

7.1 INTRODUCTION

The purpose of this section is to identify and describe alternatives to the proposed Project. Project alternatives are developed to reduce or eliminate the significant or potentially significant adverse environmental effects identified as a result of the proposed Project, while still meeting most if not all of the basic Project objectives.

An EIR must evaluate a reasonable range of alternatives to the proposed project, or to the location of the proposed project, that could feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives (CEQA Guidelines Section 15126.6). An EIR need not evaluate the environmental effects of alternatives in the same level of detail as the proposed project, but must include enough information to allow meaningful evaluation, analysis, and comparison with the proposed project.

The primary intent of the alternatives analysis is to disclose other ways that the objectives of the Project could be attained while reducing the magnitude of, or avoiding, the environmental impacts of the proposed Project. Alternatives that are included and evaluated in the EIR must be feasible alternatives. However, the Public Resources Code and the CEQA Guidelines direct that the EIR need "set forth only those alternatives necessary to permit a reasoned choice." The CEQA Guidelines provide a definition for "a range of reasonable alternatives" and, thus, limit the number and type of alternatives that need to be evaluated in a given EIR. An EIR is not required to analyze alternatives when the effects of the alternative "cannot be reasonably ascertained and whose implementation is remote and speculative" (Section 15126.6(f)(3)).

SUMMARY OF SIGNIFICANT AND UNAVOIDABLE IMPACTS

The analysis presented in the technical sections of this Draft EIR (Sections 5.1 through 5.13) determined that the following significant and unavoidable impacts would result from implementation of the proposed project:

- Impact 5.1.2** The proposed Project would develop the Project area and permanently alter the character of the area from agricultural uses to a developed urban character with office, light industrial, housing, commercial, and park uses. This impact is **significant and unavoidable**.
- Impact 5.1.4** Development of the proposed Project, in addition to other reasonably foreseeable projects in the region, would introduce new development into an undeveloped agricultural area and contribute to a cumulative increase in urban uses that result in changes in visual character. This is a **cumulatively considerable** impact.
- Impact 5.1.5** Development of the proposed Project, in addition to other reasonably foreseeable projects in the region, would introduce new development into an agricultural area and increase nighttime lighting and glare and contribute to regional skyglow. This is a **cumulatively considerable** impact.
- Impact 5.2.1** Implementation of the proposed Project would result in the conversion of approximately 1,184 acres of agricultural land, which includes approximately 325 acres of Farmland of Statewide Importance and 106 acres of Unique Farmland. The Project would also result in conversion of land under Williamson Act contract. This would constitute the loss of an irreplaceable resource and is considered a **significant** impact.

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- Impact 5.2.3** The Project would convert approximately 325 acres of Farmland of Statewide Importance and 106 acres of Unique Farmland to urban uses. The Project would also result in the conversion of one parcel under Williamson Act contract. This loss would contribute to the cumulative loss of farmland in the region. The loss of such farmland from the proposed Project would contribute to a **cumulatively considerable** impact.
- Impact 5.3.1** Subsequent land use activities associated with implementation of the proposed Project could result in short-term construction emissions that could violate or substantially contribute to a violation of federal and state standards for ozone and coarse and fine particulate matter. This is considered a **significant** impact.
- Impact 5.3.2** The proposed Project could result in long-term operational emissions that could violate or substantially contribute to a violation of federal and state standards for ozone and coarse and fine particulate matter. This is considered a **significant** impact.
- Impact 5.3.6** The proposed Project in combination with growth throughout the air basin will exacerbate existing regional problems with ozone and particulate matter. This is considered a **cumulatively considerable** impact.
- Impact 5.4.13** Implementation of the proposed Project would contribute to the loss of biological resources in the region, as well as ongoing urbanization in southern Sacramento County. The proposed Project's contribution to this impact would be **cumulatively considerable**.
- Impact 5.10.1** Construction activities could result in a substantial temporary increase in ambient noise levels at nearby noise-sensitive land uses, which may result in increased levels of annoyance, activity interference, and sleep disruption. This impact is considered **potentially significant**.
- Impact 5.10.3** Implementation of the proposed Project may result in non-transportation noise levels that could exceed applicable noise standards at nearby noise-sensitive land uses. This impact would be considered **potentially significant**.
- Impact 5.10.4** Groundborne vibration levels associated with construction activities and planned transit facilities may exceed applicable groundborne vibration criterion at nearby land uses. This impact would be **potentially significant**.
- Impact 5.10.5** Projected on-site noise levels at proposed on-site land uses associated with vehicular traffic on nearby roadways and on-site light-rail transit operations could potentially exceed the City's noise standards for land use compatibility. As a result, this impact is considered **potentially significant**.
- Impact 5.10.6** Implementation of the proposed Project would result in a substantial contribution to cumulative noise levels along some area roadways. As a result, the proposed Project would be considered to have a **cumulatively considerable** contribution to traffic noise levels along area roadways.
- Impact 5.12.2.3** Implementation of the proposed Project, in combination with other development within the SRCSD service area, would generate significant new wastewater flows requiring conveyance and treatment. This impact would be **cumulatively considerable**.

