

5.1 INTRODUCTION

The purpose of this alternatives analysis is to describe a range of reasonable alternatives to the proposed Tehama County 2008-2028 General Plan. This analysis evaluates alternatives that would obtain most of the basic objectives of the project, and the comparative merits of those alternatives (State CEQA Guidelines, Section 15126.6[a]). In accordance with State CEQA Guidelines, an EIR does not need to consider every conceivable alternative to a project, nor is it required to consider alternatives that are clearly infeasible. State CEQA Guidelines Section 15126.6(b) states that an alternatives analysis shall focus on those alternatives that are capable of avoiding or substantially lessening any significant effects of the project, even if they impede to some degree the attainment of the project objectives or would be more costly.

CEQA requires an EIR to identify project alternatives and to indicate the manner in which a project's significant effects may be mitigated or avoided, but does not mandate that the EIR itself contain an analysis of the feasibility of the various project alternatives or mitigation measures that it identifies. (Pub. Resources Code, Sections 21002.1, subd. (a); 21100, subd. (b)(4); *Sierra Club v. County of Napa* (2004) 121 Cal.App.4th 1490, 1503, citing *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656, 689-690.) As the lead agency, the Tehama County bears the responsibility for the decisions that must be made before a project can go forward, including determinations of feasibility and whether the benefits of a project outweigh the significant effects the project will have on the environment. (Pub. Resources Code Sections 21002.1, subds. (b) & (c), 21081.) In addition, CEQA specifically provides that in making these determinations, the County shall base its findings on substantial evidence in the record, a provision reflecting an understanding that the City Council will not limit its review to matters set forth in the EIR, but will base its decision on evidence found anywhere in the record. (*Sierra Club v. County of Napa*, 121 Cal.App.4th at p. 1503; citing Pub. Resources Code, Section 21081.5.)

According to the State CEQA Guidelines, an EIR need only examine in detail those alternatives that could feasibly meet most of the basic objectives of the project. When addressing feasibility, the State CEQA Guidelines Section 15126.6 states that "among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, jurisdictional boundaries, and whether the applicant can reasonably acquire, control or otherwise have access to alternative sites." CEQA Guidelines also specify that the alternatives discussion should not be remote or speculative; however, they need not be presented in the same level of detail as the assessment of the proposed project.

CEQA Guidelines indicate that several factors need to be considered in determining the range of alternatives to be analyzed in an EIR and the level of analytical detail that should be provided for each alternative. These factors include: (1) the nature of the significant impacts of the proposed project; (2) ability of alternatives to avoid or lessen the significant impacts associated with the project; (3) the ability of the alternatives to meet the objectives of the project; and (4) the feasibility of the alternatives. These factors would be unique for each project.

The significant environmental impacts of the project that the alternatives will seek to eliminate or reduce were determined and based upon the findings contained within each technical section evaluated in Sections 4.1 through 4.14 as well as Global Warming/Climate Change discussed in Section 6.0 of this DEIR.

5.0 PROJECT ALTERNATIVES

AESTHETICS

- Degradation of the existing visual character and/or quality of the County and its communities under project and cumulative conditions. (Impact 4.1.3 and Impact 4.1.5)

AGRICULTURAL RESOURCES

- Result in the loss of important farmlands (prime farmland, unique farmland, and farmland of statewide importance, etc) under project and cumulative conditions (Impact 4.2.1 and Impact 4.2.4)
- Result in a conflict with existing Williamson Act contracts (Impact 4.2.2)
- Result in conflicts between urban uses and agricultural uses (Impact 4.2.3)

AIR QUALITY

- Conflict with the TCAPCD Air Quality Attainment Plan (Impact 4.3.1)
- Contribution to air quality impacts (construction, operational and toxic air contaminants) under project and cumulative conditions (Impacts 4.3.2, Impact 4.3.3, Impact 4.3.4, and Impact 4.3.6)
- Possible exposure of sensitive receptors to odorous emissions (Impact 4.3.5)

BIOLOGICAL RESOURCES

- Direct and indirect impacts to endangered, threatened and other special-status species (Impact 4.4.1)
- Direct and indirect impacts to sensitive biotic communities including jurisdictional waters (Impact 4.4.2)
- Effects on wildlife movement corridors (Impact 4.4.3)
- Cumulative biological resources (Impact 4.4.5)

CULTURAL RESOURCES

- Result in the potential disturbance of historic and archaeological resources and paleontological resources under project and cumulative conditions (Impact 4.5.1, Impact 4.5.2 and Impact 4.5.4)

GEOLOGY AND SOILS

- Result in the placement of structures and development in areas of seismic sensitivity (Impact 4.6.1)
- Result in increased erosion or loss of topsoil (Impact 4.6.2)
- Result in development of unstable soils (Impact 4.6.3)
- Result in wastewater conflicts (Impact 4.6.4)

HAZARDS AND HAZARDOUS MATERIALS

- Result in safety hazards associated with wildland fires under project and cumulative conditions (Impact 4.7.1, and Impact 4.7.10)
- Result in safety hazards associated with airport operations (Impact 4.7.2)
- Result in transportation, use, disposal and release of Hazardous Materials (Impact 4.7.4, Impact 4.7.3)

- Result in hazardous emissions near schools (Impact 4.7.5)
- Result in flooding hazards (Impact 4.7.8)

HYDROLOGY AND WATER QUALITY

- Result in surface water quality impacts and cumulative water quality impacts (Impact 4.8.1, Impact 4.8.5)
- Result in groundwater quality impacts and cumulative groundwater quality impacts (Impact 4.8.2, Impact 4.8.5)
- Result in drainage and flooding impacts and cumulative water quality impacts (Impact 4.8.4, Impact 4.8.6)
- Water Supply and Cumulative Water Supply Impacts (Impact 4.8.3, Impact 4.8.7)

NOISE

- Cumulative Noise Impacts Associated with Increased Traffic (Impact 4.10.7)

POPULATION AND HOUSING

- Substantial increase in population and housing (Impact 4.11.1, Impact 4.11.3)

TRAFFIC AND CIRCULATION

- County roadways level of service and cumulative traffic impacts on local roadways and state highways (Impact 4.13.1, Impact 4.13.7)

UTILITIES AND SERVICE SYSTEMS

- Water supply infrastructure and cumulative water service impacts (Impact 4.14.1.1, Impact 4.14.1.2)
- Wastewater conveyance and treatment cumulative wastewater impacts (Impact 4.14.2.1, Impact 4.14.2.2)
- Impacts to electrical, natural gas, and infrastructure (Impact 4.14.3.1)

GLOBAL WARMING AND CLIMATE CHANGE

- Cumulative Increase in GHG Emissions (Impact 6.14)

5.2 PROJECT ALTERNATIVES

ALTERNATIVES CONSIDERED BUT NOT SELECTED FOR ANALYSIS

Off-Site Alternative

Given the nature of the project (adoption of the 2008-2028 General Plan for the County of Tehama) it would not be pertinent to address another area. Further, this alternative would not meet the basic project objectives, again because consideration of another location would not address issues pertinent to the establishment of land use designations and policies to regulate the orderly development of Tehama County. For these reasons, an off-site alternative is considered infeasible pursuant to State CEQA Guidelines 15126.6(c).

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Transfer of Development Potential Alternative

The Transfer of Development Potential Alternative would involve transferring development potential to other jurisdictions (e.g., Red Bluff, Corning and Tehama). This alternative would not be feasible as the County has no jurisdiction over the cities. Furthermore, the County has much more available land for potential development than the cities could accommodate. Therefore, this is not considered a feasible alternative.

PROJECT ALTERNATIVES EVALUATED

Based on the environmental analysis in Sections 4.1 through 4.14 of this DEIR, the project's alternatives were developed to provide decision-makers with a reasonable range of alternatives with which to compare to the proposed project. The following alternative scenarios were selected for evaluation in this analysis. This analysis utilizes the technical analysis provided in Sections 4.1 through 4.14 as well as input from the technical consultants on each alternative's comparison to the 2008-2028 General Plan.

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

- No Project Alternative. This alternative would maintain the General Plan approved in 1979, updating only the housing element as required by state law.
- Land Use Plan Option A Alternative. This Alternative would base its analysis on the Land Use Plan Option A of the 2008-2028 General Plan.
- Two Urban Growth Areas Alternative. This alternative would confine the future areas of growth in the County into areas surrounding the cities of Red Bluff and Corning.

Alternative 1 - No Project Alternative

Characteristics

Under Alternative 1, the proposed Tehama County General Plan and its associated Land Use Diagram would not be adopted. The existing Tehama County General Plan policy document and Land Use Diagram would remain in effect. The County would utilize its existing zoning and other regulations regarding development within the County's jurisdiction. Infrastructure would be installed under existing plans, if applicable. Existing General Plan objectives and policies would continue to be in affect.

Table 5.0-1 illustrates Alternative 1 land uses by acreage within the existing Planning Area. Alternative 1 would designate approximately 14,728 acres into suburban residential land uses allowing up to 16 units per acre. Approximately 1,049,892 will be reserved for either grazing or cropland activities and another 7,436 aces for composite cropland.

**TABLE 5.0-1
ALTERNATIVE 1 - LAND USES**

Land Use Designation	Total Acres
Cropland	254,822.31
Composite Cropland	7,435.71
Commercial Recreation	344.23
Grazing	795,069.74
General Commercial	2,127.12
Public Lands	477,801.44
General Industrial	3,131.17
Tribal Lands	1,913.94
Neighborhood Commercial	13.52
Habitat Resource	16,132.00
Resource Lands	14,327.24
Open Space	234.23
Public	368.99
Rural Large Lot	22,571.52
Rural Small Lot	24,631.02
Scenic Easement	2,633.67
Suburban	14,727.68
Timber	243,570.47
Urban	1,631.88
Water	2,138.59

Source: PMC; Vestra Resources Inc.

Table 5.0-2 summarizes the potential residential development under Alternative 1. Buildout under Alternative 1 would result in approximately 139,125 residential dwelling units and an associated population of 364,506, as well as development of commercial, industrial, and public uses. The estimated population assumes 2.62 persons per housing unit, which according to the 2000 Census, is the average size of a household in unincorporated Tehama County.

**TABLE 5.0-2
ALTERNATIVE 1 - POTENTIAL BUILDOUT HOUSING AND POPULATION**

Land Use Designation	Acres	Housing Units	Population
Residential Land Uses			
Rural Large Lot	22,571.5	2,257	5,914
Rural Small Lot	24,557.0	12,279	32,170
Suburban	13,100.6	52,400	137,288
Urban	1,631.9	26,096	68,372
Subtotal	61,861.0	93,032	243,743
Agricultural Land Uses			
Grazing	795,350.2	19,884	52,095
Cropland	262,093.0	26,209	68,668
Subtotal	1,057,443.2	46,093	120,763
Total	1,119,304.2	139,125	364,506

Source: PMC; Vestra Resources Inc.

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This analysis of Alternative 1 is consistent with the requirements for analysis of a No Project Alternative, as set forth in CEQA Guidelines Section 15126.6(e). More specifically, CEQA Guidelines Section 15126.6(e)(3)(A) states that, when the project under evaluation is the revision of an existing land use or regulatory plan, the No Project Alternative will be the continuation of the existing plan.

Comparative Impacts

Aesthetics

Degradation of the existing visual character and/or quality of the County and its communities under project and cumulative conditions. (Impact 4.1.3, Impact 4.1.5)

Implementation of the 2008-2028 General Plan would change the visual character of the Planning Area. The existing visual character of the County is predominantly rural, with scenic views located throughout the region. Overall development patterns through 2028 would not significantly change the visual character of the County as most of the development is projected to occur in the County's existing communities. However, the 2008-2028 General Plan increases the amount of residential land by more than 38,000 acres. This impact was identified as a significant and unavoidable impact under project and cumulative conditions.

Alternative 1 would reduce visual impacts by retaining less intensive land uses that are consistent with the existing rural/agricultural/open space landscape characteristics. However, urban development allowed under this Alternative would still result in significant impacts to the visual character of the County by allowing urban development in rural areas. This impact would be significant and unavoidable for Alternative 1. However, because of the reduce development area, when compared to the proposed project this Alternative would have a less severe impact regarding visual character.

Agricultural Resources

Result in the loss of important farmlands (prime farmland, unique farmland, and farmland of statewide importance, etc) under project and cumulative conditions (Impact 4.2.1, Impact 4.2.4)

As noted in Section 4.2 (Agriculture), land use designation changes in the 2008-2028 General Plan results in a net decrease of over 35,512 acres for agriculturally designated lands (See **Table 4.2-9**). The majority of this land is located in the Upland Agriculture land use designation. This was identified as a significant and unavoidable impact under project and cumulative conditions.

Alternative 1 would not result in the loss of these lands as no changes to the land use designation would occur. This alternative would reduce farmland impacts as compared to the 2008-2028 General Plan. This impact would result in a less than significant impact and therefore would be considered an environmentally better solution.

Result in a conflict with existing Williamson Act contracts (Impact 4.2.2)

While the vast majority of the land under Williamson contract is located in areas that are conducive to their continual agricultural use, there are land use changes in the 2008-2028 General Plan update that has the potential to conflict with Williamson Act lands and lead to the removal of this land from preservation contracts. The new Special Plan land use designation in the 2008-2028 General Plan is utilized primarily in an area that currently has land under Williamson Act contracts. Additionally, the expanded Rural Residential Small-Lot designation is

partially located in areas with current Williamson Act contract lands. The potential for these lands to be developed to urban type uses is high, especially in the north-central part of the County where the most growth is projected to occur. This would result in a significant and unavoidable impact.

Alternative 1 would not change the current land designations allowing the expansion of residential uses in areas of Williamson Act contract lands. Although Williamson Act Contract lands may still be converted to residential uses with Alternative 1 land use designations, the potential for conversion is less due to the reduce residentially or commercially designated lands in Alternative 1 and would be considered an environmentally better solution.

Result in conflicts between urban uses and agricultural uses (Impact 4.2.3)

Implementation of the 2008-2028 General Plan would place urbanized land uses adjacent to, and would replace, existing agricultural uses. It is anticipated that as the County's growing population increases the need for more residential, commercial and industrial development, agriculture/urban interface conflicts may occur. This would result in a significant and unavoidable impact.

Implementation of Alternative 1 would result in similar, though reduced, land use conflicts between urban/agricultural uses. This impact would still be considered significant and unavoidable. However, this Alternative would retain land use designations in the areas of existing agricultural uses that would be protective of continued uses would be considered an environmentally better solution.

