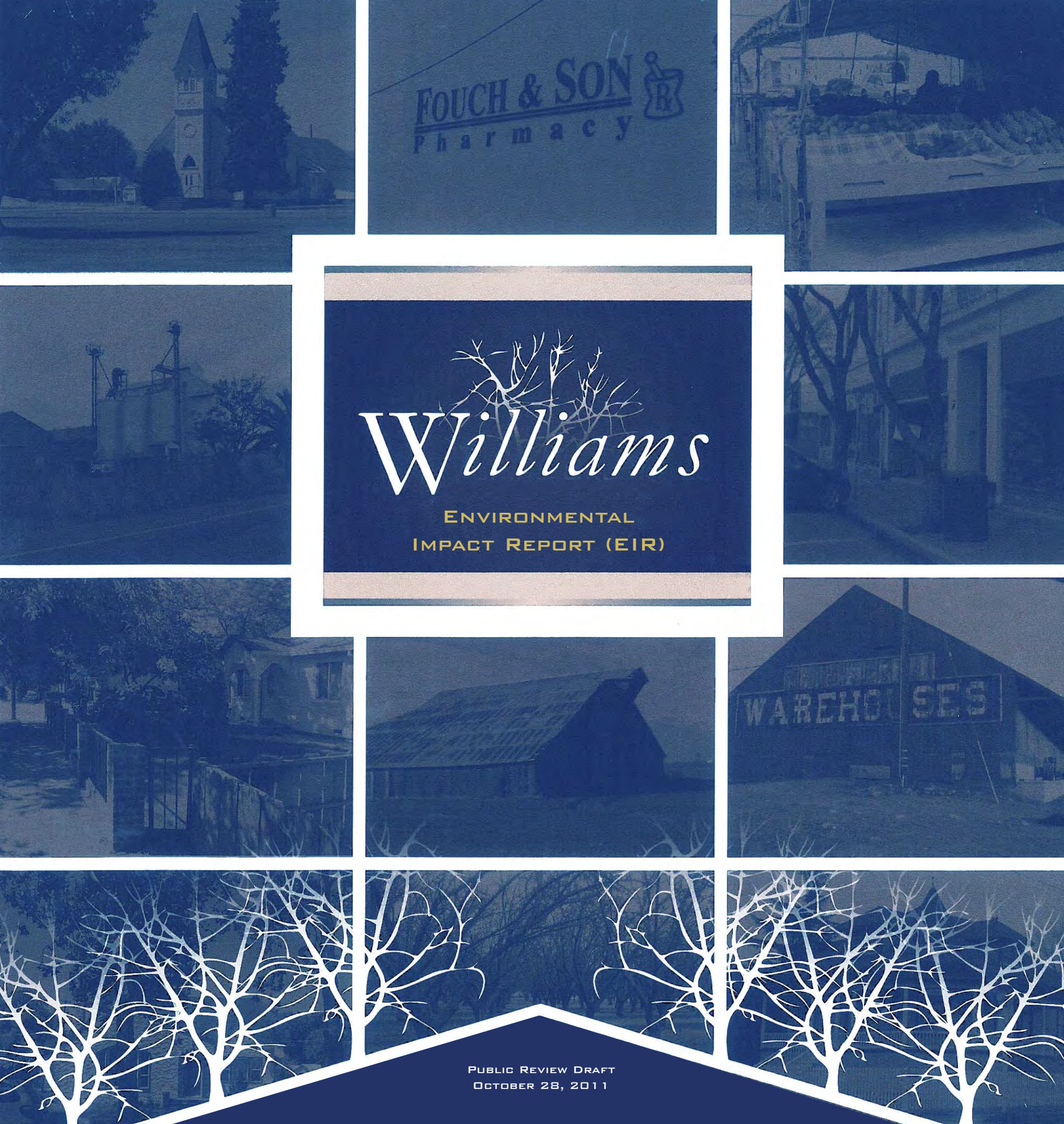

Williams

Environmental Impact Report (EIR)

Public Review Draft
October 28, 2011

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Chapter 1
Introduction

It is the intent of the Introduction (Chapter 1) and Impacts Summary (Chapter 2) to provide the reader with a clear and simple description of the proposed project and its potential environmental impacts. Section 15123 of the California Environmental Quality Act (CEQA) Guidelines requires that the summary identify each significant effect, recommended mitigation measure(s), and alternatives that would minimize or avoid potential significant impacts. The summary is also required to identify areas of controversy known to the lead agency, including issues raised by agencies and the public and issues to be resolved, including the choice among alternatives and whether or how to mitigate significant effects. This section focuses on the major areas of the proposed project that are important to decision-makers and uses non-technical language to promote understanding.

1.1 Introduction

The "Proposed Project" to be addressed in this Program Environmental Impact Report (Program EIR) is the City of Williams' Updated General Plan (September 2010). The Williams General Plan details a long-term vision and policy framework enabling the City to develop according to its stated goals. This plan identifies the manner in which the City is intending to grow, where it should (and should not) develop, requirements for improvements to public infrastructure, and provisions needed to maintain and strengthen the unique community character that has defined Williams since its inception.

The Updated General Plan is not regulatory in nature nor is it construed as discretionary approval of individual projects; rather it assumes a broader, more comprehensive approach to the City's future land use and future development. After adoption, it becomes an official policy document that is intended to substantially influence subsequent decisions regarding capital expenditures, approvals of land-use or intensity changes, zoning regulation amendments, subdivision approvals, sphere of influence amendments, annexations and pre-annexation agreements, and similar legislative or administrative actions pertaining to the growth and redevelopment of the community.

The preparation of the Updated General Plan was continually guided by the critique of alternative growth strategies and public policy discussions with residents. The Updated 2010-30 General Plan would replace the previous General Plan (Adopted September 7, 1989).

Unlike many California communities, Williams is not at a "crossroads" in the sense that it is choosing to embark on a new path to the future. Williams' vision of the future is largely unchanged from that of the earlier plan that this Updated General Plan is replacing. The new plan, however, provides a greater amount of specificity and refinement regarding future growth, with the intent that its policies, associated goals, and recommended implementation strategies serve as a framework for community decision-making. To ensure growth that is both wise and sustainable, decisions must be based on a formulation of sound public policy and founded by a comprehensive and integrated approach to analyzing community issues and identifying realistic solutions, as set forth in this Plan. The Updated General Plan is comprised of the following elements:

1. Chapter 1, Introduction;
2. Chapter 2, Background Analysis;
3. Chapter 3, Land Use and Character;
4. Chapter 4, Public Safety;
5. Chapter 5, Public Facilities,
6. Chapter 6, Noise;
7. Chapter 7, Open Space and Conservation;
8. Chapter 8, Circulation
9. Chapter 9, Housing

1.2 General Plan Preparation and Approval Process

Beginning in February 2010, the citizens and leaders of Williams initiated the process of actively determining the future of their community. This undertaking was made necessary by the gradual realization that Williams had outgrown its earlier plan, which, with the exception of the Housing Element, was 20 years old. In one instance, a significant area designated for future "Heavy Commercial" use was actually developed as single-family residential. For this and other reasons, the plan was no longer relevant and could no longer serve as a useful policy document. Therefore, a decision was made for the community to update and refine its vision of the future, ensuring desirable outcomes---on its own terms—rather than passively responding and acquiescing to a series of incremental developer proposals over the next 20 years.

To do so, attaining a shared vision was an essential first step to guide the community and its leaders in their decision-making over the next 20 years and beyond. As part of the Plan formation process, an initial Community Symposium was held jointly by the Planning Commission and General Plan Advisory Committee (GPAC) in February 2010. A visual presentation with handouts was part an agenda led by Development Impact, Inc. (Paula Daneluk) and Kendig Keast Collaborative (Bret Keast).

Between February and September the consultant team and the GPAC proceeded with the preparation of the plan elements listed above. Consultation, discussions, and other proceedings for the new General Plan were interspersed with public meetings and workshops that were open to the public and given extensive pre-meeting notification and publicity.

Housing is one of seven mandated general plan elements required by Section 65302 of the California Government Code. The 2004 Housing Element was updated and approved separately on May 10, 2011. It has been incorporated into this General Plan update for the purpose of maintaining consistency.

The adoption of the Updated General Plan requires that the Williams City Council approve and certify the Program EIR through a public hearing, again, with proper notification. The Williams General Plan is intended to establish the policy framework for future growth and redevelopment of the City and its sphere of influence over the next 20 years. The plan's focus is on preserving the assets that have contributed positively to the City's recognizable image over its history and enhancing the small town, rural qualities treasured by Williams' residents. These attributes significantly enhance the quality of life

and will enhance the City' ability to accommodate desired growth and the attraction of new businesses that can offer gainful employment to residents. While this plan depicts a vision of Williams' preferred future, its intrinsic value lies in its success in achieving a common vision through a proactive and thoughtful program of implementation.

1.3 Relationship of the General Plan and CEQA

As a comprehensive update of the General Plan, this "project" meets the criteria for environmental review through a Program EIR. A Program EIR is defined by the California Environmental Quality Act (CEQA) 15168, as:

"an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either geographically, as logical parts in the chain of contemplated actions, in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effect, which can be mitigated in similar ways."

The major purposes of this Program EIR are to:

- Identify current and projected population impacts which may affect or be affected by the Updated General Plan;
- Disclose the potential environmental impacts of the Updated General Plan;
- Foster public participation in the planning process for the Updated General Plan;
- Mitigate or reduce potentially significant environmental impacts of the Updated General Plan; and
- Analyze alternatives that result in less environmental impact from the Updated General Plan.

This Program EIR for the Williams Updated General Plan, in accordance with CEQA, outlines the environmental issues associated with the Updated General Plan and identifies potential environmental impacts, those impacts that are potentially significant, and mitigation measures to avoid or reduce potentially significant adverse environmental impacts. It also addresses cumulative impacts, growth-inducing impacts, effects found not to be significant, irreversible environmental effects, and alternatives.

In administering these provisions over the 20 year horizon period of the Updated General Plan, applications for subsequent development and activities that relate to and follow the plan must be examined in light of this program EIR to determine if additional environmental analysis is warranted. If an activity may result in additional effects, or new mitigation measures are needed, a subsequent or supplemental EIR, or negative declaration must be prepared (CEQA Guidelines §15162 and 15163).

CEQA defines a "lead agency" as the public agency having principal responsibility for carrying out or approving a project that may have a significant effect upon the environment. The City of Williams is the lead agency for preparation and adoption of the Updated General Plan Program EIR. This Program EIR is intended for use by City of Williams' decision makers and the general public in evaluating the potential environmental impacts that may result from the implementation of the Updated General Plan. Other

agencies, which also have some authority or responsibility to issue permits for project implementation, are designated as "responsible agencies." Colusa County LAFCO would be considered a responsible agency for this Updated General Plan and Program EIR.

1.4 Scope of this EIR

The scope of this EIR was established by the City of Williams through the General Plan Update process. The City completed a Notice of Preparation (NOP) on August 1, 2010, which is included as an appendix (Appendix E) to this EIR. The NOP proposed that the EIR evaluate several environmental topics and noted that the City would consider comments received in response to the NOP in determining the final scope and content of the EIR. A public scoping meeting was held in the City of Williams on August 23, 2010. This meeting was intended to inform the public and interested agencies of the General Plan Update, solicit comments, and identify areas of concern. A majority of the comments expressed concern regarding the effects the project would have on drainage, traffic, and air quality.

Based on the preliminary review conducted by the City and responses to the NOP, issues addressed in this EIR include the following:

- Changes in the City's future community character
- Changes in transportation patterns and required street system upgrades
- Agricultural resources
- Air quality
- Biological resources
- Hydrology and Water Quality
- Noise
- Public services and recreation
- Increased utility and infrastructure requirements

1.5 Organization of this Draft Environmental Impact Report

This DEIR is organized into the following chapters:

- Chapter 1, this **Introduction**, summarizes the purpose and organization of the DEIR.
- Chapter 2, **Impact Summary**, summarizes environmental consequences that would result from the proposed General Plan Update, provides a summary table that identifies significant environmental impacts, describes mitigation measures, and indicates the level of significance of impacts before and after mitigation and summarizes the alternatives discussed.
- Chapter 3, **Project Description**, describes the proposed Williams Updated General Plan and any related projects and approvals that might affect the Plan.
- Chapter 4, **Environmental Setting, Impacts, and Mitigations**, describes the environmental setting, including applicable plans and policies, provides an analysis of the potential environmental impacts of the proposed project and cumulative impacts, and identifies mitigation measures to reduce any significant impacts.

- Chapter 5, **Alternatives**, presents alternatives to the proposed project that would reduce significant environmental impacts and evaluates the comparative environmental consequences and benefits of each alternative. This section includes an analysis of the No Project Alternative as required by CEQA.
- Chapter 6, **Cumulative Impacts**, that are the result of combining the potential effects of the Plan with other planned developments, as well as foreseeable development projects.
- Chapter 7, **Growth Induced Impacts**, presenting the ways in which the proposed Plan could foster economic or population growth, or the construction of additional housing either directly or indirectly, in the surrounding environment.
- Chapter 8, **Significant Unavoidable Impacts**, resulting from the proposed General Plan Update that cannot be mitigated.
- Chapter 9, **References**, identifies the references, organizations, and persons contacted during preparation of this DEIR.

1.6 Review of the Draft Environmental Impact Report and Issuance of Final Environmental Impact Report

The DEIR will be available for review by the public and interested parties, agencies, and organizations for a review period of at least 45 days, as required by California law. In reviewing the DEIR, reviewers should focus on the document's adequacy in identifying and analyzing significant effects on the environment and ways in which the significant effects of the project might be avoided or mitigated (see CEQA Guidelines Section 15204(a)). Comments on the DEIR may be submitted in writing during the 45-day public review period to:

Monica Stegall
City Planner
City of Williams
P.O. Box 310
maguayo@cityofwilliams.org

Pursuant to California State law (Pub. Resources Code Section 21091(d)(3)), the City will accept email comments in lieu of traditional mailed or hand-delivered comments; reviewers may also follow up any email comments with letters. After the close of the review period, responses to comments on the DEIR will be prepared and published as a separate document. The DEIR text and appendices, together with the responses to comments document and any text changes to the original DEIR that are made in response to comments or other new information, will constitute the Final EIR (FEIR).

The Final EIR will be made available for public review prior to the City of Williams' consideration of its certification. Certification involves determining EIR adequacy. The City will hold public hearings to consider the certification of the Final EIR prior to adoption of the General Plan Update. Findings of Overriding Considerations may be approved as drafted or modified as part of the certification process.

Chapter 2

Impacts Summary

Table 2.1 presents a summary of impacts and mitigation measures identified in this Draft EIR. It is organized to correspond with the environmental issues discussed throughout the Draft EIR, particularly in Chapter 4. The table is arranged in four columns: 1) Environmental Impact; 2) Mitigation Measures; 3) Significance before Mitigation; and 4) Significance after Mitigation.

Table 2.1 presents a summary of impacts and mitigation measures identified in this Draft EIR. It is organized to correspond with the environmental issues discussed throughout the Draft EIR, particularly in Chapter 4. The table is arranged in four columns: 1) Environmental Impact; 2) Mitigation Measures; 3) Significance before Mitigation; and 4) Significance after Mitigation.

Table 2.1 Impacts Summary

Impact Description	Mitigation Measures	Significance Before Mitigation	Significance After Mitigation
Key: No Impact = NI Less Than Significant = LS Potentially Significant = PS Significant and Unavoidable = SU			
Land Use and Development Character			
4.1.1: Future development would physically divide and established community.	None required	NI	NI
4.1.2: Future development would conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.	Non required	LS	LS
4.1.3: Future development would conflict with any applicable habitat conservation plan or natural community conservation plan.	None required	NI	NI
Population and Housing			
4.2.1: The General Plan Update may induce growth in the Williams area.	3.32 The City will grow contiguously to manage the efficiency of public services and municipal infrastructure provision, to maintain a compact and well defined community form, and to oblige its fiscal responsibility. 3.33 Priority in the form of infrastructure and other capital improvements will be given to the redevelopment of blighted structures or properties and infill development of vacant parcels or underutilized tracts. 3.34 Development will occur first within the existing corporate limits where the infrastructure and services are readily available. 3.35 Annexation will occur in strict adherence	PS	LS

Table 2.1 Impacts Summary			
Impact Description	Mitigation Measures	Significance Before Mitigation	Significance After Mitigation
Key: No Impact = NI Less Than Significant = LS Potentially Significant = PS Significant and Unavoidable = SU			
	with the Future Land Use and Growth Plan. Requests for annexation in areas not shown in this plan will warrant further study, a showing of cause to support the request, and require a general plan amendment. 3.36 The sphere of influence will be expanded concurrent with the plan for the expansion of the corporate limits to exert influence and protect the City's long-term planning interests.		
4.2.2: The General Plan would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.	None Required	NI	NI
4.2.3: The General Plan would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.	None Required	NI	NI
Aesthetics			
4.3.1: The Plan will have a substantial adverse effect on a scenic vista.	3.11. Preserve the historic significance of downtown through development and employment of preservation guidelines for alterations to existing buildings. Utilize the guidelines also to ensure the architectural appropriateness of newly constructed buildings. 3.12. Retain the urban character of the existing buildings along 7th and 8th Streets and establish new standards to guide new development to occur in an urban context. 3.14. A downtown master plan will provide the policies and implementation framework to guide the redevelopment and future development of Downtown. 3.19 The City will manage the appearance of its gateways and corridors through proactive planning, stepped-up enforcement, and public investment. 3.20 New standards will be developed to achieve quality design and development outcomes along I-5 and each of the major corridors. 3.28. The design review standards should be revised and a design manual created to better define and illustrate explicit site and building standards.	PS	LS

Table 2.1 Impacts Summary			
Impact Description	Mitigation Measures	Significance Before Mitigation	Significance After Mitigation
Key: No Impact = NI Less Than Significant = LS Potentially Significant = PS Significant and Unavoidable = SU			
	3.44 The agricultural use and rural character of the City's perimeter should be maintained through the strict enforcement of zoning, as applicable, and influence exerted by the City within its sphere of influence. 3.i. Amend the zoning ordinance to include a new Downtown district. This district is necessary by reason of the unique, urban character and its intended use and building types. The standards should include: • Zero front and side yard setbacks to preserve the existing block frontage and to re-establish it in other areas of the district. • A minimum rather than maximum building height to create two (or more) story buildings. This encloses the street and reinforces the urban fabric. Given market conditions, two-story buildings should accommodate upper floor office and residential uses. • Uses that are suitable within a downtown environment and include those with building typologies that contribute to an urban context and pedestrian orientation. • Provisions for on-street and common (public and/or private) parking, including allowance for first floor (under building) parking, particularly for retirement housing. • Building design standards to embrace a pedestrian streetscape environment, with distinction between floors and fenestration of doors and windows. 3.k. Amend Chapter 17.11, Signs, to create a new section for "Signs in the Downtown District." The permitted signs in this district should include projecting signs and provisions for awning, overhang, and window signage. The allowances and limitations regarding sign area should be modified according to the urban context. 3.m. Prepare a downtown master plan to guide the strategies and improvement projects necessary to support the formation of a redevelopment district. The master plan should entail the type and character of future land use, specific use and building		

Table 2.1 Impacts Summary			
Impact Description	Mitigation Measures	Significance Before Mitigation	Significance After Mitigation
Key: No Impact = NI Less Than Significant = LS Potentially Significant = PS Significant and Unavoidable = SU			
	types, street and sidewalk improvements, streetscape enhancements, and infrastructure requirements, together with strategies for creating partnerships, assembling and marketing land deals, and recruiting developer interest. Lastly, the plan should evaluate market conditions and likely absorption rates and subsequently, identify funding sources and a general financing plan. 3.bb. Amend the zoning ordinance to consolidate the C-2 and C-H districts into a new Auto-Urban Commercial district and develop design standards and guidelines for new development in these areas. This district should include the following: • Site design standards requiring parking to the side and rear of buildings (rather than in front). On sites where this is infeasible by way of its size or orientation the standards should include a broader streetscape bufferyard with increased landscaping and parking lot landscaping. • A built-to-line (in place of a minimum setback). • Increased side and rear setbacks and bufferyard standards to separate and screen adjacent properties. • Building design standards relating to building scale and articulation, façade and roofline standards, and building orientation. • A minimum landscape surface ratio. 3.dd. Amend Chapter 17.108, Design Review, and develop design standards and guidelines, to include more definitive and explicit standards relating to the height and scale of buildings adjacent to residential areas, architectural forms and details, solar panel installations, outdoor lighting levels and dark-sky provisions, building and neighborhood monotony, building shapes and materials, and landscaping, screening, and fencing. 3.ll. Establish and maintain a Design Manual that includes development standards and guidelines that defines and illustrates the City's design expectations for new development and signage.		

Table 2.1 Impacts Summary			
Impact Description	Mitigation Measures	Significance Before Mitigation	Significance After Mitigation
Key: No Impact = NI Less Than Significant = LS Potentially Significant = PS Significant and Unavoidable = SU			
4.3.2: The plan will substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.	3.11. Preserve the historic significance of downtown through development and employment of preservation guidelines for alterations to existing buildings. Utilize the guidelines also to ensure the architectural appropriateness of newly constructed buildings. 3.12. Retain the urban character of the existing buildings along 7th and 8th Streets and establish new standards to guide new development to occur in an urban context. 3.14. A downtown master plan will provide the policies and implementation framework to guide the redevelopment and future development of Downtown. 3.28. The design review standards will be revised and a design manual will be created to better define and illustrate explicit site and building standards. 3.i. Amend the zoning ordinance to include a new Downtown district. This district is necessary by reason of the unique, urban character and its intended use and building types. The standards should include: • Zero front and side yard setbacks to preserve the existing block frontage and to re-establish it in other areas of the district. • A minimum rather than maximum building height to create two (or more) story buildings. This encloses the street and reinforces the urban fabric. Given market conditions, two-story buildings should accommodate upper floor office and residential uses. • Uses that are suitable within a downtown environment and include those with building typologies that contribute to an urban context and pedestrian orientation. • Provisions for on-street and common (public and/or private) parking, including allowance for first floor (under building) parking, particularly for retirement housing. • Building design standards to embrace a pedestrian streetscape environment, with distinction between floors and fenestration of doors and windows.	PS	LS

Table 2.1 Impacts Summary			
Impact Description	Mitigation Measures	Significance Before Mitigation	Significance After Mitigation
Key: No Impact = NI Less Than Significant = LS Potentially Significant = PS Significant and Unavoidable = SU			
	3.k. Amend Chapter 17.11, Signs, to create a new section for "Signs in the Downtown District." The permitted signs in this district should include projecting signs and provisions for awning, overhang, and window signage. The allowances and limitations regarding sign area should be modified according to the urban context. 3.m. Prepare a downtown master plan to guide the strategies and improvement projects necessary to support the formation of a redevelopment district. The master plan should entail the type and character of future land use, specific use and building types, street and sidewalk improvements, streetscape enhancements, and infrastructure requirements, together with strategies for creating partnerships, assembling and marketing land deals, and recruiting developer interest. Lastly, the plan should evaluate market conditions and likely absorption rates and subsequently, identify funding sources and a general financing plan. 3.p. Certify downtown as a historic district and adopt historic preservation standards. Such standards would protect the historic architecture and ensure appropriate updates and new building construction. 3.q. Earmark funds to create a façade improvement grant program and to offer business development loans for code compliance. Consider a revolving loan fund to help with business start-ups and expansions. 3.bb. Amend the zoning ordinance to consolidate the C-2 and C-H districts into a new Auto-Urban Commercial district and develop design standards and guidelines for new development in these areas. This district should include the following: • Site design standards requiring parking to the side and rear of buildings (rather than in front). On sites where this is infeasible by way of its size or orientation the standards should include a broader streetscape bufferyard with increased landscaping and parking lot landscaping. • A built-to-line (in place of a minimum setback).		

Table 2.1 Impacts Summary			
Impact Description	Mitigation Measures	Significance Before Mitigation	Significance After Mitigation
Key: No Impact = NI Less Than Significant = LS Potentially Significant = PS Significant and Unavoidable = SU			
	• Increased side and rear setbacks and bufferyard standards to separate and screen adjacent properties. • Building design standards relating to building scale and articulation, façade and roofline standards, and building orientation. • A minimum landscape surface ratio. 3.dd. Amend Chapter 17.108, Design Review, and develop design standards and guidelines, to include more definitive and explicit standards relating to the height and scale of buildings adjacent to residential areas, architectural forms and details, solar panel installations, outdoor lighting levels and dark-sky provisions, building and neighborhood monotony, building shapes and materials, and landscaping, screening, and fencing. 3.ll. Establish and maintain a Design Manual that includes development standards and guidelines that defines and illustrates the City's design expectations for new development and signage.		
4.3.3: The Plan will substantially degrade the existing visual character or quality of the site and its surroundings.	3.2 Unique standards will be prepared for the original town neighborhoods to retain the existing patterns and forms of development and to avoid inappropriate infill development or use conversions. 3.11. Preserve the historic significance of downtown through development and employment of preservation guidelines for alterations to existing buildings. Utilize the guidelines also to ensure the architectural appropriateness of newly constructed buildings. 3.12. Retain the urban character of the existing buildings along 7th and 8th Streets and establish new standards to guide new development to occur in an urban context. 3.14. A downtown master plan will provide the policies and implementation framework to guide the redevelopment and future development of Downtown. 3.24. Site improvement standards will be developed and applied to the blighted corridors to facilitate reinvestment and	PS	LS

Table 2.1 Impacts Summary			
Impact Description	Mitigation Measures	Significance Before Mitigation	Significance After Mitigation
Key: No Impact = NI Less Than Significant = LS Potentially Significant = PS Significant and Unavoidable = SU			
	regulatory compliance. 3.28. The design review standards will be revised and a design manual will be created to better define and illustrate explicit site and building standards. 3.31 Priority in the form of infrastructure and other capital improvements will be given to the redevelopment of blighted structures or properties and infill development of vacant parcels or underutilized tracts. 3.i. Amend the zoning ordinance to include a new Downtown district. This district is necessary by reason of the unique, urban character and its intended use and building types. The standards should include: • Zero front and side yard setbacks to preserve the existing block frontage and to re-establish it in other areas of the district. • A minimum rather than maximum building height to create two (or more) story buildings. This encloses the street and reinforces the urban fabric. Given market conditions, two-story buildings should accommodate upper floor office and residential uses. • Uses that are suitable within a downtown environment and include those with building typologies that contribute to an urban context and pedestrian orientation. • Provisions for on-street and common (public and/or private) parking, including allowance for first floor (under building) parking, particularly for retirement housing. • Building design standards to embrace a pedestrian streetscape environment, with distinction between floors and fenestration of doors and windows. 3.k. Amend Chapter 17.11, Signs, to create a new section for "Signs in the Downtown District." The permitted signs in this district should include projecting signs and provisions for awning, overhang, and window signage. The allowances and limitations regarding sign area should be modified according to the urban context. 3.m. Prepare a downtown master plan to guide		

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	the strategies and improvement projects necessary to support the formation of a redevelopment district. The master plan should entail the type and character of future land use, specific use and building types, street and sidewalk improvements, streetscape enhancements, and infrastructure requirements, together with strategies for creating partnerships, assembling and marketing land deals, and recruiting developer interest. Lastly, the plan should evaluate market conditions and likely absorption rates and subsequently, identify funding sources and a general financing plan. 3.bb. Amend the zoning ordinance to consolidate the C-2 and C-H districts into a new Auto-Urban Commercial district and develop design standards and guidelines for new development in these areas. This district should include the following: • Site design standards requiring parking to the side and rear of buildings (rather than in front). On sites where this is infeasible by way of its size or orientation the standards should include a broader streetscape bufferyard with increased landscaping and parking lot landscaping. • A built-to-line (in place of a minimum setback). • Increased side and rear setbacks and bufferyard standards to separate and screen adjacent properties. • Building design standards relating to building scale and articulation, façade and roofline standards, and building orientation. • A minimum landscape surface ratio. 3.dd. Amend Chapter 17.108, Design Review, and develop design standards and guidelines, to include more definitive and explicit standards relating to the height and scale of buildings adjacent to residential areas, architectural forms and details, solar panel installations, outdoor lighting levels and dark-sky provisions, building and neighborhood monotony, building shapes and materials, and landscaping, screening, and fencing.		