- Impact 5.13.1** Implementation of the proposed Project would result in a decline in service at seven intersections in the study area. This impact would be **potentially significant**.
- Impact 5.13.2** Implementation of the proposed Project would worsen existing unacceptable conditions along SR 99. This impact would be **potentially significant**.
- Impact 5.13.5** Implementation of the proposed Project, in combination with other planned, approved, and reasonably foreseeable projects, would result in a decline of service at eight intersections in the study area. This impact would be **cumulatively considerable**.
- Impact 5.13.6** Implementation of the proposed Project, in combination with other planned, approved and reasonably foreseeable projects, would worsen existing unacceptable operations along SR 99. This impact would be **cumulatively considerable**.

PROJECT ALTERNATIVES ANALYZED IN THE DEIR

The alternatives to the proposed Project analyzed in this EIR were developed with the aim of minimizing environmental impacts while still meeting the basic objectives of the Project. The City has established the following objectives for the Project for the purposes of CEQA:

- 1) Develop a comprehensive master plan for the Southeast Policy Area with a range of job opportunities that are supported by a mix of other land uses.
- 2) Provide land for new employment-generating land uses which will improve the City's jobs-to-housing ratio.
- 3) Provide for the orderly and logical growth and development of the City consistent with the vision in the General Plan.
- 4) Integrate with surrounding land uses through the incorporation of parks and open space, trails, and landscape buffers and provide for a complete transportation network made up of roadways, sidewalks, trails, and transit (including light rail) to allow for the safe and effective movement of people and goods in the Project area and connect them with other parts of the City and region.

In accordance with the provisions of CEQA Guidelines Section 15126.6, the following alternatives are evaluated at a qualitative level of detail:

- Alternative 1 – No Project Alternative
- Alternative 2 – Reduced Residential/Increased Office Alternative

The environmental effects of each of these alternatives are identified and compared with those resulting from the proposed Project. A table at the end of this section provides a summary of the comparisons and, per CEQA Guidelines Section 15126.6 (e)(2), an "environmentally superior" alternative is identified.

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7.2 ALTERNATIVES CONSIDERED BUT NOT SELECTED FOR DETAILED ANALYSIS

Consistent with CEQA, primary consideration was given to alternatives that would reduce significant impacts while still meeting most of the Project objectives. Those alternatives that would have impacts identical to or more severe than the proposed Project, or that would not meet most of the Project objectives, were rejected from further consideration for the reasons provided below.

ALTERNATIVE LOCATION/OFF-SITE ALTERNATIVE

The Project area is designated as one of six Land Use Policy Areas in the General Plan, which were established to “reflect existing and pending major project approvals, or to reflect the need for more detailed land use planning at a future date” (City of Elk Grove 2003). The Project area, designated at the Southeast Policy Area (SEPA), is the last of the large unplanned areas of the City. Most of the policy areas have been largely built out, or in the case of the Laguna Ridge Specific Plan (LRSP), have been approved and are partially built out. Outside of the SEPA, the City does not contain large tracts of undeveloped and unplanned land that could accommodate the large-scale development of job-generating uses and other associated land uses in its current boundary, and to accommodate such a development would require the City to annex lands currently in the jurisdiction of Sacramento County.

The City has determined that it is in need of job-generating land uses in order to balance the City’s jobs-to-housing ratio because the City is currently dominated by residential land uses, so many residents must travel outside of the City for work, which has environmental effects, such as traffic, air quality, climate change and greenhouse gas emissions, and noise. Development of such an alternative outside of the City’s jurisdiction, such as in unincorporated Sacramento County, would not assist the City in its objective to generate jobs to address its jobs-to-housing ratio and is not in the ability of the City to approve development outside of its jurisdiction. Given the agricultural nature of lands in Sacramento County that could accommodate a project on the scale of the proposed project, an alternative location would result in similar impacts as the proposed Project with regard to conversion of agricultural land/habitat, as well as other footprint-dependent impacts, such as cultural resources, geology and soils, and hazards. An alternate location could also be subject to limitations of infrastructure that may not occur with the proposed Project, because the Project area was planned for development in the General Plan and demand for roads, utilities, and services in this area were incorporated into long-range plans for the City and service providers. Thus, an off-site alternative would likely have similar or more severe impacts than the proposed Project.