Air Quality

Conflict with the TCAPCD Air Quality Attainment Plan (Impact 4.3.1)

Changes in the General Plan land uses would affect growth projections used for development of the Attainment Plan and result in conflicts between the General Plan and the NSVAB Air Quality Attainment Plan. This would result in a significant and unavoidable impact.

Alternative 1 would continue the existing development pattern in the County complying with growth assumptions used in the Attainment Plan. Therefore Alternative 1 would result in no impact to potential conflicts with the Attainment Plan and therefore would be considered an environmentally better solution.

Contribution to air quality impacts (construction, operational and toxic air contaminants) under project and cumulative conditions (Impacts 4.3.2, Impact 4.3.3, Impact 4.3.4, Impact 4.3.6)

Implementation of the 2008-2028 General Plan and the resulting development would increase the potential for additional mobile and stationary sources emissions, short-term construction emission, and toxic air contaminants which would adversely affect regional air quality. All of the air quality impacts listed above result in significant and unavoidable impacts.

While Alternative 1 would result in less potential for development and population growth, Alternative 1 would still result in impacts to air quality. Implementation of Alternative 1 would result in reduced air emissions. These emission levels would still be considered significant, but development under this Alternative would be within the projections being utilized by NSVAB. Therefore, Alternative 1 would be considered an environmentally better solution.

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Possible exposure of sensitive receptors to odorous emissions (Impact 4.3.5)

Implementation of the 2008-2028 General Plan would allow for the development of uses that have the potential to produce odorous emissions either during the construction or operation of the development. Additionally, implementation of the General Plan may allow for the construction of sensitive land uses (i.e. residential development, schools, parks, offices, etc.) near existing or future sources of odorous emissions. General Plan policies and implementation measures along with mitigation measures identified under this impact reduce this impact to a less than significant level.

Alternative 1 would have a similar potential to include land uses that have potential to produce odorous emissions or allow for the construction of sensitive land uses (i.e. residential development, schools, parks, offices, etc.) near existing or future sources of odorous emissions. The proposed project includes General Plan policies and implementation measures and mitigation measures which reduce this impact to a less than significant level. Alternative 1, which is a continuation of existing General Plan objectives and policies, do not offer the same level of protection as the proposed project. While, Alternative 1 would result in a reduced population that could be exposed to objectionable odors, this alternative does not have any policies regarding the protection of sensitive receptors and odorous emissions therefore, Alternative 1 would be considered an environmentally worse solution.

Biological Resources

Direct and Indirect and Cumulative Impacts to Endangered, Threatened and Other Special-Status Species Direct and Indirect Impacts to Sensitive Biotic Communities including Jurisdictional Waters, Effects on Wildlife Movement Corridors (Impact 4.4.1, Impact 4.4.2, Impact 4.4.3, Impact 4.4.5)

Implementation of the 2008-2028 General Plan could result in a direct or indirect loss of habitat for and individuals of endangered, threatened and/or other special-status plant and animal species, in impacts to sensitive biotic communities including jurisdictional waters, and could interfere substantially with the movement of wildlife. General Plan policies and implementation measures along with mitigation measures identified under these impacts reduce the impacts to a less than significant level.

Alternative 1 would likely result in reduced impacts by retaining less intensive land uses in the Planning Area. Approximately 38,000 acres identified for urban development in the 2008-2028 General Plan would not be developed under Alternative 1. However, it is acknowledged that existing agricultural operations could still result in the impacts to these habitats. Additionally, Alternative 1 biological impacts, as discussed in the 1983 General Plan, result in a significant and unavoidable impact to wildlife habitats. As the proposed project reduces all biological resource impacts to a less than significant level through the implementation of policies, implementation measures and mitigation measures and Alternative 1 results in a significant and unavoidable impact to wildlife habitats, Alternative 1 is considered the environmentally worse solution than the proposed project.

Cultural Resources

Prehistoric Resources and Historic Resources, Paleontological Resources (Impact 4.5.1, Impact 4.5.2, Impact 4.5.4)

Adoption of the Tehama County 2008-2028 General Plan could result in the potential disturbance of historic and archaeological resources, paleontological resources (i.e., fossils and fossil formations) or unique geological features. Implementation of the 2008-2028 General Plan policies, implementation measures, along with mitigation measures identified under impact 4.5.1 and 4.5.2 would assist in reducing significant impacts to known cultural resources, as well as to any unknown cultural resources. Impacts to historic resources and paleontological resources would be reduced to a less than significant level.

Alternative 1 would have reduced potential for impacts to undiscovered cultural resources by retaining less intensive land uses. However, it is acknowledged that agricultural operations could still result in impacts to undiscovered cultural resources. Alternative 1's impacts to cultural resources have been determined to be less than significant in the 1984 General Plan. Because ultimate buildout of Alternative 1 would result in less development when compared to the proposed project, Alternative 1 is considered to be an environmentally better solution

Potential Disturbance of Human Remains (Impact 4.5.3)

A project constructed as a result of the 2008-2028 General Plan could disturb human remains, especially those interred outside of formal cemeteries. The General Plan policies and implementation measures, as well as implementation of mitigation measures would reduce this impact to less than significant.

Alternative 1 would also result in a less than significant impact. Alternative 1 would have the same potential for disturbance to human remains as the proposed project.

Geology and Soils

Potential Seismic Hazards (Impact 4.6.1)

Implementation of the 2008-2028 General Plan may result in the placement of structures and development in areas of seismic sensitivity. The County of Tehama General Plan policies and implementation measures, which require adherence to the California Building Code and which require a geotechnical investigation prior to site development, would reduce the effects resulting from earthquakes, ground shaking, liquefaction, and other secondary hazards within the Tehama County General Plan Planning Area to a minimum. This impact is considered to be less than significant.

Alternative 1 would result in similar impacts to the proposed project by allowing the placement of structures and development in areas of seismic sensitivity. However, as with the proposed project, policies and implementation measures in the adopted General Plan as well as adherence to the California Building Code would reduce this potential impact to a less than significant level.

Potential Increase of Erosion and Loss of Topsoil (Impact 4.6.2)

Implementation of the 2008-2028 General Plan may result in substantial construction and site preparation activities. These activities increase soil erosion, wind and water erosion, and siltation

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of local drainages during construction, excavation and grading activities. Compliance with adopted erosion control standards and NPDES and SWPPP requirements, as well as General Plan policies and implementation measures would result in less than significant erosion impacts.

Alternative 1 may also result in substantial construction and site preparation activities, however not to the level of the proposed project. This is mainly due to Alternative 1's substantially less available land for residential development (approximately 31,500 acres) than the proposed project. However, much of this land is currently being used for agricultural purposes, either of the growing of crops or for grazing land. This type of use, without proper soil conservation, would also promote erosion and increase the likelihood of a loss of topsoil. But, agricultural land has been in production for more than 100 years in Tehama County and it must be assumed that the protection of these lands by using soil conservation techniques, reducing the potential for erosion, loss of topsoil and overgrazing has been implemented in order to make the land continuously viable for agricultural production. Considering the above arguments, Alternative 1 would result in a less than significant impact and be an environmentally better solution than the proposed project.

Potential Development on Unstable Soils (Impact 4.6.3)

Implementation of the General Plan Land Update may allow for development in areas with unstable soils. Compliance with adopted 2007 California Building Code requirements, as well as implementation of the General Plan policies and implementation measures would ensure that expansive or unstable soils related impacts are reduced to a less than significant level.

Implementation of Alternative 1 would result in similar impacts as the 2008-2028 General Plan. Alternative 1 would be subject to the County standards regarding development on unstable soils identified in the CBC and the adopted General Plan policies.

Potential Wastewater Conflicts (Impact 4.6.4)

Implementation of the General Plan may allow for development in areas with soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems and where sewers are not available for the disposal of wastewater. The County of Tehama General Plan policies and implementation measures, which require a geotechnical investigation prior to site development, would reduce impacts resulting from soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems and where sewers are not available for the disposal of wastewater. This results in a less than significant impact.

Alternative 1 may also allow for the development of areas with soils incapable of adequately supporting the use of septic tanks or alternative wastewater systems. All installation of new septic systems is subject to review and approval by the County's Environmental Health Department. However, areas of the County have had problems with leaking septic systems affecting groundwater quality. Based on this information, it must be assumed that existing General Plan policies and implementation measures are inadequate for the placement and operation of septic systems. Therefore, this impact is considered to be environmentally worse than the proposed project.

Hazards and Hazardous Materials

Wildland Fire and Cumulative Wildland Fire (Impact 4.7.1 and Impact 4.1.10)

Implementation of the General Plan could result in safety hazards associated with wildland fires in residential areas adjacent to open space and natural areas under existing and cumulative conditions. Implementation of General Plan policies and associated implementation measures would reduce potential impacts to residential areas within the Planning Area due to wildland fires and safety hazards. However, these impacts would still result in a significant and unavoidable impact.

Land use designations identified under Alternative 1 would also allow for the development of residential uses adjacent to open space and natural areas. The adopted General Plan contains objectives which reduce the potential for wildland fire hazards. However, these objectives are rather vague and do not specify actual wildland fire protection standards to the degree of the 2008-2028 General Plan. Therefore, Alternative 1 would result, to a greater degree than the 2008-2028 General Plan, in safety hazards associated with wildland fires.

Airport Operations (Impact 4.7.2)

Implementation of the 2008-2028 General Plan could result in safety hazards associated with airport operations in areas proposed for development. Implementation of these General Plan policies and associated implementation measures, as described above, would ensure that all development projects within the Tehama County General Plan Planning Area comply with federal, state, and local regulations, including the Federal Aviation Administration regulations. The result is a less than significant impact.

Alternative 1 would have similar safety impacts associated with airport operations. However, as with the 2008-2028 General Plan, Alternative 1 would be required to comply with federal, state, and local regulations, including the Federal Aviation Administration regulations concerning potential airport safety. Therefore, Alternative 1 would result in a less than significant impact.

Transportation, Use, Disposal and Release of Hazardous Materials (Impact 4.7.4, Impact 4.7.3)

Implementation of the General Plan would allow for uses that transport hazardous materials on Planning Area roadways as well as the use and disposal of hazardous materials within the Tehama County General Plan Planning Area. Tehama County General Plan policies and associated implementation measures, as well as adherence to all federal, state, and local regulations regarding the transportation of explosives, poisonous inhalation hazards, and radioactive materials, would reduce the environmental impacts associated with the routine transportation, use, and disposal of hazardous materials to less than significant.

Alternative 1, which in fact is the County's General Plan adopted in 1974 and 1983, does not address or provide objectives or policies on the transportation, use and disposal of hazardous materials. However, as the use, transportation and disposal of hazardous materials is regulated by federal, state, and local agencies, the need for objectives and policies in the General Plan is not necessarily required. Because certain agencies have been assigned the task of regulating hazardous materials by the federal and state government, inclusion of policies in a general plan would not necessarily increase the protection of individuals from these potential hazards. However, the proposed project includes policies and implementation measures that may exceed the protection offered by federal and state regulations. Therefore, Alternative 1 is

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considered to have an environmentally worse impact than the proposed project, but still result in a less than significant impact.

Hazardous Emissions Near Schools (Impact 4.7.5)

Hazardous materials would be used during construction and operational activities throughout the Planning Area, which may expose nearby students, faculty, and staff at local schools to toxic emissions. Implementation of General Plan policies and implementation measures, as well as adherence to all federal, state, and local regulations regarding the transportation, storage and handling of hazardous wastes would reduce exposure of hazardous substances and toxic emissions by nearby students, faculty, and staff at local schools to less than significant.

As with the proposed project, Alternative 1 would be subject to federal, state, and local regulations regarding the transportation, storage and handling of hazardous wastes which would reduce exposure of hazardous substances and toxic emissions by nearby students, faculty, and staff at local schools to less than significant.

Flooding Impacts (Impact 4.7.8)

Implementation of the 2008-2028 General Plan would allow of an increase in development resulting in an increase of impervious surfaces and alter drainage conditions and storm water runoff rates throughout the Tehama County General Plan area, which could result in potential flooding impacts. Implementation of the Tehama County General Plan policies and associated implementation measures would reduce the environmental impacts associated with flood hazards within the General Plan Planning Area to less than significant.

Alternative 1 does not have the development potential of the proposed project and therefore would create less impervious surfaces, a reduced altering of drainage conditions and reduced storm water runoff rates, as well the potential for building in flood zones than that of the proposed project. Alternative 1 is considered to be an environmentally better solution than the proposed project for potential flood hazards.

Hydrology and Water Quality

Surface Water Quality Impacts and Cumulative Water Quality Impacts (Impact 4.8.1, Impact 4.8.4)

Implementation of the 2008-2028 General Plan could result in an alteration of existing drainage, in the discharge of polluted runoff, discharge that could cause harm to the biological integrity of waterways, adversely impact water quality standards, or otherwise substantially degrade surface water quality. General Plan policies and implementation measures, mitigation measures, as well as compliance with NPDES permit requirements would ensure that both construction-related and operational impacts to surface water resources in the General Plan Planning Area would be less than significant under project and cumulative conditions.

Implementation of Alternative 1 has been determined in the 1984 General Plan to result in some limited adverse environmental effects (General Plan, Community Development Group, pg III-38). While Alternative 1 would result in a reduced potential for water quality impacts given the extent of urban development would be reduced, the proposed project offers a greater level of protection through its policies and implementation measures which results in a less than significant impact. Therefore, the proposed project is a better environmental alternative.

Groundwater Quality Impacts and Cumulative Groundwater Quality Impacts (Impact 4.8.2, Impact 4.8.3)

Implementation of the 2008-2028 General Plan and the resultant increase in development could result in the degradation of groundwater quality and supply resulting from future land uses. General Plan policies and implementation measures would ensure that impacts to groundwater resources in Tehama County would be considered less than significant under project and cumulative conditions.

Implementation of Alternative 1 has been determined in the 1984 General Plan to not result in significant changes in the quantity or quality of groundwater supplies (pg III-37). While Alternative 1 would result in a reduced potential for groundwater quality impacts given the extent of urban development would be reduced, the proposed project offers a greater level of protection through its policies and implementation measures which results in a less than significant impact. Therefore, the proposed project is a better environmental alternative.

Drainage and Flooding Impacts and Cumulative Water Quality Impacts (Impact 4.8.4, Impact 4.8.6)

Implementation of the 2008-2028 General Plan resultant increase in development would potentially increase impervious surfaces and alter drainage conditions and storm water runoff rates throughout Tehama County, which could result in substantial erosion or siltation on- or off-site. General Plan policies and implementation measures would ensure that drainage and flood related impacts would be less than significant under project and cumulative conditions.