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	3.ll. Establish and maintain a Design Manual that includes development standards and guidelines that defines and illustrates the City's design expectations for new development and signage.		
4.3.4: The Plan will create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	3.11. Preserve the historic significance of downtown through development and employment of preservation guidelines for alterations to existing buildings. Utilize the guidelines also to ensure the architectural appropriateness of newly constructed buildings. 3.12. Retain the urban character of the existing buildings along 7th and 8th Streets and establish new standards to guide new development to occur in an urban context. 3.14. A downtown master plan will provide the policies and implementation framework to guide the redevelopment and future development of Downtown. 3.28. The design review standards will be revised and a design manual will be created to better define and illustrate explicit site and building standards. 3.f. Prepare a neighborhood improvement plan for the original town neighborhoods to organize and coordinate with neighborhood representatives to identify improvement projects, regulatory adjustments, enforcement targets, and needed amenities. The plan should be backed by grants and seed funding for individual property improvements and a capital budget for street, sidewalk, utility, drainage, lighting, and park projects. 3.i. Amend the zoning ordinance to include a new Downtown district. This district is necessary by reason of the unique, urban character and its intended use and building types. The standards should include: • Zero front and side yard setbacks to preserve the existing block frontage and to re-establish it in other areas of the district. • A minimum rather than maximum building height to create two (or more) story buildings. This encloses the street and reinforces the urban fabric. Given market conditions, two-story buildings	PS	LS

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	should accommodate upper floor office and residential uses. • Uses that are suitable within a downtown environment and include those with building typologies that contribute to an urban context and pedestrian orientation. • Provisions for on-street and common (public and/or private) parking, including allowance for first floor (under building) parking, particularly for retirement housing. • Building design standards to embrace a pedestrian streetscape environment, with distinction between floors and fenestration of doors and windows. 3.k. Amend Chapter 17.11, Signs, to create a new section for "Signs in the Downtown District." The permitted signs in this district should include projecting signs and provisions for awning, overhang, and window signage. The allowances and limitations regarding sign area should be modified according to the urban context. 3.m. Prepare a downtown master plan to guide the strategies and improvement projects necessary to support the formation of a redevelopment district. The master plan should entail the type and character of future land use, specific use and building types, street and sidewalk improvements, streetscape enhancements, and infrastructure requirements, together with strategies for creating partnerships, assembling and marketing land deals, and recruiting developer interest. Lastly, the plan should evaluate market conditions and likely absorption rates and subsequently, identify funding sources and a general financing plan. 3.t. Restructure the C-1 district to reflect a Suburban Commercial standard. This district would include better standards to compliment and to be compatible with adjacent neighborhoods. Standards would require development to be "residential in appearance" with a similar scale and height, pitched roofs of similar composition, more green space and landscaping, and provisions for lighting,		

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	signage, and site design. 3.bb. Amend the zoning ordinance to consolidate the C-2 and C-H districts into a new Auto-Urban Commercial district and develop design standards and guidelines for new development in these areas. This district should include the following: • Site design standards requiring parking to the side and rear of buildings (rather than in front). On sites where this is infeasible by way of its size or orientation the standards should include a broader streetscape bufferyard with increased landscaping and parking lot landscaping. • A built-to-line (in place of a minimum setback). • Increased side and rear setbacks and bufferyard standards to separate and screen adjacent properties. • Building design standards relating to building scale and articulation, façade and roofline standards, and building orientation. • A minimum landscape surface ratio. 3.dd. Amend Chapter 17.108, Design Review, and develop design standards and guidelines, to include more definitive and explicit standards relating to the height and scale of buildings adjacent to residential areas, architectural forms and details, solar panel installations, outdoor lighting levels and dark-sky provisions, building and neighborhood monotony, building shapes and materials, and landscaping, screening, and fencing. 3.ll. Establish and maintain a Design Manual that includes development standards and guidelines that defines and illustrates the City's design expectations for new development and signage.		
Circulation			
4.4.1: Future development would cause an increase in traffic which is considered substantial in relation to the existing traffic load and capacity of the street system.	8.c-1 The City shall maintain and update a functional classification of the street system (Figure 8.1) that reflects land use and traffic patterns. 8.c-2 The City shall establish a data collection program for the street system to include a physical inventory, traffic volumes and accident reports.		
4.4.2: Future development would exceed, either individually or cumulatively, a level of service			

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standard for designated roads or highways.	8.c-3	The City shall strive to control traffic levels in residential neighborhoods a "livable communities standard", to not exceed a threshold of 3,500 ADT on any given residential street segment. As the City grows and this threshold is approached, alternative traffic calming strategies may be considered and implemented as resources permit. Such calming devices may include planted medians, landscaped planter strips, landscaped traffic circles		
	8.c-6	The City and Redevelopment Agency will explore opportunities to construct new, or improve safety of the existing east-west freeway crossings on E Street, or may require such improvements as a condition of new development, as appropriate.		
	8.d-5	Through the Capital Improvement Program, the City shall develop a priority system for physical improvements based on demonstrated needs according to the collected data on physical conditions, traffic volumes and safety reports. CIP improvements shall be made consistent with the City's Circulation Master Plan.		
	8.b-2	New development shall incorporate highly connected street and pedestrian/bicycle networks, with many connections between new and older neighborhoods and between neighborhood and commercial and downtown areas.		
	8.d-1	Establish a City transportation impact fee program that addresses impacts to City transportation facilities. Following adoption of the 2010 General Plan, the City will revise its development impact fees based on a Nexus Study.		
	8.d-9	Limit driveway intersections and curb cuts along arterial and collector roadways in order to provide improved mobility and public safety.		
4.4.3: Development will substantially increase hazards due to a design feature or incompatible uses.	8.d-10-	Encourage the widening of State highways to allow the safe movement of farm vehicles and equipment.	PS	LS
4.4.4: Development will result in inadequate emergency access.	8.d-11-	Provide dedicated pedestrian and bike lanes on the E Street overpass of I-5, as recommended in Chapter 5, Open Space and Conservation.	PS	LS
	8.h-	Provide for desirable and safe alternative		

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	access to schools, parks, and shopping areas from residential areas within the City. 8.h-1 The City shall include consideration of the visual aspects of a development for roadways. Aesthetic consideration shall include architectural compatibility and landscaping. 8.h-2 The City shall consider the construction of landscaped medians and landscaped sidewalk strips on commercial thoroughfares to help slow traffic flows and to help provide for a more scenic roadway. 8.h-3 The City shall consider integrating residential street features that calm traffic, increase safety and are aesthetic amenities to neighborhoods. Additionally, reduction in residential street width shall also be considered as a traffic calming option. If such street width reduction is recommended and implemented, consideration for reduction of public right of way should also be included. All traffic calming and road narrowing projects shall be designed to accommodate emergency service vehicle accessibility. 8.h-4 The City shall plan and require construction of bikeways, sidewalks, and pedestrian access ways to major destination points with emphasis on providing connecting access to schools, parks and shopping centers from residential neighborhoods. 8.h-5 The City shall evaluate the pedestrian and bicycle safety of critical circulation links, such as the E Street Bridge over Highway 5, and make improvements to these linkages to facilitate safe travel. 3.40. Infrastructure and public services will be brought to a sufficient, level of service within the developed area, requisite with needs. 3.50. New development will be compatible with existing and well established neighborhoods through appropriate use and design transitioning and cohesive types and patterns of development. 8.e- Improve travel safety, accessibility and		

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	energy efficiency. Actions: 8.e-1 The City shall review the location and frequency of accidents and develop specific site improvements. 8.e-2 The City shall consider changes in speed limits, parking and turning restrictions to enhance public safety. 8.e-3 The City shall strive to provide for smooth traffic flow and a compact urban pattern to maximize efficient movement between residential, commercial, and public areas. 8.e-4 The City shall develop an Americans With Disabilities Act (ADA) transition and compliance program for pedestrian facilities. 8.f- Provide for truck and emergency vehicle traffic. 8.f-1 Accommodate truck and emergency vehicle traffic. 8.f-2 The City shall designate by ordinance truck routes to direct trucks to routes that maintain sufficient carrying capacity and to discourage truck traffic on local residential streets (refer to Figure 4). 8.f-2 The City shall identify primary emergency vehicle routes and links between the medical facilities, fire, and police stations. 8.f-3 Design standards for local streets will provide adequate access for fire and police department services. Refer to all actions under Policy 8-b. 8.f-4 Upon signalization improvements, the City shall upgrade traffic signal installations to include “opticom” emergency vehicle preemption to enhance emergency response safety. 8.g- The planning, alignment, and improvement of the street network will reflect the proposed land use pattern of the General Plan. 8.g-1 The functional classification of streets will identify street purpose and the standards of improvement necessary to accommodate anticipated traffic demand. 8.g-2 In establishing priorities for street improvements, the potential for effects on land use and traffic patterns will be		

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		evaluated.		
	8.g-3	The City shall adopt new street plan lines (street alignments) for arterials and collectors to protect rights-of-way for future street improvements.		
	8.g-4	Projects included in the Capital Improvement Program and proposed for regional transportation plans should prioritize, in the following order: 1) projects that improve operations on existing roads without increasing capacity, 2) projects that encourage alternative transportation modes, 3) projects that increase capacity on existing roadways, and 4) new roadways.		
4.4.5: Development will conflict with adopted policies, plans, or programs supporting alternative transportation.	8.b-	Establish Complete Street Subdivision Criteria for new development and improve convenience, energy efficiency, and safety for multi-modal travel in existing neighborhoods.	PS	LS
	8.b-1	The City will develop Complete Street Subdivision Development Standards. These standards shall include provisions for cul-de-sac designs, required stubbing of streets to adjacent planned development areas, block lengths and neighborhood connectivity.		
	8.b-2	New development shall incorporate highly connected street and pedestrian/bicycle networks, with many connections between new and older neighborhoods and between neighborhood and commercial and downtown areas.		
	8.c-	Monitor the operation and performance of the multi-modal circulation system.		
	8.c-1	The City shall maintain and update a functional classification of the street system (Figure 8.1) that reflects land use and traffic patterns.		
	8.c-2	The City shall establish a data collection program for the street system to include a physical inventory, traffic volumes and accident reports.		
	8.c-3	The City shall strive to control traffic levels in residential neighborhoods a “livable communities standard”, to not exceed a threshold of 3,500 ADT on any given residential street segment. As the City grows and this threshold is approached,		

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	alternative traffic calming strategies may be considered and implemented as resources permit. Such calming devices may include planted medians, landscaped planter strips, landscaped traffic circles. 8.c-4 The City will seek funding for, and include pedestrian and bicycle improvements in Capital Improvement Planning, as feasible. Such improvements will include, but are not limited to: • Construction of sidewalks where they do not currently exist; • Widening of sidewalks in high pedestrian traffic areas; • Installation of bike paths and lanes; and • Improved crossings of roads and railroad for bicycles and pedestrians. 8.c-6 The City and Redevelopment Agency will explore opportunities to construct new, or improve safety of the existing east-west freeway crossings on E Street, or may require such improvements as a condition of new development, as appropriate. 8.c-7 All transportation improvement projects proposed for inclusion in the City's Capital Improvement Program shall be consistent with air quality, land use, circulation, and other goals and policies of the General Plan. 8.d- Maintain roadways and circulation improvements to ensure safe, energy efficient and convenient daily travel for pedestrians, bicyclists, transit users and drivers as Williams grows. 8.d-1 Establish a City transportation impact fee program that addresses impacts to City transportation facilities. Following adoption of the 2010 General Plan, the City will revise its development impact fees based on a Nexus Study. 8.d-2 New development shall construct and dedicate streets that accommodate the full range of locally available travel modes. 8.d-3 New development shall construct and dedicate and/or contribute to a connected bicycle/pedestrian network that is designed to promote travel to schools, parks, and other major destinations.		

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	8.d-4	Bicycle parking should be provided as a part of all non-residential development.		
	8.d-5	Through the Capital Improvement Program, the City shall develop a priority system for physical improvements based on demonstrated needs according to the collected data on physical conditions, traffic volumes and safety reports. CIP improvements shall be made consistent with the City's Circulation Master Plan.		
	8.d-6	The City shall maintain and update a Bikeway Master Plan to guide the orderly provision of bikeway facilities throughout the City.		
	8.d-7	The City shall integrate local bikeway planning with regional plans.		
	8.d-8	The City shall seek State Bicycle Lane Account funds and other funding to help pay for the completion of a comprehensive bikeway system within in the City.		
	8.d-9	Limit driveway intersections and curb cuts along arterial and collector roadways in order to provide improved mobility and public safety.		
	8.d-10	Encourage the widening of State highways to allow the safe movement of farm vehicles and equipment.		
	8.d-11	Provide dedicated pedestrian and bike lanes on the E Street overpass of I-5, as recommended in Chapter 5, Open Space and Conservation.		
Air Quality				
4.5.1: Implementation of the proposed City of Williams General Plan Update could conflict with or obstruct implementation of the applicable air quality plan.	3.52	Potential adverse impacts on adjacent land use types should be considered in the City's development review process (including factors such as noise, odor, pollution, excessive light, traffic, etc.)	PS	LS
	3.58	Walkability and good connectivity will be promoted through continuity of the street and pedestrian system, together with a compact community form.		
	3.60	Residential development should be oriented away from I-5 and other primary streets without adequate transitioning standards and situated within the roadway network and relative to other land uses so as to minimize high volumes		

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	of through traffic. 7.12 A comprehensive, interconnected trail system will offer pedestrian walkways, bike paths, and equestrian trails throughout the community. 7.13 The creation of inter-city trails will enhance recreational opportunities and promote walking as a viable travel mode. 7.15 The local trail system will connect local residents to regional, state, and federal trail systems. 7.as Support green roofs on new developments as a method of stormwater mitigation, as well as reduction f the urban "heat island" effect. For new construction, use of green roofs should result in a reduction in the extent of stormwater facilities that need to be constructed to meet standards. 8.b Establish complete street subdivision criteria for new development and improve convenience, energy efficiency, an safety for multi-modal travel in existing neighborhoods. 8.b-5 Upon signalization improvements, the City shall optimize traffic signal performance to increase traffic flow and reduce vehicular emissions. 8.b-7 The City shall coordinate bicycle and pedestrian paths to logically link to the County's plans for bicycle and pedestrian travel. 8.c Monitor the operation and performance of the multi-modal circulation system. 8.c-7 All transportation improvement projects proposed for inclusion in the City's Capital Improvement Program shall be consistent with air quality, land use, circulation, and other goals and policies of the General Plan. 8.d-2 New development shall construct and dedicate streets that accommodate the full range of locally available travel modes. 8.d-3 New development shall construct and dedicate and / or contribute to a connected bicycle / pedestrian network that is designed to promote travel to schools, parks, and other major		

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	destinations. 8.d-7 The City shall integrate local bikeway planning with regional plans. 8.d-11 Provide dedicated pedestrian and bike lanes on the E Street overpass of I-5, as recommended in Chapter 5, Open Space and Conservation. 8.f-2 The City shall designate by ordinance truck routes to direct trucks to routes that maintain sufficient carrying capacity and to discourage truck traffic on local residential streets. 8.h-4 The City shall plan and require construction of bikeways, sidewalks, and pedestrian access ways to major destination points with emphasis on providing connecting access to schools, parks and shopping centers from residential neighborhoods. 8.i Encourage the continued development and expansion of local and regional public transit systems. 8.i-1 The City shall review and comment on proposed changes to the Colusa County Transit Authority (CCTA) bus system. 8.i-2 The City will consult with the California Public Utilities Commission, Amtrak, Union Pacific Railroad Company, and any other relevant agencies to encourage and accommodate any future opportunities for establishing passenger rail service in Colusa County and create a central multi-modal transit station in Williams. 8.i-3 The City should actively engage in the restoration of passenger rail service along the California Northern Pacific Railroad tracks within Williams. 8.l Coordinate transportation planning with regional and local plans. 8.l-4 The City will coordinate with Caltrans, the Colusa County Air Pollution Control District and the Colusa County Regional Transportation Commission to minimize air quality and transportation impacts associated with planned and existing transportation facilities. 8.o Provide parking in a way that balances the needs of motorists, pedestrians, bicyclists,		

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		transit users and community aesthetics.		
4.5.2: Implementation of the proposed City of Williams General Plan Update could violate an air quality standard or contribute substantially to an existing or projected air quality violation. 4.5.3: Implementation could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.	3.7	The City will continue to facilitate developments that offer a variety of living options and environments provided they contribute positively to the intended community character.	PS	SU
	3.52	Potential adverse impacts on adjacent land use types should be considered in the City's development review process (including factors such as noise, odor, pollution, excessive light, traffic, etc.)		
	7.12	A comprehensive, interconnected trail system will offer pedestrian walkways, bike paths, and equestrian trails throughout the community.		
	7.13	The creation of inter-city trails will enhance recreational opportunities and promote walking as a viable travel mode.		
	7.15	The local trail system will connect local residents to regional, state, and federal trail systems.		
	7.as	Support green roofs on new developments as a method of stormwater mitigation, as well as reduction f the urban "heat island" effect. For new construction, use of green roofs should result in a reduction in the extent of stormwater facilities that need to be constructed to meet standards.		
	8.b	Establish complete street subdivision criteria for new development and improve convenience, energy efficiency, an safety for multi-modal travel in existing neighborhoods.		
	8.c-7	All transportation improvement projects proposed for inclusion in the City's Capital Improvement Program shall be consistent with air quality, land use, circulation, and other goals and policies of the General Plan.		
	8.d-2	New development shall construct and dedicate streets that accommodate the full range of locally available travel modes.		
	8.d-3	New development shall construct and dedicate and / or contribute to a connected bicycle / pedestrian network that is designed to promote travel to schools, parks, and other major		

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		destinations.		
	8.d-7	The City shall integrate local bikeway planning with regional plans.		
	8.d-11	Provide dedicated pedestrian and bike lanes on the E Street overpass of I-5, as recommended in Chapter 5, Open Space and Conservation.		
	8.i	Encourage the continued development and expansion of local and regional public transit systems.		
	8.i-1	The City shall review and comment on proposed changes to the Colusa County Transit Authority (CCTA) bus system.		
	8.i-2	The City will consult with the California Public Utilities Commission, Amtrak, Union Pacific Railroad Company, and any other relevant agencies to encourage and accommodate any future opportunities for establishing passenger rail service in Colusa County and create a central multi-modal transit station in Williams.		
	8.i-3	The City should actively engage in the restoration of passenger rail service along the California Northern Pacific Railroad tracks within Williams.		
	8.k	Publicize major transportation issues and solicit public input.		
	8.l	Coordinate transportation planning with regional and local plans.		
	8.l-4	The City will coordinate with Caltrans, the Colusa County Air Pollution Control District and the Colusa County Regional Transportation Commission to minimize air quality and transportation impacts associated with planned and existing transportation facilities.		
	8.o	Provide parking in a way that balances the needs of motorists, pedestrians, bicyclists, transit users and community aesthetics.		
4.5.4: Implementation of the proposed City of Williams General Plan Update would expose sensitive receptors to substantial pollutant concentrations.	3.52	Potential adverse impacts on adjacent land use types should be considered in the City's development review process (including factors such as noise, odor, pollution, excessive light, traffic, etc.)	PS	LS
	7.12	A comprehensive, interconnected trail system will offer pedestrian walkways, bike paths, and equestrian trails throughout the community.		

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	8.b Establish complete street subdivision criteria for new development and improve convenience, energy efficiency, an safety for multi-modal travel in existing neighborhoods. 8.c-7 All transportation improvement projects proposed for inclusion in the City's Capital Improvement Program shall be consistent with air quality, land use, circulation, and other goals and policies of the General Plan. 8.d-2 New development shall construct and dedicate streets that accommodate the full range of locally available travel modes. 8.d-3 New development shall construct and dedicate and / or contribute to a connected bicycle / pedestrian network that is designed to promote travel to schools, parks, and other major destinations. 8.d-7 The City shall integrate local bikeway planning with regional plans. 8.d-11 Provide dedicated pedestrian and bike lanes on the E Street overpass of I-5, as recommended in Chapter 5, Open Space and Conservation. 8.i Encourage the continued development and expansion of local and regional public transit systems. 8.i-1 The City shall review and comment on proposed changes to the Colusa County Transit Authority (CCTA) bus system. 8.i-2 The City will consult with the California Public Utilities Commission, Amtrak, Union Pacific Railroad Company, and any other relevant agencies to encourage and accommodate any future opportunities for establishing passenger rail service in Colusa County and create a central multi-modal transit station in Williams. 8.i-3 The City should actively engage in the restoration of passenger rail service along the California Northern Pacific Railroad tracks within Williams. 8.k Publicize major transportation issues and solicit public input. 8.l Coordinate transportation planning with regional and local plans.		

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	8.l-4 The City will coordinate with Caltrans, the Colusa County Air Pollution Control District and the Colusa County Regional Transportation Commission to minimize air quality and transportation impacts associated with planned and existing transportation facilities. 8.o Provide parking in a way that balances the needs of motorists, pedestrians, bicyclists, transit users and community aesthetics.		
4.5.5: Implementation of the proposed City of Williams General Plan would expose a substantial number of people to objectionable odors.	None required	LS	LS
4.5.6: Implementation of the proposed City of Williams General Plan Update would generate greenhouse gas emissions, either directly or indirectly.	3.7 The City will continue to facilitate developments that offer a variety of living options and environments provided they contribute positively to the intended community character. 3.52 Potential adverse impacts on adjacent land use types should be considered in the City's development review process (including factors such as noise, odor, pollution, excessive light, traffic, etc.) 3.58 Walkability and good connectivity will be promoted through continuity of the street and pedestrian system, together with a compact community form. 8.d-7 The City shall integrate local bikeway planning with regional plans. 8.d-11 Provide dedicated pedestrian and bike lanes on the E Street overpass of I-5, as recommended in Chapter 5, Open Space and Conservation. 8.i Encourage the continued development and expansion of local and regional public transit systems. 8.i-1 The City shall review and comment on proposed changes to the Colusa County Transit Authority (CCTA) bus system. 8.i-2 The City will consult with the California Public Utilities Commission, Amtrak, Union Pacific Railroad Company, and any other relevant agencies to encourage and accommodate any future opportunities for establishing passenger rail service in	PS	SU

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	Colusa County and create a central multi-modal transit station in Williams. 8.i-3 The City should actively engage in the restoration of passenger rail service along the California Northern Pacific Railroad tracks within Williams. 8.k Publicize major transportation issues and solicit public input. 8.l Coordinate transportation planning with regional and local plans. 8.l-4 The City will coordinate with Caltrans, the Colusa County Air Pollution Control District and the Colusa County Regional Transportation Commission to minimize air quality and transportation impacts associated with planned and existing transportation facilities. 8.o Provide parking in a way that balances the needs of motorists, pedestrians, bicyclists, transit users and community aesthetics.		
Noise			
4.6.1: The plan will result in the development of Noise-Sensitive Land Uses within Areas Subject to Noise Impacts.	6.1 All noise analyses prepared to determine compliance with the noise level standards contained within this Noise Element should be prepared as described in Action 6.	PS	LS
4.6.2: The plan will result in the development of Noise-Producing Uses near Existing Noise-Sensitive Land Uses.	6.3. For City projects that involve capacity enhancing roadways, or the construction of new roadways, an acoustical analysis should be prepared. If the project would result in a significant noise level increase as defined below, or if the project would cause noise levels to exceed the noise standards of Table 4.6.7, Noise Guidelines for New Uses Affected by Transportation Noise Sources, noise mitigation measures should be considered to reduce traffic noise levels to a state of compliance with Table 4.6.7. A significant increase is defined as follows: Pre-Project Noise Environment (Ldn) Significant Increase Less than 60 dB 5+ dB 60 - 65 dB 3+ dB Greater than 65 dB 1.5+ dB There are various factors which may affect the feasibility or reasonableness of the mitigation which should be considered including the following: 1. The severity of the impact; 2. The cost and effectiveness of the		

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	mitigation; 3. The number of properties which would benefit from the mitigation; and 4. Aesthetic, safety, and engineering considerations. 6.4. If noise-reducing pavement is to be utilized in conjunction with a roadway improvement project, the acoustical benefits of such pavement should be included in the noise analysis prepared for the project. 6.5. The City of Williams should work with the State to mitigate noise levels to within acceptable levels as described in this chapter when the State expands or extends roadways that impacts existing residential development. 6.6. For capacity enhancing rail, or the construction of new rail, a acoustical analysis should be prepared. If the project would result in a significant noise level increase as defined below, or if the project would cause noise levels to exceed the noise standards of Table 4.6.7, Noise Guidelines for New Uses Affected by Transportation Noise Sources, noise mitigation measures should be considered to reduce rail noise levels to a state of compliance with the Table 4.6.7. A significant increase is defined as follows: Pre-Project Noise Environment (Ldn) Significant Increase Less than 60 dB 5+ dB 60 - 65 dB 3+ dB Greater than 65 dB 1.5+ dB There are various factors which may affect the feasibility or reasonableness of the mitigation which should be considered including the following: 1. The severity of the impact; 2. The cost and effectiveness of the mitigation; 3. The number of properties which would benefit from the mitigation; and 4. Aesthetic, safety, and engineering considerations. 6.8. In the event that an airport locates in or near Williams, new residential development proposed in airport noise environments between 55 and 60 dB CNEL should be subject to the following conditions:		

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	1. Provide minimum noise insulation to 45 dB CNEL within new residential dwellings, including detached single family dwellings, with windows and exterior doors closed in any habitable room. 2. Provide disclosure statements to prospective buyers that the parcel is located in an area which may be exposed to frequent aircraft noise events (arrivals, departures, overflights, engine runups, etc.). 3. An Avigation Easement prepared by the Williams Counsel's Office granted to the City of Williams, recorded with the Williams Recorder, and filed with the City Planning Department should be obtained from each residential parcel. The Avigation Easement should acknowledge the property location near a source of aircraft noise and should grant the right of flight and unobstructed passage of all aircraft into and out of the subject Airport. 6.9. Prevent the introduction of new industrial uses in noise-sensitive areas. 6.10. Prevent the introduction of new noise-producing uses in noise-sensitive areas. 6.11. Prevent encroachment of noise-sensitive uses upon existing noise-producing facilities. 6.12. When siting a new public park, the City should consider separating the park from a noise-sensitive area if intense activities are to occur in the park. 6.13. Prevent encroachment of noise-sensitive uses upon existing industrial facilities. 6.14. Noise associated with construction activities should adhere strictly to the City Code restrictions regarding prohibited operating hours. Actions 6.a. The City of Williams should develop requirements for an acoustical analysis to be prepared with subdivision processes and site plan applications. This analysis should include the following provisions: 1. Be prepared by qualified persons experienced in the fields of environmental noise assessment and architectural acoustics. 2. Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions. 3. Estimate projected future (20 year) noise		

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	levels, and compare those levels to the adopted policies of this general plan and adopted ordinance standards. 4. Recommend appropriate mitigation to achieve compliance with the adopted policies and standards of this general plan and ordinance standards. 5. Estimate interior and exterior noise exposure after the prescribed mitigation measures have been implemented. 6.b. Any extreme noise producer not specifically exempt should be discouraged or prohibited by City Codes and policies. 6.c. The City of Williams should adopt regulations to require implementation of noise mitigation to newly constructed roadways in new subdivision developments. 6.d. Adopt noise performance standards for new industrial uses. 6.e. Where noise mitigation measures are required to satisfy the noise level standards of this Noise Element, development standards for new industrial sites should require the use of setbacks and site design, and thereby keep the use of noise barriers at a minimum. 6.f. Adopt noise performance standards for new noise-producing uses. 6.g. Adopt noise mitigation measures that will apply to new noise-sensitive uses if placed in proximity to noise producing facilities. 6.h. Where noise mitigation measures are required to satisfy the noise level standards of this Noise Element, development standards for new commercial sites should require the use of setbacks and site design, and thereby keep the use of noise barriers at a minimum. 6.i. Any noise regulations adopted by the City should specifically exempt public parks and park activities. 6.j. Adopt an ordinance amendment to require sound wall regulations when new subdivisions are proposed adjacent to existing or proposed highways or major roads. 6.k. Where noise mitigation measures are required to satisfy the noise level standards of this Noise Element, development standards for new residential subdivisions, additional setbacks should be considered in addition to the sound barrier wall		