Because there are no tracts of undeveloped, unplanned land in the city that could accommodate the large-scale of development of job-generating land uses needed to generate enough jobs to assist in balancing the City’s jobs-to-housing ratio, an alternative location/off-site alternative is not considered in further detail.

SMALLER FOOTPRINT ALTERNATIVE

In determining potential alternatives to the proposed Project, the City also considered the possibility of a smaller footprint alternative, which would comply with the development assumptions of the General Plan and provide for the development of job-generating land uses and associated development to keep up with the City’s projected growth. Such an alternative would develop a smaller portion of the Project area, leaving a portion of it undeveloped agricultural land.

While a reduced footprint alternative would have fewer impacts associated with ground disturbance, such as conversion of agricultural land and biological impacts, with less developable land available for development in the Project area, land elsewhere in the City or region would have to be developed in order to accommodate the growth projected to occur in Elk Grove. Development to offset the reduction in the Project area would result in off-site impacts for the development that would occur elsewhere in the City. It could also result in increases in vehicle miles traveled, which would result in increases in criteria air pollutants and greenhouse gases. Depending on the location for the off-site improvements, it is possible that footprint impacts (e.g., biological resources, cultural resources, agricultural resources) could be more severe than they would be under the proposed Project. Further, developing only a portion of the site with the remainder being developed at an off-site location would preclude a comprehensive master plan for the Project uses as a whole. CEQA Guidelines Section 15126.6(b) states that the discussion of alternatives to the proposed project “shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project.” Therefore, this alternative does not meet the criteria set forth in the CEQA Guidelines concerning alternatives to be analyzed in an EIR and is not considered in further detail.

REDUCED DENSITY/INTENSITY ALTERNATIVE

The City considered a reduced density alternative that would reduce the density and intensity of development. This would result in the development of fewer residences and less office and light industrial/flex space, which would overall reduce environmental impacts such as air quality, greenhouse gas emissions, traffic, noise, and demand for utilities and public services. However, similar to the consideration of a reduced footprint alternative, with an alternative that would reduce the density and intensity of development, the need for job-generating land uses and housing to accommodate projected growth in the City would remain, so it is likely that a reduced density/intensity alternative would increase growth pressure on other areas of the City or outside of the City. Therefore, under a reduced density/intensity alternative, there would be the same footprint-related impacts on the Project site, but there would also be off-site impacts associated with additional development outside of the Project area.

Because this alternative would result in footprint impacts on the Project site that are similar to those of the Project, and would also result in off-site impacts, this alternative would not reduce impacts compared to the proposed project. Therefore, this alternative was not considered in further detail.

7.3 ALTERNATIVE 1 – NO PROJECT ALTERNATIVE

Alternative 1 is the No Project Alternative. CEQA Guidelines Section 15126.6(e)(1) states that a No Project Alternative shall be analyzed. The purpose of describing and analyzing a No Project Alternative is to allow decision-makers to compare the impacts of approving the proposed Project with the impacts of not approving the proposed Project. The No Project Alternative analysis is not the baseline for determining whether the environmental impacts of the proposed Project may be significant, unless the analysis is identical to the environmental setting analysis which does establish that baseline.

CHARACTERISTICS

Because the Project area does not currently have an existing land use plan, it is not consistent with the requirements of CEQA Guidelines Section 15126.6(e)(3)(A); therefore, this alternative does not evaluate the continuation of an existing land use plan. Consistent with General Plan

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Policy LU-32, all land use planning for the Project area was deferred until the preparation of a comprehensive master plan, which the Project is implementing.

Based on this, the No Project Alternative assumes that no land use plan will be put into place for the Project area and existing conditions would remain as they are, with a continuation of uses permitted under the existing AG-20 and AG-80 zoning districts. This alternative assumes existing agricultural operations that have historically occurred on the site would remain. This would also preclude plans to extend light rail and major roadways through the Project area. This alternative would result in limited new jobs and population increases in the Project area. Utilities infrastructure would not be extended, and no improvements to the on-site drainage would be made.