Alternative 1 would also have potential drainage and flooding impacts as a result of development. While Alternative 1 would result in a reduced potential for drainage and flooding impacts given the extent of urban development would be reduced, the proposed project offers a greater level of protection through its policies and implementation measures which results in a less than significant impact. Therefore, the proposed project is a better environmental alternative.

Water Supply and Cumulative Water Supply Impacts (Impact 4.8.3, Impact 4.8.7)

Implementation of the proposed General Plan would potentially increase the demand for water from both surface and groundwater sources throughout Tehama County, which could result in water shortages or reduce recharge to aquifers.

While Alternative 1 would result in less population growth, this smaller growth would still require water and thus impact the water source in the County. However, because Alternative 1 would result in a buildout population of 95,387 persons less than the proposed 2008-2028 General Plan, this alternative would be the better alternative when regarding water supply in the County.

Noise

Cumulative Noise Impacts Associated with Increased Traffic (Impact 4.10.7)

Implementation of the 2008-2028 General Plan, in combination with development occurring within the incorporated cities of Red Bluff, Corning, and Tehama would potentially increase traffic levels in the planning area. General Plan policies and implementation measures along with mitigation measure 4.10.7 reduce this impact to less than significant.

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Alternative 1 would also result in potential cumulative traffic noise impacts. Alternative 1 would have less traffic because of less buildout population. The reduction in traffic would reduce traffic noise and therefore Alternative 1 would be the better alternative.

Population and Housing

Substantial Increase in Population and Housing (Impact 4.11.1, Impact 4.11.3)

Implementation of the 2008-2028 General Plan would include an increase in land uses that promote the increase in population and housing to the area. Land use changes included in the 2008-2028 General Plan may result in a substantial increase the population to the area over existing conditions. The 2008-2028 General Plan does not contain any policies which would limit population growth. Because of this, the implementation of the 2008-2028 General Plan will result in a significant and unavoidable impact under project and cumulative conditions.

The impacts on future population growth and housing development may vary, depending on factors such as the housing market, job availability, type of housing built and economic conditions. Under Alternative 1, fewer housing units would be built than under the proposed project. The population projections in this analysis assume a constant relationship between population and housing stock, which likely will not occur. However, as discussed elsewhere in this section, the lower number of housing units under Alternative 1 would result in less significant impacts on the physical environment than the proposed project.

Traffic and Circulation

County Roadways Level of Service and Cumulative Traffic Impacts on Local Roadways and State Highways (Impact 4.13.1, Impact 4.13.7)

(SU) While policies and implementation measures provided in the General Plan Update and mitigation measures listed above would reduce impacts to the County's roadways, it is not certain that the total funding necessary to make these improvements will be available when needed and therefore the roadway would continue to operate at an unacceptable LOS. Additionally, much of the roadway impacts will be to state or interstate highways, which are outside of the County's jurisdiction and the County cannot ensure that these improvements would be completed. Given these conditions, this impact is considered significant and unavoidable under project and cumulative conditions.

Alternative 1 is expected to lead to fewer impacts to transportation than the proposed project. Since there would be less development, and consequently fewer residents, under Alternative 1, there would be fewer motorists and therefore less traffic. The 1984 General Plan discussed the growth in certain areas of the County (Bowman Road, Lake California Drive and areas surrounding Red Bluff) could lead to issues at specific intersections and road segments. The 1984 General Plan identified roadway improvements reduce these impacts. Because implementation of Alternative 1 would result in less development, it stands to reason that roadway level of service impacts would be less extensive and would be the better environmental alternative.

Utilities and Service Systems

Water Supply Infrastructure and Cumulative Water Service Impacts (Impact 4.14.1.1, Impact 4.14.1.2)

Implementation of the General Plan would require additional treatment capacity, storage capacity, and other conveyance facilities to meet the projected water demands. The policies and implementation measures in the General Plan provide for future water supply in the unincorporated portions of Tehama County and complement the existing standards and guidelines. General Plan policies and associated implementation measures would reduce the General Plan's water supply impacts yet these would remain significant and unavoidable impacts under project and cumulative conditions.

Alternative 1 would also result in potential impacts to water supply and service. However, evaluation of this impact in the 1984 General Plan resulted in a determination that water supply and service was adequate to serve future growth. This was based on the General Plan's development pattern which "recognized the availability of domestic water supply, the suitability of soils to accommodate individual septic systems and the location of rural-small lot residential growth in areas suited for this specified density" (1984 General Plan, Environmental Review, pg IVv-9).

Wastewater Conveyance and Treatment Cumulative Wastewater Impacts (Impact 4.14.2.1, Impact 4.14.2.2)

Implementation of the Tehama County General Plan would substantially increase wastewater flows and require additional infrastructure and may require additional treatment capacity to accommodate anticipated demands that would result in a physical effect on the environment. Implementation of the General Plan Land Use Element and Public Services Element policies and associated implementation measures listed above will assist in reducing the General Plan's wastewater related impacts yet not to a level that is less than significant. General Plan impacts to wastewater conveyance and treatment are considered to be significant and unavoidable.

Alternative 1 would also increase wastewater flows and may require additional treatment capacity. However, Alternative 1 would result in less population growth. Therefore the demand for treatment facilities is not as great as the proposed project. As a result, Alternative 1 is the better environmental alternative.

Electrical, Natural Gas, and Infrastructure (Impact 4.14.3.1)

Implementation of the General Plan would substantially increase demand for electrical, natural gas, telephone and related infrastructure. General Plan Public Services Element policies and associated implementation measures will assist in reducing the General Plan's electrical, natural gas, telephone, and cable related impacts to a level that is less than significant.

Alternative 1 would also increase the demand for electrical, natural gas, telephone and related infrastructure. However, Alternative 1 would result in less population growth. Therefore the demand for these facilities is not as great as the proposed project. As a result, Alternative 1 is the better environmental alternative.

Global Warming and Climate Change

Cumulative Increase in GHG Emissions (Impact 6.14)

Buildout of the 2008-2028 General Plan would result in the cumulative increase of greenhouse gases including CO₂ emitted into the atmosphere. The County can and does require energy efficient design in building construction within the County. This requirement and the General Plan policies and implementing actions can effectively reduce greenhouse gas (GHG) emissions. Whether or not these requirements will reduce emissions effectively enough to mitigate the County's contribution to GHGs is unknown as currently no thresholds or standards

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have been established for the reduction of GHG. Therefore, until such time that there are thresholds of significance for which to compare the County's GHGs contribution, it must be assumed that any increase in GHGs will lead to a change in climate. Therefore, this impact is considered significant and unavoidable and the 2008-2028 General Plan would have a cumulatively considerable contribution.

Alternative 1 would produce less GHG's because of less development. However, because no thresholds or standards currently exist regarding GHG emissions, it must be assumed that any increase in GHG emissions would result in a significant impact. Additionally, because Alternative 1 is a continuation of the 1983 General Plan and global warming and climate change was not an issue when this policy document was written, global warming was not of concern and policies and implementation measures were not established to lessen this impact. As a result, the proposed project may, in fact, have less impact on global warming and climate change through implementation of its policies. However, because Alternative 1 would result in less population and development, GHG emission may be less recognizing that the proposed project includes policies to reduce these emissions. However, until such time that there are thresholds of significance for which to compare the County's GHGs contribution, it must be assumed that any increase in GHGs will lead to a change in climate. Therefore, Alternative 1's impact is considered significant and unavoidable and would have a cumulatively considerable contribution.

Alternative 2 - Land Use Plan Option A – Majority Opinion Land Use Diagram

The 2008-2028 General Plan included an alternative land use diagram entitled the Majority Opinion Land Use Diagram. This land use plan was an alternative initiated by the General Plan Revision Advisory Committee as a reduced density option which basically reduces the allowed housing unit density for certain areas within the County. Table 5.0-3 identifies the land use designations by acreage for Alternative 2.

**TABLE 5.0-3
ALTERNATIVE 2 – LAND USE ACRES**

Land Use Designation	Acres
Commercial Recreation	180.00
City	7,764.80
General Commercial	1,152.20
Public	488,195.40
General Industrial	3,348.00
Habitat Resources	8,683.10
Resource Lands	15,112.60
Public Facility	667.70
Rural Large Lot	25,203.90
Rural Small Lot	35,472.80
Special Plan/General Commercial	1,108.70
Special Plan/Rural Small Lot	9,571.50
Special Plan/Suburban	5,680.00
Special Plan/Valley Floor Ag	3,330.90
Suburban	14,904.80
Timber	239,447.80
Tribal	1,984.80
Upland Ag	666,285.60

Land Use Designation	Acres
Urban	1,797.20
Valley Floor Ag	359,744.20
Special Plan /Habitat Resources	27.90
Special Plan/Rural Large Lot	785.50
Water	2,084.50
Special Plan/Public Facilities	49.5

As with the proposed General Plan, Alternative 2 also introduces a new land use overlay designation of Special Plan. The Special Plan overlay designated area, approximately 17,863 acres, allows for residential, commercial, public facilities and other uses. The major difference between the 2008-2028 General Plan and Alternative 2, as far as population and housing unit changes, is the reduction of acreage in the Special Plan/Suburban land use designation from 14,113.3 acres to 5,680.0 acres and the increase of Special Plan/Rural Small Lot from 3,247.6 acres to 9,571.5 acres. While this change may seem fairly minimal, the changes result in a substantial reduction in buildout housing units, population and the infrastructure and services necessary to serve these uses.

The 2008-2028 General Plan projects a buildout population of 416,967 and housing unit count of 184,499. Alternative 2 has a project buildout population of 357,909 and 158,367 housing units. The lower projected population and housing units would then result in a lesser impact on the environment in many areas since less land would be needed for growth and fewer people will place a lesser impact on utilities, parks, recreation, traffic, noise, etc. Other than having a lower population estimate, this alternate would have all the goals and programs of the Draft General Plan.

**TABLE 5.0-4
ALTERNATIVE 2 - POTENTIAL BUILDOUT HOUSING AND POPULATION**

Land Use Designation	Acres	Housing Units	Population
Residential			
Rural Large Lot	25,989	2,599	5,874
Rural Small Lot	45,044	22,522	50,900
Suburban	20,585	82,339	186,087
Urban	1,797	28,755	64,987
Subtotal	93,416	136,215	307,847
Agricultural			
Upland Agriculture	666,286	17,987	40,651
Valley Floor Agriculture	359,744	4,164	9,411
Subtotal	1,026,030	22,151	50,062
Total	119,445	158,367	357,909

Comparative Impacts

Aesthetics

Degradation of the existing visual character and/or quality of the County and its communities under project and cumulative conditions. (Impact 4.1.3, Impact 4.1.5)

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Implementation of the proposed General Plan would change the visual character of the Planning Area. The existing visual character of the County is predominantly rural, with scenic views located throughout the region. Overall development patterns through 2028 would not significantly change the visual character of the County as most of the development is projected to occur in the County's existing communities. However, the 2008-2028 General Plan increases the amount of residential land by more than 38,000 acres. This impact was identified as a significant and unavoidable impact under project and cumulative conditions.

Alternative 2 would reduce visual impacts by retaining less intensive land uses that are consistent with the existing rural/agricultural/open space landscape characteristics. However, urban development allowed under this Alternative would still result in significant impacts to the visual character of the County by allowing urban development in rural areas. This impact would be significant and unavoidable for Alternative 2. However, because of the reduced development area, when compared to the proposed project, this Alternative would have a less severe impact regarding visual character.

Agricultural Resources

Result in the loss of important farmlands (prime farmland, unique farmland, and farmland of statewide importance, etc) under project and cumulative conditions (Impact 4.2.1, Impact 4.2.4)

As noted in Section 4.2 (Agriculture), land use designation changes in the 2008-2028 General Plan results in a net decrease of over 35,512 acres for agriculturally designated lands (See **Table 4.2-9**). The majority of this land is located in the Upland Agriculture land use designation. This was identified as a significant and unavoidable impact under project and cumulative conditions.

Alternative 2 would also result in the loss of these lands as the major difference between Alternative 2 and the proposed project are changes in residential type land uses. As a result, Alternative 2 would have the same impact to agricultural lands as the proposed project.

Result in a conflict with existing Williamson Act contracts (Impact 4.2.2)

While the vast majority of the land under Williamson Act contract is located in areas that are conducive to their continual agricultural use, there are land use changes in the 2008-2028 General Plan that has the potential to conflict with Williamson Act lands and lead to the removal of this land from preservation contracts. The new Special Plan land use designation in the 2008-2028 General Plan is located in an area that currently has land under Williamson Act contracts. Additionally, the expanded Rural Residential Small-Lot designation is partially located in areas with current Williamson Act contract lands. The potential for these lands to be developed to urban type uses is high, especially in the north-central part of the County where the most growth is projected to occur. This would result in a significant and unavoidable impact.

As with the proposed project, Alternative 2 would allow for development in areas with existing Williamson Act contracts. However, the major difference between Alternative 2 and the proposed project are changes in residential type land uses and therefore would result in the same impacts to conversion of land under Williamson Act contract to residential uses as the proposed project.

Result in conflicts between urban uses and agricultural uses (Impact 4.2.3)

Implementation of the 2008-2028 General Plan would place urbanized land uses adjacent to, and would replace, some existing agricultural uses. It is anticipated that as the County's growing

population increases the need for more residential, commercial and industrial development, agriculture/urban interface conflicts may occur. This would result in a significant and unavoidable impact.

Implementation of Alternative 2 would result in similar, though reduced, land use conflicts between urban/agricultural uses. This impact would still be considered significant and unavoidable.

Air Quality

Conflict with the TCAPCD Air Quality Attainment Plan (Impact 4.3.1)

Changes in the General Plan land uses would affect growth projections used for development of the Attainment Plan and result in conflicts between the General Plan and the NSVAB Air Quality Attainment Plan. This would result in a significant and unavoidable impact.

Alternative 2 would have less growth potential than the proposed project as well as the current General Plan. This would support the County in complying with growth assumptions used in the Attainment Plan. Therefore Alternative 2 would result in no impact to potential conflicts with the Attainment Plan and therefore would be considered an environmentally better solution.

Contribution to air quality impacts (construction, operational and toxic air contaminants) under project and cumulative conditions (Impacts 4.3.2, Impact 4.3.3, Impact 4.3.4, Impact 4.3.6)

Implementation of the proposed General Plan and the resulting development would increase the potential for additional mobile and stationary sources emissions, short-term construction emission, and toxic air contaminants which would adversely affect regional air quality. All of the air quality impacts listed above result in significant and unavoidable impacts.

While Alternative 2 would result in less potential for development and population growth, Alternative 2 would still result in impacts to air quality. Implementation of Alternative 2 would result in reduced air emissions. These emission levels would still be considered significant, but development under this Alternative would be within the projections being utilized by NSVAB. Therefore, Alternative 2 would be considered an environmentally better alternative.