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	to further protect future residents. 6.l. Adopt noise mitigation measures that will apply to new noise-sensitive uses if placed in proximity to existing industrial facilities, commercial facilities. 6.m. Noise analyses prepared for multi-family residential projects, town homes, mixed-use projects, condominiums, or other residential projects where floor/ceiling assemblies or party-walls are common to different owners/occupants, should address satisfaction with the State of California Noise Insulation standards.		
4.6.3: The plan will result in traffic noise level increases under build-out.	MM6-1: Adopt Citywide Noise Reduction Program.	PS	SU
4.6.4: The plan will result in possible temporary, short-term exposure of Sensitive Receptors to vibration.	MM 6-2: Require implementation of measures to reduce temporary, short-term project-generated vibration levels from construction. To reduce impacts associated with vibration generated during construction/demolition activities, the City shall require future project applicants to conform to the following requirements: • All construction activities shall be limited to the hours of 7 a.m.–6 p.m. Painting, interior finish work, and other generally quiet activities may be allowed outside of these hours provided that construction noise does not exceed ambient noise levels by 10 dBA at nearby sensitive receptors. • All construction equipment shall be properly maintained and equipped with noise control, such as mufflers, in accordance with manufacturers' specifications. • Construction equipment shall be staged and construction employee parking shall be located as far as possible from any sensitive receptors. For the purposes of this project, sensitive receptors are residential dwellings and the community park. • Stationary equipment with substantial potential to result in vibration (e.g., pile drivers) shall be placed away from existing vibration-sensitive receptors (including residences constructed during earlier phases) and/or acoustical shielding shall be provided. • A disturbance coordinator shall be designated and the name and phone number of this person shall be posted conspicuously at the	PS	LS

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	site. The disturbance coordinator shall respond to complaints about vibration and shall take the steps necessary to mitigate the problem in a timely fashion. • Access to the site by construction-related truck traffic shall be limited to the hours of 7 a.m.–6 p.m., Monday–Sunday, unless a special permit is issued to the project applicant by the City.		
Geology and Soils			
4.7.1: Fault Rupture: Future development resulting from implementation of the proposed General Plan Update could result in geologic or seismic hazards with respect to rupture of a known earthquake fault.	None Required	LS	LS
4.7.2: Seismic Ground Shaking: The City of Williams could be subject to high levels of ground shaking and minor liquefaction during a seismic event. This could result in substantial damage to some buildings within the community.	4.13 The City will continue to coordinate with the Colusa county Office of Emergency Services and the California State Office of Emergency Services to collect, account for, and distribute geologic data for use in preparedness and hazard mitigation planning. 4.14 Geotechnical investigation will be required by the City for any development proposed to occur in an area of known subsidence for which engineering modification may be necessary to mitigate or eliminate adverse impacts. 4.15 All building permits for new buildings or the expansion or reconstruction of existing buildings will ensure conformance with the seismic requirements of the California Building Code and applicable fire and building codes. 4.16 The City will comply with state seismic and building standards n the design and citing of its critical emergency response facilities, and coordinate with other local agencies, such as the Williams Unified School District, to facilitate their compliance as well. 4.u Update from time to time the City's building standards to stay current with amendments to the California Building Code.	PS	LS
4.7.3: Landslides: The proposed General Plan Update could result	None Required	NI	NI

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in geologic or seismic hazards with respect to landslides.				
4.7.4: Soil Erosion: Future development resulting from implementation of the proposed General Plan Update could result in impacts related to soil erosion or the loss of topsoil	4.1	The City will require applicants for development to submit drainage studies that adhere to storm water design requirements and incorporate measures from the Storm Drainage Master Plan to prevent on- or off-site flooding.	PS	LS
	4f	Begin identifying Best Management Practices (BMPs), particularly construction site storm water runoff control and post-construction storm water management, to reduce the discharge of pollutants to the storm water system. These should be integrated as standards into the City's subdivision regulations.		
	4.4	New development shall not cause downstream property owners, watercourses, channels, or conduits to receive storm water runoff at a higher peak flow rate than would have resulted from the same storm event occurring over the development site with the land in its natural, undeveloped condition.		
	4g	Through improved land development practices and regulations, establish a hierarchy for managing storm water with the following priorities: minimize impervious surfaces, attenuate flows by use of open, vegetated swales and natural depressions and preserve existing natural stream channels, infiltrate runoff, provide storm water retention and then detention structures, provide velocity dissipation structures or channel design, and construct storm sewers.		
4.7.5: Minerals: The proposed General Plan Update could result in the loss of availability of a known mineral resource.	None Required		NI	NI
Hydrology and Water Quality				
4.8.1: Future development would violate any water quality standards or waste discharge requirements.	5.1.	The City of Williams will provide utilities concurrently with development.	PS	LI
	5.2.	The City of Williams will provide utility service in logical order and therefore will not extend trunk facilities through significant expanses of vacant land. Exceptions will be made for industries that will make a significant contribution to the sustainability of the community.		

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	5.3. Improvements to the collection, distribution, treatment, and conveyance system will be commensurate with the demands of new development. 5.4. The City will identify non-development related NPDES permitting requirements to ensure they coordinate with development related regulations. Work to align all NPDES related efforts shall be a continuing effort. 5.5. The City's ongoing efforts to improve the drainage system and to coordinate them with parks and recreational needs shall be communicated to all decision makers and City staff to ensure alignment. 5.6 The City will amend its Storm Drainage Master Plan to take into consideration the Central Valley Flood Protection Plan and to incorporate design standard that go beyond engineering to incorporate aesthetic features. 5.b. Continue developing the City's Capital Improvement Program (CIP) to repair and replace aging and deteriorated sewer lines, which will improve the flow efficiency, reduce inflow and infiltration into the collection and treatment systems, and help to mitigate ground water impacts. 5.e. Amend the zoning ordinance to include ground water protection measures in site development standards. Include open space provisions in the density standards. 5.f. Amend the subdivision ordinance to include ground water protection measures in future subdivisions. 5.g. Develop and promote a voluntary water conservation program.		
4.8.2: Future development would substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.	5.1 The City of Williams will provide utilities concurrently with development. 5.2 The City of Williams will provide utility service in logical order and therefore will not extend trunk facilities through significant expanses of vacant land. Exceptions will be made for industries that will make a significant contribution to the sustainability of the community. 5.3 Improvements to the collection,	LS	LS

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	distribution, treatment, and conveyance system will be commensurate with the demands of new development. 5.b Continue developing the City's Capital Improvement Program (CIP) to repair and replace aging and deteriorated sewer lines, which will improve the flow efficiency, reduce inflow and infiltration into the collection and treatment systems, and help to mitigate ground water impacts. 5.e Amend the zoning ordinance to include ground water protection measures in site development standards. Include open space provisions in the density standards. 5.f Amend the subdivision ordinance to include ground water protection measures in future subdivisions. 5.g In accordance with AB 1881, the Water Conservation Landscaping Act of 2006, water efficient landscape standards shall be developed to reduce water consumption for new development		
4.8.3: Future development would substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.	5.1. The City of Williams will provide utilities concurrently with development. 5.5. The City's ongoing efforts to improve the drainage system and to coordinate them with parks and recreational needs shall be communicated to all decision makers and City staff to ensure alignment. 5.g In accordance with AB 1881, the Water Conservation Landscaping Act of 2006, water efficient landscape standards shall be developed to reduce water consumption for new development 5.h. Develop design standards for detention basins based on type – aesthetic design for single use basins and recreational standards (development requirements) for joint use. 5.i. For joint use detention basins, on a case-by-case basis, determine the proper cost share between drainage mitigation to be borne by future development versus public benefit of additional recreational infrastructure. Distinguish cost participation depending on the number of dwelling units that will be served by the	LS	LS
4.8.4. Future development would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.		LS	LS
4.8.5 Future development would otherwise substantially degrade water quality.		LS	LS

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	recreational use. Establish guidelines for parkland dedication credit in future residential areas. 5.j. Develop different sets of standards and specifications for drainage features. Draft the standards to correspond with the Land Use Plan character – rural, suburban, auto-urban, and urban. 5.k. Incorporate into City standards and specifications means for addressing storm water quality, including a first preference for non-structure best management practices such as bio-retention, vegetated swales and buffer strips, constructed wetlands, and other environmentally sensitive design and construction practices.		
4.8.6: Future development would place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.	3.43. Future development and redevelopment should be planned and implemented with appreciation for the physical environment and natural features of the community and with recognition of potential physical constraints to ensure appropriate siting of various types of development. 3.45. Sensitive resources, including floodplains, wetlands, riparian buffer areas along stream channels, and valued view sheds, will be protected and preserved. 5.1. The City of Williams will provide utilities concurrently with development. 5.5. The City's ongoing efforts to improve the drainage system and to coordinate them with parks and recreational needs shall be communicated to all decision makers and City staff to ensure alignment. 5.6 The City will amend its Storm Drainage Master Plan to take into consideration the Central Valley Flood Protection Plan and to incorporate design standard that go beyond engineering to incorporate aesthetic features.	LS	LS
4.8.7: Place within a 100-year flood hazard area structures which would impede or redirect flood flows.		LS	LS
		LS	LS
4.8.8: Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.	None Required	NI	NI
4.8.9: Future development would expose people or structures to a	None Required	NI	NI

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significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.			
4.8.10: Future development would be affected inundation by seiche, tsunami, or mudflow.	None Required	NI	NI
Public Services			
4.9.1: Future development would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services.	5.7. The City will provide facilities and services at a minimum of its current manpower ratio per 1000 persons. 5.8. The City will evaluate service provision annually with its budget process to determine necessary additions to the workforce and facility expansion to meet increasing demands of growth. 5.9. The City will determine enhancements annually with its budget process to identify necessary growth in its services to continue to meet service needs. 5.11. The City of Williams remains open to all opportunities to coordinate efforts to continuously improve public education. 5.14. The City will consider adding a new program to educate community leaders of the services the City provides. 5.15. The City recognizes there continues to be need to fill gaps in the provision of health care within a reasonable distance. 5.l. Identify and then evaluate specific areas of the City as potential “City Center” sites. 5.m. Workshop the concepts with the City Council and further develop a long range plan for city facilities. 5.n. Identify expansion options for all facilities in the short run for the interim needs that will present themselves prior to having accomplished consolidation. 5.o. Estimate the City’s population annually and project a one, two, five, ten, and twenty year population to recalibrate the City’s future needs for facilities and services. Include development pressures and gauge the likelihood that they will come to fruition in the estimates and projections 5.p. Support WUSD efforts to expand permanent buildings on site to decrease	PS	LS

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	the need for temporary buildings. 5.q. Maintain the City/WUSD relationship to continue sharing school and City facilities and services. 5.r. Create written agreements with WUSD regarding school facility use as public parks. 5.s. Take steps to lay out a program for an annual "Williams 101" that targets community leaders and teaches them about all City functions, including SOI residents. 5.t. Streamline development approvals by eliminating lengthy review processes and allowing staff-level approval for all health and social service related uses. 5.u. Ensure that all staff members understand that health and social service providers are a priority for the City so that they may facilitate establishment and retention of such uses. 5.v. Continue to evaluate significant gaps and address those that the market has not covered through programming and the Community Center. 5.w. Monitor and reevaluate services provided at the Community Center annually and adjust as appropriate. 5.x. Consider an additional City staff position that can act as a clearinghouse of contact information for assistance that is available in the City, County, and region.		
Cultural Resources			
4.10.1: The proposed General Plan Update could change substantially the significance of a historical resource, defined as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historic resource would be materially impaired.	3.11. Preserve the historic significance of downtown through development and employment of preservation guidelines for alterations to existing buildings. Utilize the guidelines also to ensure the architectural appropriateness of newly constructed buildings. 3.12. Retain the urban character of the existing buildings along 7th and 8th Streets and establish new standards to guide new development to occur in an urban context. 3.15. Redevelopment priority will be given to the rehabilitation and reuse of empty buildings before new buildings are constructed, provided its warrant and	PS	LS

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	feasibility. 3.16. All reasonable and feasible avenues will be explored to save and reuse historic buildings. 3.17. Vacant parcels will be developed in a manner that embraces the urban fabric of downtown. 3.19. The uses and height and area standards will be adapted to preserve the downtown environment.		
4.10.2: The proposed Williams General Plan Update could cause a substantial adverse change in the significance of an archaeological resource, destroy a paleontological resource, or disturb human remains.	1. In the event that undiscovered cultural resources are found during construction activities on the project site, for example, during road or utilities excavations, the responsible field manager shall order discontinuation of all activities within a minimum of 10 meters of the discovery and promptly contact a qualified archaeologist to evaluate the find. 2. Project construction personnel shall receive pre-construction orientation regarding cultural resources, their recognition, avoidance, and treatment in the event of fortuitous discoveries of cultural resources. A note to this effect shall be included on all project related plans including, but not limited to grading plans, improvement plans and final map. 3. In the event that human skeletal remains, however fragmentary they may be, or disturbed from their original context, the Amador County Coroner and the Native American Heritage Commission, Sacramento are to be notified immediately. All work within a minimum of ten (10) meters shall be discontinued until the representatives of these agencies have been consulted and a work plan has been identified.	PS	LS
Biological Resources			

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4.11.1: Implementation of the proposed City of Williams General Plan Update could result in a substantial adverse effect on species identified as candidate, sensitive, or special status plant species by the California Department of Fish and Game or U.S. Fish and Wildlife Service, their habitats, or other sensitive vegetation communities.	3hh	Establish minimum open space standards within each district, which may be used for storm water detention, resource protection (e.g. riparian buffers along streams, bufferyards, and / or parks, trails, and open space. The amount of private or common open space relates to the character of development. For instance, in the Agriculture and Estate Residential districts, there is a high proportion or private open space whereas the Suburban Residential and Urban Residential districts have increasing percentages of common (public or semi-public) open space.	PS	LS
	3.jj	Incorporate development options within each zoning district. Different lot sizes and percentages of open space maintain the district character while allowing market flexibility and adjustment to site conditions. In other words, a smaller lot may be used and clustered to set aside adequate open space to preserve agricultural resources, such as orchards, or to fulfill the City's storm water management objectives, a comparable density, and character is achieved.		
	3.kk	Utilize density bonuses as an incentive for promoting open space preservation, more efficient, clustered development and housing choice.		
	3.43	Future development and redevelopment should be planned and implemented with appreciation for the physical environment and natural features of the community and with recognition of potential physical constraints to ensure appropriate siting of various types of development.		
	3.44	Development will occur in a manner that is compatible with the existing agricultural resources, including agricultural cropland, orchards, and ranchlands.		
	3.45	Sensitive resources, including floodplains, wetlands, riparian buffer areas along stream channels, and valued view shed, will be protected and preserved.		
	3.48	Resources will be protected and integrated as amenities to development.		
	4.1	The City will require applicants for development to submit drainage studies that adhere to storm water design		

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	requirements and incorporates measures from the Strom Drainage Master Plan to prevent on- or off-site flooding. 4.4 New development shall not cause downstream property owners, watercourses, channels, or conduits to receive storm water runoff at a higher peak flow rate than would have resulted from the same storm event occurring over the development site with the land in its natural, undeveloped condition. 4.8 The City will promote and encourage the use of natural drainage configurations such as depression areas, wetlands, and natural swales versus underground storm drainage infrastructure. 4.9 The design of drainage improvements will be sensitive to community aesthetics, aquatic habitat, recreation (trails, playing fields), wetlands and water quality mitigation. 4.f Begin identifying Best Management Practices (BMPs), particularly construction site storm water runoff control and post-construction storm water management, to reduce the discharge of pollutants to the storm water system. 7.4 Prime farmland should be prioritized for agricultural (rather than industrial or residential) uses to ensure the most efficient use of land. 7.o Locate new parks in the presence of natural amenities while preserving environmental resources and site features. Continue to emphasize natural resource protection as a key objective of ongoing parkland acquisitions and enhancement of existing park locations. 7.14 The creation of linear greenways will serve as a vehicle to protect natural resources and provide for natural scenic corridors. 7.al Prohibit the re-location or removal of endangered species unless replacement provisions are in place. 7.am Discourage the introduction of invasive species and prevent the spread of non-native invasive species that have become established.		

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4.11.2: Implementation of the proposed City of Williams General Plan Update could result in an adverse effect on species identified as candidate, sensitive, or special status wildlife species by the California Department of Fish and Game or U.S. Fish and Wildlife Service, and their habitats.	7.17 The preservation and protection of rare, threatened, or endangered species within the planning area, including candidate species and species of special concern, warrants design consideration with developing new land. 7.18 Animal corridors along waterways, tree groves, and grasslands should be developed to ensure safe animal travel. 7.x Designate animal reserves or habitat areas in public parks and open space, effectively limiting recreation activities to provide undisturbed refuges for animal wildlife. 7.y Coordinate with regional authorities to create interconnected wildlife corridors both within and outside the City limits. 7.z Promote and support Habitat Conservation Plans between landowners and the US Fish and Wildlife Service. Habitat Conservation Plans (HCP) are long-term agreements designed to offset any harmful effects that a proposed activity might have on federally-listed threatened and endangered species. 7.ad Promote landowner education regarding the benefits and potential applicability of conservation easements within subdivisions and for individual properties. 7.ae Develop a “land bank” program whereby owners of flood-prone property may deed land to the “bank” for long-term conservation. 7.27 In the removal and relocation of plants and trees, special consideration will be given to endangered species. 7.ah Establish a public advisory committee to develop landscape guidelines, standards, and measures for protecting plant and wildlife communities on public and private properties. 7.ai Adopt design practices that are compatible with the environment, including an emphasis on native and drought-tolerant species.	PS	LS

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4.11.3: Implementation of the proposed City of Williams General Plan Update could result in the loss of wetlands and other waters of the US.	3.hh Establish minimum open space standards within each district, which may be used for storm water detention, resource protection (e.g. riparian buffers along streams, bufferyards, and / or parks, trails, and open space. The amount of private or common open space relates to the character of development. For instance, in the Agriculture and Estate Residential districts, there is a high proportion or private open space whereas the Suburban Residential and Urban Residential districts have increasing percentages of common (public or semi-public) open space. 3.43 Sensitive resources, including floodplains, wetlands, riparian buffer areas along stream channels, and valued view shed, will be protected and preserved. 3.46 Resources will be protected and integrated as amenities to development. 4.4 New development shall not cause downstream property, watercourses, channels, or conduits to receive storm water runoff at a higher peak flow rate than would have resulted from the same storm event occurring over the development site with the land in its natural, undeveloped condition. 4.8 The City will promote and encourage the use of natural drainage configurations such as depression areas, wetlands, and natural swales versus underground storm drainage infrastructure. 4.9 The design of drainage improvements will be sensitive to community aesthetics, aquatic habitat, recreation (trails, playing fields), wetlands, and water quality mitigation. 4d Begin identifying Best Management Practices (BMPs), particularly construction site storm water runoff control and post-construction storm water management, to reduce the discharge of pollutants to the storm water system. 7p Locate new parks in the presence of natural amenities while preserving environmental resources and site features. Continue to emphasize natural resource protection as a key objective of ongoing parkland acquisitions and enhancement of existing park locations. 7.14 The creation of linear greenways will serve as a vehicle to protect natural resources and provide for natural scenic corridors.	PS	LS

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	7.al Prohibit the re-location or removal of endangered species unless replacement provisions are in place. 7.am Discourage the introduction of invasive species and prevent the spread of non-native invasive species that have become established. 7.17 The preservation and protection of rare, threatened, or endangered species within the planning area, including candidate species and species of special concern, warrants design consideration with developing new land.		
4.11.4: Implementation of the proposed Williams General Plan Update could conflict with adopted policies, ordinances or plans protecting biological resources, Habitat Conservation Plan, or Natural Community Conservation Plan.	None required.	NI	NI
Agriculture			
4.12.1: The plan would result in conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.	3.32 The City will grow contiguously to manage the efficiency of public services and municipal infrastructure provision, to maintain a compact and well defined community form, and to oblige its fiscal responsibility. 3.33 Priority in the form of infrastructure and other capital improvements will be given to the redevelopment of blighted structures or properties and infill development of vacant parcels or underutilized tracts. 3.34 Development will occur first within the existing corporate limits where the infrastructure and services are readily available. 3.38 Development or individual uses outside the corporate limits will not be prematurely provided municipal infrastructure until annexation is warranted and executed, subject to conformance with the Future Land Use and Growth Plan. Services will be provided to these areas through mutual aid and other agreements and mandates.	PS	SU

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	3.41	The City's land use pattern should focus new development and significant redevelopment where adequate public services and utility capacity are already in place or projected for improvement, including streets, water, wastewater, and drainage infrastructure.		
	3.46	The agricultural use and rural character of the City's perimeter should be maintained through the strict enforcement of zoning, as applicable, and influence exerted by the City within its sphere of influence.		
	7.3	Agriculture and ranching activities will be supported through financial incentives and access to municipal venues and facilities.		
	7.4	Prime farmland should be prioritized for agricultural (rather than industrial or residential) uses to ensure the most efficient use of land.		
4.12.2: Future development would conflict with existing zoning for agricultural use, or a Williamson Act contract.	3.44	Development will occur in a manner that is compatible with the existing agricultural resources, including agricultural cropland, orchards, and ranchlands.	PS	LS
	3.45	Agricultural resources will be observed so as not to unnecessarily encroach upon their operations or create nuisance conditions.		
	3.55	New development or redevelopment on "in-fill" parcels in developed areas should maintain compatibility with existing uses and the prevailing land use pattern in the area.		
	3.56	Land uses with unusual characteristics or a higher likelihood of raising compatibility issues should be subject to more focused review and approval through a special approval process. Reasonable conditions or permit provisions should be applied to mitigate potential adverse impacts on nearby properties and uses.		
	7.1	Zoning regulations will be used to preserve the rural scale and character of the "Agricultural/Rural" zoning district, including adequate transitions and buffering areas between different character types.		

Table 2.1 Impacts Summary			
Impact Description	Mitigation Measures	Significance Before Mitigation	Significance After Mitigation
Key: No Impact = NI Less Than Significant = LS Potentially Significant = PS Significant and Unavoidable = SU			
4.12.3: Involvement of other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.	None required	NI	NI
Hazards and Hazardous Materials			
4.13.1: Creation of a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	4.31 The Williams Fire Protection Authority will assume responsibility for hazardous materials incidents that occur within the City limits, and provide assistance, as needed, in the instance of an incident in proximity to yet outside of the City. 4.32 The City will work with the Colusa County Office of Emergency Services to coordinate their response to any hazardous materials incidents. 4.33 The City will continue to cooperate with Colusa County in the acceptance of household hazardous wastes at the Road Department in Williams. 4.34 The City will continue to train its firefighters in basic hazardous materials fire training. 4.35 The City will establish hazardous materials routes, which should be listed in the National Hazardous Materials Registry managed by the U.S. Department of Transportation Federal Motor Carrier Safety Administration (FMCSA). 4.36 The City will establish designated truck routes through and around the City via an ordinance adopted by the City Council.	PS	LS
4.13.2: Creation of a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.		PS	LS
4.13.3: Creation of hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.		PS	LS
4.13.4: Development on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.		PS	LS
4.13.5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the project result in a safety hazard for people residing or working in the project area.	None required	LS	LS
4.13.6: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the project result in a safety hazard for people residing or working in the project	None required.	NI	NI

Table 2.1 Impacts Summary				
Impact Description	Mitigation Measures		Significance Before Mitigation	Significance After Mitigation
Key: No Impact = NI Less Than Significant = LS Potentially Significant = PS Significant and Unavoidable = SU				
area.				
4.13.7: For a project within the vicinity of a private airstrip, the project results in a safety hazard for people residing or working in the project area.	3.32	The City will grow contiguously to manage the efficiency of public services and municipal infrastructure provision, to maintain a compact and well defined community form, and to oblige its fiscal responsibility.	PS	LS
	3.33	Priority in the form of infrastructure and other capital improvements will be given to the redevelopment of blighted structures or properties and infill development of vacant parcels or underutilized tracts.		
	3.34	Development will occur first within the existing corporate limits where the infrastructure and services are readily available.		
	3.35	Annexation will occur in strict adherence with the Future Land Use and Growth Plan. Requests for annexation in areas not shown in this plan will warrant further study, a showing of cause to support the request, and require a general plan amendment.		
	3.38	Development or individual uses outside the corporate limits will not be prematurely provided municipal infrastructure until annexation is warranted and executed, subject to conformance with the Future Land Use and Growth Plan. Services will be provided to these areas through mutual aid and other agreements and mandates.		
4.13.8: Impairment of the implementation of or physically interference with an adopted emergency response plan or emergency evacuation plan.	4.1	The City will require applicants for development to submit drainage studies that adhere to storm water design requirements and incorporate measures from the Storm Drainage Master Plan to prevent on- or off-site flooding.	PS	LS
	4.2	Future development will include adequate provisions for on- and/or off-site collection, storage, and conveyance of storm water, in accordance with the City's policies and standards.		
	4.3	Land within the floodplain that is indicated for future development in this general plan will mitigate flooding conditions		

Table 2.1 Impacts Summary			
Impact Description	Mitigation Measures	Significance Before Mitigation	Significance After Mitigation
Key: No Impact = NI Less Than Significant = LS Potentially Significant = PS Significant and Unavoidable = SU			
	through the means required by the City and FEMA. 4.4 New development shall not cause downstream property owners, watercourses, channels, or conduits to receive storm water runoff at a higher peak flow rate than would have resulted from the same storm event occurring over the development site with the land in its natural, undeveloped condition. 4.5 Storm retention/detention facilities will be integrated into the open space set-asides of future land developments and used as amenities and recreational areas. 4.6 Storm detention basins will be jointly used as public open space and recreational facilities where such improvements are determined by the City to be needed and warranted. 4.7 The City will continue to participate in the National Flood Insurance Program and in so doing with maintain their regulations in compliance with the standards of the Federal Emergency Management Agency (FEMA). 4.8 The City will promote and encourage the use of natural drainage configurations such as depression areas, wetlands, and natural swales versus underground storm drainage infrastructure. 4.9 The design of drainage improvements will be sensitive to community aesthetics, aquatic habitat, recreation (trails, playing fields), wetlands, and water quality mitigation. 4.10 The City will encourage design strategies to reduce the impact of impervious surfaces on storm water quality through the use of water gardens, rain barrels or cisterns, pervious pavement, vegetated swales, swale blocks, and green roofs, among others. Protection from and Response to Seismic Events 4.11. The City will continue to coordinate with the Colusa County Office of Emergency Services and the California State Office of Emergency Services to collect, account for,		

Table 2.1 Impacts Summary			
Impact Description	Mitigation Measures	Significance Before Mitigation	Significance After Mitigation
Key: No Impact = NI Less Than Significant = LS Potentially Significant = PS Significant and Unavoidable = SU			
	and distribute geologic data for use in preparedness and hazard mitigation planning. 4.12. Geotechnical investigation will be required by the City for any development proposed to occur in an area of known subsidence for which engineering modifications may be necessary to mitigate or eliminate adverse impacts. 4.13. All building permits for new buildings or the expansion or reconstruction of existing buildings will ensure conformance with the seismic requirements of the California Building Code and applicable fire and building codes. 4.14. The City will comply with state seismic and building standards in the design and citing of its critical emergency response facilities, and coordinate with other local agencies, such as the Williams Unified School District, to facilitate their compliance as well.4.16. The City will coordinate with the Colusa County Office of Emergency Services to identify and establish evacuation routes and operational plans to be used in case of a fire (or other) public safety hazard. Fire Prevention and Protection 4.17. The City will continue to minimize its risk for wild land and urban fires through the administration and enforcement of Chapter 15.24, Fire Code, which should be amended from time to time, concurrent with the amendments of the California Fire Code. 4.18. The City will continue to plan for the provision of water infrastructure to support the fire fighting capabilities of the WFPA. 4.19. The City will continue to actively participate in the California Master Mutual Aid Agreement. 4.20. The City will observe responsible land use planning as it relates to the management and protection against fire hazards. 5.c Execute plans to install a new water		

