan during the a.m. and p.m. peak hours at various intersections
- Consistency with General Plan Transportation and Circulation Element, which adopted a transportation system management (TSM) that requires a 10% reduction in traffic through the implementation of TSM programs

Air Quality

- Generation of hydrocarbons and PM10 during construction activities, creating the potential for nuisance
- Contribution to local carbon monoxide concentrations from traffic generated by the proposed project

Noise

- Construction noise impacts on adjacent noise-sensitive receptors such as residences and offices

Biological Resources

- Alteration of existing patterns of wildlife use and contribution to a cumulative reduction in agricultural and ruderal grassland habitat in the project area, including suitable foraging habitat for Swainson's hawk
- Possible removal of elderberry shrubs where avoidance is infeasible, affecting suitable habitat for valley elderberry longhorn beetle
- Possible destruction of an active raptor nest, which could only be determined through subsequent field confirmation surveys

Magnetic and Electric Fields

- Exposure of occupants of newly constructed buildings to magnetic and electric fields produced by existing power lines

Earth

- Potential for construction of individual projects to include activities (e.g., site grading, excavation, and use of compacted fill) that would disrupt, displace, compact, or overcover the soil and topography
- Possible increase in wind or water erosion from disruption of soil during site preparation
- Possible exposure of people or property to potential seismic and liquefaction hazards

Plant Life

- Possible effects on one or more trees of significant size

- Slight potential for occurrence of populations of one or more special-status plant species along the Putah Creek corridor where disturbance has been fairly limited
- Possible disturbance of existing riparian corridors and removal of native vegetation resulting from modifications to Putah Creek, including new bridges and flood control improvements

Cultural Resources

- Possible alteration or destruction of a prehistoric archaeological site

Significant and Unavoidable Impacts

The analysis for the Gateway/Olive Drive Specific Plan concluded that the following impacts were significant and unavoidable.

Land Use

- Permanent loss of prime farmland on the Nishi/Gateway site

Air Quality

- Increased regional emissions from new traffic generated by the project, which would cause deterioration in regional air quality

Noise

- Exposure of new proposed land uses within the project area to excessive train and traffic noise (outdoor noise only)