Possible exposure of sensitive receptors to odorous emissions (Impact 4.3.5)

Implementation of the proposed General Plan would allow for the development of uses that have the potential to produce odorous emissions either during the construction or operation of the development. Additionally, implementation of the General Plan may allow for the construction of sensitive land uses (i.e. residential development, schools, parks, offices, etc.) near existing or future sources of odorous emissions. General Plan policies and implementation measures along with mitigation measures identified under this impact reduce this impact to a less than significant level.

Alternative 2 would have a similar potential to include land uses that have potential to produce odorous emissions or allow for the construction of sensitive land uses (i.e. residential development, schools, parks, offices, etc.) near existing or future sources of odorous emissions. The proposed project includes General Plan policies and implementation measures and mitigation measures which reduce this impact to a less than significant level. Alternative 2, which would incorporate the proposed General Plan objectives and policies, would offer the same level of protection as the proposed project. However, Alternative 2 would result in a reduced

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population that could be exposed to objectionable odors, therefore, Alternative 2 would be considered an environmentally better solution.

Biological Resources

Direct, Indirect and Cumulative Impacts to Endangered, Threatened and Other Special-Status Species Direct and Indirect Impacts to Sensitive Biotic Communities including Jurisdictional Waters, Effects on Wildlife Movement Corridors (Impact 4.4.1, Impact 4.4.2, Impact 4.4.3, Impact 4.4.5)

Implementation of the proposed General Plan could result in a direct or indirect loss of habitat for and individuals of endangered, threatened and/or other special-status plant and animal species, in impacts to sensitive biotic communities including jurisdictional waters, and could interfere substantially with the movement of wildlife. General Plan policies and implementation measures along with mitigation measures identified under these impacts reduce the impacts to a less than significant level.

Alternative 2 would likely result in slightly reduced impacts by retaining less intensive land uses in the Planning Area. Approximately 2,109.4 acres identified for urban development in the proposed General Plan would not be developed under Alternative 2 as a result of land use changes under Alternative 2. However, it is acknowledged that existing agricultural operations could still result in the impacts to these habitats. As the proposed project reduces all biological resource impacts to a less than significant level through the implementation of policies, implementation measures and mitigation measures and Alternative 2 incorporates the policies, implementation measures and mitigation measures of the proposed project, Alternative 2 is considered the environmentally the same as the proposed project and would also result in a less than significant impact.

Cultural Resources

Prehistoric Resources and Historic Resources, Paleontological Resources (Impact 4.5.1, Impact 4.5.2, Impact 4.5.4)

Adoption of the Tehama County 2008-2028 General Plan could result in the potential disturbance of historic and archaeological resources, paleontological resources (i.e., fossils and fossil formations) or unique geological features. Implementation of the proposed General Plan policies, implementation measures, along with mitigation measures identified under impact 4.5.1 and 4.5.2 would assist in reducing significant impacts to known cultural resources, as well as to any unknown cultural resources. Impacts to historic resources and paleontological resources would be reduced to a less than significant level.

Alternative 2 would have reduced potential for impacts to undiscovered cultural resources by retaining less intensive land uses. However, it is acknowledged that agricultural operations could still result in impacts to undiscovered cultural resources. Alternative 2 would incorporate the policies, implementation measures and mitigation measures of the proposed project. Because of uncertainty of whether the policies and implementation measures ability to reduce impacts to prehistoric and historic resources to a less than significant level, Alternative 2 would have similar result although because ultimate buildout of Alternative 2 would result in less development when compared to the proposed project, Alternative 2 is considered to be an environmentally better solution.

Potential Disturbance of Human Remains (Impact 4.5.3)

A project constructed as a result of the 2008-2028 General Plan could disturb human remains, especially those interred outside of formal cemeteries. The General Plan policies and implementation measures, as well as implementation of mitigation measures would reduce this impact to less than significant.

Alternative 2 would also result in a less than significant impact. Alternative 2 would have the same potential for disturbance to human remains as the proposed project.

Geology and Soils

Potential Seismic Hazards (Impact 4.6.1)

Implementation of the 2008-2028 General Plan may result in the placement of structures and development in areas of seismic sensitivity. The County of Tehama General Plan policies and implementation measures, which require adherence to the California Building Code and which require a geotechnical investigation prior to site development, would reduce the effects resulting from earthquakes, ground shaking, liquefaction, and other secondary hazards within the Tehama County General Plan Planning Area to a minimum. This impact is considered to be less than significant.

Alternative 2 would result in similar impacts to the proposed project by allowing the placement of structures and development in areas of seismic sensitivity. However, as with the proposed project, policies and implementation measures in the adopted General Plan as well as adherence to the California Building Code would reduce this potential impact to a less than significant level.

Potential Increase of Erosion and Loss of Topsoil (Impact 4.6.2)

Implementation of the 2008-2028 General Plan may result in substantial construction and site preparation activities. These activities increase soil erosion, wind and water erosion, and siltation of local drainages during construction, excavation and grading activities. Compliance with adopted erosion control standards and NPDES and SWPPP requirements, as well as General Plan policies and implementation measures would result in less than significant erosion impacts.

Alternative 2 may also result in substantial construction and site preparation activities, however not to the level of the proposed project. This is mainly due to Alternative 2's slightly less available land for residential development (approximately 2,100 acres) than the proposed project. However, much of this land is currently being used for agricultural purposes, either of the growing of crops or for grazing land. This type of use, without proper soil conservation, would also promote erosion and increase the likelihood of a loss of topsoil. But, agricultural land has been in production for more than 100 years in Tehama County and it must be assumed that the protection of these lands by using soil conservation techniques, reducing the potential for erosion, loss of topsoil and overgrazing has been implemented in order to make the land continuously viable for agricultural production. Considering the above arguments, Alternative 2 would result in a less than significant impact and be an environmentally better solution than the proposed project.

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Potential Development on Unstable Soils (Impact 4.6.3)

Implementation of the General Plan Land Update may allow for development in areas with unstable soils. Compliance with adopted 2001 California Building Code requirements, as well as implementation of the General Plan policies and implementation measures would ensure that expansive or unstable soils related impacts are reduced to a less than significant level.

Implementation of Alternative 2 would result in similar impacts as the proposed General Plan. Alternative 2 would be subject to the County standards regarding development on unstable soils identified in the CBC and the adopted General Plan policies.

Potential Wastewater Conflicts (Impact 4.6.4)

Implementation of the General Plan may allow for development in areas with soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems and where sewers are not available for the disposal of wastewater. The County of Tehama General Plan policies and implementation measures, which require a geotechnical investigation prior to site development would reduce impacts resulting from soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems and where sewers are not available for the disposal of wastewater. This results in a less than significant impact.

Alternative 2 may also allow for the development of areas with soils incapable of adequately supporting the use of septic tanks or alternative wastewater systems. All installation of new septic systems are subject to review and approval by the County's Environmental Health Department. As with the proposed project, the requirement a geotechnical investigation prior to site development would reduce impacts resulting from soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems and where sewers are not available for the disposal of wastewater. This results in a less than significant impact.

Hazards and Hazardous Materials

Wildland Fire and cumulative Wildland Fire (Impact 4.7.1 and Impact 4.7.10)

Implementation of the General Plan could result in safety hazards associated with wildland fires in residential areas adjacent to open space and natural areas under existing and cumulative conditions. Implementation of General Plan policies and associated implementation measures would reduce potential impacts to residential areas within the Planning Area due to wildland fires and safety hazards. However, these impacts would still result in a significant and unavoidable impact.

Land use designations identified under Alternative 2 would also allow for the development of residential uses adjacent to open space and natural areas. The adopted General Plan contains objectives which reduce the potential for wildland fire hazards. As with the proposed project, implementation of the proposed General Plan policies and associated implementation measures would reduce impacts to residential areas. Therefore, Alternative 2 would result in similar impact to safety hazards associated with wildland fires.

Airport Operations (Impact 4.7.2)

Implementation of the proposed General Plan could result in safety hazards associated with airport operations in areas proposed for development. Implementation of these General Plan policies and associated implementation measures, as described above, would ensure that all development projects within the Tehama County General Plan Planning Area comply with

federal, state, and local regulations, including the Federal Aviation Administration regulations. The result is a less than significant impact.

Alternative 2 would have similar safety impacts associated with airport operations. However, as with the proposed General Plan, Alternative 2 would be required to comply with federal, state, and local regulations, including the Federal Aviation Administration regulations concerning potential airport safety. Therefore, Alternative 2 would result in a less than significant impact.

Transportation, Use, Disposal and Release of Hazardous Materials (Impact 4.7.4, Impact 4.7.3)

Implementation of the General Plan would allow for uses that transport hazardous materials on Planning Area roadways as well as the use and disposal of hazardous materials within the Tehama County General Plan Planning Area. Tehama County General Plan policies and associated implementation measures, as well as adherence to all federal, state, and local regulations regarding the transportation of explosives, poisonous inhalation hazards, and radioactive materials, would reduce the environmental impacts associated with the routine transportation, use, and disposal of hazardous materials to less than significant.

Alternative 2 would have the same proposed General Plan policies and associated implementation measures. Because certain agencies have been assigned the task of regulating hazardous materials by the federal and state government, inclusion of policies in a general plan would not necessarily increase the protection of individuals from these potential hazards. However, the Alternative 2 as well as the proposed project includes policies and implementation measures that may exceed the protection offered by federal and state regulations. Therefore, Alternative 2 is considered to have an environmentally similar impact to that of the proposed project, and result in a less than significant impact.

Hazardous Emissions Near Schools (Impact 4.7.5)

Hazardous materials would be used during construction and operational activities throughout the Planning Area, which may expose nearby students, faculty, and staff at local schools to toxic emissions. Implementation of General Plan policies and implementation measures, as well as adherence to all federal, state, and local regulations regarding the transportation, storage and handling of hazardous wastes would reduce exposure of hazardous substances and toxic emissions by nearby students, faculty, and staff at local schools to less than significant.

As with the proposed project, Alternative 2 would be subject to federal, state, and local regulations regarding the transportation, storage and handling of hazardous wastes which would reduce exposure of hazardous substances and toxic emissions by nearby students, faculty, and staff at local schools to less than significant.

Flooding Impacts (Impact 4.7.8)

Implementation of the proposed General Plan would allow of an increase in development resulting in an increase of impervious surfaces and alter drainage conditions and storm water runoff rates throughout the Tehama County General Plan area, which could result in potential flooding impacts. Implementation of the Tehama County General Plan policies and associated implementation measures would reduce the environmental impacts associated with flood hazards within the General Plan Planning Area to less than significant.

Alternative 2 does not have the development potential of the proposed project and therefore would create less impervious surfaces, a reduced altering of drainage conditions and reduced

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storm water runoff rates, as well the potential for building in flood zones than that of the proposed project. Alternative 2 is considered to be an environmentally better solution than the proposed project for potential flood hazards.

Hydrology and Water Quality

Surface Water Quality Impacts and Cumulative Water Quality Impacts (Impact 4.8.1, Impact 4.8.5)

Implementation of the 2008-2028 General Plan could result in an alteration of existing drainage, in the discharge of polluted runoff, discharge that could cause harm to the biological integrity of waterways, adversely impact water quality standards, or otherwise substantially degrade surface water quality. General Plan policies and implementation measures, mitigation measures, as well as compliance with NPDES permit requirements would ensure that both construction-related and operational impacts to surface water resources in the General Plan Planning Area would be less than significant under project and cumulative conditions.

Alternative 2 would result in a reduced potential for water quality impacts given the extent of urban development would be reduced and offers the same level of protection through the policies and implementation measures and result in a less than significant impact. Therefore, Alternative 2 has a similar result in surface water quality impact. However, because Alternative 2 has less potential population and development growth than the proposed project, Alternative 2 is a better environmental alternative under cumulative conditions.

Groundwater Quality Impacts and Cumulative Groundwater Quality Impacts (Impact 4.8.2, Impact 4.8.5)

Implementation of the proposed General Plan and the resultant increase in development could result in the degradation of groundwater quality resulting from future land uses. General Plan policies and implementation measures would ensure that impacts to groundwater resources in Tehama County would be considered less than significant under project and cumulative conditions.

Implementation of Alternative 2 would result in a reduced potential for groundwater quality impacts given the extent of urban development. In addition, Alternative 2's inclusion of the proposed project policies and implementation measures for the protection of groundwater resources would result in a less than significant impact. However, because Alternative 2 would result in less development, it is considered a better environmental alternative.

Drainage and Flooding Impacts and Cumulative Water Quality Impacts (Impact 4.8.4, Impact 4.8.6)

Implementation of the proposed General Plan resultant increase in development would potentially increase impervious surfaces and alter drainage conditions and storm water runoff rates throughout Tehama County, which could result in substantial erosion or siltation on- or off-site. General Plan policies and implementation measures would ensure that drainage and flood related impacts would be less than significant under project and cumulative conditions.

Alternative 2 would also have potential drainage and flooding impacts as a result of development. However, Alternative 2 would result in a reduced potential for drainage and flooding impacts given the extent of urban development would be reduced when compared to the proposed project. Alternative 2's inclusion of the proposed project policies and

implementation measures regarding drainage and flooding impacts would result in a less than significant impact. However, Alternative 2 is a better environmental alternative because of the reduction in potential development.

Water Supply and Cumulative Water Supply Impacts (Impact 4.8.3, Impact 4.8.7)

Implementation of the proposed General Plan would potentially increase the demand for water from both surface and groundwater sources throughout Tehama County, which could result in water shortages or reduce recharge to aquifers.

While Alternative 2 would result in less population growth, this smaller growth would still require water and thus impact the water source in the County. However, because Alternative 2 would result in a buildout population of 69,092 persons less than the proposed 2008-2028 General Plan, this alternative would be the better alternative when regarding water supply in the County.

Noise

Cumulative Noise Impacts Associated with Increased Traffic (Impact 4.10.7)

Implementation of the 2008-2028 General Plan, in combination with development occurring within the incorporated cities of Red Bluff, Corning, and Tehama would potentially increase traffic levels in the planning area. General Plan policies and implementation measures along with mitigation measure 4.10.7 reduce this impact to less than significant.

Alternative 2 would also result in potential cumulative traffic noise impacts. Alternative 2 would have less traffic because of less buildout population. The reduction in traffic would reduce traffic noise and therefore Alternative 2 would be the better alternative.