Table 2.1 Impacts Summary			
Impact Description	Mitigation Measures	Significance Before Mitigation	Significance After Mitigation
Key: No Impact = NI Less Than Significant = LS Potentially Significant = PS Significant and Unavoidable = SU			
	supply well. 5.d Further develop plans for a second water storage tank. Prevention of and Responses to Hazardous Substance Events 4.38. New development adjacent to areas of ongoing agricultural development shall provide agricultural buffers that are adequate to protect residents from the harmful effects of agricultural chemical use. 4.39. The City will educate the public as to the types of household hazardous waste and the proper means of disposal. 4.40. The City will require that development project proposals address existing hazardous materials concerns, particularly past agricultural uses, through preparation of Phase I or Phase II hazardous materials studies.		
4.13.9: Exposure of people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.	None Required	NI	NI
Parks and Recreation			
4.13.1: Increased use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	7.5 The financial support and development of future parks will follow the long-range, Parks and Recreation Master Plan (and subsequent updates) to accommodate a diversity recreational activities and support the interests of all age ranges, including youth, singles, families, and retirees. The annual budget under the City of Williams Parks Improvement Project should complement the Plan. 7.6 The City will continue to expand its parks and recreational facilities and services in proportion to population growth and state and national standards. 7.8 Parks and open space should be evenly distributed, with regard to location, size, and amenities, to reflect population	PS	LS

Table 2.1 Impacts Summary			
Impact Description	Mitigation Measures	Significance Before Mitigation	Significance After Mitigation
Key: No Impact = NI Less Than Significant = LS Potentially Significant = PS Significant and Unavoidable = SU			
	density and nearby land uses. 7.9 The City will lead efforts to pursue grant and other funding opportunities to improve and expand facilities, gain additional staff support, and finance community events. 7.10 A collaboration of government entities, public agencies, and local community groups will maximize the efficiency of resources. 7.11 Parkland dedication and development fee requirements should be used to increase quantity and quality, sustaining a high level of service across the entire system. 7.12 A comprehensive, interconnected trail system will offer pedestrian walkways, bike paths, and equestrian trails throughout the community		
4.13.2: Construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	3.41 The City's land use pattern should focus new development and significant redevelopment where adequate public services and utility capacity are already in place or projected for improvement, including streets, water, wastewater, and drainage infrastructure. 3.66 Schools, parks, golf courses, and community facilities should be located close to or within residential neighborhoods for accessibility and to provide a focal point for effective and cohesive neighborhood design. 3.67 Uses that commonly have moderate- to large-scale assemblies of people such as churches, funeral homes, membership organizations, and other institutions, should be appropriately located on adequate size parcels with sufficient space to accommodate the off-street parking and accessory needs. Such uses should be located so as to minimize any adverse or undue significant burden on adjacent or adjoining land uses, as well as that portion of the street network. 3.69 Parks and open spaces will be well distributed and conveniently accessible to all neighborhoods, including provisions for pedestrian connectivity.	PS	LS

Table 2.1 Impacts Summary				
Impact Description	Mitigation Measures		Significance Before Mitigation	Significance After Mitigation
Key: No Impact = NI Less Than Significant = LS Potentially Significant = PS Significant and Unavoidable = SU				
	7.o	Locate new parks in the presence of natural amenities while preserving environmental resources and site features. Continue to emphasize natural resource protection as a key objective of ongoing parkland acquisition and enhancement of existing park locations.		
Municipal Utilities and Service Systems				
4.15.1: Future development could result in the exceedance of wastewater treatment requirements of the Central Valley Regional Water Quality Control Board.	5.1	The City of Williams will provide utilities concurrently with development.	PS	LS
	5.3	Improvements to the collection, distribution, treatment, and conveyance system will be commensurate with the demands of new development.		
	5.4	The City will identify non-development related NPDES permitting requirements to ensure they coordinate with development related regulations. Work to align all NPDES related efforts shall be a continuing effort.		
	5.a	Adopt best management practices for piping, manholes, bedding and backfill materials, and incorporate these standards into the City's technical specifications for construction projects. Subsequently, implement additional checklist items related to NPDES compliance.		
	5.b	Continue developing the City's Capital Improvement Program (CIP) to repair and replace aging and deteriorated sewer lines, which will improve the flow efficiency, reduce inflow and infiltration into the collection and treatment systems, and help to mitigate ground water impacts.		
4.15.2: Future development could result in the requirement for and construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	5.1	The City of Williams will provide utilities concurrently with development.	PS	LS
	5.2	The City of Williams will provide utility service in logical order and therefore will not extend trunk facilities through significant expanses of vacant land. Exceptions will be made for industries that will make a significant contribution to the sustainability of the community.		
4.15.3: Future development could require additional capacity to serve the project's projected demand in addition to existing commitments.	5.3	Improvements to the collection, distribution, treatment, and conveyance	PS	LS

Table 2.1 Impacts Summary				
Impact Description	Mitigation Measures		Significance Before Mitigation	Significance After Mitigation
Key: No Impact = NI Less Than Significant = LS Potentially Significant = PS Significant and Unavoidable = SU				
		system will be commensurate with the demands of new development.		
	5.b	Continue developing the City's Capital Improvement Program (CIP) to repair and replace aging and deteriorated sewer lines, which will improve the flow efficiency, reduce inflow and infiltration into the collection and treatment systems, and help to mitigate ground water impacts.		
	5.d	Further develop plans for a second water storage tank.		
	5.g	Develop and promote a voluntary water conservation program.		
4.16.1: Implementation of the Updated General Plan could result in an increased demand for energy. New residential, commercial, industrial and civic uses could increase local energy demands which could cause significant environmental effects.	3.32	The City will grow contiguously to manage the efficiency of public services and municipal infrastructure provision, to maintain a compact and well defined community form, and to oblige its fiscal responsibility.	PS	LS
	3.34	Development will occur first within the existing corporate limits where the infrastructure and services are readily available.		
	3.37	Decisions to provide municipal infrastructure and public services will include, among others, the location of subject development relative to: • Existing development; and • The area of existing utility service; and • The City limits; and • Existing sphere of influence.		
	3.39	Development and future annexation will occur in areas that are most suitable for the extension of services and infrastructure, eg proximity and capacity of roads and utilities, fire and police response sites, etc.		
	3.74	Appropriate locations for low- and high-density residential development should be provided based on accessibility, site suitability, utility availability, and environmental factors.		
	4.29	The City's Police Department will continue to emphasize the use of modern technology in providing for effective law		

Table 2.1 Impacts Summary			
Impact Description	Mitigation Measures	Significance Before Mitigation	Significance After Mitigation
Key: No Impact = NI Less Than Significant = LS Potentially Significant = PS Significant and Unavoidable = SU			
	enforcement. 5.1 The City of Williams will provide utilities concurrently with development. 5.2 The City of Williams will provide utility service in logical order and therefore will not extend trunk facilities through significant expanses of vacant land. Exceptions will be made for industries that will make a significant contribution to the sustainability of the community. 5.10 The City recognizes the opportunity to consolidate services into a single area to streamline service delivery. 5.21 The City will anticipate and effectively manage its long-term pattern of growth in a forward-looking and fiscally responsible manner, while balancing the needs of current residents and existing infrastructure investments. 7.13 The creation of inter-city trails will enhance recreational opportunities and promote walking as a viable travel mode. 7.19 Subdivision regulations and design guidelines should be used as a tool to promote sustainable land planning and development practices. 7.28 Use of shade trees reduces radiation heating and encourages outdoor recreation. 8.b Establish complete street subdivision criteria for new development and improve convenience, energy efficiency, and safety for multi-modal travel in existing neighborhoods. 8.d Maintain roadways and circulation improvements to ensure safe, energy efficient and convenient daily travel for pedestrians, bicyclists, transit users and drivers as Williams grows. 4.u. Update from time to time the City's building standards to stay current with amendments to the California Building Code. 5.b Continue developing the City's Capital Improvement Program (CIP) to repair and replace again and deteriorated sewer lines, which will improve the flow efficiency, reduce inflow and infiltration		

Table 2.1 Impacts Summary				
Impact Description	Mitigation Measures		Significance Before Mitigation	Significance After Mitigation
Key: No Impact = NI Less Than Significant = LS Potentially Significant = PS Significant and Unavoidable = SU				
		into the collection and treatment systems, and help to mitigate ground water impacts.		
	5.g.	In accordance with AB 1881, the Water Conservation Landscape Act of 2006, develop water efficient landscaping standards for new development.		
	7.f	Consider funding a marketing campaign that promotes the purchase of "local" products from the City of Williams and Sacramento Valley region.		
	7.q	Invest in a multi-use trail over the E Street Bridge, allowing for safe and accessible, multi-modal travel across the Interstate divide.		
	7.ap	Plan trees in parking lots, parks and recreation areas, and pedestrian corridors to promote outdoor activity, reduce radiation heating, and encourage the reduction of greenhouse gases.		
	7.as	Support green roofs on new developments as a method of stormwater mitigation, as well as reduction f the urban "heat island" effect.		
	8.i-3	The City shall encourage the restoration f passenger rail service along the California Northern Pacific Railroad tracks within Williams.		
4.16.2: Implementation of the Updated General Plan could result in an increased demand for energy and the need to extend services and infrastructure which could cause significant environmental effects.	3.32	The City will grow contiguously to manage the efficiency of public services and municipal infrastructure provision, to maintain a compact and well defined community form, and to oblige its fiscal responsibility.	PS	SU
	3.35	Development will occur first within the existing corporate limits where the infrastructure and services are readily available.		
	3.37	Decisions to provide municipal infrastructure and public services will include, among others, the location of subject development relative to:		
	•	Existing development; and		
	•	The area of existing utility service; and		
	•	The City limits; and		
	•	Existing sphere of influence.		
	3.39	Development and future annexation will occur in areas that are most suitable for		

Table 2.1 Impacts Summary			
Impact Description	Mitigation Measures	Significance Before Mitigation	Significance After Mitigation
Key: No Impact = NI Less Than Significant = LS Potentially Significant = PS Significant and Unavoidable = SU			
	the extension of services and infrastructure, eg proximity and capacity of roads and utilities, fire and police response sites, etc. 3.74 Appropriate locations for low- and high-density residential development should be provided based on accessibility, site suitability, utility availability, and environmental factors. 4.29 The City's Police Department will continue to emphasize the use of modern technology in providing for effective law enforcement. 5.1 The City of Williams will provide utilities concurrently with development. 5.2 The City of Williams will provide utility service in logical order and therefore will not extend trunk facilities through significant expanses of vacant land. Exceptions will be made for industries that will make a significant contribution to the sustainability of the community. 7.19 Subdivision regulations and design guidelines should be used as a tool to promote sustainable land planning and development practices. 4.u. Update from time to time the City's building standards to stay current with amendments to the California Building Code. 5.b Continue developing the City's Capital Improvement Program (CIP) to repair and replace again and deteriorated sewer lines, which will improve the flow efficiency, reduce inflow and infiltration into the collection and treatment systems, and help to mitigate ground water impacts.		

Alternatives

This EIR analyzes alternatives to the proposed project. Three alternatives to the proposed project are considered and described in detail in Chapter 5:

- General Plan Update (Selected Plan)
- High Growth
- Residential Clustering and Downtown Infill
- Mixed Use Concentration
- No Project

As shown in the alternatives analysis, the General Plan Update has the least environmental impact and is, therefore, the environmentally superior alternative. The High Growth Alternative 2 has the most environmentally significant impacts due to the large amount of growth and contributions to impacts to air quality. The other alternatives are generally comparable with regard to environmental impacts due to the population increase being the same. The No Project alternative would not incorporate the new policies of the Update General Plan and would, therefore, result in a larger environmental impact than the General Plan Update.

Chapter 3
Project Description

3.1 Background

Under California state law[1], every city and county is required to have a general plan. The general plan is to be comprehensive and long-range in guiding the physical development of the incorporated city, plus any land outside city boundaries that has a relationship to the city's planning activities. To this end, the California Supreme Court has called the general plan "the constitution for all future development" within a given community. [2]

The project analyzed in this Environmental Impact Report (EIR) is the adoption and long-term implementation of a comprehensive update and revision of the 1988 Williams General Plan (Updated General Plan). The Updated General Plan will serve as the blueprint for the City of Williams (the "City") and will establish goals, policies, and programs for the long-term physical development, quality of life, and public safety in the community. The Updated General Plan includes a land use designation map (Figure 3.1) that replaces the land use designation map associated with the 1988 General Plan.[3] The City has established 2030 as the horizon year for the Updated General Plan; in other words, the year by which the City would expect that policies and programs would ultimately be realized.

This EIR has been prepared in accordance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines. This Program EIR, prepared in accordance with CEQA Guidelines Section 15168, allows for the development of a series of actions that can be characterized as a single project.

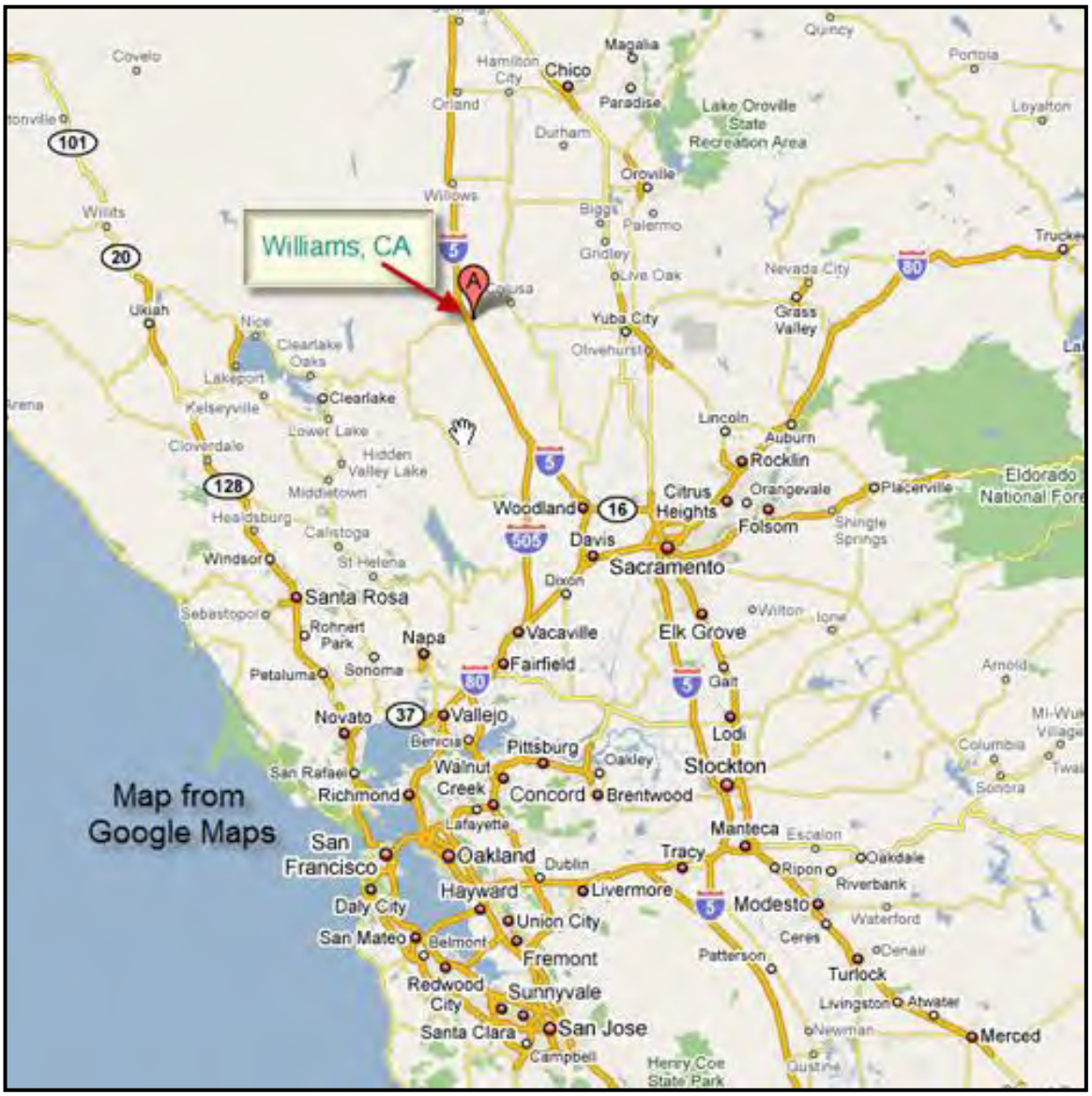
3.2 Project Location

Figure 3-2 shows the project's regional location. Williams is located along Interstate 5 (I-5) within the Central Valley Region of California. It is located one hour from Downtown Sacramento along I-5 and two hours from Downtown San Francisco via U.S. 505 and U.S. 80. I-5 continues north through Eugene (415 miles) and Portland, OR (523 miles), Olympia (636 miles) and Seattle, WA (695 miles), and terminating near Vancouver, British Columbia. To the south it traverses Sacramento (59 miles) and Los Angeles (442 miles) and then follows the Pacific Coast through San Diego (563 miles) to Tijuana, Mexico.

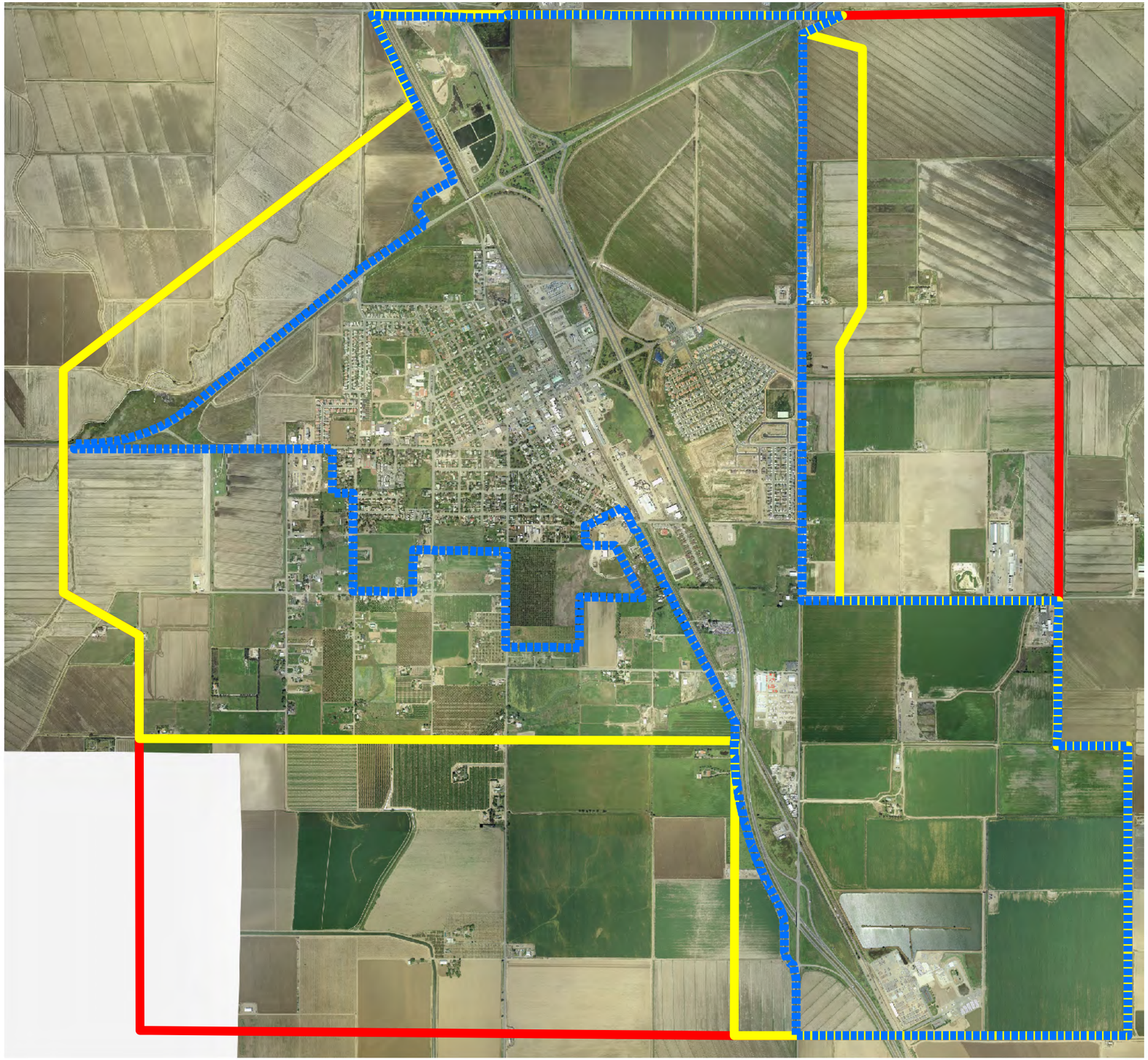
Access from Williams to the east and west is by way of SR 20. The State of California in its Interregional Transportation Strategic Plan19 classifies SR 20 as a High Emphasis Interregional Route. It extends westward through Lake and Mendocino Counties connecting with U.S. 101 providing access to Fort Bragg and south to the Bay Area. To the east, SR 20 is a route often used to bypass Sacramento, which connects to Interstate 80 through Tahoe National Forest to Reno, NV.

The Planning Area covered by the Updated General Plan, as shown in Figure 3.1, consists of the corporate limits of the City as well as lands within the City's sphere of influence ("SOI").

Figure 3.2 Regional Location



The term “sphere of influence” applies to the area designated by the Colusa County Local Agency Formation Commission (also known as LAFCO) as the probable, future physical boundary or service area of the City. The Colusa County LAFCO, in applying the policies and provisions of the Cortese-Knox-Hertzberg Act to its decisions regarding annexations, incorporations, reorganizations, and other changes of government, identifies the City’s sphere of influence as the extraterritorial areas in which the City is most likely to expand over the next 20 to 30 years. The sphere of influence lands may have postal addresses in the City, but such areas are actually outside the existing City limits and, as a result, are currently outside of the City’s regulatory jurisdiction. Land use regulatory authority in the sphere of influence areas outside the City’s incorporated boundaries is held by Colusa County. However, certain portions of the sphere of influence receive one or more services administered by the City, including



Map 3-3

Proposed Sphere of Inf uence

Legend

- City Limits
- SOI (Existing)
- City Planning Area and Proposed Sphere of Influence

Total Area

City Limits: 3,187.3 acres

Existing SOI: 4,800.7 acres

Proposed SOI: 7,066.5 acres

water and sewer services. Overall, planning decisions made for the City are assumed to have a bearing on growth and development in these unincorporated adjacent areas; hence the term “sphere of influence.”

William’s topography is relatively flat. The tributaries of the Freshwater Creek Basin include the City’s most significant natural drainage corridor, Salt Creek, together with Spring Creek and Freshwater Creek that both merge into Salt Creek. Overall, the community is surrounded by open, agricultural lands. The incorporated area of Williams is generally a compact urban form that has mostly occurred in a contiguous manner.

3.3 Planning Process and Plan Objectives

3.3.1 Planning Process

The City has initiated a process to update the General Plan. The plan development process was designed to enable residents and community leaders to come together and decide how they would like the community to develop, including critical considerations such as the pattern and sequencing of development within the city limits and throughout the SOI, timely provision of adequate facilities and services, coordination of infrastructure improvements, and community appearance and character enhancements. Rather than simply reacting to events as they unfold, a General Plan will enable the community to develop a proactive plan for achieving the ideal future imagined by the community through this planning process.

The City Council appointed a General Plan Advisory Committee (GPAC) to assist in the development of the General Plan Update. The GPAC, along with Community workshops, has provided direction and insight to the General Plan Update process. Based on information received from the GPAC and the community, a Proposed Land Use Map was developed which is the basis of the environmental documentation.

3.3.2 Plan Objectives

This General Plan Update offers a strategic policy framework for both the corporate limits, and the surrounding area including the SOI. The objective of the plan is, therefore, to provide guidance for decisions relating to the future use of land, community character and design, housing and neighborhoods, economic development, circulation and mobility, open space and recreation, resource conservation and management, and public facilities and services. The horizon time of this plan is the Year 2030.

It is the intent of this General Plan that the policies and associated goals and recommended implementation strategies serve as a framework for community decision-making. To ensure growth that is both wise and sustainable, decisions would be based on a formulation of sound policy and founded by a comprehensive and integrated approach to analyzing community issues and identifying realistic solutions, as set forth in this plan.

In 2009, during the period leading up to the plan update process, the City Council and Planning Commission adopted a set of "guiding principles" representing desired outcomes and objectives for the New General Plan. These guiding principles form the basis for several of the lead agency's project objectives.

- Replace the current general plan prepared in 1988 with a new plan that reflects the goals and aspirations of the community through the year 2030.
- Ensure Updated General Plan achieves compliance with all applicable state laws and Regulations.
- Plan for sustainability within our finite resources including but not limited to open space, water, energy, and air quality.
- Ensure that change harmonizes with existing development to preserve the City's historic and neighborhood character, recognizing the presence and importance of agriculture to the local economy and the community's heritage.
- Strengthen economic vitality to provide jobs, services, housing, revenues and opportunities to existing and future residents
- Preserve and generate awareness of the City's cultural, educational, economic, and recreational diversity and historic heritage
- Collaborate with and embrace the City's neighborhoods to improve the health, safety, and well being for all in our community
- Continue to make community participation an important part of achieving a greater city
- Work to develop attractive, convenient transportation alternatives to the automobile. Design for active and safe pedestrian and bicycle-friendly streets and public Spaces.
- Ensure that the City is fully prepared to meet all responsibilities as well as to maximize opportunities associated with the "Sustainable Communities Strategy" to be developed by regional agencies under SB 375.

3.4 Project Components

The existing General Plan was originally adopted in 1988. According to state law, there are seven mandated elements of a general plan: Land Use, Circulation, Housing, Open Space, Conservation, Safety and Noise (Government Code Section 65302). All elements are addressed in the Williams General Plan Update and an additional element Public Facilities and Growth Capacity has been included. The Open Space and Conservation elements were combined into one section with Parks to more comprehensively address these topics in a coordinated fashion. Public Facilities and Growth Capacity has been included as a element to provide the community with direction related to timely extension of adequate infrastructure, provision of quality public services, and a logical sequencing of future development.

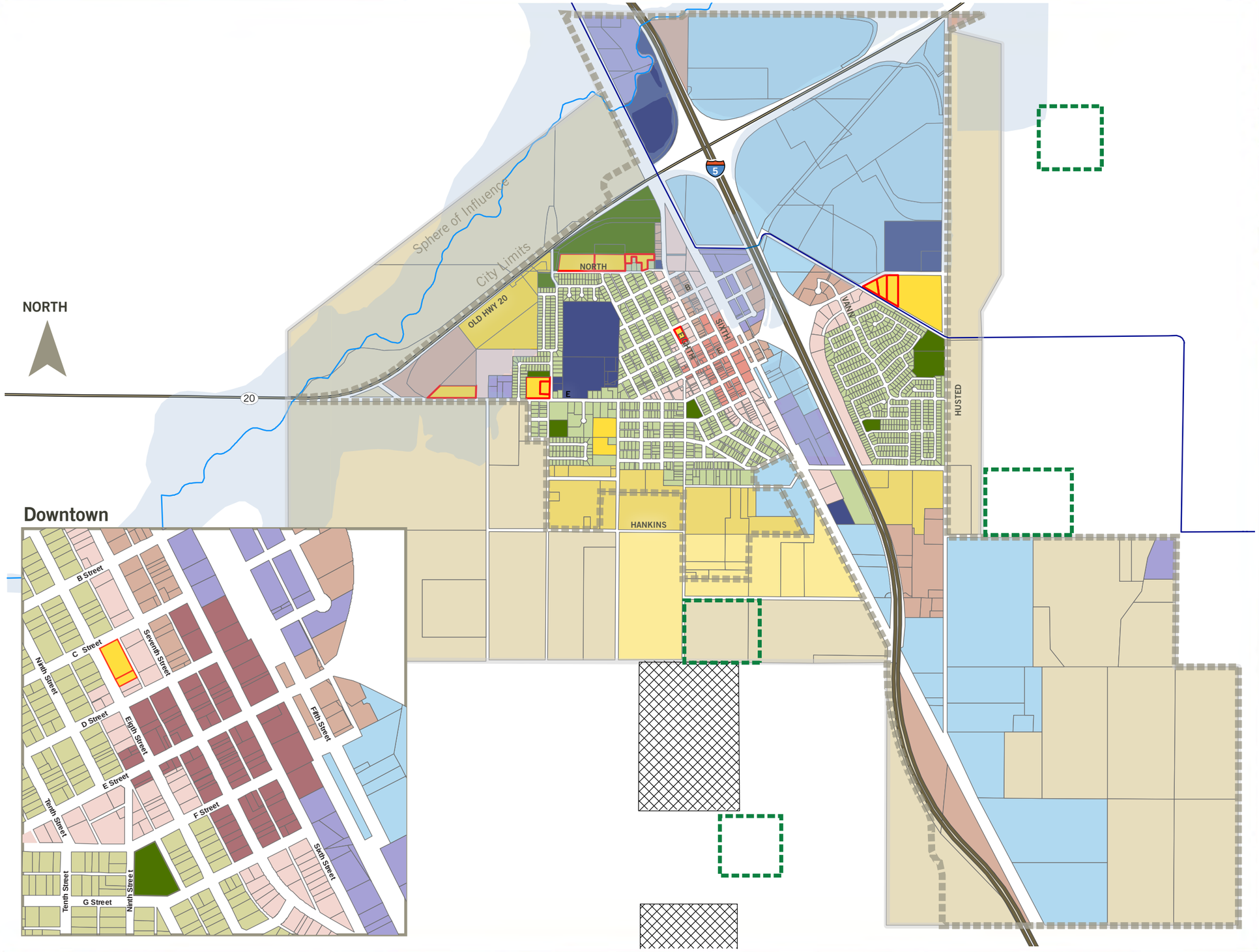
The General Plan Update includes the following chapters:

Chapter 1, Introduction– Outlines the planning process and establishes a vision for future growth and development in the community.