COMPARATIVE IMPACTS

Aesthetics, Light, and Glare

Under this alternative, the Project area would remain in its current undeveloped state. The Project area would continue to contain agricultural activities, including dairies, and rural residential uses. There would be no change in the visual character of the Project area. No new sources of light or glare would be developed, so there would be no impact on visual resources, light, or glare. Impacts under this alternative would be less than under the proposed Project.

Agricultural Resources

Under the No Project Alternative, the Project area would remain in agricultural production. There would be no direct impact associated with conversion of agricultural lands in the Project area, including Important Farmland and the parcels currently under Williamson Act contracts. One of the Williamson Act contracts located on-site is currently in nonrenewal status, and another is partially in nonrenewal status, so that contract would expire unless the property owner(s) file for renewal. While direct impacts resulting from conversion of agricultural land would not occur and would be less than under the proposed Project, the Project area would remain adjacent to future development areas to the west, north, and east, so indirect impacts on agricultural resources may still occur. However, impacts are less than under the proposed Project.

Air Quality

Because no new development would take place under this alternative, no new sources of air pollutants would be developed. Due to the ongoing presence of agricultural activities, emissions of particulate matter from cultivation activities would likely continue. Odors may also result from ongoing agricultural activities. However, this is consistent with the existing condition, and no new impacts would occur unless new sources of particulate matter or odors were developed (i.e., a new dairy or more intensive crop cultivation), as permitted under the AG-20 and AG-80 zoning districts. Particulate matter emissions would likely be greater than under the proposed Project because grading and cultivation activities would continue to occur on a regular basis, whereas the primary source of particulate matter under the proposed Project would be due to construction activities, which would be temporary. Similarly, potentially offensive odors affecting neighboring properties would be worse under the No Project Alternative, particularly if additional odor-causing agricultural uses are allowed. However in both cases, this is consistent with the existing condition, and these uses are currently permitted by right in the AG-20 and AG-80 zoning districts.

Overall, air pollutant emissions would be less than expected under the proposed Project because there would be no development of new emissions sources, no increases in traffic, and no development of the internal roadways in the Project area that would enable additional traffic in the Project area. No construction activities would occur, so construction emissions would not occur. Operational emissions would be lower under this alternative because few people would be present, density would be low, and no additional traffic would occur.

Biological Resources

Because the Project area would remain in its current state, impacts on biological resources would be less than under the proposed Project. The agricultural lands in the Project area provide foraging habitat for some species, including birds. Conditions for species that currently live in the Project area would not be changed. The existing drainage in the Project area would remain in its current state, so any species living in or using the drainage would be undisturbed as well. Overall, impacts on biological resource could be less than under the proposed Project.

Cultural Resources

Many portions of the Project area are under cultivation and are regularly disced and tilled for agricultural purposes, but this has occurred for decades, so the potential to disturb or destroy cultural or paleontological resources under the No Project Alternative is low. Under the proposed Project, most of the Project area would be graded and excavated, potentially to depths deeper than past and current discing and tilling activities. Therefore, the potential for encountering unknown cultural or paleontological would be less likely under the No Project Alternative.

Geology, Soils, and Seismicity

Under the No Project Alternative, no new development would occur in the Project area, so there would be no new risks associated with geological hazards, including seismicity, soil hazards, and ground failure. Therefore, impacts related to geology, soils, and seismicity would be less under the No Project Alternative than with the proposed Project.

Greenhouse Gas Emissions

Because the No Project Alternative would result in no new development, there would be no new sources of greenhouse gases, although continuing agricultural operations would in the Project area would result in the emission of some greenhouse gases, due to diesel and gasoline emissions from farm equipment and vehicles and methane from livestock. However, the greenhouse gas emissions from ongoing agricultural activities would be less than under the proposed Project.

Hazards and Hazardous Materials

Under the No Project Alternative, hazardous materials would continue to be used in the Project area, including the use of agricultural chemicals and fuels and solvents for farm equipment. It is assumed that use of these chemicals in the Project area is currently complying with applicable hazardous materials regulations and that compliance with applicable hazardous materials regulations would continue under the No Project Alternative. Therefore, the No Project Alternative would not result in any changes in the existing hazardous materials environment, and the impacts would be similar to those under the proposed Project, since compliance with regulations would be required under both scenarios.

