

Chapter 5. Environmental Analysis

INTRODUCTION

Chapters 5A through 5J provide a detailed discussion of the existing conditions (setting) in the planning area and the impacts resulting from implementation of the General Plan update. The setting information was used to form the foundation on which impacts associated with each of the four General Plan update alternatives are evaluated. The impact discussion provides an assessment of impacts associated with each alternative and identifies mitigation measures designed to reduce significant impacts to a less-than-significant level.

As part of the General Plan update, an initial study was prepared and circulated for public comment (see Appendix A for a copy of the initial study and responses received). On the basis of the initial study and public input, the scope of environmental resources and issues to be addressed in the General Plan update EIR was established.

The left column of Table 5-1 provides a list of the 10 environmental resource chapters used to evaluate the impacts identified for further review in the initial study. The right column of this table illustrates which chapter in this EIR contains a discussion of the topic areas covered in the initial study.

Table 5-1. EIR Content

EIR Chapter	Initial Study Topic Areas
Chapter 5A, "Land Use, Aesthetics, and Hazardous Materials"	Aesthetics II. Agricultural Resources VII. Hazards and Hazardous Materials IX. Land Use and Planning
Chapter 5B, "Population and Housing"	XII. Population and Housing
Chapter 5C, "Public Services and Utilities"	XIII. Public Services XIV. Recreation XV. Utilities and Service Systems
Chapter 5D, "Traffic and Circulation"	XVI. Transportation/Traffic
Chapter 5E, "Air Quality"	III. Air Quality
Chapter 5F, "Noise"	XI. Noise
Chapter 5G, "Hydrology and Water Quality"	VIII. Hydrology and Water Quality
Chapter 5H, "Biological Resources"	IV. Biological Resources
Chapter 5I, "Soils, Geology, and Mineral Resources"	VI. Geology and Soils X. Minerals
Chapter 5J, "Cultural Resources"	V. Cultural Resources

The initial study prepared for this EIR reported the potential impacts related to implementation of the General Plan update based on information known at the time of its preparation. To ensure that this EIR evaluates all topics that may be significantly impacted by the proposed General Plan update and its land use map alternatives, the topics in the checklist were again reviewed during preparation of this EIR.

During preparation of this EIR, information was collected and analyzed on the topics described in the initial study checklist. From this analysis, it was found that a few additional topic areas from the checklist did not warrant an in depth analysis since they did not have the potential to be significantly impacted. These topics, as well as those found to have a “less than significant” or “no impact” potential during preparation of the initial study are described in Table 5-2. The topics described in Table 5-2 are not evaluated further in this EIR since they would not result in significant impacts on the environment. All other topics covered by the initial study checklist have been incorporated into the chapters as described in Table 5-1.

Table 5-2. Topics Not Analyzed in Detail in This EIR

	Initial Study Topic Area (Taken from Initial Study Checklist)	Checklist Status	Findings
Ib.	Substantially damage scenic resources along a scenic highway, including, but not limited to, trees, rock outcroppings, and historic buildings?	PS	The planning area has no officially designated scenic highways, corridors, vistas, or viewing areas. Therefore, no adverse impact will occur with implementation of the proposed General Plan and new junior high school.
IIb.	Conflict with existing zoning for agricultural use or with a Williamson Act contract?	PS	As described in Chapter 5A, there are no lands with active Williamson Act contracts (Table 5A-2) within the planning area. Two sites with past contracts (Signature and Davis Technology Campus sites) have previously filed for non-renewal. Therefore, the proposed General Plan and new junior high school will not impact Williamson Act lands. Impacts on growth inducement are covered in Chapter 7 of this EIR.
IIIe.	Create objectionable odors affecting a substantial number of people?	PS	The General Plan being evaluated is programmatic in nature in that it sets out land use locations and policies by which the City will evaluate future projects. No specific project proposals are being assessed by this EIR that would provide evidence of the potential for creation of objectionable odors. Development within business park, industrial, or commercial areas could produce odors, but the type, location, and intensity of such odors can not be realistically evaluated at this time. The potential for future impacts will need to be assessed when individual projects are submitted for evaluation. Under each of the land use map alternatives, traffic congestion will increase, but not to a level where odors affecting a substantial number of people will occur in comparison to existing conditions. Congestion may impact air quality measures, which are described in Chapter 5E.