Williams
2010 GENERAL PLAN

Map 3.5

Future Land Use and Growth Plan



Legend

- City Limits
- Sphere of Influence
- Williamson Act[1]
- Proposed School Site
- Floodplain

Future Land Use

- Agriculture (2,118.58 acres)
- Parks and Recreation (62.36 acres)
- Neighborhood Conservation (288.71 acres)
- Estate Residential (176.08 acres)
- Suburban Residential (144.76 acres)
- Urban Residential (68.65 acres)
- Urban Residential - High Density (30.23 acres)
- Suburban Commercial (84.53 acres)
- Commercial (173.40 acres)
- Downtown (23.44 acres)
- Business Park (908.72 acres)
- Industrial (86.56 acres)
- Institutional (113.94 acres)

[1]The location of land designated as Williamson Act is approximate.

0 0.125 0.25 0.5 0.75 1 Miles

Chapter 2, Background Analysis – Provides an assessment of demographic and socioeconomic factors affecting the community. This chapter includes an overview of the City's environmental setting.

Chapter 3, Land Use and Character – Establishes policy direction and a vision for the physical development of William's and the proposed Sphere of Influence including protection of environmental resources, housing, and preservation of community character. This chapter includes a future land use plan which depicts the pattern of use and the density and design characteristics of William's future development.

Chapter 4, Public Safety – This plan element identifies the various threats to the health and safety of the community and addresses them with both short and long term solutions that will prevent the occurrence of a disaster and minimize the loss of life, property, and resources should one transpire.

Chapter 5, Public Facilities – Identifies and reviews the adequacy of public services and facilities needed to support and enhance the quality of life of Williams' existing and future residents. Specific facilities and services include education, health and protective services, and municipal infrastructure and utilities. The chapter also provides an evaluation with recommendations on the current Sphere of Influence (SOI) for Williams, along with future annexation policies.

Chapter 6, Noise – This plan element identifies and appraises existing noise problems in the community, and provides guidance to avoid noise and land use incompatibility problems in the future.

Chapter 7, Parks, Open Space and Conservation - Identifies strategies for preserving open space and natural resources and secondly, to evaluate the existing park system and identify future needs and enhancement opportunities.

Chapter 8, Circulation - Provide guidance for the incremental and methodical development of its mobility system. Included in this element is a Thoroughfare Plan that displays the planned roadway network and the functional classifications of each segment.

Chapter 9, Housing - This plan element supplements a previously prepared Housing Element to document achievements of the housing goals since the previous plan and to outline the measures of consistency with the other General Plan sections. The City adopted the Housing Element as a separate work effort. This element has been incorporated into the document.

Each Plan Element includes a series of policy and action recommendations that support the overall vision of the Plan and mitigate many of the environmental impacts associated with implementation of the General Plan.

Table 3-1 below shows the correspondence between the seven required general plan elements and the layout of the Updated General Plan.

Table 3.1: Locations of Required Elements Within the Updated General Plan	
Required General Plan Elements	***Chapter Locations within the Updated Williams General Plan***
Land Use	*Background Analysis (existing conditions)* *Land Use and Character (plan)*
Circulation	*Transportation*
Open Space	*Open Space and Conservation*
Conservation	
Housing	*Housing*
Safety	*Public Safety*
Noise	*Noise*
	Public Facilities
Source: City of Williams, 2010	

The Updated General Plan also includes an Introduction and a appropriate appendices. The Introduction summarizes the citizen participation process fundamental to the development of the project, and the resulting overall vision for the Updated General Plan.

3.5 Summary of Updated General Plan Recommendations

The Williams Updated General Plan includes hundreds of specific recommended actions. Many of these actions represent the continuation of existing policies and programs, while others are to perform further study or consideration of a future action or regulatory measure. Many of the recommendations, however, are for taking concrete actions and establishing new procedures that will result in tangible changes to Williams through the year 2030. The following selected descriptions and recommendations are drawn from the Updated General Plan report. Persons interested in further details are urged to read the full Plan document, which is available on the City's Web site.

Williams is expected to grow to a population of around 9,822 persons by the Year 2030. This represents an increase of about 4,535 persons reflecting an overall growth of 185 percent of the City's current population. This is significant for a community of this size. With this amount and rate of growth, the community may expect the challenges of the added infrastructure requirements (new streets, sidewalks and utility and drainage lines), provisions for increased services and the corresponding facilities and personnel (police, fire, EMS, code enforcement, etc.), and heightened demands for civic spaces and quality of life amenities (parks, trails, community and recreation centers, cultural and entertainment venues). All these will be expected while also protecting and improving the value and integrity of existing neighborhoods and aiming to preserve the community's identity and small town atmosphere.

3.5.1 Future Land Use

- Downtown should continue to serve as the center of civic uses and activities and as a venue for culture and entertainment.
- Emphasize the reuse and redevelopment of existing property in a manner that will strictly adhere to the policies and principles of this General Plan Update and the provisions of the development ordinances, which is currently being amended.
- Increase focus on corridor revitalization and enhancement.
- Orient future residential development away from I-5 and other primary streets.
- Residential areas should not be situated next to intense nonresidential uses without provisions for increased separation and bufferyards. Less intense nonresidential development may be appropriate next to residential development with performance standards to mitigate adverse impacts.
- Medium to high-density housing should be developed at a density and scale that is compatible with the surrounding neighborhood and available utilities and roadway capacity. Larger multi-family developments should be located on sites with adequate space for off-street parking, accessory structures, and recreational activity, and toward the edge of single-family residential areas where higher traffic generation and taller building heights can be better accommodated.
- Smaller-scale commercial development should be accommodated at selected locations within or at the edge of residential neighborhoods to address retail and personal service needs of nearby residents in a convenient and accessible manner, subject to restrictions and performance standards to ensure a compatible character.
- Schools, parks, golf courses, and community facilities should be located close to or within residential neighborhoods for accessibility and to provide a focal point for effective and cohesive neighborhood design.
- Uses that commonly have moderate- to large-scale assemblies of people such as churches, funeral homes, membership organizations, and other institutions, should be appropriately located on adequate size parcels with sufficient space to accommodate the off-street parking and accessory needs. Such uses should be located so as to minimize any adverse or undue significant burden on adjacent or adjoining land uses, as well as that portion of the street network.
- Smaller-scale suburban commercial retail and service uses should be located at intersections of collector or arterial streets and at the edge of logical neighborhood areas – or within neighborhoods where suitable sites exist and conditions are appropriate to balance compatibility with convenience.

3.5.2 Protection and Improvement of Community Character

- Add provisions to the zoning ordinance for bufferyards. Different from the conventional means of screening adjacent uses, bufferyards vary according to the context of adjacent uses. The standards are based on a relative opacity, which may be met through

combinations of buffer width, plant type and density, and structural elements (fences and earthen berms).

- Establish minimum open space standards within each zoning district, which may be used for storm water detention, resource protection (e.g. riparian buffers along streams), bufferyards, and/or parks, trails, and open space. The amount of private or common open space relates to the character of development. For instance, in the Agriculture and Estate Residential districts, there is a high proportion of private open space whereas the Suburban Residential and Urban Residential districts have increasing percentages of common (public or semi-public) open space.
- Adopt scale standards to better manage the character of development. For instance, scale is a controlling factor in the Suburban Commercial district to ensure compatibility with adjacent or nearby neighborhoods. This is particularly important given similar use types between this character type and the more intensive commercial forms of development. The scale standards should include a floor area ratio as well as a maximum building square footage and height.
- Incorporate development options within each zoning district that promote variety in development forms within a designated community character type. For instance, different lot sizes and percentages of open space will maintain an area's character while providing market flexibility and adjustment to varying site conditions. In other words, a smaller lot may be used and clustered to set aside adequate open space to preserve agricultural resources, such as the orchards, or to fulfill the City's storm water management objectives. A comparable density and character is achieved.
- Adopt and employ density bonuses as an incentive for promoting open space preservation, more efficient, clustered development, and housing choice.

3.5.3 Downtown Improvements

- Relocate the farmer's market to the immediate downtown area, possibly either on the corner of 7th Street and E Street or F Street. Design the site as a civic park/plaza amenity that has permanent improvements to support the market, including shade structures, electrical connections, lighting, and design amenities (e.g. pavilion or performance stage, public art installations, fountains, gardens, etc.)
- Form a downtown partnership committee of land and property owners, tenants, and other interests to maintain and open dialogue and facilitate downtown improvement and redevelopment.
- Certify downtown as a cultural district and adopt design standards. Such standards would protect the historic architecture and ensure appropriate updates and new building construction.
- Earmark funds to create a façade improvement grant program and to offer business development loans for code compliance. Consider a revolving loan fund to help with business start-ups and expansions.

- Begin investigation of possible properties within the downtown district for a municipal complex that would house and consolidate the administrative offices of the City.

3.5.4 Highway Corridor Improvements

- Develop a gateway and landscape plan along I-5 beginning with entry monuments along the northbound and southbound frontage at the E Street interchange, and phased to extend north and south to the City limits. The City should coordinate with CalTrans to secure use of the right-of-way for these improvements, with an agreement as to maintenance and liability. In lieu of right-of-way enhancement, the City should acquire landscape easements from the adjacent property owners and through the course of new development.
- Acquire easements at the I-5/Old Highway 20 and Husted Road interchanges, and at the eastern and western City limits along Old Highway 20 to construct gateway monuments and landscape and lighting treatments.
- Prepare a corridor revitalization plan for 7th Street, extending from Old Highway 20 to the south City limits (excluding the segment with the downtown district). The plan should document the physical elements that contribute to its appearance (including use types and activities, outdoor storage and display, pavement and other surface types, fencing and screening, landscaping, building scales and setbacks, signage, etc.), together with a strategy and regulatory approach. The plan should establish a basis for drafting new site development standards for which compliance would be required either at the time of an occupancy change , a building permit, or in given time increments.
- Prepare an overlay district with new use and site development standards for the properties on either side of 6th Street and 7th Street and extending a distance of 150 feet or more.

3.5.5 Flood Protection

- Through improved land development practices and regulations, establish a hierarchy for managing storm water with the following priorities: minimize impervious surfaces, attenuate flows by use of open, vegetated swales and natural depressions and preserve existing natural stream channels, infiltrate runoff, provide storm water retention and then detention structures, provide velocity dissipation structures or channel design, and construct storm sewers.
- Require new development projects to provide site or project specific storm drainage solutions that are consistent with the approach outlined in the Storm Drainage Master Plan.
- Require storm water storage facilities to be designed to store 115 percent of the required storm volume to support the development as means to reduce the need to clean out accumulated sediments and other solids.
- Require new development projects to construct elements of the master plan infrastructure system that are within or abutting their project boundaries.

- Allow the use of temporary onsite detention basins as an interim measure, subject to applicable engineering standards, only until such time as the City's permanent drainage system is completed. Funds, in an amount to be determined, must be deposited with the City to pay for the future decommissioning and filling of the temporary detention basis.
- Pre-plan for the incorporation of recreational elements into future detention basins by acquiring sufficient additional land and programming recreational facility improvements, as applicable.
- Investigate the feasibility of the alternatives outlined in the Preliminary Technical Memorandum for Flood Hazard Mitigation Study Project Alternatives. The structural alternatives include improving the conveyance capacity of Freshwater and Salt Creeks and the supporting network of drainage laterals, replacing bridge crossings to remove obstructions, constructing diversion dams to channel flows away from the City, constructing flood detention and multi-purpose flood retention reservoirs, constructing levees to the west and north of the City with removable floodwall sections, and elevating existing structures. The non-structural alternatives include land acquisition, cropland storage, channel restoration, upland re-vegetation, and improved maintenance of stream channels.

3.5.6 Protection from Hazards (Public Safety)

- Coordinate with the Colusa County Office of Emergency Services in their 2010 update of the Local Hazard Mitigation Plan. Specifically, the City should seek to elaborate on this plan to ensure its interests in seismic hazard preparedness, as well as consistency with this General Plan.
- Update from time to time the City's building standards to stay current with amendments to the California Building Code.
- Investigate buildings within the City of Williams that were constructed of unreinforced masonry and built prior to the current standards of building construction to document their location and make record of needed code compliance.
- Prepare and publish an emergency response plan for the City that outlines the roles and responsibilities of different agencies, the command center location, areas of shelter, means of public notification, and the methods for providing emergency response.
- Coordinate with the Colusa County Office of Emergency Services in their 2010 update of the Local Hazard Mitigation Plan to expand upon the City's emergency response plan pertaining to wildfires and urban fires.
- Investigate the improvements necessary to elevate the fire insurance rating from four to three within the next five years.
- The City should review and amend its ordinances and remove any regulatory barriers, as necessary, to integrate defensible space provisions. While not within a State Responsibility Area (SRA), provisions relating to vegetation management, clearing, and fuel reduction are good fire protection practices.

- Develop a local fire safe council of community members to aid the WFPA in developing a readiness plan and educating land and homeowners to mitigate the risks and effects of fire hazards.
- Continue to promote the availability of fire inspections as a means for identifying risks and measures for protecting against unnecessary fires.
- Prepare a local fire service evaluation report to constructively self-evaluate the fire response and to identify the means for reducing the response time and achieving the goal of six minutes on 90 percent of the fire calls.
- Commensurate with future increases in population and demand for fire services, add more full-time and volunteer firefighters to maintain or improve upon the current ratios.
- In conjunction with the State Office of Emergency Services, conduct a community-wide disaster drill on a bi-annual basis.
- Coordinate with regional, state, and federal agencies to establish, maintain, and test coordinated emergency response systems that address a variety of hazardous and threatening situations for Williams' residents.
- Continue to plan for the construction of a second fire station on the east side of I-5, at a time that it is warranted and feasible.
- Perform an annual review of the Development Impact Fee Study to determine cost variations, as required by Resolution 03-24.

3.5.7 Utility Services

Adopt best management practices for piping, manholes, bedding and backfill materials, and incorporate these standards into the City's technical specifications for construction projects. Subsequently, implement additional checklist items related to NPDES compliance.

- Continue developing the City's Capital Improvement Program (CIP) to repair and replace aging and deteriorated sewer lines, which will improve the flow efficiency, reduce inflow and infiltration into the collection and treatment systems, and help to mitigate ground water impacts.
- Execute plans to install a new water supply well, and further develop plans for a second elevated water storage tank.
- Amend the zoning ordinance to include ground water protection measures in site development standards. Include open space provisions in the density standards.
- Amend the subdivision ordinance to include ground water protection measures in future subdivisions.
- Develop and promote a voluntary a water conservation program
- Develop design standards for detention basins based on type – aesthetic design for single use basins and recreational standards (development requirements) for joint use.
- For joint use detention basins, on a case-by-case basis, determine the proper cost share between drainage mitigation to be borne by future development versus public benefit of additional recreational infrastructure. Distinguish cost participation depending on the

number of dwelling units that will be served by the recreational use. Establish guidelines for parkland dedication credit in future residential areas.

- Develop different sets of standards and specifications for drainage features. Draft the standards to correspond with the Land Use Plan character types, e.g., rural, suburban, auto-urban, and urban.
- Incorporate into City standards and specifications means for addressing storm water quality, including a first preference for non-structure best management practices such as bio-retention, vegetated swales and buffer strips, constructed wetlands, and other environmentally sensitive design and construction practices.

3.5.8 Public Facilities and Services

- Identify expansion options for all facilities in the short run for the interim needs that will present themselves prior to having accomplished consolidation.
- Estimate the City's population annually and project a one-, two-, five-, ten-, and twenty-year population to recalibrate the City's future needs for facilities and services. Include development pressures and gauge the likelihood that they will come to fruition in the estimates and projections.
- Support Williams Unified School District (WUSD) efforts to expand permanent buildings on site to decrease the need for temporary buildings.
- Maintain the City/WUSD relationship to continue sharing school and City facilities and services.
- Establish written agreements with WUSD regarding school facility use as public parks.
- Ensure that all staff members understand that health and social service providers are a priority for the City so that they may facilitate establishment and retention of such uses.
- Continue to evaluate significant gaps and address those that the market has not covered through programming and the Community Center.
- Monitor and reevaluate services provided at the Community Center annually and adjust as appropriate.
- Parks and open spaces will be well distributed and conveniently accessible to all neighborhoods, including provisions for pedestrian connectivity.
- Downtown will be the hub of civic activity through provision of public spaces and amenities.

3.5.9 Direction of Future Growth

The existing form of the community is that each of the neighborhoods is generally contiguous and interconnected. Those areas within the City limits that remain undeveloped include significant acreages that, under the previous General Plan, were planned for industrial and business uses to the north and south east of I5. West of I5, future residential has been anticipated for many years to the south, with future commercial to the north.

There are a total of approximately 2600 acres in the City limits of which approximately 990 acres are developed and 1600 acres are vacant. There are several tentative subdivision plan maps that have been

approved to the south, west of I5. With the significant downturn in the housing market, these maps may expire. Regardless of whether they expire or become active developments, it is clear that this area is in the City's growth path.

As depicted in the Future Land Use Plan, there has been interest in nonresidential development to the northeast, east of I-5. The California Highway Patrol facility just relocated to that area and will soon be joined by the new Community College. This development is likely to attract additional development, especially types of activities that can benefit from the location of the College. Areas outside of the City's Sphere of Influence (SOI) in the acreage to the east are also within the City's growth path. The areas to the south and to the east of the City are relatively free of natural barriers.

- In order to manage the efficiency of public services and oblige its fiscal responsibility in expanding municipal infrastructure, the City will grow contiguously and maintain a compact and well defined community form.
- Development will occur first within the existing corporate limits where the infrastructure and services are readily available.
- Annexation will occur in strict adherence with the Future Land Use and Growth Plan. Requests for annexation in areas not shown in this plan will warrant further study, a showing of cause to support the request, and require a general plan amendment.
- The Sphere of Influence will be expanded soon after with the plan is adopted for the expansion of the corporate limits to exert influence and protect the City's long-term planning interests.
- Development or individual uses outside the corporate limits will not be prematurely provided municipal infrastructure until annexation is warranted and executed, subject to conformance with the Future Land Use and Growth Plan. Services will be provided to these areas through mutual aid and other agreements and mandates.
- Development and future annexation will occur in areas that are most suitable for the extension of services and infrastructure, e.g. proximity and capacity of roads and utilities, fire and police response sites, etc.
- Infrastructure and public services will be brought to a sufficient, quality standard within the developed area, requisite with needs.
- The City's land use pattern should focus new development and significant redevelopment where adequate public services and utility capacity are already in place or projected for improvement, including streets, water, wastewater, and drainage infrastructure.
- Future development and redevelopment should be planned and implemented with appreciation for the physical environment and natural features of the community and with recognition of potential physical constraints to ensure appropriate siting of various types of development.
- The overall development pattern will transition from urban to suburban to rural with increased distance from the City center.

- The traditional street and lot pattern will be respected in the design of new areas adjacent to the original town area

3.5.10 Resource Protection

- Development will occur in a manner that is compatible with the existing agricultural resources, including agricultural cropland, orchards, and ranchlands).
- Sensitive resources, including floodplains, wetlands, riparian buffer areas along stream channels, and valued view sheds, will be protected and preserved.
- The agricultural use and rural character of the City's perimeter should be maintained through the strict enforcement of zoning, as applicable, and influence exerted by the City within its sphere of influence.
- Agricultural resources will be observed so as not to unnecessarily encroach upon their operations or create nuisance conditions.
- Resources will be protected and integrated as amenities into development.
- Development patterns should provide for transitions and buffering between various land use intensities. Where land uses of incompatible intensities abut, there should be adequate bufferyards to separate them.
- Potential adverse impacts on adjacent land use types should be considered in the City's development review process (including factors such as noise, odor, pollution, excessive light, traffic, etc.).
- New development or redevelopment on "in-fill" parcels in developed areas should maintain compatibility with existing uses and the prevailing land use pattern and development scale in the area.
- Land uses with unusual characteristics or a higher likelihood of raising compatibility issues should be subject to more focused review and approval through a special approval process. Reasonable conditions or permit provisions should be applied to mitigate potential adverse impacts and land-use incompatibilities on nearby properties and occupancies.
- Residential areas should not be situated next to intense nonresidential uses without provisions for increased separation and bufferyards. Less intense nonresidential development may be appropriate next to residential development with performance standards to mitigate adverse impacts.
- Medium to high-density housing should be developed at a density and scale that is compatible with the surrounding neighborhood and available utilities and roadway capacity. Larger multi-family developments should be located on sites with adequate space for off-street parking, accessory structures, and recreational activity, and toward the edge of single-family residential areas where higher traffic generation and taller building heights can be better accommodated.
- Smaller-scale commercial development should be accommodated at selected locations within or at the edge of residential neighborhoods to address retail and personal service

needs of nearby residents in a convenient and accessible manner, subject to restrictions and performance standards to ensure a compatible character.

- Uses that commonly have moderate- to large-scale assemblies of people such as churches, funeral homes, membership organizations, and other institutions, should be appropriately located on adequate size parcels with sufficient space to accommodate the off-street parking and accessory needs. Such uses should be located so as to minimize any adverse or undue significant burden on adjacent or adjoining land uses, as well as that portion of the street network.
- Smaller-scale suburban commercial retail and service uses should be located at intersections of collector or arterial streets and at the edge of logical neighborhood.

3.5.11 Housing and Neighborhoods

- An assortment of housing types will be provided to meet community and regional housing needs and to fulfill objectives of choice and affordability.
- Appropriate locations for low- and high-density residential development should be provided based on accessibility, site suitability, utility availability, and environmental factors.
- Portions of the community should be reserved for uniform development of a specific housing type (e.g., detached single-family dwellings, duplexes, townhomes, patio homes, apartments, and manufactured homes), while blending of residential uses should be allowed in other areas to suit the differing tastes of housing consumers, but with reasonable development standards to ensure compatibility.
- Schools, parks, golf courses, and community facilities should be located close to or within residential neighborhoods for accessibility and to provide a focal point for effective and cohesive neighborhood design.
- The original town neighborhoods will be conserved through regulatory provisions and proactive planning measures.
- New development will be compatible with existing and well established neighborhoods through appropriate use and design transitioning and cohesive types and patterns of development.
- Priority in the form of infrastructure and other capital improvements will be given to the redevelopment of blighted structures or properties and infill development of vacant parcels or underutilized tracts.
- A Residential Urban High Density zoning district will be created and strategically located in areas that can accommodate and are compatible with surrounding uses to allow the opportunity for the development of affordable housing.

Chapter 4

Environmental Analysis

4.1 Land Use and Development Character

4.1.1 Introduction

This section evaluates existing and proposed land uses associated with the proposed Updated General Plan, as presented in Chapter 3, Land Use and Character. At present, the combined City and SOI areas are identical to those of the existing 1988 General Plan. However, as illustrated in map 3.4, the SOI is expected to expand to 7,066 acres. With future growth projected to increase by more than 100% by 2030, the community may expect challenges in accommodating this growth in an orderly manner, providing required infrastructure and services in an efficient manner, and meeting the demands for civic spaces and quality of life amenities.

4.1.2 Environmental Setting.

Existing Development

Williams is a standalone agricultural community that is surrounded by farmland. Its existing developed pattern is broadly bound by Old Highway 20 on the north, Husted Road on the east, Davis Road on the west, and Theatre Road (as extended westward) on the south. The pattern of development, which was initiated by the railroad has been expanded gradually over the past 100 years, is oriented along the major transportation corridors, including mostly industrial and limited commercial development adjacent to I-5 and the CFNR Railroad alignments downtown retail/office and public uses along 7th Street both north and south of E Street, and street-oriented commercial uses along E Street extending from 11th Street across I-5 to the Glenn-Colusa Irrigation Canal. There are industrial and ag-industrial uses to the southeast along Husted Road.

The remaining quadrants of the community are residentially developed with mostly single family detached dwellings, together with a few attached and multiple family dwellings (including duplexes, senior living, migrant housing, and apartments).

Development Barriers

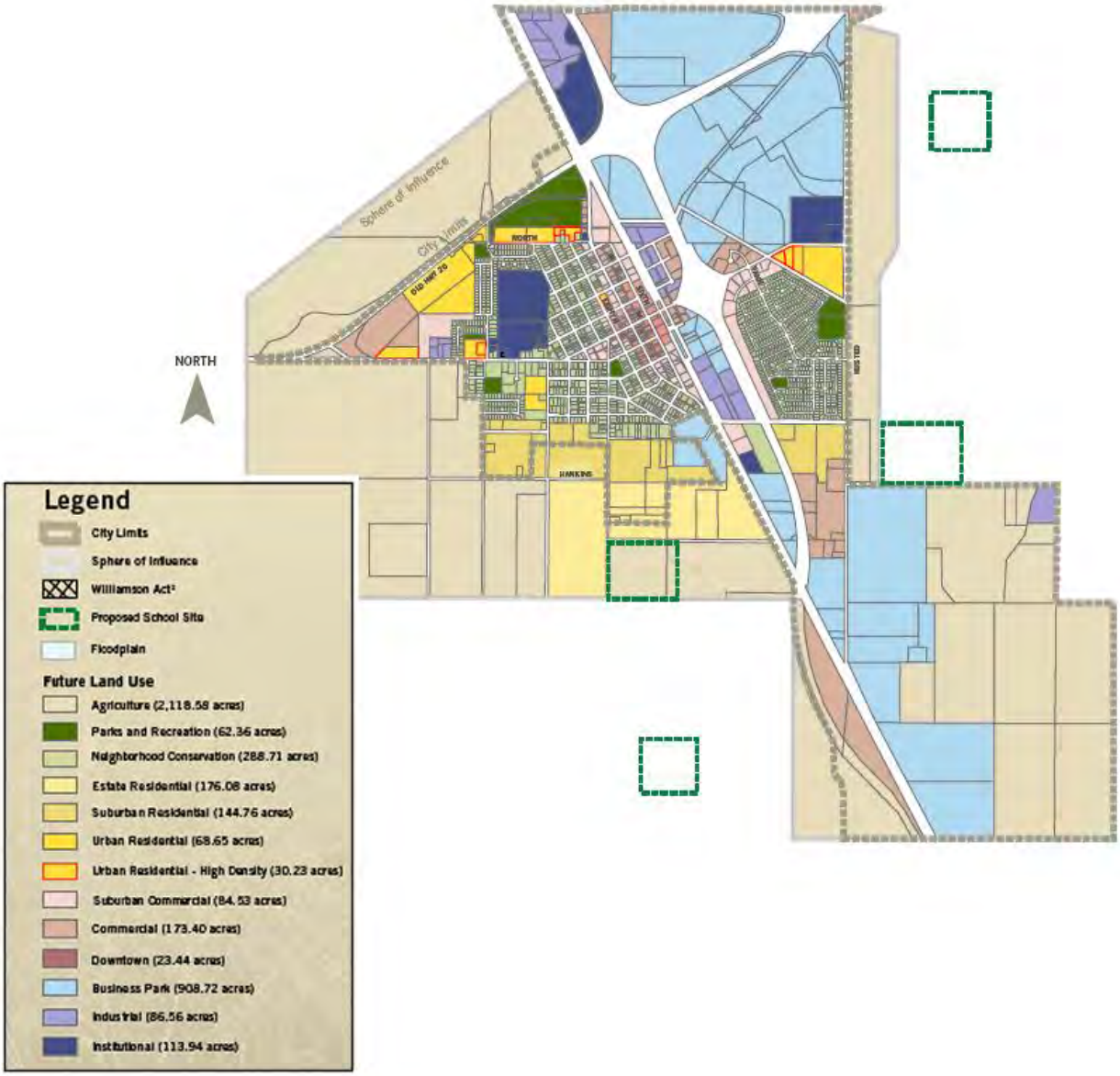
While the transportation corridors described above stimulated historic development, they also act as internal barriers to the community. Development in Williams is divided by the I-5 and CFNR corridors, which act as barriers for both vehicular travel and particularly, pedestrian foot-traffic. Old Highway 20 and the extents of the Federal Emergency Management Agency (FEMA) floodplain create significant barriers to the north, forming an artificial development boundary for the foreseeable future. Although to a much lesser extent, E Street forms a pedestrian barrier due to its relative traffic volumes and speeds. To date, the Glenn-Colusa Irrigation Canal has formed an edge to development, although development is expected in the forthcoming business park within the triangular area bound by the canal, E Street, and Husted Road. Lastly, portions of South Williams create a barrier to development given the existing ownership and land use patterns. As development occurs, it is important to acknowledge and plan accordingly for these natural and artificial barriers to avoid leapfrogging to the best extent possible.