Population and Housing

Substantial Increase in Population and Housing (Impact 4.11.1, Impact 4.11.3)

Implementation of the 2008-2028 General Plan would include an increase in land uses that promote the increase in population and housing to the area. Land use changes included in the 2008-2028 General Plan may result in a substantial increase the population to the area over existing conditions. The proposed General Plan does not contain any policies which would limit population growth. Because of this, the implementation of the proposed General Plan will result in a significant and unavoidable impact under project and cumulative conditions.

The impacts on future population growth and housing development may vary, depending on factors such as the housing market, job availability, type of housing built and economic conditions. Under Alternative 2, fewer housing units would be built than under the proposed project. The population projections in this analysis assume a constant relationship between population and housing stock, which likely will not occur. However, as discussed elsewhere in this section, the lower number of housing units under Alternative 2 would result in less significant impacts on the physical environment than the proposed project.

Traffic and Circulation

County Roadways Level of Service and Cumulative Traffic Impacts on Local Roadways and State Highways (Impact 4.13.1, Impact 4.13.7)

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Implementation of the 2008-2028 General Plan would result in an increase in traffic volumes that would result in deficient level of service conditions in year 2030. While policies and implementation measures provided in the General Plan Update and mitigation measures listed above would reduce impacts to the County's roadways, it is not certain that the total funding necessary to make these improvements will be available when needed and therefore the roadway would continue to operate at an unacceptable LOS. Additionally, much of the roadway impacts will be to state or interstate highways, which are outside of the County's jurisdiction and the County cannot ensure that these improvements would be completed. Given these conditions, this impact is considered significant and unavoidable under project and cumulative conditions.

Alternative 2 is expected to lead to fewer impacts to transportation than the proposed project. Since there would be less development, and consequently fewer residents, under Alternative 2, there would be fewer motorists and therefore less traffic. However, as with the proposed project it is not certain the total funding necessary to make future roadway improvements will be available and therefore result in a significant and unavoidable impact. Additionally, in order to fund additional roadway facilities to meet the projected demand, a certain level of growth would be required. Otherwise these new facilities would be economically infeasible. The land use designations identified in the proposed project were determined, in part, based on the level of growth needed to pay for transportation infrastructure. It has been determined by the County that less growth than what has been projected by the County would not be able to pay for the water infrastructure needed to serve future growth. Based on this determination, implementation of Alternative 2 would result in inadequate funding for roadway infrastructure and as a consequence result in a worse environmental impact than the proposed project.

Utilities and Service Systems

Water Supply Infrastructure and Cumulative Water Service Impacts (Impact 4.14.1.1, Impact 4.14.1.2)

Implementation the General Plan would require additional treatment capacity, storage capacity, and other conveyance facilities to meet the projected water demands. The policies and implementation measures in the General Plan provide for future water supply in the unincorporated portions of Tehama County and complement the existing standards and guidelines. General Plan policies and associated implementation measures would reduce the General Plan's water supply impacts yet these would remain significant and unavoidable impacts under project and cumulative conditions.

Alternative 2 would also result in potential impacts to water supply and service. Because Alternative 2 would result in substantially less population than the proposed project, it would stand to reason that water supply infrastructure and service impacts would be less. However as with transportation infrastructure, in order to fund additional treatment capacity, storage capacity, and other conveyance facilities to meet the projected water demands, a certain level of growth would be required. Otherwise these new facilities would be economically infeasible. The land use designations identified in the proposed project were determined, in part, based on the level of growth needed to pay for new water supply infrastructure. Based on this determination, implementation of Alternative 2 would result in inadequate water infrastructure and services and as a consequence result in a worse environmental impact than the proposed project.

Wastewater Conveyance and Treatment Cumulative Wastewater Impacts (Impact 4.14.2.1, Impact 4.14.2.2)

Implementation of the Tehama County General Plan would substantially increase wastewater flows and require additional infrastructure and may require additional treatment capacity to accommodate anticipated demands that would result in a physical effect on the environment. Implementation of the General Plan Land Use Element and Public Services Element policies and associated implementation measures listed above will assist in reducing the General Plan's wastewater related impacts yet not to a level that is less than significant. General Plan impacts to wastewater conveyance and treatment are considered to be significant and unavoidable.

Alternative 2 would also increase wastewater flows and may require additional treatment capacity. However, Alternative 2 would result in less population growth but as with transportation and water infrastructure and facilities a certain level of growth is necessary to make is feasible to construct needed wastewater facilities and Alternative 2 would not allow adequate growth. Consequently, implementation of Alternative 2 would result in inadequate wastewater infrastructure and services and result in a worse environmental impact than the proposed project.

Electrical, Natural Gas, and Infrastructure (Impact 4.14.3.1)

Implementation of the General Plan would substantially increase demand for electrical, natural gas, telephone and related infrastructure. General Plan Public Services Element policies and associated implementation measures will assist in reducing the General Plan's electrical, natural gas, telephone, and cable related impacts to a level that is less than significant.

Alternative 2 would also increase the demand for electrical, natural gas, telephone and related infrastructure. However, Alternative 2 would result in less population growth. Therefore the demand for these facilities is not as great as the proposed project. As a result, Alternative 2 is the better environmental alternative.

Global Warming and Climate Change

Cumulative Increase in GHG Emissions (Impact 6.14)

Buildout of the 2008-2028 General Plan would result in the cumulative increase of greenhouse gases including CO₂ emitted into the atmosphere. The County can and does require energy efficient design in building construction within the County. This requirement and the General Plan policies and implementing actions can effectively reduce greenhouse gas (GHG) emissions. Whether or not these requirements will reduce emissions effectively enough to mitigate the County's contribution to GHGs is unknown as currently no thresholds or standards have been established for the reduction of GHG. Therefore, until such time that there are thresholds of significance for which to compare the County's GHGs contribution, it must be assumed that any increase in GHGs will lead to a change in climate. Therefore, this impact is considered significant and unavoidable and the 2008-2028 General Plan would have a cumulatively considerable contribution.

Alternative 2 would produce less GHG's because of less development. However, because no thresholds or standards currently exist regarding GHG emissions, it must be assumed that any increase in GHG emissions would result in a significant impact. Because Alternative 2 would include the proposed project's policies and implementation measures regarding global warming and climate change and would result in less population and development, GHG emission would be less than the proposed project. However, until such time that there are thresholds of significance for which to compare the County's GHGs contribution, it must be assumed that any increase in GHGs will lead to a change in climate. Therefore, Alternative 2's

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impact is considered significant and unavoidable and would have a cumulatively considerable contribution.

Alternative 3 - Two Urban Growth Areas

Alternative 3 divides all future growth into two urban centers; the area surrounding the City of Red Bluff and the area surrounding the City of Corning. This alternative has the same projected growth at buildout as the proposed General Plan. However, this scenario does not confine the majority of anticipated growth to the north central portion of the County, but rather attempts to spread the growth between the two urban centers. This would result in two medium size municipalities of approximately 150,000 to 175,000 persons under buildout conditions (includes city populations) or more than an 775 percent increase in the greater Red Bluff urban area and 1,950 percent increase in the greater Corning urban area.¹ All land use acreage totals would remain the same as the proposed General Plan, but the majority of urban land uses would be located in the two urban areas. This would result in placing urban uses on agricultural lands surrounding the cities of Corning and Red Bluff but reserving the lands in the northernmost portion of the County which have been identified for residential, commercial, industrial and other urban type development in the proposed General Plan.

Comparative Impacts

Aesthetics

Degradation of the existing visual character and/or quality of the County and its communities under project and cumulative conditions. (Impact 4.1.3, Impact 4.1.5)

Implementation of the proposed General Plan would change the visual character of the Planning Area. The existing visual character of the County is predominantly rural, with scenic views located throughout the region. Overall development patterns through 2028 would not significantly change the visual character of the County as most of the development is projected to occur in the County's existing communities. However, the 2008-2028 General Plan increases the amount of residential land by more than 38,000 acres. This impact was identified as a significant and unavoidable impact under project and cumulative conditions.

Alternative 3 and the proposed project would have similar visual impacts. However, Alternative 3 would have two major urban development areas instead of one identified for the proposed project. This would impact a much greater area and degrade the existing visual character to a greater extent. This Alternative would still result in significant impacts to the visual character of the County by allowing urban development in rural areas. This impact would be significant and unavoidable for Alternative 3. However, because the development area would be located in two development areas as opposed to one, this Alternative would have a greater impact regarding visual character.

Agricultural Resources

Result in the loss of important farmlands (prime farmland, unique farmland, and farmland of statewide importance, etc) under project and cumulative conditions (Impact 4.2.1, Impact 4.2.4)

¹ The greater urban area population for Red Bluff is estimated to be 19,297 persons and in Corning 7,671 persons in 2000. (2000 Census)

As noted in Section 4.2 (Agriculture), land use designation changes in the 2008-2028 General Plan results in a net decrease of over 35,512 acres for agriculturally designated lands (See **Table 4.2-9**). The majority of this land is located in the Upland Agriculture land use designation. This was identified as a significant and unavoidable impact under project and cumulative conditions.

Alternative 3 would also result in the loss of these lands but to a greater extent as the development would occur in to major agricultural areas in the County. As a result, Alternative 3 would have a worse impact to agricultural lands than the proposed project.

Result in a conflict with existing Williamson Act contracts (Impact 4.2.2)

While the vast majority of the land under Williamson Act contract is located in areas that are conducive to their continual agricultural use, there are land use changes in the 2008-2028 General Plan that has the potential to conflict with Williamson Act lands and lead to the removal of this land from preservation contracts. The new Special Plan land use designation in the 2008-2028 General Plan is located in an area that currently has land under Williamson Act contracts. Additionally, the expanded Rural Residential Small-Lot designation is partially located in areas with current Williamson Act contract lands. The potential for these lands to be developed to urban type uses is high, especially in the north-central part of the County where the most growth is projected to occur. This would result in a significant and unavoidable impact.

As with the proposed project, Alternative 3 would allow for development in areas with existing Williamson Act contracts. This would result in a significant and unavoidable impact.

Result in conflicts between urban uses and agricultural uses (Impact 4.2.3)

Implementation of the 2008-2028 General Plan would place urbanized land uses adjacent to and would replace existing agricultural uses. It is anticipated that as the County's growing population increases the need for more residential, commercial and industrial development, agriculture/urban interface conflicts may occur. This would result in a significant and unavoidable impact.

Implementation of Alternative 3 would result in similar land use conflicts between urban/agricultural uses as it promotes urban development in an agricultural area. This impact would be considered significant and unavoidable.

Air Quality

Conflict with the TCAPCD Air Quality Attainment Plan (Impact 4.3.1)

Changes in the General Plan land uses would affect growth projections used for development of the Attainment Plan and result in conflicts between the General Plan and the NSVAB Air Quality Attainment Plan. This would result in a significant and unavoidable impact.

Alternative 3 would have the same growth potential as the proposed project. This growth potential may conflict with the Air Quality Attainment Plan as this growth was not considered in the Attainment Plan. This would result in a significant and unavoidable impact.

Contribution to air quality impacts (construction, operational and toxic air contaminants) under project and cumulative conditions (Impacts 4.3.2, Impact 4.3.3, Impact 4.3.4, Impact 4.3.6)

Implementation of the proposed General Plan and the resulting development would increase the potential for additional mobile and stationary sources emissions, short-term construction

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emission, and toxic air contaminants which would adversely affect regional air quality. All of the air quality impacts listed above result in significant and unavoidable impacts.

Alternative 3 would result in the same potential for development and population growth as the proposed General Plan and result in cumulative impacts to air quality. The emission levels would be considered significant. Therefore, Alternative 3 would have the same environmental impact.

Possible exposure of sensitive receptors to odorous emissions (Impact 4.3.5)

Implementation of the proposed General Plan would allow for the development of uses that have the potential to produce odorous emissions either during the construction or operation of the development. Additionally, implementation of the General Plan may allow for the construction of sensitive land uses (i.e. residential development, schools, parks, offices, etc.) near existing or future sources of odorous emissions. General Plan policies and implementation measures along with mitigation measures identified under this impact reduce this impact to a less than significant level.

Alternative 3 would have a similar potential to include land uses that have potential to produce odorous emissions or allow for the construction of sensitive land uses (i.e. residential development, schools, parks, offices, etc.) near existing or future sources of odorous emissions. The proposed project includes General Plan policies and implementation measures and mitigation measures which reduce this impact to a less than significant level. Alternative 3, which would incorporate the proposed General Plan objectives and policies, would offer the same level of protection as the proposed project. Therefore, Alternative 3 would be considered an environmentally similar alternative.

Biological Resources

Direct and Indirect Impacts to Endangered, Threatened and Other Special-Status Species Direct and Indirect Impacts to Sensitive Biotic Communities including Jurisdictional Waters, Effects on Wildlife Movement Corridors (Impact 4.4.1, Impact 4.4.2, Impact 4.4.3)

Implementation of the proposed General Plan could result in a direct or indirect loss of habitat for and individuals of endangered, threatened and/or other special-status plant and animal species, in impacts to sensitive biotic communities including jurisdictional waters, and could interfere substantially with the movement of wildlife. General Plan policies and implementation measures along with mitigation measures identified under these impacts reduce the impacts to a less than significant level.

Alternative 3 would likely result in slightly more biological impacts by allowing development in areas with substantial wetlands. However, it is acknowledged that existing agricultural operations could still result in the impacts to these wetlands and its habitats. Alternative 3 incorporates the policies, implementation measures and mitigation measures identified in the proposed project which reduces all biological resource impacts to a less than significant level. However, because Alternative 3 would allow development in areas that have been specifically identified for preservation in the proposed project through retaining existing land use designations, Alternative 3 is considered the environmentally worse than the proposed project.

Conflicts with Local Policies or Ordinances (Impact 4.4.4)

No habitat conservation plans (HCPs) or natural community conservation plans (NCCPs) occur within the Planning Area. However, new development contemplated by the 2008-2028 General

Plan could potentially result in the removal of trees that are protected under Resolution No. 57-1994, which protects oak woodland habitat. General Plan policies and implementation measures reduce the impacts to a less than significant level.

As no HCPs or NCCPS currently exist within the County, as with the proposed project Alternative 3 would have no impact on these plans. As with the proposed project, Alternative 3 would be required to mitigate for the loss of oak woodlands. Alternative 3 would have the same impact to local plans or ordinances as the proposed project.

Cultural Resources

Prehistoric Resources and Historic Resources, Paleontological Resources (Impact 4.5.1, Impact 4.5.2, Impact 4.5.4)

Adoption of the Tehama County 2008-2028 General Plan could result in the potential disturbance of historic and archaeological resources, paleontological resources (i.e., fossils and fossil formations) or unique geological features. Implementation of the proposed General Plan policies, implementation measures, along with mitigation measures identified under impact 4.5.1 and 4.5.2 would assist in reducing significant impacts to known cultural resources, as well as to any unknown cultural resources. Impacts to historic resources and paleontological resources would be reduced to a less than significant level.