Table 5-2. Topics Not Analyzed in Detail in This EIR

Initial Study Topic Area (Taken from Initial Study Checklist)	Checklist Status	Findings
IVd. Interfere substantially with the movement of any native resident of migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	PS	<p>No adverse impact is projected to occur with implementation of the General Plan or new junior high school.</p> <p>Within the planning area, the only waterway known to be used by migratory fish is the South Fork of Putah Creek. The South Fork of Putah Creek is located about 1 mile south of any area proposed for urbanized uses or future development. Areas surrounding the creek and draining towards it would remain as currently planned and used. Given the separation from the creek and urban uses and the fact that most drainage to the south from the City would flow to the Yolo Bypass, the proposed General Plan was determined to have no adverse impact on migratory fish.</p> <p>Impacts on other wildlife species are evaluated in Chapter 5H.</p>
IVf. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	PS	<p>A draft Yolo County Habitat Conservation Plan (Yolo HCP) has been prepared for the County of Yolo; the Cities of Davis, West Sacramento, Winters, and Woodland; the DFG; and the USFWS. The Yolo HCP is a proposed conservation plan supporting application a federal permit under Section 10(a) of the federal ESA and a state permit under Section 2081 of the California Fish and Game Code. The Yolo HCP describes a cooperative federal, state, and local program of conservation for a number of covered species of plants and animals, within the jurisdictional limits of the cities and the County of Yolo. The Yolo HCP has been prepared as a "multiple habitat and species" plan pursuant to federal and state law to meet local endangered species requirements. The plan is currently in public review. Acceptance by all parties involved is uncertain at this time. Since this plan has not been adopted, compliance was not evaluated in this EIR.</p>
Vc. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	PS	<p>The Davis planning area does not have a high potential for paleontological resources. The City of Davis applies a routine condition of approval for projects that require all work to stop should buried resources be discovered, and that proper treatment be implemented to resources found on-site. The proposed General Plan is not expected to adversely impact paleontological resources.</p>

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Initial Study Topic Area (Taken from Initial Study Checklist)	Checklist Status	Findings
VIe. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	PS	<p>All development within the City of Davis is required to connect to a sewer system. Development outside the City limits is planned to be extremely limited, and any new development will be required to meet septic system criteria implemented by Yolo County. The proposed new junior high school will be connected to the existing City sewer system. No adverse impacts related to septic systems will occur.</p> <p>Assessment of sewer system and capacities is discussed in Chapter 5C.</p>
VIIb. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	LS	<p>The proposed General Plan and new junior high school will not create an adverse hazard related to foreseeable upset or accident conditions. Existing and future facilities may have accidents that result in the release of hazardous materials (e.g., fuel spill at a gas station, natural gas leak), but the City and other responsible agencies maintain response plans for these incidents designed to minimize their impacts. While an incident could create a hazard, the implementation of the General Plan is not seen as creating any new adverse impacts.</p>
VIIf. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	LS	<p>All existing and future projects are evaluated by the City and other appropriate regulatory agencies concerning projects within one-quarter mile of an existing school, and the General Plan does not adversely impact these facilities. Siting criteria and evaluation of impacts related to the new junior high school site at the Signature site is evaluated in Chapter 6 of this EIR.</p>
VIIe. Be located within an airport land use plan area or, where such a plan has not been adopted, be within 2 miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?	LS	<p>The only airport in the planning area is the UC Davis Airport, which serves general aviation. The Yolo County Airport, approximately 1 mile east of the planning area, is a general aviation airport serving private planes. The Sacramento International Airport is located 12 miles northwest of downtown Sacramento, approximately 20 miles northeast of the City.</p> <p>The proposed General Plan and new junior high school site will not adversely impact any of the airports or their associated land use plans, and does not propose land uses that would be incompatible or result in a safety hazard.</p>
VIIIf. Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area?	LS	<p>No private airstrips are located within the planning area. Therefore, no adverse impacts will occur from implementation of the proposed General Plan or establishment of a new junior high school.</p>