Community Character Categories

The existing land use categories used in the Updated General Plan reflect the intended character of development, in addition to its use. The land use character designations (see Figure 4-1, Future Land Use Character) are described as follows:

- **Agriculture** refers to the peripheral areas that are used for agricultural purposes, where residences and farm buildings are clearly an accessory to the principal farm operations. By their purpose and nature the character of the agricultural areas is rural.
- **Neighborhood Conservation** describes the original town neighborhoods. This area is uniquely defined because, while the use is single family, its character is distinguishable and wholly different from the more recently developed Nicolaus Estates and Valley Ranch. As a result, this area must be handled in a way that will preserve its character.
- **Suburban Residential** refers to the balance of the residential areas, including Valley Ranch and Nicolas Estates. These contemporary neighborhoods are patterned and characterized by consistent lot frontages and building setbacks, a regular pattern of driveways, greater proportions of floor area to lot area, and a more uniform home design and scale.
- **Urban Residential, Attached** is used to describe development such as the Valley West Care Center, Pinewood Court, Pinewood Manor Apartments, Williams Migrant Housing, and the duplexes along Virginia Way. These areas are characterized by an auto orientation (e.g. a relative higher percentage of site imperviousness), higher density, reduced setbacks, and tighter spacing between units.
- **Commercial** describes the retail and office uses along 6th and 7th Streets and along E Street between 11th Street and Vann Street. These properties are oriented to the auto with expansive on-site parking and broader setbacks from the street frontage.
- **Downtown Commercial** refers to the immediate downtown area along 7th Street from just south of F Street north to D Street. It also extends west along E Street between 6th Street and 8th Street. These areas are urban in character by reason of their build-to frontage conditions, zero side yard setbacks, and enclosure of the street environment.
- **Industrial** describes all the industrial properties by reason of their design to accommodate on-site parking and circulation, storage and display of materials and equipment, and outdoor activity areas.
- **Institutional** uses include government and other public and semi-public uses such as City buildings (City Hall and Fire Station, Police Headquarters, and Public Works Department and Corporation Yard), buildings and facilities of the Williams Unified School District, Sacramento Valley Museum and Old Gym, and California Highway Patrol.
- **Parks and Recreation** include the community's parks and public open spaces that are devoted to public use, including wetlands and storm detention areas and the streams and canals.

Figure 4.1: Future Land Use Character (Map 3.5)



Plan Description

During the plan update process, Williams' citizens have expressed its vision as a city that will maintain its status as a community noted for its good planning made evident by the quality and sustainability of development, preservation of open space, protection of its agricultural and environmental resources, and conservation of its original town area and neighborhoods. It has a wealth of housing choices settled in highly livable neighborhoods that are walkable, well connected, and accessible to community parks and trails. A revitalized downtown will be the hub of civic pride and cultural and entertainment activities for residents and visitors alike.

The 75 future land use policy statements presented in Chapter 3 address the following broad issues:

- Maintain the integrity of established neighborhoods and establish conservation measures that will stimulate improvement and reinvestment. Establishment of new development standards that will improve the quality and appearance of future neighborhoods.
- Development of standards and regulations that promote compatible development of the land use character classifications described above.
- Future growth that is contiguous to existing development, occurring first within the existing corporate limits, where infrastructure services are readily available. Annexation and expansion of the City's sphere of influence will grow in accordance with the future land use plan.
- Avoidance of premature establishment of municipal infrastructure outside the corporate limits.
- Future development and redevelopment shall be executed in a manner that is compatible with existing agricultural resources, sensitive areas (such as floodplains and wetlands), and other important natural resources.
- The Downtown shall continue to serve as the center of civic uses and activities, acting as a venue for culture and entertainment.
- The freestanding appearance and rural character of the City's perimeter shall be maintained.

4.1.3 Regulatory Setting

Williams Zoning Ordinance

Land use in Williams is currently regulated in accordance with the City's Zoning Ordinance, which was originally adopted in 1971 and has been updated from time to time in response to development proposals or planning initiatives over the past 40 years. The existing ordinance divides the City into the following 11 zoning districts:

Table 4.1.1: Williams Zoning Districts

District		Acres
A-E	Agriculture - Exclusive	260.8
R-1	Residential - One Family	467.6
R-2	Residential - Two Family	62.2
R-3	Residential - Multi-Family	80.9
R-4	Apartment - Professional	49.5
P-F	Public Facility	213.0
C-1	Retail Commercial	16.2
C-2	Heavy Commercial	239.5
C-H	Highway Commercial	232.4
M-H	Heavy Industrial	435.2
M-L	Light Industrial	1,095.3

Source: City of Williams Zoning Map

The City is currently engaged in the process of updating its Zoning Ordinance in concert with the growth and community character recommendations presented in the Updated General Plan.

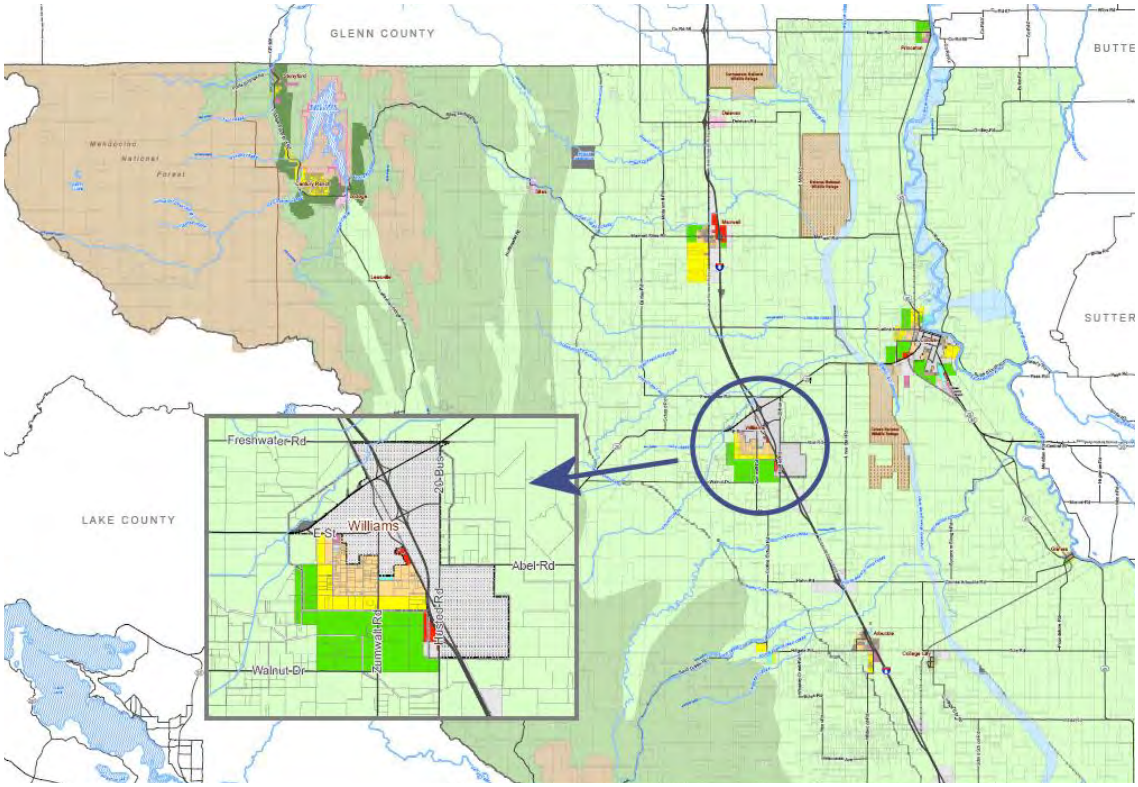
Areas outside the Williams municipal boundary are regulated by the Colusa County Zoning Ordinance, which was adopted in 1991. These areas are zoned primarily for agricultural uses.

Colusa County General Plan

The current Colusa County general plan of record was adopted in 1989, and the Future Land Use Map from the plan is shown as Figure 4.1.1 of this document. The gray areas shown on the map in the northern and eastern sectors of the Williams SOI are designated for future industrial uses. The green area south of the City was designated as "agricultural transition"—a holding zone for eventual urban development.

Colusa County is in the process of updating its 1989 General Plan, with its anticipated adoption in late 2011 or early 2012.

Figure 4.1.2: Colusa County Land Use Plan (Adopted in 1989)



Colusa County Zoning Ordinance

Colusa County's Zoning Ordinance was passed and adopted on June 18, 1991 as Ordinance No. 534. The zoning regulations provide standards for density, land use, building height, yard setbacks, open space, and other dimensional criteria for the unincorporated portions of the County.

4.1.4 Impact Methodology

Analysis was performed as to the impacts of the planned future land use on the existing physical community, current land use plans, and local natural habitats. Land use changes were compared to the existing level of development within the study area.

4.1.5 Standards of Significance

The methodology used to determine the significance of an impact was based on the criteria presented in Appendix G of the CEQA guidelines. A land use impact is considered significant if it results in any of the following:

a. Physically divide an establish community.
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal

program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

c. Conflict with any applicable habitat conservation plan or natural community conservation plan.

4.1.6 Impacts and Mitigation

Physical Division of the Community

IMPACT 4.1.1: Future development would physically divide and established community.	
Level of Significance Before Policies/Mitigation:	No Impact
Mitigation Measures:	None required
Level of Significance After Policies/Mitigation:	No Impact

Impact Analysis and Mitigation

The proposed Future Land Use Plan Element and other provisions of the General Plan Update include no provisions that would further isolate any established sector of development or otherwise physically divide the community. Many of the recommended goals and actions are intended to promote infill development, which would result in greater unification of the community. Examples of policy statements to implement this include the following:

3.32. The City will grow contiguously to manage the efficiency of public services and municipal infrastructure provision, to maintain a compact and well defined community form, and to oblige its fiscal responsibility.

3.33. Priority in the form of infrastructure and other capital improvements will be given to the redevelopment of blighted structures or properties and infill development of vacant parcels or underutilized tracts.

3.34. Development will occur first within the existing corporate limits where the infrastructure and services are readily available.

3.35. Annexation will occur in strict adherence with the Future Land Use and Growth Plan. Requests for annexation in areas not shown in this plan will warrant further study, a showing of cause to support the request, and require a general plan amendment.

3.36. The Sphere of Influence will be expanded soon after General Plan Update adoption for the expansion of the corporate limits to exert influence and protect the City's long-term planning interests.

Conflicts with Other Plans and Policies

IMPACT 4.1.2:	***Future development would conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.***
Level of Significance Before Policies/Mitigation:	Less Than Significant
Mitigation Measures:	None Required
Level of Significance After Policies/Mitigation:	Less Than Significant

Impact Analysis

Implementing the proposed General Plan could potentially conflict with land use planning documents in the unincorporated areas of the Williams Sphere of Influence (SOI). The Colusa County General Plan shows County land use designations for properties in the sphere of the City of Williams. Since the Williams' Planning Area includes areas within the jurisdiction of the County, some areas have conflict with regard to the land use designation. The Williams General Plan Update will be taken under consideration during the current County planning update process, and the City is seeking coordination for adjustments to be made to the County's updated plan to be consistent with the new Williams General Plan. The City staff would continue to coordinate planning efforts for the properties within the City's Sphere of Influence with the Colusa County staff.

The City of Williams is also located within the Sacramento-San Joaquin Valley and is part of the area covered in the FloodSAFE Vision of the State of California Department of Water Resources. The area around Williams is in the Tier 2 area which allows for local jurisdictions to make land use decisions that integrate flood risk management considerations to contribute to a more sustainable California through reducing the economic, environmental, and social effects that can result from flooding. This issue is discussed in more detail in Section 4.8, Hydrology and Water Quality.

Conflicts with Habitat or Natural Community Conservation

IMPACT 4.1.3:	**Future development would conflict with any applicable habitat conservation plan or natural community conservation plan.**
Level of Significance Before Policies/Mitigation:	No Impact
Mitigation Measures:	None Required
Level of Significance After Policies/Mitigation:	No Impact

Impact Analysis

No Habitat Conservation Plans (HCP) or Natural Community Conservation Plans (NCCP) exist for this study area or the adjacent lands. Therefore, the proposed plan is not in conflict with any existing plans. It is found that there is no impact.

4.2 Population and Housing

4.2.1 Introduction

Population trends and addressed in Chapter 2, Background Analysis, of the Updated General Plan. This section discusses impacts to population resulting from the General Plan Update. The General Plan goals and recommended actions related to population growth in the community are identified in this section. Impacts related to induced growth are also discussed.

4.2.2 Past Trends

Population Change

Population growth trends over the past 40 years are shown in Table 4.2.1 below.

Table 4.2.1: Historic Growth for Williams and Colusa County

Year	Williams	Colusa County	% of County
1970	1,571	12,430	12.64%
1980	1,658	12,791	12.96%
1990	2,297	16,275	14.11%
2000	3,670	18,804	19.52%
2009	5,287	21,997	24.04%

Source: California State Department of Finance (Population Estimates for Cities, Counties and State, 2001-2009 and Historical Census Populations of Places, Towns, and Cities in California, 1850-2000), U.S. Census Bureau (Population and Housing Units: 1940 to 1990)

Williams has experienced approximately 32% annual growth over the last 40 years, and approximately 45 percent over the last 20 years. The influx of new residents has led the City of Williams to represent an increasing population percentage of the County.

Ethnicity

Current and project ethnicity patterns for Colusa County and California are shown in Table 4.2.2, below. Colusa County is significantly more homogenous than the State of California, with a predominance of White and Hispanic residents. In 1990, like Colusa County, the City of Williams had approximately 40 percent of residents with Hispanic or Latino origin. Since then, the proportion of Hispanic population has increased considerably, rising to 70 percent by 2000. (Source 1990 and 2000 U.S. Census).

Table 4.2.2: Ethnicity Patterns and Projections								
Year	Total	**White**	**Hispanic**	**Asian**	**Pac. Islander**	**Black**	**Am. Indian**	**Multirace**
Colusa County								
2000	19,027	48.3%	46.4%	1.3%	0.4%	0.5%	1.8%	1.2%
2010	23,787	43.6%	51.2%	1.4%	0.4%	0.5%	1.6%	1.3%
2020	29,588	41.0%	53.9%	1.5%	0.3%	0.4%	1.5%	1.3%
2030	34,488	38.9%	56.2%	1.4%	0.3%	0.4%	1.5%	1.4%
2040	38,131	36.6%	58.6%	1.3%	0.3%	0.4%	1.4%	1.4%
2050	41,662	34.7%	60.5%	1.2%	0.2%	0.4%	1.4%	1.5%
California								
2000	34,105,437	47.3%	32.4%	11.0%	0.3%	6.5%	0.5%	1.9%
2010	39,135,676	42.0%	37.1%	12.0%	0.4%	5.8%	0.6%	2.1%
2020	44,135,923	37.4%	41.4%	12.5%	0.4%	5.4%	0.7%	2.2%
2030	49,240,891	33.3%	45.4%	12.9%	0.5%	5.0%	0.7%	2.3%
2040	54,266,115	29.5%	48.9%	13.1%	0.5%	4.7%	0.7%	2.4%
2050	59,507,876	26.4%	52.1%	13.3%	0.6%	4.5%	0.7%	2.4%
Source: U.S. Census Bureau								

Age Distribution

As shown in Table 4.2.3, below, Williams and Colusa County have a younger age distributions than nearby counties, indicating a greater need for economic, recreational, and social opportunities that accommodate these life stages.

Table 4.2.3 Age Distribution					
Age Group	**Williams**	**Colusa**	**Arbuckle Co.**	**Colusa Co.**	**State of California**
Under 18 years old	34.6%	30.2%	35.9%	31.6%	27.3%
18 to 24 years old	12.9%	10.2%	12.0%	10.3%	9.9%
25 to 64 years old	43.3%	48.2%	43.5%	46.8%	52.1%
Over 64 years old	9.2%	11.4%	8.5%	11.4%	10.6%
Source: U.S. Census Bureau					

Williams also has a higher proportion of children and youth (under 18 years), requiring a greater emphasis on family-oriented, housing needs, educational facilities, and recreational services and facilities.

Although the neighboring City of Colusa has a smaller percentage of children and youth Williams' larger proportional size indicates a greater demand on resources with 5,402 under 18-year-old residents compared to Williams 3,670 (Source: 2000 U.S. Census).

Williams has approximately 9 percent less working-age residents (24- to 64-years-old) than the State, which is reinforced by its younger median age.

4.2.3 Implications of Population Growth

By 2030, the housing stock will need to nearly double in order to accommodate approximately 6,150 new residents, assuming persons per household must accommodate the increased capacities associated with the projected growth.

Due to Williams' relatively small size, the local economy may experience more rapid fluctuations with the gain (or loss) of a major employer. As the City grows and diversifies its economic base, it will become more resistant to economic fluctuations.

4.2.4 Impact Assessment Methodology

The impacts to population and housing were evaluated using the information identified in the Updated General Plan Section 2, Background Analysis, and the build-out population projections identified in the Updated General Plan Chapter 3, Land Use and Character. The population forecasting procedure utilized four different techniques, yielding a range of growth to between a minimum of 7,664 and a maximum of 9,669 residents by the year 2030. The midpoint of these projections, as shown in Figure 2.2 and Table 2.2 in the General Plan report, is a 2030 population of 9,822. Future land uses were projected and allocated on the basis of this assumption.

4.2.5 Standards of Significance

As itemized in the CEQA Guidelines Appendix G checklist, the City's General Plan Update would result in significant impacts to population/housing if any of the following were to occur:

a. Induce substantial population growth in an area, either directly (for example by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

4.2.6 Impacts and Mitigation

Inducement of Growth

IMPACT 4.2.1: The General Plan Update may induce growth in the Williams area.	
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	Policies and Recommended Actions in the proposed General Plan Update
Level of Significance After Policies/Mitigation:	Less than Significant

Impact Analysis and Mitigation

Over many decades, the population of Williams has steadily increased but at consistently low levels. Growth in the area has been largely constrained in the past due to its isolated, rural location.

However, the continuing expansion of the Sacramento–Arden Arcade–Yuba City, CA-NV Combined Statistical Area is likely to accelerate future growth northward along I-5. Also, during the General Plan update process, Williams City leaders expressed the desire to take aggressive actions to stimulate economic growth that would attract new residents.

Full build-out of the General Plan is expected to occur well beyond Year 2030. Complete development of the planning area (city limits, SOI, Proposed SOI) would accommodate over 13,000 persons and 4,000 housing units. However, in order for build-out to occur, additional facilities and services would be necessary as this level of development exceeds the current availability and capacity streets and utilities, as well as other capital investments. While this forty- or fifty-year build-out is significant compared to current conditions, the policies in the plan reduce or eliminate the potential for negative impacts associated with directly induced growth.

With the implementation of the following policies and recommendations presented in the Updated General Plan Chapter 3, Land Use and Community Character(repeated from Section 4.1), the impact of growth will be less than significant:

3.32 The City will grow contiguously to manage the efficiency of public services and municipal infrastructure provision, to maintain a compact and well defined community form, and to oblige its fiscal responsibility.

3.33 Priority in the form of infrastructure and other capital improvements will be given to the redevelopment of blighted structures or properties and infill development of vacant parcels or underutilized tracts.

3.34 Development will occur first within the existing corporate limits where the infrastructure and services are readily available.

3.35 Annexation will occur in strict adherence with the Future Land Use and Growth Plan. Requests for annexation in areas not shown in this plan will warrant further study, a showing of cause to support the request, and require a general plan amendment.

3.36 The sphere of influence will be expanded soon after adoption of the General Plan Update for the expansion of the corporate limits to exert influence and protect the City's long-term planning interests.

Dispersal of Housing

IMPACT 4.2.2: The General Plan would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.	
Level of Significance Before Policies/Mitigation:	No Impact
Mitigation Measures:	No additional analysis is needed and no mitigation is required
Level of Significance After Policies/Mitigation:	No Impact

Impact Analysis

New housing will be constructed concurrently with population growth. Also, no projects are proposed that would result in the major acquisition of residential properties and removal of dwelling units. For these reasons, housing or people would not be displaced as a direct result of implementing the General Plan Update.

Displacement of Population

IMPACT 4.2.3: The General Plan would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.	
Level of Significance Before Policies/Mitigation:	No Impact
Mitigation Measures:	No additional analysis is needed and no mitigation is required
Level of Significance After Policies/Mitigation:	No Impact

Impact Analysis

No Impact, as there are no substantial residential institutions or military installations in Williams that would be affected by this updated plan.

4.3 Aesthetics

4.3.1 Introduction

This section describes existing visual and aesthetic resources for the study area and region, and evaluates the potential impacts of the Updated General Plan. In addition, the Updated General Plan goals and recommended actions pertaining to aesthetics are described. The California Environmental Quality Act (CEQA) describes the concept of aesthetic resources in terms of scenic vistas, scenic resources (such as trees, topographic features, and historic buildings within a state scenic highway), the existing visual character or quality of the study area, and light and glare impacts. The following impact analysis is based on information drawn from the Williams General Plan Update.

4.3.2 Environmental Setting

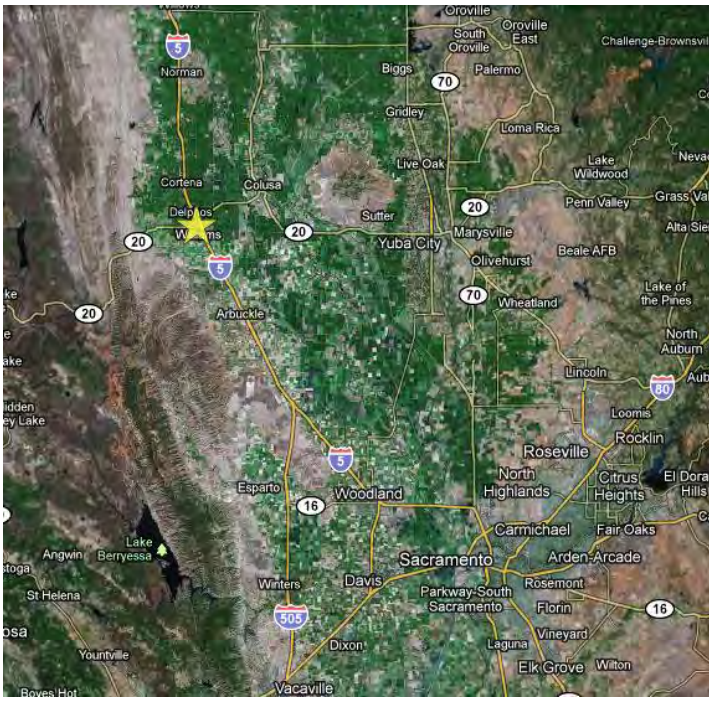
The following information provides an overview of the existing visual resources and character in the study area.

Study Area Visual Setting

The study area consists of the City's planning area of approximately 7,067 acres (Figure 4.3.1, Location Map). The study area is a freestanding community that is divided by Interstate 5 running north/south and State Highway 20/Business 20 running east/west.

Land uses within the study area, as described earlier in Section 4.1, include residential, commercial, institutional, agricultural, industrial and open space. The City is surrounded by agricultural lands in all directions.

Figure 4.3.1 Location Map (Source: Google Maps)



Unique Visual Features

The Downtown Area.
As described in the Updated General Plan Chapter 3, Land Use and Character, the Williams Downtown area is located along 7th Street (Old Hwy 99W), bounded by the railroad tracks on the east and 9th Street to the west. Downtown has done well to maintain its identity. It is strategically located and immediately accessible to the interstate highway. While there are needed improvements to infill vacant parcels, rehabilitate and reuse empty buildings, and better define the limits of the downtown district, it has maintained its historic, small-town rural identity. Preserving this special character will be vital as the community initiates the planning and redevelopment process. Doing so warrants a downtown master plan (Action Recommendation 3.k.) as a guiding policy and strategy document that is complimented by a robust implementation framework outlining public investments, private redevelopment projects, appropriate development restrictions, and a realistic financing plan.

Established Williams Neighborhoods. A majority of the neighborhoods north, south, and west of the Downtown are predominately single-family residential with a few mixed medical offices, public institutions, apartments and churches. The buildings in this area are mostly 30+ years old with little development in recent years. The streets have been laid out in a grid pattern with mid-block alleys and wide residential streets. The sidewalk pattern varies from having none at all to the provision of sidewalks on either side of the street, separated from the street pavement by an attractive tree-lined parkway.

Scenic Vistas. Williams is situated approximately 10 miles east of the base of the Coast Range. These mountains are visible to travelers on Interstate 5 and westbound on Highway 20. Because Williams itself is situated on flat land, the mountains are visible in the distance from most locations, unless obstructed by buildings or landscaping. While attractive, the mountains are of great enough distance from Williams that the vista cannot be characterized as being unique or significant.

4.3.3 Standard of Significance

The criteria used to determine the significant of an impact were based on the criteria presented in Appendix G of the CEQA Guidelines. The City of Williams General Plan Update would result in significant adverse aesthetic impacts if it results in any of the following:

a. Have a substantial adverse effect on a scenic vista.
b. Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
c. Substantially degrade the existing visual character or quality of the site and its surroundings.
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

4.3.4 Impacts and Mitigation

Scenic Vistas

IMPACT 4.3.1: The Plan will have a substantial adverse effect on a scenic vista.	
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	Policies and Recommended Actions in the proposed General Plan Update
Level of Significance After Policies/Mitigation:	Less than Significant

Impact Analysis and Mitigation

The City of Williams is presently an urban and suburban area surrounded by agricultural land uses. Implementation of the General Plan would result in increased urban and suburban growth, which could alter the visual setting or character of the SOI. This would occur primarily at the City's southern and eastern edges, which would not affect the westward views to the mountains. This additional development is unlikely to be perceived as a negative aesthetic impact in comparison to its current state.

To travelers on I-5, Williams' small community urban center surrounded by rural land and farmland creates a visual contrast that complements the neighboring scenic fabric. This provides an interesting contrast that can be seen as enhancing the scenic value of the region. While development consistent with the General Plan could alter the area's rural setting as it converts from agricultural use or vacant to development, the plan promotes the preservation, protection, and promotion of the existing aesthetic features and applies land development standards that meet these goals to new development.

Implementation of the General Plan Update will result in beneficial impacts to the scenic experience as travelers pass through the City on I-5 and Route 20. The following policies and actions, when implemented, will result in tangible benefits:

Policies

3.11. Preserve the historic significance of downtown through development and employment of preservation guidelines for alterations to existing buildings. Utilize the guidelines also to ensure the architectural appropriateness of newly constructed buildings.

3.12. Retain the urban character of the existing buildings along 7th and 8th Streets and establish new standards to guide new development to occur in an urban context.

3.14. A downtown master plan will provide the policies and implementation framework to guide the redevelopment and future development of Downtown.

3.19. The City will manage the appearance of its gateways and corridors through proactive planning, stepped-up enforcement, and public investment.

3.20. New standards and the establishment of a new design review program will be developed to achieve quality design and development outcomes throughout the City.