Alternative 3 would have a similar potential for impacts to undiscovered cultural resources as the proposed project. Alternative 3 would incorporate the policies, implementation measures and mitigation measures of the proposed project. Because of uncertainty of whether the policies and implementation measures ability to reduce impacts to prehistoric and historic resources to a less than significant level, Alternative 3 would have similar result.

Potential Disturbance of Human Remains (Impact 4.5.3)

A project constructed as a result of the 2008-2028 General Plan could disturb human remains, especially those interred outside of formal cemeteries. The General Plan policies and implementation measures, as well as implementation of mitigation measures would reduce this impact to less than significant.

Alternative 3 would also result in a less than significant impact. Alternative 3 would have the same potential for disturbance to human remains as the proposed project.

Geology and Soils

Potential Seismic Hazards (Impact 4.6.1)

Implementation of the 2008-2028 General Plan may result in the placement of structures and development in areas of seismic sensitivity. The County of Tehama General Plan policies and implementation measures, which require adherence to the California Building Code and which require a geotechnical investigation prior to site development, would reduce the effects resulting from earthquakes, ground shaking, liquefaction, and other secondary hazards within the Tehama County General Plan Planning Area to a minimum. This impact is considered to be less than significant.

Alternative 3 would result in similar impacts to the proposed project by allowing the placement of structures and development in areas of seismic sensitivity. However, as with the proposed

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project, policies and implementation measures in the adopted General Plan as well as adherence to the California Building Code would reduce this potential impact to a less than significant level.

Potential Increase of Erosion and Loss of Topsoil (Impact 4.6.2)

Implementation of the 2008-2028 General Plan may result in substantial construction and site preparation activities. These activities increase soil erosion, wind and water erosion, and siltation of local drainages during construction, excavation and grading activities. Compliance with adopted erosion control standards and NPDES and SWPPP requirements, as well as General Plan policies and implementation measures would result in less than significant erosion impacts.

Alternative 3 would also result in substantial construction and site preparation activities. However, much of this land is currently being used for agricultural purposes, either of the growing of crops or for grazing land. This type of use, without proper soil conservation, would also promote erosion and increase the likelihood of a loss of topsoil. But, agricultural land has been in production for more than 100 years in Tehama County and it must be assumed that the protection of these lands by using soil conservation techniques, reducing the potential for erosion, loss of topsoil and overgrazing has been implemented in order to make the land continuously viable for agricultural production. Alternative 3 and the proposed project would result in a less than significant impact and be an environmentally similar solution.

Potential Development on Unstable Soils (Impact 4.6.3)

Implementation of the General Plan Land Update may allow for development in areas with unstable soils. Compliance with adopted 2007 California Building Code requirements, as well as implementation of the General Plan policies and implementation measures would ensure that expansive or unstable soils related impacts are reduced to a less than significant level.

Implementation of Alternative 3 would result in similar impacts as the proposed General Plan. Alternative 3 would be subject to the County standards regarding development on unstable soils identified in the CBC and the adopted General Plan policies.

Potential Wastewater Conflicts (Impact 4.6.4)

Implementation of the General Plan may allow for development in areas with soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems and where sewers are not available for the disposal of wastewater. The County of Tehama General Plan policies and implementation measures, which require a geotechnical investigation prior to site development would reduce impacts resulting from soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems and where sewers are not available for the disposal of wastewater. This results in a less than significant impact.

Alternative 3 may also allow for the development of areas with soils incapable of adequately supporting the use of septic tanks or alternative wastewater systems. All installation of new septic systems are subject to review and approval by the County's Environmental Health Department. As with the proposed project, the requirement a geotechnical investigation prior to site development would reduce impacts resulting from soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems and where sewers are not available for the disposal of wastewater. This results in a less than significant impact.

Hazards and Hazardous Materials

Wildland Fire and Cumulative Wildland Fire (Impact 4.7.1 and Impact 4.7.10)

Implementation of the General Plan could result in safety hazards associated with wildland fires in residential areas adjacent to open space and natural areas under existing and cumulative conditions. Implementation of General Plan policies and associated implementation measures would reduce potential impacts to residential areas within the Planning Area due to wildland fires and safety hazards. However, these impacts would still result in a significant and unavoidable impact.

Land use designations identified under Alternative 3 would also allow for the development of residential uses adjacent to open space and natural areas. The adopted General Plan contains objectives which reduce the potential for wildland fire hazards. As with the proposed project, implementation of the proposed General Plan policies and associated implementation measures would reduce impacts to residential areas. Therefore, Alternative 3 would result in similar impact to safety hazards associated with wildland fires.

Airport Operations (Impact 4.7.2)

Implementation of the proposed General Plan could result in safety hazards associated with airport operations in areas proposed for development. Implementation of these General Plan policies and associated implementation measures, as described above, would ensure that all development projects within the Tehama County General Plan Planning Area comply with federal, state, and local regulations, including the Federal Aviation Administration regulations. The result is a less than significant impact.

Alternative 3 would have similar safety impacts associated with airport operations. However, as with the proposed General Plan, Alternative 3 would be required to comply with federal, state, and local regulations, including the Federal Aviation Administration regulations concerning potential airport safety. Therefore, Alternative 3 would result in a less than significant impact.

Transportation, Use, Disposal and Release of Hazardous Materials (Impact 4.7.4, Impact 4.7.3)

Implementation of the General Plan would allow for uses that transport hazardous materials on Planning Area roadways as well as the use and disposal of hazardous materials within the Tehama County General Plan Planning Area. Tehama County General Plan policies and associated implementation measures, as well as adherence to all federal, state, and local regulations regarding the transportation of explosives, poisonous inhalation hazards, and radioactive materials, would reduce the environmental impacts associated with the routine transportation, use, and disposal of hazardous materials to less than significant.

Alternative 3 would have the same proposed General Plan policies and associated implementation measures. Because certain agencies have been assigned the task of regulating hazardous materials by the federal and state government, inclusion of policies in a general plan would not necessarily increase the protection of individuals from these potential hazards. However, the Alternative 3 as well as the proposed project includes policies and implementation measures that may exceed the protection offered by federal and state regulations. Therefore, Alternative 3 is considered to have an environmentally similar impact than the proposed project, and result in a less than significant impact.

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Hazardous Emissions Near Schools (Impact 4.7.5)

Hazardous materials would be used during construction and operational activities throughout the Planning Area, which may expose nearby students, faculty, and staff at local schools to toxic emissions. Implementation of General Plan policies and implementation measures, as well as adherence to all federal, state, and local regulations regarding the transportation, storage and handling of hazardous wastes would reduce exposure of hazardous substances and toxic emissions by nearby students, faculty, and staff at local schools to less than significant.

As with the proposed project, Alternative 3 would be subject to federal, state, and local regulations regarding the transportation, storage and handling of hazardous wastes which would reduce exposure of hazardous substances and toxic emissions by nearby students, faculty, and staff at local schools to less than significant.

Flooding Impacts (Impact 4.7.8)

Implementation of the proposed General Plan would allow of an increase in development resulting in an increase of impervious surfaces and alter drainage conditions and storm water runoff rates throughout the Tehama County General Plan area, which could result in potential flooding impacts. Implementation of the Tehama County General Plan policies and associated implementation measures would reduce the environmental impacts associated with flood hazards within the General Plan Planning Area to less than significant.

Alternative 3 has the same development potential of the proposed project and therefore would create similar impervious surfaces areas, alteration of drainage conditions and storm water runoff rates, as well the potential for building in flood zones than that of the proposed project. Alternative 3 is considered to be an environmentally similar solution to the proposed project for potential flood hazards.

Hydrology and Water Quality

Surface Water Quality Impacts and Cumulative Water Quality Impacts (Impact 4.8.1, Impact 4.8.5)

Implementation of the 2008-2028 General Plan could result in an alteration of existing drainage, in the discharge of polluted runoff, discharge that could cause harm to the biological integrity of waterways, adversely impact water quality standards, or otherwise substantially degrade surface water quality. General Plan policies and implementation measures, mitigation measures, as well as compliance with NPDES permit requirements would ensure that both construction-related and operational impacts to surface water resources in the General Plan Planning Area would be less than significant under project and cumulative conditions.

Alternative 3 would result in a similar potential for water quality impacts and offers the same level of protection through the policies and implementation measures and result in a less than significant impact. Therefore, Alternative 3 has a similar result in surface water quality impact.

Groundwater Quality Impacts and Cumulative Water Quality Impacts (Impact 4.8.2, Impact 4.8.5)

Implementation of the proposed General Plan and the resultant increase in development could result in the degradation of groundwater quality resulting from future land uses. General Plan policies and implementation measures would ensure that impacts to groundwater resources in

Tehama County would be considered less than significant under project and cumulative conditions.

Implementation of Alternative 3 would result in a similar potential for groundwater quality impacts given the extent of urban development. In addition, Alternative 3's inclusion of the proposed project policies and implementation measures for the protection of groundwater resources would result in a less than significant impact.

Drainage and Flooding Impacts and Cumulative Water Quality Impacts (Impact 4.8.4, Impact 4.8.6)

Implementation of the proposed General Plan resultant increase in development would potentially increase impervious surfaces and alter drainage conditions and storm water runoff rates throughout Tehama County, which could result in substantial erosion or siltation on- or off-site. General Plan policies and implementation measures would ensure that drainage and flood related impacts would be less than significant under project and cumulative conditions.

Alternative 3 would also have potential drainage and flooding impacts as a result of development as projected growth is the same just in difference location. Alternative 3 includes the proposed project policies and implementation measures regarding drainage and flooding impacts and as such would result in a less than significant impact. Alternative 3 is consider to have the same environmental impact as the proposed project.

Water Supply and Cumulative Water Supply Impacts (Impact 4.8.3, Impact 4.8.7)

Implementation of the proposed General Plan would potentially increase the demand for water from both surface and groundwater sources throughout Tehama County, which could result in water shortages or reduce recharge to aquifers.

Alternative 3 would result in the same population growth as the 2008-2028 General Plan and thus impact the water sources in the County. This alternative would be similar to the 2008-2028 General Plan when regarding water supply in the County.

Noise

Cumulative Noise Impacts Associated with Increased Traffic (Impact 4.10.7)

Implementation of the 2008-2028 General Plan, in combination with development occurring within the incorporated cities of Red Bluff, Corning, and Tehama would potentially increase traffic levels in the planning area. General Plan policies and implementation measures along with mitigation measure 4.10.7 reduce this impact to less than significant.

Alternative 3 would also result in potential cumulative traffic noise impacts. Alternative 3 would have the same number of cars on the road although at different locations as a result of locating the main growth in two areas. As a result, traffic noise would not be as extensive in one location but would be spread more evenly along the I-5 corridor. As such, this traffic noise would affect a larger area and therefore impact more people. Therefore, Alternative 3 would be the worse alternative.

Population and Housing

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Substantial Increase in Population and Housing (Impact 4.11.1, Impact 4.11.3)

Implementation of the 2008-2028 General Plan would include an increase in land uses that promote the increase in population and housing to the area. Land use changes included in the 2008-2028 General Plan may result in a substantial increase the population to the area over existing conditions. The proposed General Plan does not contain any policies which would limit population growth. Because of this, the implementation of the proposed General Plan will result in a significant and unavoidable impact under project and cumulative conditions.

The impacts on future population growth and housing development may vary, depending on factors such as the housing market, job availability, type of housing built and economic conditions. Under Alternative 3, the same number of housing units would be built as the proposed project. The population projections in this analysis assume a constant relationship between population and housing stock, which likely will not occur. Because implementation of Alternative 3 would result in the same projected population growth and not include any policies that would limit population growth as with the proposed project, Alternative 3 would also result in a significant and unavoidable impact under project and cumulative conditions.

Traffic and Circulation

County Roadways Level of Service and Cumulative Traffic Impacts on Local Roadways and State Highways (Impact 4.13.1, Impact 4.13.7)

Implementation of the 2008-2028 General Plan would result in an increase in traffic volumes that would result in deficient level of service conditions in year 2030. While policies and implementation measures provided in the General Plan Update and mitigation measures listed above would reduce impacts to the County's roadways, it is not certain that the total funding necessary to make these improvements will be available when needed and therefore the roadway would continue to operate at an unacceptable LOS. Additionally, much of the roadway impacts will be to state or interstate highways, which are outside of the County's jurisdiction and the County cannot ensure that these improvements would be completed. Given these conditions, this impact is considered significant and unavoidable under project and cumulative conditions.

Alternative 3 is expected to lead to greater impacts to circulation and transportation than the proposed project. Because Alternative 3 locates projected growth into two development areas instead of one, Alternative 3 would most likely require twice as many new roadways and transportation facilities. Although these roadways and facilities may not be as substantial in size or number because they need to serve less population, the greater number of roadways would offset any gain in reduce sizing. As with the proposed project it is not certain the total funding necessary to make future roadway improvements will be available and therefore result in a significant and unavoidable impact. Additionally, in order to fund additional roadway facilities to meet the projected demand, a certain level of growth would be required. Otherwise these new facilities would be economically infeasible. The land use designations identified in the proposed project were determined, in part, based on the level of growth needed to pay for transportation infrastructure. It has been determined by the County that less growth than what has been projected by the County would not be able to pay for the water infrastructure needed to serve future growth. Based on this determination, implementation of Alternative 3 would result in inadequate funding for roadway infrastructure and as a consequence result in a worse environmental impact than the proposed project.

Utilities and Service Systems

Water Supply Infrastructure and Cumulative Water Service Impacts (Impact 4.14.1.1, Impact 4.14.1.2)

Implementation the General Plan would require additional treatment capacity, storage capacity, and other conveyance facilities to meet the projected water demands. The policies and implementation measures in the General Plan provide for future water supply in the unincorporated portions of Tehama County and complement the existing standards and guidelines. General Plan policies and associated implementation measures would reduce the General Plan's water supply impacts yet these would remain significant and unavoidable impacts under project and cumulative conditions.

Alternative 3 would also result in potential impacts to water supply and service. However this impact may result in greater impacts to utilities and service systems as projected growth would occur in two areas instead of one requiring twice as many facilities. As with transportation infrastructure, in order to fund additional treatment capacity, storage capacity, and other conveyance facilities to meet the projected water demands, a certain level of growth would be required. Otherwise these new facilities would be economically infeasible. The land use designations identified in the proposed project were determined, in part, based on the level of growth needed to pay for new water supply infrastructure. Based on this determination, implementation of Alternative 3 may result in inadequate water infrastructure and services due to financial infeasibility and as a consequence result in a worse environmental impact than the proposed project.