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Hydrology and Water Quality

Since no construction would occur under this alternative, there would be no impact associated with the potential for erosion and stormwater runoff during construction activities. The Project area would still be subject to potential impacts for stormwater runoff impacts associated with the erosion from agricultural lands and from chemical runoff from agricultural chemicals. There would be no stormwater pollution protection program (SWPPP) in place or use of best management practices (BMPs) as there would be during construction and implementation of the proposed Project, but runoff from agricultural operations would still be subject to the regulations that are currently in place to prevent impacts associated with runoff and erosion, so it is expected that there would be no change from existing conditions. Phase I Environmental Site Assessments (ESAs) done for properties within the Project area that contain dairies identified potential groundwater contamination associated with past manure and dairy wastewater discharges; one Phase I ESA disclosed that at the time of the study, the Regional Water Quality Control Board was considering legal action against the property for illegal discharges to surface water. Therefore, continuation of agricultural activities, including dairies, could result in water quality impacts that would not occur under the proposed Project.

Some of the hydromodifications planned as part of the proposed Project would help to address off-site drainage from properties located upstream. Therefore, implementation of the No Project Alternative would result in the need for upstream development projects to redesign their drainage so that they can address those issues and not cause adverse impacts in the Project area. However it should be noted that off-site drainage issues on other properties planned for development would not be caused by implementation of the No Project Alternative; it would remove the assumption that upstream drainage issues would be mitigated in the Project area. The No Project Alternative itself would not result in the exacerbation of on-site drainage or localized impacts, and these impacts would be considered less than those that would result under the proposed Project. Similarly, the No Project Alternative would not result in the need to alter the Project area's drainage pattern.

Because the Project area would remain in agricultural production and would not be developed with impervious surfaces, groundwater recharge potential would be greater under this alternative than with the proposed Project. However, as noted above, existing dairy uses on the site have resulted in some negative effects on groundwater quality.

Overall, this alternative would result in more negative effects on hydrology and water quality than the proposed Project.

Noise

Since the No Project Alternative would result in no changes in land use or new infrastructure, roadways, or other noise-generating uses, the noise environment would remain consistent with existing conditions. Without the addition of construction noise, noise from new residential and nonresidential land uses, and traffic noise, the noise impacts associated with this alternative would be much less than under the proposed Project.

Public Services and Recreation

Since no new development or resulting population growth would occur under the No Project Alternative, this alternative would not result in new demand for public services or recreation services. Since the existing population and agricultural activities would remain fairly constant, implementation of the No Project Alternative would not result in the need for additional public

services or infrastructure or facilities to provide public services or recreation services. Therefore, the impact for this alternative is less than that of the proposed Project.

Public Utilities

The No Project Alternative would result in no development, so there would be no need to expand existing or construct new utility infrastructure for water, wastewater, or stormwater drainage. Water demand would remain as it is currently. Although the Project area would be used for agriculture, which would require irrigation, the water demand would be expected to increase in the Project area due to the higher intensity of new development. Therefore, implementation of the No Project Alternative would result in lower water demand than the proposed Project. In addition, because there would be no new development, there would be no increase in the demand for solid waste services. Solid waste generation would remain consistent with existing conditions, there would be no need to increase capacity at the landfills serving the Project area, and there would be no violation of solid waste regulations. Therefore, the impact for this alternative is less than under the proposed Project.

Transportation

Traffic impacts would be much less under the proposed Project because there would be no new homes, schools, commercial uses, or jobs that would generate traffic trips. Congestion would not occur. However, the No Project Alternative could result in conflicts with plans that anticipate the development of roadways through the Project site; for example, roads that would connect the LRSP area to the Sterling Meadows development, or from development in the LRSP north of the Project area to Kammerer Road to the south. Other approved developments may be dependent on roadways planned to travel through the Project area. However, with the major reduction of estimated traffic trips from the No Project Alternative, traffic impacts overall would be less than under the proposed Project.

Conclusion

Overall, this alternative would reduce the severity of most of the impacts identified for the proposed Project, except for those related to hydrology and water quality. This alternative, however, would not achieve any of the Project objectives.

7.4 ALTERNATIVE 2 – REDUCED RESIDENTIAL/INCREASED OFFICE ALTERNATIVE

CHARACTERISTICS

Alternative 2, the Reduced Residential/Increased Office Alternative, would reduce the residential capacity and replace it with office use. Specifically, this alternative assumes that approximately one-third of the Project's residential acreage (143 acres), distributed evenly over various residential densities, would be replaced with office uses. As a result, approximately 504 residential units would be eliminated from the proposed Project and replaced with approximately 2,980,000 square feet (sf) of office space, based on the office space ratio assumptions used for the proposed Project.