Table 5-2. Topics Not Analyzed in Detail in This EIR

Initial Study Topic Area (Taken from Initial Study Checklist)	Checklist Status	Findings
VIIg. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	NI	<p>The City maintains a Multi-Hazard Functional Planning Guide to provide safety and protection of citizens from natural and environmental hazards. The proposed General Plan implements these procedures and supports their update and implementation. The proposed General Plan update facilitates emergency response and evacuation by supporting the development of a well-planned community with appropriate transportation facilities. Therefore, the proposed General Plan would not impair emergency response or evacuation.</p> <p>The proposed new junior high school site would be developed in compliance with state standards, and would not conflict or impair emergency response or evacuation.</p>
VIIIh. Expose people or structures to the risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	NI	<p>While fires do occasionally occur in undeveloped areas and agricultural fields, the planning area does not contain any areas that are considered to be conducive to wildland fires of a magnitude that would expose urban development to a significant risk. Therefore, no adverse impact is projected to occur with implementation of the proposed General Plan or establishment of a new junior high school.</p>
VIIIj. Contribute to inundation by seiche, tsunami, or mudflow?	NI	<p>Because of the areas flat topography, distance from any large body of water, and low seismic risk, the proposed General Plan will not locate any land uses in areas adversely impacted by such events. The proposed junior high school site is also not impacted by such activities.</p>
IXa. Physically divide an established community?	PS	<p>After review of the proposed General Plan land use map alternatives and policies, it has been determined that the proposed General Plan will not create any barriers that will physically divide an established community. In fact, transportation (vehicle, bicycle, and pedestrian) facilities will be improved under the General Plan update, which will facilitate connections within the community.</p>
Xa. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	NI	<p>The most important mineral resources in the region are sand and gravel, which are mined on Cache Creek and other channels in Yolo County. A survey of aggregate resources by the State Division of Mines and Geology showed that no significant deposits of aggregate resources are located in the planning area. The only mineral resource known to exist in the City's planning area is natural gas; however, specific resources areas have not been identified or developed. For natural gas, the General Plan will not preclude its extraction should a developable source be found. Given the lack of other mineral resources in the planning area, the proposed General Plan and establishment of a new junior high school will not adversely impact mineral resources.</p>

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Initial Study Topic Area (Taken from Initial Study Checklist)	Checklist Status	Findings
Xb. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	NI	See response to Topic Xb. Above.
XIb. Expose persons to or generate excessive groundborne vibration or groundborne noise levels?	PS	<p>The General Plan being evaluated is programmatic in nature in that it sets out land use locations and policies by which the City will evaluate future projects. No specific project proposals are being assessed by this EIR that would provide evidence of the potential for creation of excessive vibration or groundborne noise. The potential for future impacts will need to be assessed when individual projects are submitted for evaluation. Regarding existing conditions, while vibration exists, no sources of substantial vibration or groundborne noise have been identified in the planning area.</p> <p>No adverse impact is projected to occur with implementation of the General Plan or establishment of a new junior high school.</p>
XIe. Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and expose people residing or working in the project area to excessive noise levels?	NI	<p>The only airport in the planning area is the UC Davis Airport, which serves general aviation. The Yolo County Airport, approximately 1 mile east of the planning area, is a general aviation airport serving private planes. The Sacramento International Airport is located 12 miles northwest of downtown Sacramento, approximately 20 miles northeast of the City.</p> <p>The proposed General Plan does not proposed any development that would be incompatible with the operation of these airports, and no land uses are proposed near enough to any of these airports to be adversely impacted by airport noise.</p>
XIf. Be located within the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels?	NI	No private airstrips are located within the planning area. Therefore, no adverse impacts will occur from implementation of the proposed General Plan.
XIIf. Displace a substantial number of existing housing units, necessitating the construction or replacement housing elsewhere?	LS	None of the proposed land use map alternatives nor any of the policies within the existing General Plan or proposed General update would cause the displacement of a substantial number of existing dwelling units. The majority of development that will occur under any of the land use map alternatives is on undeveloped land. The proposed site for establishment of a new junior high school is currently used for agricultural purposes, and would not displace housing.
XIIf. Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?	LS	None of the proposed land use map alternatives nor any of the policies within the existing General Plan or proposed General update would cause the displacement

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XVIc. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	NI	of a substantial number of persons. The majority of development that will occur under any of the land use map alternatives is on undeveloped land. The proposed site for establishment of a new junior high school is currently used for agricultural purposes, and would not displace persons.
XVIId. Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	PS	<p>The proposed General Plan and existing City design standards provide for roadway designs that promote the safe operation of vehicles, bicycles, and pedestrians. Any roadway expansion to occur under the proposed General Plan will be designed to meet or exceed current safety requirements. Therefore, no adverse impact is expected.</p> <p>The City's policies on developing a compact City form and providing a transition zone between agricultural and urban uses promotes the separation of these uses, and consequently, reduces the potential interaction between automobiles and farm equipment. The changes in the General Plan are not expected to cause a significant impact related to incompatible traffic.</p> <p>The access point(s) for the proposed junior high school will be prepared in conjunction with the City, and will be designed to meet state and local design standards. The access location and final project design will also be subject to additional CEQA review once the site's design has been completed.</p>
XVIIf. Result in inadequate parking capacity?	PS	<p>The General Plan, proposed General Plan update, and the City's Zoning Ordinance all provide specifications for parking. Compliance with these standards will provide for adequate parking facilities.</p> <p>The proposed junior high school site will be designed to meet state specifications for minimum parking (both vehicles and bicycles), and will not result in impacts related to parking.</p>
<p>PS = Potentially significant impact LS = Less than significant impact NI = No impact</p>		