3.44 The agricultural use and rural character of the City's perimeter will be maintained through the strict enforcement of zoning, as applicable, and influence exerted by the City within its sphere of influence.

3.28. The design review standards will be revised and a design manual will be created to better define and illustrate explicit site and building standards.

Actions:

- 3.i. Amend the zoning ordinance to include a new Downtown district. This district is necessary by reason of the unique, urban character and its intended use and building types. The standards should include:

  - Zero front and side yard setbacks to preserve the existing block frontage and to re-establish it in other areas of the district.

  - A minimum rather than maximum building height to create two (or more) story buildings. This encloses the street and reinforces the urban fabric. Given market conditions, two-story buildings should accommodate upper floor office and residential uses.

  - Uses that are suitable within a downtown environment and include those with building typologies that contribute to an urban context and pedestrian orientation.

  - Provisions for on-street and common (public and/or private) parking, including allowance for first floor (under building) parking, particularly for retirement housing.

  - Building design standards to embrace a pedestrian streetscape environment, with distinction between floors and fenestration of doors and windows.

- 3.k. Amend Chapter 17.11, Signs, to create a new section for "Signs in the Downtown District." The permitted signs in this district should include projecting signs and provisions for awning, overhang, and window signage. The allowances and limitations regarding sign area should be modified according to the urban context.
- 3.m. Prepare a downtown master plan to guide the strategies and improvement projects necessary to support the formation of a redevelopment district. The master plan should entail the type and character of future land use, specific use and building types, street and sidewalk improvements, streetscape enhancements, and infrastructure requirements, together with strategies for creating partnerships, assembling and marketing land deals, and recruiting developer interest. Lastly, the plan should evaluate market conditions and likely absorption rates and subsequently, identify funding sources and a general financing plan.
- 3.bb. Amend the zoning ordinance to consolidate the C-2 and C-H districts into a new Auto-Urban Commercial district and develop design standards and guidelines for new development in these areas. This district should include the following:

  - Site design standards requiring parking to the side and rear of buildings (rather than in front). On sites where this is infeasible by way of its size or orientation the standards should

include a broader streetscape bufferyard with increased landscaping and parking lot landscaping.

- A built-to-line (in place of a minimum setback).
- Increased side and rear setbacks and bufferyard standards to separate and screen adjacent properties.
- Building design standards relating to building scale and articulation, façade and roofline standards, and building orientation.
- A minimum landscape surface ratio.

- 3.dd. Amend Chapter 17.108, Design Review, and develop design standards and guidelines, to include more definitive and explicit standards relating to the height and scale of buildings adjacent to residential areas, architectural forms and details, solar panel installations, outdoor lighting levels and dark-sky provisions, building and neighborhood monotony, building shapes and materials, and landscaping, screening, and fencing.
- 3.ll. Establish and maintain a Design Manual that includes development standards and guidelines that defines and illustrates the City's design expectations for new development and signage.

Damage to Other Scenic Resources

IMPACT 4.3.2: The plan will substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.	
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	Policies and Recommended Actions in the proposed General Plan Update
Level of Significance After Policies/Mitigation:	Less than Significant

Impact Analysis and Mitigation

There are no scenic highways, rock outcroppings or other terrain features that could be adversely impacted by growth and development in the City.

The General Plan update includes provisions that, when implemented will protect and improve the conditions of historic sites and other buildings. This is evidenced by the following policies and actions proposed in Chapter 3, Land Use and Character:

Policies:

3.11. Preserve the cultural significance of downtown through development and employment of design guidelines for alterations to existing buildings. Utilize the guidelines also to ensure the architectural appropriateness of newly constructed buildings.

3.12. Retain the urban character of the existing buildings along 7th and 8th Streets and establish new standards to guide new development to occur in an urban context.

3.14. A downtown master plan will provide the policies and implementation framework to guide the redevelopment and future development of Downtown.

3.28. The design review standards will be revised and a design manual will be created to better define and illustrate explicit site and building standards.

Actions:

3.i. Amend the zoning ordinance to include a new Downtown district. This district is necessary by reason of the unique, urban character and its intended use and building types. The standards should include:

- Zero front and side yard setbacks to preserve the existing block frontage and to re-establish it in other areas of the district.
- A minimum rather than maximum building height to create two (or more) story buildings. This encloses the street and reinforces the urban fabric. Given market conditions, two-story buildings should accommodate upper floor office and residential uses.
- Uses that are suitable within a downtown environment and include those with building typologies that contribute to an urban context and pedestrian orientation.
- Provisions for on-street and common (public and/or private) parking, including allowance for first floor (under building) parking, particularly for retirement housing.
- Building design standards to embrace a pedestrian streetscape environment, with distinction between floors and fenestration of doors and windows.

3.k. Amend Chapter 17.11, Signs, to create a new section for “Signs in the Downtown District.” The permitted signs in this district should include projecting signs and provisions for awning, overhang, and window signage. The allowances and limitations regarding sign area should be modified according to the urban context.

3.m. Prepare a downtown master plan to guide the strategies and improvement projects necessary to support the formation of a redevelopment district. The master plan should entail the type and character of future land use, specific use and building types, street and sidewalk improvements, streetscape enhancements, and infrastructure requirements, together with strategies for creating partnerships, assembling and marketing land deals, and recruiting developer interest. Lastly, the plan should evaluate market conditions and likely absorption rates and subsequently, identify funding sources and a general financing plan.

3.p. Certify downtown as a design district and adopt design standards. Such standards would protect the architecture integrity of structures and ensure appropriate updates and new building construction.

3.q. Create a façade improvement grant program and to offer business financial and other incentives for code compliance and facade enhancements to commercial buildings. Consider a revolving loan fund to help with business start-ups and expansions.

3.bb. Amend the zoning ordinance to consolidate the C-2 and C-H districts into a new Auto-Urban Commercial district and develop design standards and guidelines for new development in these areas. This district should include the following:

- Site design standards requiring parking to the side and rear of buildings (rather than in front). On sites where this is infeasible by way of its size or orientation the standards should include a broader streetscape bufferyard with increased landscaping and parking lot landscaping.
- A built-to-line (in place of a minimum setback).
- Increased side and rear setbacks and bufferyard standards to separate and screen adjacent properties.
- Building design standards relating to building scale and articulation, façade and roofline standards, and building orientation.
- A minimum landscape surface ratio.

3.dd. Amend Chapter 17.108, Design Review, and develop design standards and guidelines, to include more definitive and explicit standards relating to the height and scale of buildings adjacent to residential areas, architectural forms and details, solar panel installations, outdoor lighting levels and dark-sky provisions, building and neighborhood monotony, building shapes and materials, and landscaping, screening, and fencing.

3.ll. Establish and maintain a Design Manual that includes development standards and guidelines that defines and illustrates the City's design expectations for new development and signage.

Degradation to Visual Site Characteristics

IMPACT 4.3.3: The Plan will substantially degrade the existing visual character or quality of the site and its surroundings.	
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	Policies and Recommended Actions in the proposed General Plan Update
Level of Significance After Policies/Mitigation:	Less than Significant

Impact Analysis and Mitigation

Impacts to the City's visual character resulting from the adoption of the Williams General Plan Update will be beneficial. The City currently has a significant number of deteriorated structures, unmaintained vacant lots, areas with unkempt vegetation, abandoned signs, and other undesirable visual-features. Future economic development and redevelopment programs, incentives for improvements,

development infill policies, and other community improvement programs are intended to directly or indirectly remedy these conditions. Proposed policies and actions include:

Policies:

3.2 Unique standards will be prepared for the original town neighborhoods to retain the existing patterns and forms of development and to avoid inappropriate infill development or use conversions.

3.11. Preserve the historic significance of downtown through development and employment of preservation guidelines for alterations to existing buildings. Utilize the guidelines also to ensure the architectural appropriateness of newly constructed buildings.

3.12. Retain the urban character of the existing buildings along 7th and 8th Streets and establish new standards to guide new development to occur in an urban context.

3.14. A downtown master plan will provide the policies and implementation framework to guide the redevelopment and future development of Downtown.

3.24. Site improvement standards will be developed and applied to the blighted corridors to facilitate reinvestment and achieve regulatory compliance.

3.28. The design review standards will be revised and a design manual will be created to better define and illustrate explicit site and building standards.3.31 Priority in the form of infrastructure and other capital improvements will be given to the redevelopment of blighted structures or properties and infill development of vacant parcels or underutilized tracts.

Actions:

3.i. Amend the zoning ordinance to include a new Downtown district. This district is necessary by reason of the unique, urban character and its intended use and building types. The standards should include:

- Zero front and side yard setbacks to preserve the existing block frontage and to re-establish it in other areas of the district.

- A minimum rather than maximum building height to create two (or more) story buildings. This encloses the street and reinforces the urban fabric. Given market conditions, two-story buildings should accommodate upper floor office and residential uses.
- Uses that are suitable within a downtown environment and include those with building typologies that contribute to an urban context and pedestrian orientation.
- Provisions for on-street and common (public and/or private) parking, including allowance for first floor (under building) parking, particularly for retirement housing.
- Building design standards to embrace a pedestrian streetscape environment, with distinction between floors and fenestration of doors and windows.

3.k. Amend Chapter 17.11, Signs, to create a new section for "Signs in the Downtown District." The permitted signs in this district should include projecting signs and provisions for awning, overhang, and window signage. The allowances and limitations regarding sign area should be modified according to the urban context.

3.m. Prepare a downtown master plan to guide the strategies and improvement projects necessary to support the formation of a redevelopment district. The master plan should entail the type and character of future land use, specific use and building types, street and sidewalk improvements, streetscape enhancements, and infrastructure requirements, together with strategies for creating partnerships, assembling and marketing land deals, and recruiting developer interest. Lastly, the plan should evaluate market conditions and likely absorption rates and subsequently, identify funding sources and a general financing plan.

3.bb. Amend the zoning ordinance to consolidate the C-2 and C-H districts into a new Auto-Urban Commercial district and develop design standards and guidelines for new development in these areas. This district should include the following:

- Site design standards requiring parking to the side and rear of buildings (rather than in front). On sites where this is infeasible by way of its size or orientation the standards should include a broader streetscape bufferyard with increased landscaping and parking lot landscaping.
- A built-to-line (in place of a minimum setback).
- Increased side and rear setbacks and bufferyard standards to separate and screen adjacent properties.
- Building design standards relating to building scale and articulation, façade and roofline standards, and building orientation.
- A minimum landscape surface ratio.

3.dd. Amend Chapter 17.108, Design Review, and develop design standards and guidelines, to include more definitive and explicit standards relating to the height and scale of buildings adjacent to residential areas, architectural forms and details, solar panel installations, outdoor lighting levels

and dark-sky provisions, building and neighborhood monotony, building shapes and materials, and landscaping, screening, and fencing.

3.ll. Establish and maintain a Design Manual that includes development standards and guidelines that defines and illustrates the City's design expectations for new development and signage.

Light and Glare

IMPACT 4.3.4: The Plan will create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	Goals and Recommended Actions in the proposed General Plan Update
Level of Significance After Policies/Mitigation:	Less than Significant

Impact Analysis and Mitigation

For safety and security reasons, new streets and parkways require nighttime lighting as part of the urban development process. This lighting, both public and private, will increase the overall ambient light levels of the City. The increased ambient urban lighting is not considered adverse by normal urban standards. The City's development review process includes adequate provisions to assure that excessive light and glare is not created by individual project developments. A photometric plan may be considered as a requirement of proposed new development to ensure that light and glare do not spill over onto adjacent properties. Under new development standards that would be developed in response to the General Plan Update, new lighting would be required to minimize light and glare as well as off-site spillage.

Lighting improvements are included within the context of the following proposed policies and actions:

Policies:

3.11. Preserve the historic significance of downtown through development and employment of preservation guidelines for alterations to existing buildings. Utilize the guidelines also to ensure the architectural appropriateness of newly constructed buildings.

3.12. Retain the urban character of the existing buildings along 7th and 8th Streets and establish new standards to guide new development to occur in an urban context.

3.14. A downtown master plan will provide the policies and implementation framework to guide the redevelopment and future development of Downtown.

3.28. The design review standards will be revised and a design manual will be created to better define and illustrate explicit site and building standards.

Actions:

3.f. Prepare a neighborhood improvement plan for the original town neighborhoods to organize and coordinate with neighborhood representatives to identify improvement projects, regulatory adjustments, enforcement targets, and needed amenities. The plan should be backed by grants and seed funding for individual property improvements and a capital budget for street, sidewalk, utility, drainage, lighting, and park projects.

3.i. Amend the zoning ordinance to include a new Downtown district. This district is necessary by reason of the unique, urban character and its intended use and building types. The standards should include:

- Zero front and side yard setbacks to preserve the existing block frontage and to re-establish it in other areas of the district.
- A minimum rather than maximum building height to create two (or more) story buildings. This encloses the street and reinforces the urban fabric. Given market conditions, two-story buildings should accommodate upper floor office and residential uses.
- Uses that are suitable within a downtown environment and include those with building typologies that contribute to an urban context and pedestrian orientation.
- Provisions for on-street and common (public and/or private) parking, including allowance for first floor (under building) parking, particularly for retirement housing.
- Building design standards to embrace a pedestrian streetscape environment, with distinction between floors and fenestration of doors and windows.

3.k. Amend Chapter 17.11, Signs, to create a new section for “Signs in the Downtown District.” The permitted signs in this district should include projecting signs and provisions for awning, overhang, and window signage. The allowances and limitations regarding sign area should be modified according to the urban context.

3.m. Prepare a downtown master plan to guide the strategies and improvement projects necessary to support the formation of a redevelopment district. The master plan should entail the type and character of future land use, specific use and building types, street and sidewalk improvements, streetscape enhancements, and infrastructure requirements, together with strategies for creating partnerships, assembling and marketing land deals, and recruiting developer interest. Lastly, the plan should evaluate market conditions and likely absorption rates and subsequently, identify funding sources and a general financing plan.

3.t. Restructure the C-1 district to reflect a Suburban Commercial standard. This district would include better standards to compliment and to be compatible with adjacent neighborhoods. Standards would require development to be “residential in appearance” with a similar scale and height, pitched roofs of similar composition, more green space and landscaping, and provisions for lighting, signage, and site design.

3.bb. Amend the zoning ordinance to consolidate the C-2 and C-H districts into a new Auto-Urban Commercial district and develop design standards and guidelines for new development in these areas. This district should include the following:

- Site design standards requiring parking to the side and rear of buildings (rather than in front). On sites where this is infeasible by way of its size or orientation the standards should include a broader streetscape bufferyard with increased landscaping and parking lot landscaping.
- A built-to-line (in place of a minimum setback).
- Increased side and rear setbacks and bufferyard standards to separate and screen adjacent properties.
- Building design standards relating to building scale and articulation, façade and roofline standards, and building orientation.
- A minimum landscape surface ratio.

3.dd. Amend Chapter 17.108, Design Review, and develop design standards and guidelines, to include more definitive and explicit standards relating to the height and scale of buildings adjacent to residential areas, architectural forms and details, solar panel installations, outdoor lighting levels and dark-sky provisions, building and neighborhood monotony, building shapes and materials, and landscaping, screening, and fencing.

3.ll. Establish and maintain a Design Manual that includes development standards and guidelines that defines and illustrates the City's design expectations for new development and signage.

As a result of project analysis, based on data collected in the evaluation of the City's proposed General Plan and the proposed mitigation measures, the project will not result in a significant adverse environmental impact to aesthetic resources within the Study Area.

4.4 Circulation

4.4.1 Introduction

The Circulation Element, Chapter 8 of the Updated General Plan, addresses the movement of people, goods, and services within and around the City of Williams. This Element contains goals, policies and programs that establish the City's circulation system to accommodate pedestrians, bicycles, motor vehicles, public transit, and other means of travel. It includes all the State required topics that must be included in a Circulation Element in addition to identification of issues of concerns and potential solutions to address them to include the primary circulation system, the secondary circulation system, and goals, policies, and programs.

This section of the EIR evaluates potential transportation impacts resulting from implementation of the proposed Williams General Plan Update. The impact analysis examines the roadway, intersection, truck routes, transit, bicycle/pedestrian and rail components of the overall transportation system. Impacts are evaluated based upon a comparison between existing conditions and future conditions with the proposed General Plan.

4.4.2 Environmental Setting

Functional Classification System

A description of the environmental setting of the Williams street system is based on the U.S. Department of Transportation's standard street functional classification system. Descriptions of Williams' street system are provided below, on a function-by-function basis:

- **Freeways** – Characterized by high speeds and limited controlled access, freeways primarily serve regional and long distance travel. I-5, the only freeway through the City of Williams (controlled and maintained by Caltrans), is a four-lane freeway that extends from Mexico to the Oregon border, providing regional access to the City of Williams from Redding, Sacramento, and the San Francisco Bay Area. This roadway has an average daily trip (ADT) rate of approximately 60,000 vehicles. Within the City's Sphere of Influence, I-5 has interchanges at Husted Road, E Street and SR 20.
- **Expressways and/or Major Arterials** – Have four lanes with restricted driveway access, but with a mix of grade-separated interchanges and at-grade intersections. SR 20, the only expressway in Williams (controlled and maintained by Caltrans), is a state highway facility that traverses in the east-west direction through central and northern California connecting Interstate Highway 5 with Interstate Highway 80. Regionally, SR 20 serves as an interregional auto and truck travel route that connects the Central Valley with the cities of Williams, Marysville, Grass Valley, and Nevada City. Within the City's SOI, SR 20 is predominantly a two-lane arterial.
- **Minor Arterials** – Have four lanes and medium carrying capacity that are principally for travel between larger land uses within the community. Husted Road and E Street between Husted Road and 6th Street, designated the City's the minor arterials, are currently two-lane roadways that extends east and west from I-5, connecting with SR 20 and Old Highway 99 to the west and Husted

Rd. to the east. The posted speed limit on E Street varies from 25 mph to 35 mph. E Street forms all way stop controlled intersections with 7th Street and 5th Street. The roadway has half-street improvements as it crosses I-5, without any bicycle lanes.

- **Major Collectors (Industrial Streets)** – Have two lanes that may be upgraded to an arterial in the future and usually limit on-street parking to maintain smooth flow. Old Highway 99, the only designated Major Collector in Williams is a two-lane north south arterial that traverses parallel to I-5, and connects to it via the Husted Road interchange ramps. Old Highway 99 West traverses through a mixed use commercial and residential areas. This roadway is designated as 7th Street between B Street and Theatre Road.
- **Collector Streets** – Have two lanes for carrying relatively low capacity at slower speeds and are used to connect neighborhoods as well as arterials. A collector street serves abutting property and carries traffic to and from the higher street classifications. There are 14 roadway sections within the City's SOI that are designated Collectors (see Table 8.2).
- **Local Streets** – Have two lanes that provide access for not more than 100 residential dwellings and are characteristic of low speed, low capacity roads that provide direct access to adjacent land uses and are typically meant only for local, as opposed to through traffic. These consist of all other City Streets not designated freeways, expressways, arterials or collector roads.

Table 4.4.1 presents the functional classifications for various roadways in the City. Roads not listed in the table are designated as Local Streets.

Table 4.4.1 Functional Classification System for Williams Roadways		
Functional Classification/ Roadway	**From**	**To**
Freeway		
I-5	Northern City Limits	Southern City Limits
Expressway		
SR 20	Western City Limits	Eastern City Limits
Minor Arterial		
Husted Road	SR 20	Southern City Limits
E Street	6th Street	Husted Road
Major Collector		
E Street	SR 20	12th Street
Old Highway 99w	Northern City Limits	Husted Road (Old Highway 99 W Extension West Of I-5)
Walnut Drive	Western City Limits	Husted Road
Collector		
Husted Road	SR 20	Southern City Limits
Freshwater Road	Western City Limits	Husted Road
E Street	6th Street	Husted Road
Hankins Road	Western City Limits	9th Street
Hill Road	Hankins Road	Walnut Drive
Davis Road	E Street	Walnut Drive
Freshwater Lateral Road	Freshwater Road	SR 20
Marguerite Drive	E Street	SR 20
Ella Street	Marguerite Drive	Husted Road
Virginia Way	SR 20	E Street
Venice Boulevard	E Street	Hankins Road
George Road	Hankins Road	New Street (Connecting Hankins Road to 9th Street
12th Street	E Street	New Street (Connecting Hankins Road to 9th Street)
9th Street	Theatre Road	Southern City Limits
Theatre Road	9th Street	Old Highway 99 W
Crawford Road	9th Street	Old Highway 99 W
Abel Road	Husted Road	Eastern City Limits
Old Highway 99W	Crawford Road	Southern City Limits

Levels of Service

The City-wide Traffic Circulation Study, conducted in 2011 as part of the plan update project, quantified current and projected future traffic operations through the determination of level of service (LOS). Level of service is a qualitative measure of traffic operating conditions, whereby, a letter grade “A” through “F” is assigned to an intersection or roadway segment representing progressively worsening traffic conditions. For the analysis of transportation facilities, LOS D has been taken as the City’s threshold for acceptable/tolerable operations for all study roadway facilities except in downtown area. LOS E has been taken as the threshold for acceptable/tolerable operations in downtown.

Table 4.4.2 and 4.4.3 summarize the impacts associated with the six LOS classifications.

Table 4.4.2 Level of Service (LOS) Criteria for Roadways		
LOS	**Signalized Intersections**	**Unsignalized Intersection**
A	Uncongested operations, all queues clear in a signal cycle	Little or no delay
B	Uncongested operations, all queues clear in a signal cycle	Short traffic delays
C	Light congestion, occasional backups on critical approaches	Average traffic delays
D	Significant congestion of critical approaches but intersection functional Cars are required to wait through more than one cycle during short peaks. No long queues formed.	Long traffic delays
E	Severe congestion with some long-standing queues at critical approaches. Blockage of intersection may occur if traffic signal does not provide for protracted turning movements. Traffic queue may block nearby intersection(s) upstream of critical approach(es).	Very long traffic delays
F	Total breakdown, stop and go operation	Interaction blocked by external cause.

The City-wide transportation study concluded that all City roadway sections and intersections currently operate at acceptable levels (see Tables 8.5 and 8.6 in Chapter 8 of the updated plan). As shown on Table 8.7, most roadways in Williams can remain without significant upgrade. However, the following roadway segments are shown for widening needs as follows:

- Husted Road from Freshwater Road to E Street.
- Husted Road from E Street to Abel Road.
- Husted Road from Abel Road to I-5 SB Ramps.
- E Street from Husted Road to I-5 SB Ramps.

Table 4.4.3 Level of Service (LOS) Criteria for Intersections						
LOS	**Type of Flow**	**Delay**	**Maneuverability**	**Signalized Delay**	**Unsignal-ized**	**All-Way Stop**
A	Stable	Very slight delay. Progression is very favorable with most vehicles arriving during the green phase not stopping at all.	Turning movements are easily made, and nearly all drivers find freedom of operation.	≤10.0	≤10.0	≤10.0
B	Stable	Good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.	Vehicle platoons are formed. Many drivers begin to feel somewhat restricted within groups of vehicles.	>10 and ≥ 20.0	>10 and ≥ 15.0	>10 and ≥ 15.0
C	Stable	Higher delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, although many still pass through the intersection without stopping.	Back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	>20 and ≥ 35.0	>20 and ≥ 25.0	>20 and ≥ 25.0
D	Approaching Unstable	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are frequent occurrences.	Maneuverability is severely limited during short periods due to temporary back-ups.	>35 and ≥ 55.0	>35 and ≥ 35.0	>35 and ≥ 35.0
E	Unstable	Generally considered to be the limit of acceptable delay. Indicative of poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures are frequent occurrences.	There are typically long queues of vehicles waiting upstream of the intersection.	>55 and ≥ 80.0	>55 and ≥ 50.0	>55 and ≥ 50.0
F	Forced	Generally considered to be unacceptable to most drivers. Often occurs with over saturation. May also occur at high volume-to-capacity ratios. There are many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors.	Jammed conditions. Back-ups from other locations restrict or prevent movement. Volumes may vary widely, depending principally on the downstream back-up condition.	>80.0	>50.0	>50.0
References: 1. Highway Capacity Manual, Special Report No. 209, Transportation Research Board, Third Edition, Updated December, 2000.						

Improvements Needed to Accommodate Full Buildout

As listed in Table 8.7 and shown on Map 8.2 in Chapter 8 of the Updated General Plan report, 17 intersections are expected to exceed the City's acceptable Level of Service, (LOS D) at the City's full plan buildout. These intersections will eventually need to be signalized to accommodate the City's land use distribution and growth. Table 4.4.3 presents a listing of the intersections where improvements will be needed to mitigate the increases in traffic when full buildout occurs—over the next forty years. Details of proposed improvements are presented at the conclusion of Chapter 8.

Table 4.4.3 Proposed Intersection Improvements
SR 20/E. Street
SR 20/Old Highway 99W
SR 20/1-5 SB Ramps
SR 20/I-5 NB Ramps
SR 20/Husted Rd./Freshwater Rd.
E Street/9th Street North
E Street/9th Street South
E Street/7th Street
E Street/5th Street
E Street/I-5 SB Ramps
E Street/I-5 NB Ramps
E Street/Vann Street
E Street/Husted Road
Husted Road/Husted Rd Lateral
Husted Road/Abel Road
Husted Road/Crawford Road
Husted Road/Old Highway 99W
Husted Road/I-5 NB Ramps
Husted Road/I-5 SB Ramps
E Street/Marguerite Drive
SR 20/Marguerite Drive

It should also be noted that, in many instances, the planned improvements actually will mitigate future growth to a higher level LOS than the City's acceptable LOS D level.

Truck Access and Routes

Trucks play an important role in the movement of goods and the delivery of services. The California Vehicle Code, Section 35701 grants local agencies the authority (by ordinance) to establish Truck Routes. Designated truck routes within and through the City include Old Highway 99W, 6th Street, 5th Street, 4th Street, Vann Street north of E Street and Husted Road are the north-south truck routes. B Street, C Street and D street east of 7th Street/Old Highway 99W, SR 20 and E Street are other major east-west truck routes within the City.

The federal Surface Transportation Assistance Act of 1982 (STAA) has designated certain truck routes through the State of California. I-5 and SR 20 are designated as National Network and Terminal Access, respectively and described in more detail as follows:

- I-5 - National Network (Federal): The National Network (NN) are federal highways primarily comprised of the National System of Interstate and Defense Highways. The NN routes are not signed for STAA trucks access. NN routes.
- SR 20 - Terminal Access (State, Local): Terminal Access (TA) routes are portions of State routes or local roads that can accommodate STAA trucks (defined as truck tractor-semitrailer (or double) that conforms to the requirements of the STAA. The State Highway TA routes.

Transit/Bus Service

The Colusa County Transit provides a Dial-A-Ride system with fixed timed routes to Williams and nearby communities. The agency also provides out-of-county medical transportation on an on-call basis to Chico, Davis, Lincoln, Marysville, Oroville, Roseville, Sacramento, Willows, Woodland and Yuba City. In addition, they provide curb-to-curb service to the general population and door-to-door service for disabled passengers.

The Colusa County Transit Agency (CCTA) provides a General Public Paratransit service to the County of Colusa. It currently (2011) operates a fleet of six ADA compliant vehicles, with seating capacity of 19 passenger and two wheelchair positions with 14 fixed routes, a Dial-a-Ride service Monday through Friday weekdays (7:00 am to 5:00 pm), and a commuter service to Colusa on Friday. CCTA operates a modern transit office and facility at 715 D Street in Colusa that is well equipped with maintenance, communication, and storage. It has 11 buses, two medical vehicles and staff support vehicles to accommodate additional growth and demand in the County.

It has been noted by the CCTA that ridership in Colusa County has dropped in recent years from about 280 passengers per day to about 120. However transit authorities indicate that as the economy has started to improve in 2011, ridership is increasing. It was also noted that there is a need for after-hours transit service, such as a taxi service. As the City of Williams grows, increased transit service for employment, shopping, recreation, and medical appointments will continue to increase.

Bicycle Circulation

Senate Bill 277 (Statutes of 1975) established the California Bikeways Act. The Act included provisions requiring the State Department of Transportation to establish "recommended minimum general design criteria for the development, planning, and construction of bikeways..." Also, Assembly Bill 1358 (Statutes of 2008), the California Complete Streets Act, requires the City to incorporate new provisions for multi-modal transportation, such as bicycle and pedestrian facilities into the Circulation Element. Providing a safe and convenient system for bicycle and pedestrian circulation is an important concern of the Circulation Element.