Wastewater Conveyance and Treatment Cumulative Wastewater Impacts (Impact 4.14.2.1, Impact 4.14.2.2)

Implementation of the Tehama County General Plan would substantially increase wastewater flows and require additional infrastructure and may require additional treatment capacity to accommodate anticipated demands that would result in a physical effect on the environment. Implementation of the General Plan Land Use Element and Public Services Element policies and associated implementation measures listed above will assist in reducing the General Plan's wastewater related impacts yet not to a level that is less than significant. General Plan impacts to wastewater conveyance and treatment are considered to be significant and unavoidable.

Alternative 3 would also increase wastewater flows and may require additional treatment facilities to serve two population areas. As with transportation and water infrastructure and facilities a certain level of growth is necessary to make is feasible to construct needed wastewater facilities and Alternative 3 may not allow adequate growth in any individual area to make it financially feasible to pay for additional facilities. Consequently, implementation of Alternative 3 may result in inadequate wastewater infrastructure and services and result in a worse environmental impact than the proposed project.

Electrical, Natural Gas, and Infrastructure (Impact 4.14.3.1)

Implementation of the General Plan would substantially increase demand for electrical, natural gas, telephone and related infrastructure. General Plan Public Services Element policies and associated implementation measures will assist in reducing the General Plan's electrical, natural gas, telephone, and cable related impacts to a level that is less than significant.

Alternative 3 would also increase the demand for electrical, natural gas, telephone and related infrastructure. Alternative 3's policies and associated implementation measures listed above will

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assist in reducing the electrical, natural gas, telephone, and cable related impacts to a level that is less than significant.

Global Warming and Climate Change

Cumulative Increase in GHG Emissions (Impact 6.14)

Buildout of the 2008-2028 General Plan would result in the cumulative increase of greenhouse gases including CO₂ emitted into the atmosphere. The County can and does require energy efficient design in building construction within the County. This requirement and the General Plan policies and implementing actions can effectively reduce greenhouse gas (GHG) emissions. Whether or not these requirements will reduce emissions effectively enough to mitigate the County's contribution to GHGs is unknown as currently no thresholds or standards have been established for the reduction of GHG. Therefore, until such time that there are thresholds of significance for which to compare the County's GHGs contribution, it must be assumed that any increase in GHGs will lead to a change in climate. Therefore, this impact is considered significant and unavoidable and the 2008-2028 General Plan would have a cumulatively considerable contribution.

Alternative 3 would produce the same GHG emissions as the proposed project. Therefore, Alternative 3's impact is considered significant and unavoidable and would have a cumulatively considerable contribution.

5.3 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines Section 15126.6(e)(2) indicates that an environmentally superior alternative must be identified in an EIR. Based on the summary of information presented in **Table 5.0-5**, the environmentally superior alternative to the proposed project is Alternative 2 – Land Use Plan Option A Alternative. Alternative 2 generally has lesser adverse impacts on the environment than the proposed project. However, Alternative 2 may not adequately meet proposed General Plan objectives related to growth. In addition, Alternative 2 may result in environmentally worse impacts than the proposed project in a number of areas. The proposed project's land use changes were developed, in part, to reflect the potential development needed to establish economically feasible facilities and infrastructure for projected future growth in the County. It has been determined by the County that in order to develop new roadways, water and wastewater facilities to adequately serve future growth a certain level of development must be accommodated in order to make these facilities economically feasible. Because Alternative 2's buildout population is substantially less than the 2008-2028 General Plan as well as the existing General Plan, Alternative 2 may not allow for the potential facilities and infrastructure necessary to accommodate future growth in the County and therefore not comply with the proposed General Plan objectives related to growth.

**TABLE 5.0-5
COMPARISON OF PROJECT ALTERNATIVES TO THE PROPOSED GENERAL PLAN**

Environmental Categories	Proposed General Plan (Impact Significance)	Adopted General Plan – Alternative 1 (Impact Significance)	Majority Opinion Land Use Diagram Alternative - Alternative 2 (Impact Significance)	Two Urban Growth Areas Alternative - Alternative 3 (Impact Significance)
Aesthetics	Project Impacts	B	B	W
Degradation of the existing visual character and/or quality of the County and its communities under project and cumulative conditions. (Impact 4.1.3 and Impact 4.1.5)	Would change the visual character of the Planning Area (PS)	Alternative 1 would have reduced visual impacts by retaining less intensive land uses that are consistent with the existing rural/agricultural/open space landscape characteristics. (PS)	Alternative 2 would reduce visual impacts by retaining less intensive land uses that are consistent with the existing rural/agricultural/open space landscape characteristics. (S)	Alternative 3 and the proposed project would have similar visual impacts. (PS)
Level of Significance After Mitigation	(SUI)	(SUI)	(SUI)	(SUI)
Agricultural Resources	Project Impacts	B	B	W
Result in the loss of important farmlands (prime farmland, unique farmland, and farmland of statewide importance, etc) under project and cumulative conditions (Impact 4.2.1 and Impact 4.2.4)	As noted in Section 4.2 (Agriculture), land use designation changes in the 2008-2028 General Plan results in a net decrease of over 35,512 acres for agriculturally designated lands (S)	Alternative 1 would not result in the loss of these lands as no changes to the land use designation would occur. (LTS)	Alternative 2 would also result in the loss of these lands as the major difference between Alternative 2 and the proposed project are changes in residential type land uses. (S)	Alternative 3 would also result in the loss of these lands but to a greater extent as the development would occur in to major agricultural areas in the County. (S)
Level of Significance After Mitigation	(SUI)	(LTS)	(SUI)	(SUI)
Result in a conflict with existing Williamson Act contracts (Impact 4.2.2)	The potential for Williamson contracts to be developed to urban type uses is high, especially in the north-central part of the County where the most growth is projected to occur.	The potential for conversion of Williamson contracts less due to the reduced residentially or commercially designated lands in Alternative 1. (S)	Alternative 2 would allow for development in areas with existing Williamson Act contracts. Therefore Alternative 2 would result in the same impacts to conversion of land under Williamson	As with the proposed project, Alternative 3 would allow for development in areas with existing Williamson Act contracts. (S)

5.0 PROJECT ALTERNATIVES

Environmental Categories	Proposed General Plan (Impact Significance)	Adopted General Plan – Alternative Alternative 1 (Impact Significance)	Majority Opinion Land Use Diagram Alternative - Alternative 2 (Impact Significance)	Two Urban Growth Areas Alternative - Alternative 3 (Impact Significance)
	(S)		Act contract to residential uses as the proposed project	
Level of Significance After Mitigation	(SUI)	(SUI)	(SUI)	(SUI)
Result in conflicts between urban uses and agricultural uses (Impact 4.2.3)	It is anticipated that as the County's growing population increases the need for more residential, commercial and industrial development, agriculture/urban interface conflicts may occur. (S)	Implementation of Alternative 1 would result in similar, though reduced, land use conflicts between urban/agricultural uses. (S)	Implementation of Alternative 2 would result in similar, though reduced, land use conflicts between urban/agricultural uses. (S)	Alternative 3 would result in similar land use conflicts between urban/agricultural use. (S)
Level of Significance After Mitigation	(SUI)	(SUI)	(SUI)	(SUI)
Air Quality	Project Impacts	B	B	S
Conflict with the TCAPCD Air Quality Attainment Plan (Impact 4.3.1)	Changes in the General Plan land uses would affect growth projections used for development of the Attainment Plan and result in conflicts between the General Plan and the NSVAB Air Quality Attainment Plan. (PS)	Therefore Alternative 1 would result in no impact to potential conflicts with the Attainment Plan. (LTS)	Alternative 2 would have less growth potential than the proposed project as well as the current General Plan. (LTS)	Alternative 3 would have the same growth potential as the proposed project. This growth potential may conflict with the Air Quality Attainment Plan. (PS)
Level of Significance After Mitigation	(SUI)	(LTS)	(LTS)	(SUI)
Contribution to air quality impacts (construction, operational and toxic air contaminants) under project	Implementation of the proposed General Plan and the resulting development would increase the potential for addi-	Implementation of Alternative 1 would result in reduced air emissions. (S)	While Alternative 2 would result in less potential for development and population growth, Alternative 2 would still result in impacts	Alternative 3 would result in the same potential for development and population growth as the proposed General Plan and

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Environmental Categories	Proposed General Plan (Impact Significance)	Adopted General Plan – Alternative 1 (Impact Significance)	Majority Opinion Land Use Diagram Alternative - Alternative 2 (Impact Significance)	Two Urban Growth Areas Alternative - Alternative 3 (Impact Significance)
and cumulative conditions (Impacts 4.3.2, Impact 4.3.3, Impact 4.3.4, and Impact 4.3.6)	tional mobile and stationary sources emissions, short-term construction emission, and toxic air contaminants which would adversely affect regional air quality. (S)		to air quality. (S)	result in cumulative impacts to air quality. (S)
Level of Significance After Mitigation	(SUI)	(SUI)	(SUI)	(SUI)
Possible exposure of sensitive receptors to odorous emissions (Impact 4.3.5)	Implementation of the proposed General Plan would allow for the development of uses that have the potential to produce odorous emissions either during the construction or operation of the development. (PS)	Alternative 1 would result in a reduced population that could be exposed to objectionable odors. (PS)	Alternative 2 would have a similar potential to include land uses that have potential to produce odorous emissions or allow for the construction of sensitive land uses (i.e. residential development, schools, parks, offices, etc.) near existing or future sources of odorous emissions. (PS)	Alternative 3 would have a similar potential to include land uses that have potential to produce odorous emissions. (PS)
Level of Significance After Mitigation	(LTS)	(LTS)	(LTS)	(LTS)
Biological Resources	Project Impacts	B	B	W
Direct and Indirect Impacts to Endangered, Threatened and Other Special-Status Species Direct and Indirect Impacts to Sensitive Biotic Communities including Jurisdictional Waters, Effects on Wildlife Movement Cor-	Implementation of the proposed General Plan could result in a direct or indirect loss of habitat for and individuals of endangered, threatened and/or other special-status plant and animal species, in impacts to sensitive biotic communities in-	Alternative 1 would likely result in reduced impacts by retaining less intensive land uses in the Planning Area. (S)	Alternative 2 would likely result in slightly reduced impacts by retaining less intensive land uses in the Planning Area. (S)	Alternative 3 would likely result in slightly more biological impacts by allowing development in areas with substantial wetlands. (S)

5.0 PROJECT ALTERNATIVES

Environmental Categories	Proposed General Plan (Impact Significance)	Adopted General Plan – Alternative 1 (Impact Significance)	Majority Opinion Land Use Diagram Alternative - Alternative 2 (Impact Significance)	Two Urban Growth Areas Alternative - Alternative 3 (Impact Significance)
ridors (Impact 4.4.1, Impact 4.4.2, Impact 4.4.3, Impact 4.4.5)	cluding jurisdictional waters, and could interfere substantially with the movement of wildlife. (S)			
Level of Significance After Mitigation	(LTS)	(LTS)	(LTS)	(LTS)
Level of Significance After Mitigation	(LTS)	(LTS)	(LTS)	(LTS)
Cultural Resources	Project Impacts	B	B	S
Prehistoric Resources and Historic Resources, Paleontological Resources (Impact 4.5.1, Impact 4.5.2, Impact 4.5.4)	Adoption of the Tehama County 2008-2028 General Plan could result in the potential disturbance of historic and archaeological resources, paleontological resources (i.e., fossils and fossil formations) or unique geological features. (S)	Because ultimate buildout of Alternative 1 would result in less development when compared to the proposed project, Alternative 1 is considered to be an environmentally better solution. (S)	Alternative 2 would have reduced potential for impacts to undiscovered cultural resources by retaining less intensive land uses. (S)	Alternative 3 would have a similar potential for impacts to undiscovered cultural resources as the proposed project. (S)
Level of Significance After Mitigation	(LTS)	(LTS)	(LTS)	(LTS)
Potential Disturbance of Human Remains (Impact 4.5.3)	A project constructed as a result of the 2008-2028 General Plan could disturb human remains, especially those interred outside of formal cemeteries. (LTS)	Alternative 1 would have the same potential for disturbance to human remains as the proposed project. (LTS)	Alternative 2 would have the same potential for disturbance to human remains as the proposed project. (LTS)	Alternative 3 would have the same potential for disturbance to human remains as the proposed project. (LTS)
Level of Significance After Mitigation	(LTS)	(LTS)	(LTS)	(LTS)

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Environmental Categories	Proposed General Plan (Impact Significance)	Adopted General Plan – Alternative Alternative 1 (Impact Significance)	Majority Opinion Land Use Diagram Alternative - Alternative 2 (Impact Significance)	Two Urban Growth Areas Alternative - Alternative 3 (Impact Significance)
Geology and Soils	Project Impacts	W	B	S
Potential Seismic Hazards (Impact 4.6.1)	May result in the placement of structures and development in areas of seismic sensitivity. (PS)	Alternative 1 would result in similar impacts to the proposed project by allowing the placement of structures and development in areas of seismic sensitivity. (PS)	Alternative 2 would result in similar impacts to the proposed project by allowing the placement of structures and development in areas of seismic sensitivity. (PS)	Alternative 3 would result in similar impacts to the proposed project by allowing the placement of structures and development in areas of seismic sensitivity. (PS)
Level of Significance After Mitigation	(LTS)	(LTS)	(LTS)	(LTS)
Potential Increase of Erosion and Loss of Topsoil (Impact 4.6.2)	Implementation of the 2008-2028 General Plan may result in an increase in soil erosion, wind and water erosion, and siltation of local drainages. (PS)	Alternative 1 may also result in substantial construction and site preparation activities, however not to the level of the proposed project. (PS)	Alternative 2 may also result in substantial construction and site preparation activities, however not to the level of the proposed project. (PS)	Alternative 3 would also result in substantial construction and site preparation activities. (PS)
Level of Significance After Mitigation	(LTS)	(LTS)	(LTS)	(LTS)
Potential Development on Unstable Soils (Impact 4.6.3)	Implementation of the General Plan Land Update may allow for development in areas with unstable soils. (PS)	Alternative 1 would be subject to the County standards regarding development on unstable soils identified in the CBC and the adopted General Plan policies. (PS)	Implementation of Alternative 2 would result in similar impacts as the proposed General Plan. (PS)	Implementation of Alternative 3 would result in similar impacts as the proposed General Plan. (PS)
Level of Significance After Mitigation	(LTS)	(LTS)	(LTS)	(LTS)
Potential Wastewater Conflicts (Impact 4.6.4)	May allow for development in areas with soils incapable of adequately supporting the use	Existing General Plan policies and implementation measures are inadequate for the	Alternative 2 may also allow for the development of areas with soils incapable of ade-	Alternative 3 may also allow for the development of areas with soils incapable of ade-