Overall, Alternative 2 would result in the development of 9,021,000 sf of office space on 423 acres and 2,976 residential units on approximately 287 acres. This would include 192 units of Estate Residential, 894 units of Low Density Residential, 883 units of Medium Density Residential, and 1,007 units of High Density Residential. Based on the employment ratios used in Section 2.0, Project Description, of this Draft EIR, this alternative would generate approximately 8,837

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additional jobs, for a total of 26,142 jobs. Residential population would be reduced by 6,379, for a total of 10,631 residents. This alternative assumes that the remaining land use assumptions for commercial, mixed use, schools, parks, drainage, etc., would remain the same as assumed under the proposed Project. However, it should be noted that if this alternative is selected, refinements would be necessary.

COMPARATIVE IMPACTS

Aesthetics, Light, and Glare

Under both Alternative 2 and the proposed Project, the entire Project area would be permanently converted from agricultural uses to developed urban uses, including a mix of residential and nonresidential uses. Under Alternative 2, the Project area would contain a larger proportion of nonresidential (specifically office) uses and fewer residences. Therefore, the character would be less residential in nature, but the existing agricultural character would cease to exist. Consequently, with either this alternative or the proposed Project, the agricultural nature of the site would be lost and the impact would be the same.

With the reduction in residential uses, it is possible that the Project area would have fewer schools and parks, the development of which is largely dependent on residential development. While the proportion of residential and office uses may vary from the proposed Project, the entire site would still represent an overall change in character to a developed form, and there would be similar impacts on scenic resources and light and glare. Therefore, the Project area would look slightly different than under the proposed Project, but overall the character would be similar and aesthetic impacts would be similar.

Agricultural Resources

Under Alternative 2, the entire Project area would be developed, like the proposed Project, so all of the existing agricultural lands, including Important Farmland and parcels under Williamson Act contracts, would be converted to nonagricultural land uses. Therefore, the impact on agricultural resources would be similar to that of the proposed Project.

Air Quality

Although different uses would be developed under this alternative, the area of disturbance would be the same, so impacts related to grading, such as generation of particulates (dust) would be the same. It is also assumed that construction equipment would be similar, so overall construction emissions would be expected to be similar to those that would occur under the proposed Project. Neither the Project nor this alternative would create a major stationary source of air pollution or odors. This alternative would generate approximately 13,390 fewer vehicle trips from residential uses (residential uses for the proposed Project would generate approximately 40,180 trips); however, the additional office uses under this alternative would generate approximately 32,870 more daily trips than the proposed Project. Consequently, this alternative would generate approximately 19,480 more vehicle trips than the proposed Project (32,870 more daily office use trips - 13,390 fewer residential use trips = 19,480 more daily trips than the proposed Project). While there could be some reductions achieved due to internalization of trips, it is assumed that this alternative would generate more emissions associated with vehicle trips, so air quality impacts of this alternative would be more severe than the proposed Project.

Biological Resources

The Reduced Residential/Increased Office Alternative would occupy the same development footprint as the proposed Project. Development would still occur over the entire Project area, so the impact on biological resources would be the same as that of the proposed Project.

Cultural Resources

Similar to the analyses of agricultural and biological resources, because Alternative 2 would result in the same development footprint as the proposed Project, impacts associated with ground disturbance would be the same, so the impact on cultural resources would be the same as under the proposed Project.

Geology, Soils, and Seismicity

Similar to the proposed Project, this alternative would develop the entire Project area, although the number of residences would be reduced and the amount of office space would increase. Regardless, the potential impacts associated with seismicity, ground failure, and unstable or erodible soils would generally be the same. This impact would be similar to the proposed Project.

Greenhouse Gas Emissions

Similar to the analysis of air quality, the increase in daily traffic trips would also increase greenhouse gas emissions that would contribute to climate change. Neither the Project nor Alternative 2 would result in the development of a major source of greenhouse gas emissions, so the impact would be similar. Emissions from daily traffic trips would be increased, and emissions would contribute to the cumulative climate change impact. However, implementation of the mitigation measure identified for the Project to comply with the measures in the City's Climate Action Plan would ensure that development would achieve AB 32's goal of reaching 1990 levels by 2020.

Hazards and Hazardous Materials

Use, storage, transport, and disposal of hazardous materials would be generally the same under the Reduce Residential/Increased Office Alternative as they would be under the proposed Project. The amounts and types of hazardous materials that would be used in either residential or office uses would generally be limited to household cleaners, solvents, paints, etc. The reduction of residential uses and increase in office space would not introduce new, more severe sources of hazardous materials to the Project area. Therefore, impacts associated with potential releases of hazardous materials would be similar to that of the proposed Project.