5.0 PROJECT ALTERNATIVES

Environmental Categories	Proposed General Plan (Impact Significance)	Adopted General Plan – Alternative 1 (Impact Significance)	Majority Opinion Land Use Diagram Alternative - Alternative 2 (Impact Significance)	Two Urban Growth Areas Alternative - Alternative 3 (Impact Significance)
	of septic tanks or alternative wastewater disposal systems. (PS)	placement and operation of septic systems. (PS)	quately supporting the use of septic tanks or alternative wastewater systems. (PS)	quately supporting the use of septic tanks or alternative wastewater systems. (PS)
Level of Significance After Mitigation	(LTS)	(SUI)	(LTS)	(LST)
Hazards and Hazardous Materials	Project Impacts	W	S	S
Wildland Fire (Impact 4.7.1, Impact 4.7.10)	Could result in safety hazards associated with wildland fires in residential areas adjacent to open space and natural areas. (PS)	Alternative 1 would result, to a greater degree than the proposed General Plan, in safety hazards associated with wildland fires. (PS)	Alternative 2 would also allow for the development of residential uses adjacent to open space and natural areas. (PS)	Alternative 3 would also allow for the development of residential uses adjacent to open space and natural areas. (PS)
Level of Significance After Mitigation	(SUI)	(SUI)	(SUI)	(SUI)
Airport Operations (Impact 4.7.2)	Could result in safety hazards associated with airport operations in areas proposed for development. (PS)	Alternative 1 would be required to comply with federal, state, and local regulations, including the Federal Aviation Administration regulations concerning potential airport safety (PS)	Alternative 2 would have similar safety impacts associated with airport operations. (PS)	Alternative 3 would have similar safety impacts associated with airport operations. (PS)
Level of Significance After Mitigation	(LTS)	(LTS)	(LTS)	(LTS)
Transportation, Use, Disposal and Release of Hazardous Materials (Impact 4.7.4, Impact 4.7.3)	Would allow for uses that transport hazardous materials on Planning Area roadways as well as the use and disposal of hazardous materials within	Alternative 1, which in fact is the County's General Plan adopted in 1974 and 1983, does not address or provide objectives or policies on the transportation,	Alternative 2 is considered to have an environmentally similar impact to that of the proposed project. (PS)	Alternative 3 is considered to have an environmentally similar impact to that of the proposed project. (PS)

5.0 PROJECT ALTERNATIVES

Environmental Categories	Proposed General Plan (Impact Significance)	Adopted General Plan – Alternative Alternative 1 (Impact Significance)	Majority Opinion Land Use Diagram Alternative - Alternative 2 (Impact Significance)	Two Urban Growth Areas Alternative - Alternative 3 (Impact Significance)
	the Tehama County General Plan Planning Area. (PS)	use and disposal of hazardous materials. (PS)		
Level of Significance After Mitigation	(LTS)	(LTS)	(LTS)	(LTS)
Hazardous Emissions Near Schools (Impact 4.7.5)	Hazardous materials would be used during construction and operational activities throughout the Planning Area, which may expose nearby students, faculty, and staff at local schools to toxic emissions (PS)	Alternative 1 would be subject to federal, state, and local regulations regarding the transportation, storage and handling of hazardous wastes. (PS)	As with the proposed project, Alternative 2 would be subject to federal, state, and local regulations regarding the transportation, storage and handling of hazardous wastes. (PS)	As with the proposed project, Alternative 3 would be subject to federal, state, and local regulations regarding the transportation, storage and handling of hazardous wastes. (PS)
Level of Significance After Mitigation	(LTS)	(LTS)	(LTS)	(LTS)
Flooding Impacts (Impact 4.7.8)	Would allow of an increase in development resulting in an increase of impervious surfaces and alter drainage conditions and storm water runoff rates, which could result in potential flooding impacts. (PS)	Alternative 1 does not have the development potential of the proposed project and therefore would create less impervious surfaces, a reduced altering of drainage conditions and reduced storm water runoff rates, as well the potential for building in flood zones than that of the proposed project. (PS)	Alternative 2 does not have the development potential of the proposed project and therefore would create less impervious surfaces. (PS)	Alternative 3 has the same development potential of the proposed project and therefore would create similar impervious surfaces areas, alteration of drainage conditions and storm water runoff rates, as well the potential for building in flood zones than that of the proposed project. (PS)
Level of Significance After Mitigation	(LTS)	(LTS)	(LTS)	(LTS)
Hydrology and Water Quality	Project Impacts	W	B	S

5.0 PROJECT ALTERNATIVES

Environmental Categories	Proposed General Plan (Impact Significance)	Adopted General Plan – Alternative 1 (Impact Significance)	Majority Opinion Land Use Diagram Alternative - Alternative 2 (Impact Significance)	Two Urban Growth Areas Alternative - Alternative 3 (Impact Significance)
Surface Water Quality Impacts and Cumulative Water Quality Impacts (Impact 4.8.1, Impact 4.8.5)	Could result in an alteration of existing drainage, in the discharge of polluted runoff, discharge that could cause harm to the biological integrity of waterways, adversely impact water quality standards, or otherwise substantially degrade surface water quality. (PS)	While Alternative 1 would result in a reduced potential for water quality impacts given the extent of urban development would be reduced, the proposed project offers a greater level of protection through its policies and implementation measures which results in a less than significant impact. (LS)	Alternative 2 would result in a reduced potential for water quality impacts. (PS)	Alternative 3 would result in a similar potential for water quality impacts and offers the same level of protection through the policies and implementation measures. (PS)
Level of Significance After Mitigation	(LTS)	(LTS)	(LTS)	(LTS)
Groundwater Quality Impacts and Cumulative Groundwater Quality Impacts (Impact 4.8.2, Impact 4.8.5)	Implementation of the proposed General Plan and the resultant increase in development could result in the degradation of groundwater quality and groundwater supply resulting from future land uses. (PS)	While Alternative 1 would result in a reduced potential for groundwater quality impacts given the extent of urban development would be reduced, the proposed project offers a greater level of protection through its policies and implementation measures. (PS)	Implementation of Alternative 2 would result in a reduced potential for groundwater quality impacts given the reduced urban development. (PS)	Implementation of Alternative 3 would result in a similar potential for groundwater quality impacts. (PS)
Level of Significance After Mitigation	(LTS)	(LTS)	(LTS)	(LTS)
Drainage and Flooding Impacts and Cumulative Water Quality Impacts (Impact 4.8.4, Impact 4.8.6)	Implementation of the proposed General Plan resultant increase in development would potentially increase impervious surfaces and alter drainage conditions and	While Alternative 1 would result in a reduced potential for drainage and flooding impacts given the extent of urban development would be reduced, the proposed project offers a greater level	Alternative 2 would result in a reduced potential for drainage and flooding impacts. (PS)	Alternative 3 would also have potential drainage and flooding impacts as a result of development. (PS)

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Environmental Categories	Proposed General Plan (Impact Significance)	Adopted General Plan – Alternative Alternative 1 (Impact Significance)	Majority Opinion Land Use Diagram Alternative - Alternative 2 (Impact Significance)	Two Urban Growth Areas Alternative - Alternative 3 (Impact Significance)
	storm water runoff rates throughout Tehama County, which could result in substantial erosion or siltation on- or off-site. (PS)	of protection through its policies and implementation measures. (LTS)		
Level of Significance After Mitigation	(LTS)	(LTS)	(LTS)	(LTS)
Water Supply and Cumulative Water Supply Impacts (Impact 4.8.3, Impact 4.8.7)	Implementation of the proposed General Plan would potentially increase the demand for water from both surface and groundwater sources throughout Tehama County, which could result in water shortages or reduce recharge to aquifers. (PS)	Alternative 1 would result in a buildout population of 95,387 persons less than the proposed 2008-2028 General Plan, this alternative would be the better alternative when regarding water supply in the County. (PS)	Alternative 2 would result in a buildout population of 69,092 persons less than the proposed 2008-2028 General Plan, this alternative would be the better alternative when regarding water supply in the County. (PS)	Alternative 3 would have the same population growth and therefore would have similar impacts to water supply. (PS)
Level of Significance After Mitigation	(SUI)	(SUI)	(SUI)	(SUI)
Noise	Project Impacts	B	B	W
Cumulative Noise Impacts Associated with Increased Traffic (Impact 4.10.7)	Implementation of the 2008-2028 General Plan, in combination with development occurring within the incorporated cities of Red Bluff, Corning, and Tehama. (PS)	Alternative 1 would also result in potential cumulative traffic noise impacts. Alternative 1 would have less traffic because of less buildout population. The reduction in traffic would reduce traffic noise and therefore Alternative 1 would be the better alternative.	Alternative 2 would also result in potential cumulative traffic noise impacts. Alternative 2 would have less traffic because of less buildout population. The reduction in traffic would reduce traffic noise and therefore Alternative 2 would be the better alternative.	Alternative 3 would be spread more evenly along the I-5 corridor. As such, this traffic noise would affect a larger area and therefore impact more people. Therefore, Alternative 3 would be the worse alternative. (PS)

5.0 PROJECT ALTERNATIVES

Environmental Categories	Proposed General Plan (Impact Significance)	Adopted General Plan – Alternative 1 (Impact Significance)	Majority Opinion Land Use Diagram Alternative - Alternative 2 (Impact Significance)	Two Urban Growth Areas Alternative - Alternative 3 (Impact Significance)
			(PS)	
	(LTS)	(LTS)	(LTS)	(LTS)
Population and Housing	Project Impacts	B	B	S
Substantial Increase in Population and Housing (Impact 4.11.1, Impact 4.11.3)	Implementation of the 2008-2028 General Plan would include an increase in land uses that promote the increase in population and housing to the area. (PS)	Fewer housing units would be built than under the proposed project. (PS)	Under Alternative 2, fewer housing units would be built than under the proposed project. (PS)	Alternative 3 would result in the same projected population growth. (PS)
Level of Significance After Mitigation	(SUI)	(LTS)	(LTS)	(SUI)
Traffic and Circulation	Project Impacts	B	W	W
County Roadways Level of Service and Cumulative Traffic Impacts on Local Roadways and State Highways (Impact 4.13.1, Impact 4.13.7)	Implementation of the 2008-2028 General Plan would result in an increase in traffic volumes that would result in deficient level of service conditions in year 2030. (S)	Implementation of Alternative 1 would result in less development and roadway level of service impacts. (PS)	Alternative 2 would result in inadequate funding for roadway infrastructure. (PS)	Alternative 3 is expected to lead to greater impacts to circulation and transportation than the proposed project. (PS)
Level of Significance After Mitigation	(SUI)	(LTS)	(LTS)	(SUI)
Utilities and Service Systems	Project Impacts	B	W	W
Water Supply Infrastructure and Cumulative Water Service Impacts (Impact 4.14.1.1, Impact 4.14.1.2)	Implementation the General Plan would require additional treatment capacity, storage capacity, and other conveyance facilities to meet the projected wa-	Evaluation of this impact in the 1984 General Plan resulted in a determination that water supply and service was adequate to serve future growth.	Alternative 2 would result in inadequate water infrastructure and services. (PS)	This impact may result in greater impacts to utilities and service systems as projected growth would occur in two areas instead of one requiring twice as many facilities.

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Environmental Categories	Proposed General Plan (Impact Significance)	Adopted General Plan – Alternative 1 (Impact Significance)	Majority Opinion Land Use Diagram Alternative - Alternative 2 (Impact Significance)	Two Urban Growth Areas Alternative - Alternative 3 (Impact Significance)
	ter demands. (PS)	(LTS)		(PS)
Level of Significance After Mitigation	(SUI)	(LTS)	(SUI)	(SUI)
Wastewater Conveyance and Treatment Cumulative Wastewater Impacts (Impact 4.14.2.1, Impact 4.14.2.2)	Implementation of the Tehama County General Plan would substantially increase wastewater flows and require additional infrastructure and may require additional treatment capacity to accommodate anticipated demands that would result in a physical effect on the environment. (PS)	Alternative 1 would also increase wastewater flows and may require additional treatment capacity. (PS)	Alternative 2 would result in inadequate wastewater infrastructure and service. (PS)	Alternative 3 would also increase wastewater flows and may require additional treatment facilities to serve two population areas. (PS)
Level of Significance After Mitigation	(SUI)	(SUI)	(SUI)	(SUI)
Electrical, Natural Gas, and Infrastructure (Impact 4.14.3.1)	Implementation of the General Plan would substantially increase demand for electrical, natural gas, telephone and related infrastructure. (PS)	Alternative 1 Alternative 1 would result in less population growth. Therefore the demand for these facilities is not as great as the proposed project. (PS)	The demand for these facilities is not as great as the proposed project. (PS)	Alternative 3 would also increase the demand for electrical, natural gas, telephone and related infrastructure. (PS)
Level of Significance After Mitigation	(LTS)	(LTS)	(LTS)	(LTS)
Global Warming and Climate Change	Project Impacts	S	B	S
Cumulative Increase in GHG Emissions (Impact 6.14)	Buildout of the 2008-2028 General Plan would result in the cumulative increase of greenhouse gases	Alternative 1 would produce less GHG's because of less development. However, because no thresholds or stan-	GHG emission would be less than the proposed project. (S)	Alternative 3 would produce the same GHG emissions as the proposed project.

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Environmental Categories	Proposed General Plan (Impact Significance)	Adopted General Plan – Alternative Alternative 1 (Impact Significance)	Majority Opinion Land Use Diagram Alternative - Alternative 2 (Impact Significance)	Two Urban Growth Areas Alternative - Alternative 3 (Impact Significance)
	including CO ₂ emitted into the atmosphere. (S)	dards currently exist regarding GHG emissions, it must be assumed that any increase in GHG emissions would result in a significant impact (S)		(S)
	(SUI)	(SUI)	(SUI)	(SUI)

Notes: B = Better, S = Same, W = Worse

(LTS = Less than Significant) (PS = Potentially Significant) (S = Significant) (SUI = Significant and Unavoidable Impact)

A quantitative comparison is provided, where available, for impacts that were analyzed in Sections 4.1 through 4.14 of the Draft EIR. No quantitative data was available for Human Health/Risk of Upset, Hydrology and Water Quality, Geology and Soils, and Cultural, Paleontological Resource, or Visual Resources. The classifications of B, S and W were based on available quantitative and qualitative information for the proposed General Plan and the four alternatives.