Hydrology and Water Quality

Under this alternative, it is assumed that the drainage improvements would remain as they are currently planned under the proposed Project. The replacement of one-third of the residential uses with office uses would not result in a substantial increase in runoff that would trigger the need to resize or change the design of the planned detention basins or redesign the on-site drainage. Impacts on water quality would be similar to the proposed Project. Impacts on groundwater recharge potential and supplies would be similar to impacts of the proposed Project. Impacts associated with flood hazards would be similar to the proposed Project as well.

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Noise

Because this alternative would result in more traffic than the proposed Project, noise levels associated with increases in traffic levels would also increase. Noise levels associated with construction would be similar. Construction of office buildings of the mass and form that would be found in Elk Grove would not be likely to result in significantly higher construction noise levels than residential uses. Office uses generate noise in many of the same ways that residences do: starting cars, people talking, landscaping, etc. The proposed office buildings would have little to no nighttime population, which would reduce nighttime noise levels. In addition, with the reduction in residential uses, the number of sensitive receptors located in the Project area would decrease accordingly. However, because traffic levels would increase, it is logical to conclude that noise levels in the Project area under this alternative would increase from what is expected under the proposed Project.

Public Services and Recreation

In general, residential land uses produce a greater demand for public services than nonresidential uses, particularly for schools, parks, and recreation services. Replacing one-third of the residential uses with office uses may reduce demand for police services slightly, but overall demand for fire protection services would likely be similar to that of the Project. The reduction in residential uses would also reduce demand for parks, so this impact would be less severe than that of the proposed Project.

Public Utilities

Demand for public utilities can vary depending on land use. Demand for water supply varies by residential density, with average demands as follows: 1.33 acre-feet (AF) per acre per year (AF/acre/year) for estate residential; 2.89 AF/acre/year for low density residential; 3.70 AF/acre/year for medium density residential; and 4.12 AF/acre/year for high density residential. Water demand for office uses is in the middle of the demand range for residential, with a typical demand of 2.75 AF/acre/year. **Table 7.0-1**, adapted from **Table 5.12-5** in Section 5.12, Public Utilities, presents Alternative 2's expected water demand based on the change in proposed land uses. As shown in the table, Alternative 2 would result in a total water demand of approximately 3,170.7 AF per year (AF/year) (including water system losses), compared to the Project's anticipated demand of 3,188.0 AF/year.

TABLE 7.0-1
ALTERNATIVE 2 LAND USE AND WATER DEMAND ESTIMATE

Land Use Description	Corresponding Land Use Classification in WSMP	Area (acres)	Unit Water Demand Factor ¹ (AF/acre/year)	Water Demand (AF/year)
Basin	Vacant	49.4	0.00	0.00
Commercial	Commercial	14.2	2.75	39.1
Drainage Channel	Public Recreation ²	1.7	0.00	0.00
Estate Residential	Rural Estates	42.0	1.33	55.9
Elementary School	Public Recreation	27.6	3.46	95.5
Greenway	Public Recreation	35.5	3.46	122.8
High Density Residential	Multi-Family High Density	40.0	4.12	164.8

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Land Use Description	Corresponding Land Use Classification in WSMP	Area (acres)	Unit Water Demand Factor ¹ (AF/acre/year)	Water Demand (AF/year)
Low Density Residential	Single-Family	141.3	2.89	408.4
Light Industrial/Flex Space	Industrial	108.2	2.71	293.2
Medium Density Residential	Multi-Family Low Density	63.3	3.70	234.2
Office	Commercial	423.2	2.75	1,188.6
Park/Open Space	Public Recreation	56.8	3.46	196.5
Mixed Use Residential	Multi-Family High Density	14.0	4.12	57.7
Mixed Use Commercial	Commercial	27.3	2.75	75.1
Channel	Vacant	65.3	0.00	0.00
Road (ROW)	Right-of-Way	84.4	0.21	17.7
Subtotal		1,194.8 ³		2,949.5
System Losses 7.5%				221.2
Total Demand				3,170.7

Source: SCWA 2013, p. 5

Notes:

1. The unit water demands provided in this table are consistent with the WSMP.
2. While classified as "Public Recreation," the Drainage Channel land use has no identified water demand.
3. May not add due to rounding.

However, demand for wastewater conveyance and treatment would be slightly higher for Alternative 2. The alternative would be expected to generate 5,072 equivalent dwelling units (EDUs) per acre of wastewater, compared to 5,492 EDUs per acre for residential and office land uses under the proposed Project. The overall reduction in residential and increase in office space would lead to a slight decrease in wastewater generation, but this decrease is relatively minor. This alternative would not result in the need to expand wastewater treatment capacity at the wastewater treatment plant, so it would not trigger a significant impact.

Employee-generating land uses tend to have higher solid waste disposal rates than residential land uses. The analysis in this Draft EIR assumed that solid waste generation would be 0.785 ton per resident per year and 1.971 tons per employee per year. With a decrease in the number of residents and increase in the number of employees generated, Alternative 2 would result in the generation of approximately 59,871 tons of solid waste per year, compared to 59,494 tons for the proposed Project. This reflects a small increase, but not enough to warrant the need for new or expanded solid waste facilities, so the impacts is considered to be similar to the proposed Project.

Similarly, electricity, natural gas, and telephone services impacts are likely to be similar to those anticipated under the proposed Project. The service providers have based planning for new facilities for development of the Project area and surrounding areas on General Plan assumptions, and the growth assumptions for this alternative are in the limitations of those assumptions. It is assumed that development under this alternative would also comply with Title 24, Part 6 of the California Code of Regulations related to energy efficiency and that this alternative would not result in a wasteful use of energy. Impacts on utilities overall would be similar to the proposed Project.

7.0 PROJECT ALTERNATIVES

Transportation

As discussed above under the analysis of air quality, the reduction of residential and increase in office uses would result in a net increase in daily traffic trips under this alternative, which would generally increase congestion in the Project area and the study intersections. The shift from residential to office would not result in changes in air traffic patterns or increases in hazards due to roadway design features. It is assumed that the planned circulatory pattern would remain generally the same; therefore, it is assumed there would be no impacts on emergency access, similar to the proposed Project. The increase in office uses could change the use of public transit, bicycles, or pedestrian facilities, but the extent to which they could change is not known. Those impacts would be expected to remain similar to the proposed Project. Overall, traffic trips and congestion levels would be increased compared to those expected under the proposed Project.

7.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Table 7.0-2 provides a summary of the potential impacts of the alternatives evaluated in this section, as compared with the potential impacts of the proposed Project.

**TABLE 7.0-2
COMPARISON OF ALTERNATIVES TO THE PROPOSED PROJECT**

Issue	Alternative 1 (No Project)	Alternative 2
Aesthetics, Light and Glare	B	S
Agricultural Resources	B	S
Air Quality	B	W
Biological Resources	B	S
Cultural Resources	B	S
Geology, Soils, and Seismicity	B	S
Greenhouse Gas Emissions	B	W
Hazards and Hazardous Materials	S	S
Hydrology and Water Quality	W	S
Noise	B	W
Public Services and Recreation	B	B
Public Utilities	B	S
Transportation	B	W

B – Impacts better than those under proposed Project

S – Impacts the same as those under proposed Project, or no better or worse

W – Impacts worse than those under proposed Project

Based on the evaluation described in this section, the No Project Alternative (Alternative 1) is considered to be the environmentally superior alternative. Alternative 1 was determined to have less adverse environmental impacts than the proposed project on all issues. However, Alternative 1 would meet none of the Project objectives since no development would occur. Furthermore, the proposed Project is intended to implement the General Plan, which sets aside the Project area as a Special Policy Area. The General Plan and all citywide development assumptions are based on the Project area being developed to accommodate future growth.

As discussed in the Alternatives Considered but Not Selected for Detailed Analysis subsection, an alternative of similar size and scale at an off-site location would result in similar impacts at that location and would also leave the Project site for development as planned in the General Plan. Therefore, that alternative would not have any environmental advantages over the proposed Project. A reduced footprint alternative would have fewer impacts associated with ground disturbance, but land elsewhere in the City would have to be developed in order to accommodate the growth projected to occur in the City. Development to offset the reduction in the Project area would result in off-site impacts for the development that would occur elsewhere in the City. So a reduced footprint alternative would not have any environmental advantages over the proposed Project. Similarly, a reduced density alternative would not accommodate as much growth as the proposed Project and additional land would need to be developed to accommodate the difference.

Alternative 2 would be generally consistent with the objectives of the proposed project and would not result in the need to develop areas outside the project area. Therefore, Alternative 2 is the environmentally superior alternative that meets the project objectives and is consistent with the City's General Plan. However, as shown in Table 7.0-2, Alternative 2 would result in some impacts that exceed those of the proposed Project, so the proposed Project is superior to Alternative 2.

7.0 PROJECT ALTERNATIVES

REFERENCES

City of Elk Grove. 2003. *City of Elk Grove General Plan*.