Williams' neighborhoods and business districts will be served by a system of on and off-street pedestrian and bicycle routes. The bicycle and pedestrian path system is intended to connect all areas of the community to all major destinations. Class I, II, and III Bikeway designations are shown in Map 8.4 in Chapter 8, Circulation, of the Updated General Plan.

Sidewalks

Sidewalks provide a relatively safe area for pedestrian movement because they are separated from most other forms of transportation. Consistent with recent legislation under the American Disabilities Act (ADA), all existing and planned pedestrian improvements should allow access to all people and comply with the design guidelines as set forth within the Act.

A considerable network of sidewalks exists in commercial areas of the City. To further encourage and enhance pedestrian circulation, conditional approval of any development proposal by the Planning Commission and City Council needs to include a requirement that the applicant install curbs, gutters, and sidewalks where they do not currently exist. To provide easier access for wheelchairs, City standards, consistent with ADA requirements, call for ramps at all street corners.

The first priority access for future sidewalk improvements should be near schools and school bus stops. The second priority areas for sidewalk improvements shall be in commercial districts.

Construction of sidewalk improvements should is required in areas where capital improvement projects are undertaken by the City, where assessment districts are formed, and as a part of any private development or subdivision projects. Assessment districts and capital improvement projects for other purposes, such as street widening, may include the installation of curbs, gutters, and sidewalks.

Rail Transportation

Currently there are no passenger or freight services through Williams. Freight trains pass through Williams twice a day on the Union Pacific: California Northern Railroad (CFNR) line, which traverses the City from north to south.

While no studies or plans have been developed to date, establishing a rail-transit link as part of the transportation corridor between the Williams area and the Bay and the Sacramento areas would facilitate the long-term economic growth of the area. Rail transit also offers the potential for more comfortable and expedient alternatives for the movement of people and products between the Williams and the Bay Area. This should be a consideration for planning over the longer-term.

Aviation

The Colusa County Airport is located 12 miles and is about 20 minutes from Williams. Due to this distance, it would not be affected by any development or redevelopment proposed in this plan update.

The Williams Soaring Center is a small, private glider airport, which is located along the east side of Husted Road north of its intersection with E Street. The soaring center has a 2,300 foot paved runway paralleling Husted Road.

4.4.3 Regulatory Setting

Federal

Safe, Accountable, Efficient Transportation Equity Act (SAFETEA)

The Safe, Accountable, Efficient Transportation Equity Act, or SAFETEA, was approved by Congress in July 2005 and signed into law by the President in August 2005. This law provides $244 billion in

guaranteed funding for Federal surface transportation programs for the between 2005 and 2010, an average annual increase of 35 percent from previous years. This law replaces the Transportation Equity Act for the 21st Century (TEA-21), which expired in September 2003.

State of California

Caltrans

Caltrans is responsible for planning, design, construction, and maintenance of all State highways. Any federally funded transportation improvements are subject to review by Caltrans staff and the California Transportation Commission. The Guide for the Preparation of Traffic Impact Studies (Caltrans, 2001) provides consistent guidance for Caltrans staff who reviews local development. This guide also applies to land use change proposals and helps to inform local agencies of the information needed for Caltrans to analyze the traffic impacts to State highway facilities including signalized intersections.

Local

The City of Williams has jurisdiction over all City streets and City-operated traffic signals, while Colusa County has jurisdiction over roads outside the City limits, including those within the City's SOI. State highways, including State Route 20 and Interstate 5, are under the jurisdiction of the California Department of Transportation (Caltrans). Colusa County Transit System (CCTS) operates public transportation in and around the project area.

4.4.4 Impact Methodology

The City of Williams in has developed a regional travel demand-forecasting model, which has been used as a reference for this EIR and is the basis for determining the projected levels of service indicated earlier in this section. The model is designed to forecast average daily traffic in the City of Williams' 54 traffic analysis zones, nearly all freeway, arterial, collector streets, and many of the more significant local streets. It also includes planned improvements as identified in the proposed General Plan. The model was validated against existing traffic counts conducted by the City. Further, peak hour traffic turn movement counts were extracted from recent traffic studies to round out the traffic count database. The procedures for forecasting traffic are outlined below.

1. Raw (unadjusted) model traffic volumes are extracted and imported into a post-processing spreadsheet. The extracted data includes: 1) the model estimates for the existing base year traffic volumes; and 2) the model estimates for the future year traffic volumes.
2. The base year and future year traffic volumes are subtracted and then added to the existing traffic count to create a future traffic volume.
3. For those roadway segments where no existing traffic volume exists, the future forecast volumes are used. The model was validated against existing traffic counts and was adjusted to match these counts as close as possible. Given that the overall margin of error is small, it is assumed that the estimates for existing traffic are close to the actual traffic volumes.

4. The future (projected) traffic volumes are then divided by the daily or directional peak hour capacities depending upon the street classifications used for the roadway segment. The resultant volume-to-capacity ratios are then assigned a daily or peak hour level of service.
5. For those roadway segments that operate at sub-standard levels of service, either the roadway classification or the number of travel lanes is changed to reflect future mitigation. The resultant roadway configuration is then retested for level of service.

The analysis of traffic impacts in Williams for Chapter 8 of this General Plan were taken from the Transportation Impact Study prepared for the City of Williams in 2011 by Omni-Means Engineers and Planners and included in this DEIR as Appendix A.

4.4.5 Standards of Significance

The Williams 2030 Updated General Plan establishes development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in "Appendix G - Environmental Checklist Form", of the CEQA Guidelines and based on industry standards for the determination of impacts based on the potential deterioration in levels of service (LOS). The project (or the project alternatives) would result in a significant impact if it would:

a. Causes an increase in traffic which is considered substantial in relation to the existing traffic load and capacity of the street system – streets or intersections exceeding a LOS D as a result of the intended project or plan;
b. Exceed, either individually or cumulatively, a level of service standard for designated roads or highways;
c. Substantially increase hazards due to a design feature or incompatible uses;
d. Result in inadequate emergency access;
e. Conflict with adopted policies, plans, or programs supporting alternative transportation.

4.1.6 Impacts and Mitigation

Traffic Volumes and Service Levels

IMPACT 4.4.1:	**Future development would cause an increase in traffic which is considered substantial in relation to the existing traffic load and capacity of the street system.**
IMPACT 4.4.2:	**Future development would exceed, either individually or cumulatively, a level of service standard for designated roads or highways.**
Level of Significance Before Policies/Mitigation:	Potentially Significant Impact
Mitigation Measures:	Required
Level of Significance After Policies/Mitigation:	Less than Significant Impact

Impact Analysis

With a projected increase in population between 7,664 and 9,669 by 2030, the Proposed General Plan update includes substantial amounts of new development in and around the City relative to its current size. Growth and development implied by the plan would substantially increase the total number of

vehicle trips and miles of vehicular travel in some portions of the project area as compared to existing conditions. In order to mitigate traffic increases, accommodate projected growth, and address an acceptable Level of Service, improvements would be required to a number of existing roadway facilities and several new facilities.

Mitigation Measures/Policies and Recommended Actions in the Proposed General Plan Update
Specifically, the Chapter 8, Circulation Element, of the Updated General Plan identifies and proposes widening or other improvements for three roadways and 17 intersections that could be adversely affected by future traffic increases attributed to Williams' future growth. These are underscored by the following recommended policies:

8.c-1 The City shall maintain and update a functional classification of the street system (Figure 8.1) that reflects land use and traffic patterns.

8.c-2 The City shall establish a data collection program for the street system to include a physical inventory, traffic volumes and accident reports.

8.c-3 The City shall strive to control traffic levels in residential neighborhoods a "livable communities standard", to not exceed a threshold of 3,500 ADT on any given residential street segment. As the City grows and this threshold is approached, alternative traffic calming strategies may be considered and implemented as resources permit. Such calming devices may include planted medians, landscaped planter strips, landscaped traffic circles.

8.c-6 The City and Redevelopment Agency will explore opportunities to construct new, or improve safety of the existing east-west freeway crossings on E Street, or may require such improvements as a condition of new development, as appropriate.

8.d-5 Through the Capital Improvement Program, the City shall develop a priority system for physical improvements based on demonstrated needs according to the collected data on physical conditions, traffic volumes and safety reports. CIP improvements shall be made consistent with the City's Circulation Master Plan.

Additionally, the Updated General Plan establishes a set of recommended policies to ensure that developers of future subdivisions, housing projects, and other non-residential projects provide adequate streets and other transportation facilities to provide adequate access and circulation:

8.b-2 New development shall incorporate highly connected street and pedestrian/bicycle networks, with many connections between new and older neighborhoods and between neighborhood and commercial and downtown areas.

8.d-1 Establish a City transportation impact fee program that addresses impacts to City transportation facilities. Following adoption of the 2010 General Plan, the City will revise its development impact fees based on a Nexus Study.

8.d-9 Limit driveway intersections and curb cuts along arterial and collector roadways in order to provide improved mobility and public safety.

Hazards and Emergency Services Access

IMPACT 4.4.3: **Development will substantially increase hazards due to a design feature or incompatible uses.** **IMPACT 4.4.4:** **Development will result in inadequate emergency access.**	
Level of Significance Before Policies/Mitigation:	Potentially Significant Impact
Mitigation Measures:	Required
Level of Significance After Policies/Mitigation:	Less than Significant Impact

Analysis

Since the Updated General Plan allows for a significant increase in development in the City, new roads will be required to service proposed development. Construction of new roads and encroachments onto existing roads could potentially increase traffic and circulation related hazards in the area. In addition, traffic congestion resulting from the increased traffic may also increase hazards. In order to mitigate for these potential impacts, all future roads in the City will be required to adhere with the General Plan, Subdivision and Zoning provisions adopted by the City, as well as Federal, State, and local ordinances regarding development and road construction.

Mitigation Measures/Goals and Recommended Actions in the Proposed General Plan Update

In addition, this document includes mitigation to improve the existing roadway system to ensure traffic and circulation safety in the City. Chapter 8, Circulation, of the Updated General Plan report includes policy statements that will ensure the design of safe roadways, adequate ingresses and egresses for development, and design standards that prevent the deterioration of emergency vehicle access. Adherence to these measures will mitigate the potential of occurring hazards. Policy and action statements include the following:

8.h- Provide for desirable and safe alternative access to schools, parks, and shopping areas from residential areas within the City.

Actions:

8.d-10 Encourage the widening of State highways to allow the safe movement of farm vehicles and equipment.

8.d-11 Provide dedicated pedestrian and bike lanes on the E Street overpass of I-5, as recommended in Chapter 5, Open Space and Conservation.

8.h-1 The City shall include consideration of the visual aspects of a development for roadways. Aesthetic consideration shall include architectural compatibility and landscaping.

8.h-2 The City shall consider the construction of landscaped medians and landscaped sidewalk strips on commercial thoroughfares to help slow traffic flows and to help provide for a more scenic roadway.

8.h-3 The City shall consider integrating residential street features that calm traffic, increase safety and are aesthetic amenities to neighborhoods. Additionally, reduction in residential street width shall also be considered as a traffic calming option. If such street

width reduction is recommended and implemented, consideration for reduction of public right of way should also be included. All traffic calming and road narrowing projects shall be designed to accommodate emergency service vehicle accessibility.

8.h-4 The City shall plan and require construction of bikeways, sidewalks, and pedestrian access ways to major destination points with emphasis on providing connecting access to schools, parks and shopping centers from residential neighborhoods.

8.h-5 The City shall evaluate the pedestrian and bicycle safety of critical circulation links, such as the E Street Bridge over Highway 5, and make improvements to these linkages to facilitate safe travel.

Chapter 3, Land Use and Character, of the Updated General Plan report includes a series of policy statements that, if adhered to through zoning restrictions, will reduce substantially the likelihood of any land use conflicts that would result in any traffic hazards. Policies include the following:

3.40. Infrastructure and public services will be brought to a sufficient, level of service within the developed area, requisite with needs.

3.50. New development will be compatible with existing and well established neighborhoods through appropriate use and design transitioning and cohesive types and patterns of development.

These land use policies are further reinforced by the following policies and actions recommended in Chapter 8, Circulation:

8.e- Improve travel safety, accessibility and energy efficiency.

Actions:

8.e-1 The City shall review the location and frequency of accidents and develop specific site improvements.

8.e-2 The City shall consider changes in speed limits, parking and turning restrictions to enhance public safety.

8.e-3 The City shall strive to provide for smooth traffic flow and a compact urban pattern to maximize efficient movement between residential, commercial, and public areas.

8.e-4 The City shall develop an Americans With Disabilities Act (ADA) transition and compliance program for pedestrian facilities.

8.f- Provide for truck and emergency vehicle traffic.

Actions:

8.f-1 Accommodate truck and emergency vehicle traffic.

8.f-2 The City shall designate by ordinance truck routes to direct trucks to routes that maintain sufficient carrying capacity and to discourage truck traffic on local residential streets (refer to Figure 4).

8.f-2 The City shall identify primary emergency vehicle routes and links between the medical facilities, fire, and police stations.

8.f-3 Design standards for local streets will provide adequate access for fire and police department services. Refer to all actions under Policy 8-b.

8.f-4 Upon signalization improvements, the City shall upgrade traffic signal installations to include "opticom" emergency vehicle preemption to enhance emergency response safety.

8.g- The planning, alignment, and improvement of the street network will reflect the proposed land use pattern of the General Plan.

Actions:

8.g-1 The functional classification of streets will identify street purpose and the standards of improvement necessary to accommodate anticipated traffic demand.

8.g-2 In establishing priorities for street improvements, the potential for effects on land use and traffic patterns will be evaluated.

8.g-3 The City shall adopt new street plan lines (street alignments) for arterials and collectors to protect rights-of-way for future street improvements.

8.g-4 Projects included in the Capital Improvement Program and proposed for regional transportation plans should prioritize, in the following order: 1) projects that improve operations on existing roads without increasing capacity, 2) projects that encourage alternative transportation modes, 3) projects that increase capacity on existing roadways, and 4) new roadways.

Conflict with Other Plans and Programs

IMPACT 4.4.5: Development will conflict with adopted policies, plans, or programs supporting alternative transportation.	
Level of Significance Before Policies/Mitigation:	Potentially Significant Impact
Mitigation Measures:	Required
Level of Significance After Policies/Mitigation:	Less than Significant Impact

Analysis

Increased traffic attributed to future development will mean that it may take pedestrians longer to cross streets and bicyclists may avoid traffic on arterials, increasing total travel time. Increases in traffic, particularly truck traffic, also may increase bicycling hazards. However, the proposed General Plan includes policies, which are directed towards improving pedestrian and bicycle safety and operation. In addition, the Proposed General Plan includes plans for pedestrian and bicycle circulation through the proposed residential development projects and promotes pedestrian and bicycle access throughout the City, especially to the downtown commercial area. These policies are intended to mitigate any adverse potential impacts to the pedestrian and bicycle circulation system.

Mitigation Measures/Goals and Recommended Actions in the Proposed General Plan Update

The City will implement a variety of goals and recommended actions designed to promote alternative transportation methods. By including the goals and recommended actions from the Updated General

Plan provided below, the plan would not conflict with any adopted policies, plans, or programs supporting alternative transportation and any associated impacts to alternative transportation would be reduced to a less than significant level. Policies and actions include the following:

8.b- Establish Complete Street Subdivision Criteria for new development and improve convenience, energy efficiency, and safety for multi-modal travel in existing neighborhoods.

Actions:

8.b-1 The City will develop Complete Street Subdivision Development Standards. These standards shall include provisions for cul-de-sac designs, required stubbing of streets to adjacent planned development areas, block lengths and neighborhood connectivity.

8.b-2 New development shall incorporate highly connected street and pedestrian/bicycle networks, with many connections between new and older neighborhoods and between neighborhood and commercial and downtown areas.

8.c- Monitor the operation and performance of the multi-modal circulation system.

Actions:

8.c-1 The City shall maintain and update a functional classification of the street system (Figure 8.1) that reflects land use and traffic patterns.

8.c-2 The City shall establish a data collection program for the street system to include a physical inventory, traffic volumes and accident reports.

8.c-3 The City shall strive to control traffic levels in residential neighborhoods a “livable communities standard”, to not exceed a threshold of 3,500 ADT on any given residential street segment. As the City grows and this threshold is approached, alternative traffic calming strategies may be considered and implemented as resources permit. Such calming devices may include planted medians, landscaped planter strips, landscaped traffic circles.

8.c-4 The City will seek funding for, and include pedestrian and bicycle improvements in Capital Improvement Planning, as feasible. Such improvements will include, but are not limited to:

- Construction of sidewalks where they do not currently exist;
- Widening of sidewalks in high pedestrian traffic areas;
- Installation of bike paths and lanes; and
- Improved crossings of roads and railroad for bicycles and pedestrians.

8.c-6 The City and Redevelopment Agency will explore opportunities to construct new, or improve safety of the existing east-west freeway crossings on E Street, or may require such improvements as a condition of new development, as appropriate.

8.c-7 All transportation improvement projects proposed for inclusion in the City's Capital Improvement Program shall be consistent with air quality, land use, circulation, and other goals and policies of the General Plan.

8.d- Maintain roadways and circulation improvements to ensure safe, energy efficient and convenient daily travel for pedestrians, bicyclists, transit users and drivers as Williams grows.

Actions:

8.d-1 Establish a City transportation impact fee program that addresses impacts to City transportation facilities. Following adoption of the 2010 General Plan, the City will revise its development impact fees based on a Nexus Study.

8.d-2 New development shall construct and dedicate streets that accommodate the full range of locally available travel modes.

8.d-3 New development shall construct and dedicate and/or contribute to a connected bicycle/pedestrian network that is designed to promote travel to schools, parks, and other major destinations.

8.d-4 Bicycle parking should be provided as a part of all non-residential development.

8.d-5 Through the Capital Improvement Program, the City shall develop a priority system for physical improvements based on demonstrated needs according to the collected data on physical conditions, traffic volumes and safety reports. CIP improvements shall be made consistent with the City's Circulation Master Plan.

8.d-6 The City shall maintain and update a Bikeway Master Plan to guide the orderly provision of bikeway facilities throughout the City.

8.d-7 The City shall integrate local bikeway planning with regional plans.

8.d-8 The City shall seek State Bicycle Lane Account funds and other funding to help pay for the completion of a comprehensive bikeway system within in the City.

8.d-9 Limit driveway intersections and curb cuts along arterial and collector roadways in order to provide improved mobility and public safety.

8.d-10 Encourage the widening of State highways to allow the safe movement of farm vehicles and equipment.

8.d-11 Provide dedicated pedestrian and bike lanes on the E Street overpass of I-5, as recommended in Chapter 5, Open Space and Conservation.

4.5 Air Quality

4.5.1 Introduction

This chapter discusses air quality in the City of Williams and evaluates potential local and regional air quality impacts associated with the City of Williams General Plan Update. This chapter is based on both quantitative and spatial analyses, and was prepared using information from the California Air Resources Board, US Environmental Protection Agency, and the Colusa County Air Pollution Control District.

4.5.2 Environmental Setting

The Colusa County Air Pollution Control District (CCAPCD) implements the regulations and rules governing air quality in Colusa County. Colusa County is located within, and is a part of, the Sacramento Valley Air Basin (SVAB). The northern portion of the SVAB is comprised of the following seven counties: Butte, Colusa, Glenn, Shasta, Sutter, Tehama and Yuba counties. These seven counties together form the Northern Sacramento Valley Planning Area (NSVPA). The NSVPA is predominantly rural, with few major urban areas.

Climate and Meteorology

This section describes pertinent characteristics of the air basin and provides an overview of the physical conditions affecting pollutant dispersion in the Project Area. Climate and air quality are influenced by a variety of factors including geographic location, topography, and urbanization of an area. Atmospheric conditions, such as wind speed, wind direction, and air temperature also play a role in air quality.

The City of Williams and the associated Project Area of the City of Williams General Plan Update are located in the central portion of the Sacramento Valley. The entire air basin is about 200 miles long in a north-south direction, and has a maximum width of about 150 miles including the surrounding foothill regions. The valley floor averages only about 50 miles in width. The NSVPA is bounded on the north and west by the Coastal Mountain Range and on the east by the southern portion of the Cascade Mount Range and the northern portion of the Sierra Nevada Mountains. These mountain ranges easily reach heights of 6,000 feet and have individual peaks that are much higher. This topography provides a substantial physical barrier to both the locally created pollution and the pollution that is transported via prevailing winds northward from the Sacramento Metropolitan area.

The climate of this area is typically referred to as a Mediterranean climate with hot, dry summers and cool, wet winters. During the summer months (mid-April to mid-October), significant precipitation is rare. Temperatures range 50 degrees Fahrenheit at night to daytime highs in the 90s to low 100s. During the winter, the weather the area experiences rainstorms and foggy weather. These periods of dense and persistent fog are most common between storms. Winter daytime temperatures average around 50 degrees with the nighttime temperatures in the upper 30s with an occasional dip below freezing.

Winds in the Project area are primarily up- and down-valley due to the channeling effect of the mountains to either side of the valley and the marine breezes that flow through the Carquinez Strait.

The interplay between these marine breezes and the mountains surrounding the valley creates a low-level southerly breeze that is important to the Sacramento Valley by transporting air pollutants over large distances.

The region experiences temperature inversions that limit atmospheric mixing and trap pollutants. This results in high pollutant concentrations near the ground surface. Vertical dispersion of air pollutants in the area is often affected by the presence of this persistent temperature inversion. While input of cumulative pollutants into the atmosphere from mobile and stationary sources does not vary substantially by season, the duration of an inversion layer increases the concentration of pollutants in the inversion layer. To disperse the pollutants horizontally, a strong wind or daytime warming of the surface air layer is needed.

Colusa County experiences two types of inversion layers. The first type of inversion layer contributes to photochemical smog problems by confining pollution to a layer near the ground, typically occurring in the summer months. During this type of inversion, sinking air forms a "lid" over the region. The second kind of inversion causes localized air pollution "hot spots" at emission sources due to poor dispersion. This generally occurs in the winter nights when the air is stagnant and foggy. Motor vehicle emissions such as carbon monoxide (CO) and nitrogen dioxide (NO2) are a concern particularly in the winter because of the low inversions and stagnant air that prevent the emissions from dispersing. Ozone (O3) occurs more in the summer months due to the lack of intense sunlight which is needed to produce O3 from its chemical precursors, volatile organic compounds (VOCs) and oxides of nitrogen (NOx).

4.5.3 Air Quality Standards

Federal

The federal Clean Air Act (CAA) governs air quality in the United States and California. Air quality in the State is also governed by more stringent regulations under the California CAA. The federal level, the US Environmental Protection Agency (EPA) administers the CAA, while California CAA is administered by the California Air Resources Board (CARB) at the State level and by the CCAQD at the regional and local level. The EPA is responsible for enforcing the federal CAA, as well as establishing the National Ambient Air Quality Standards (NAAQS).

Air pollution is a general term referring to one or more chemical substances that degrade the quality of the atmosphere. Seven pollutants have been identified by the federal EPA as being of concern nationwide: CO, O3, NOx, particulate matter (PM) sized 10 microns or less (PM10), fine particulate matter equal to or less than 2.5 microns in size (PM2.5), NO2, sulfur dioxide (SO2) and lead (Pb). Air quality studies generally focus on five pollutants that are most commonly measured and regulated: CO, O3, NO2, SO2, and suspended particulate matter (ie PM10 and PM2.5).

State of California

Pollutants regulated under the California CAA are similar to those regulated under the federal CAA. In many cases, California standard are more stringent than the national ambient air quality standards.

Federal and State air quality standards are shown in Table 4.5.1. As levels of sulfur dioxide have steadily decreased throughout the State, monitoring for this criteria air pollutant is gradually being phased out.

Most of the criteria pollutants are directly emitted, but O3 is a secondary pollutant that is formed in the atmosphere by chemical reactions between NOx and VOCs, most commonly referred to as reactive organic gases (ROG). Criteria air pollutants are classified in each air basin, county, or in some cases, within a specific urbanized area. The classification is determined by comparing actual monitoring data with state and federal standards. If a pollutant concentration is lower than the standard, the area is classified as attainment for that pollutant. If an area exceeds the standard, the area is classified as nonattainment for that pollutant. If there is not enough data available to determine whether the standard has been exceeded in an area, the area is designated unclassified.

Table 4.5.1 National and California Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [a]	Federal Standards [b]	
		Concentration [c]	Primary [c,d]	Secondary [c,e]
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m^3)	--	Same as Primary Standard
	8 Hour	0.070 ppm (137 µg/m^3)	0.075 ppm (147 µg/m^3) [5]	
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m^3	150 µg/m^3	Same as Primary Standard
	Annual Arithmetic Mean	20 µg/m^3	--	
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	No separate state standard	35 µg/m^3	Same as Primary Standard
	Annual Arithmetic Mean	12 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	None
	8 Hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3) [f]	Same as Primary Standard
	1 Hour	0.18 ppm (339 µg/m^3)	100 ppb (188 µg/m^3) [f]	None
Sulfur Dioxide (SO_2)	1 Hour	0.25 ppm (655 µg/m^3)	75 ppb (188 µg/m^3) [f]	--
	3 Hour	--	--	0.5 ppb (1,300 µg/m^3) [f]
	24 Hour	0.04 ppm (105 µg/m^3)	--	--
Lead (Pb) [h]	30 Day Average	1.5µg/m^3	--	--
	Calendar Quarter	--	1.5 µg/m^3	Same as Primary Standard
	Rolling 3 Month Average [i]	--	0.15 µg/m^3	
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer – visibility within 10 miles or more due to particles when the relative humidity is less than 70 percent.	No Federal Standards	

Table 4.5.1 National and California Ambient Air Quality Standards			
Pollutant	**Averaging Time**	**California Standards [a]**	**Federal Standards [b]**
Sulfates (SO_4)	24 Hour	25 µg/m^3	
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	
Vinyl Chloride [h]	24 Hour	0.01 ppm (26 µg/m^3)	

Notes:

a California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter – PM10, PM2.5, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations (CCR).

b National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98% of the daily concentrations, averaged over three years, are equal to or less than the standard.

c Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25 C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25 C and a reference pressure of 760 torr; parts per million (ppm) in this table refers to ppm by volume, or micromoles of pollutants per mole of gas.

d National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

e National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

f To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100pm (effective January 22, 2010). Note that the EPA standards are in units of parts per billion (ppb). California standards are in units of ppm. To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standards of 53ppb and 100 ppb are identical to 0.053 ppm and 0.100ppm, respectively.

g On June 2, 2010, the US EPA established a new 1-hour sulfur dioxide standard, effective August 23, 2010, which is based on the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations. EPA also proposed a new automated Federal Reference Method (FRM) using ultraviolet technology, but will retain the older pararosaniline methods until the FRM have adequately permeated State monitoring networks. The EPA also revoked both the existing 24-hour sulfur dioxide standard of 0.14ppm and the annual primary sulfur dioxide standard of 0.030ppm, effective August 23, 2010. The secondary sulfur dioxide standard was not revised at that time; however, the secondary standard is undergoing a separate review by EPA. Note that the new standard is in units of ppb. California standards are in units of ppm. To directly compare the new primary national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

h The CARB has identified lead and vinyl chloride as 'toxic air contaminants' (TACs) with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

i National lead standard, rolling 3-month average: final rule signed October 15, 2008.

Source:

California Air Resources Board 9/8/10, http://www.arb.ca.gov/research/aaqs/aaqs2.pdf, accessed 8/24/11

Carbon Monoxide

CO is an odorless, colorless toxic gas that is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. In cities, automobile exhaust can cause as much as 95 percent of all CO emissions. Relatively high concentrations are typically found near crowded intersections and along heavily used roadways caring slow-moving traffic. Even under the severest meteorological and traffic conditions, high concentrations of CO are limited to locations within a relatively short distance (300 to 600 feet) of heavily traveled roadways. At high concentrations, CO can reduce the oxygen-carrying capacity of blood and cause headaches, dizziness and unconsciousness.

Carbon monoxide concentrations are typically higher in winter. With the inversions discussed previously in this chapter, and the stagnant low-level fog, the dispersion of vehicle emissions is reduced. In addition, the CO emission rates of vehicles also show an increase at low air temperatures.

Standards have been set for both the state and federal regulations for 1 and 8 hour averages. The state 1 hour standard is 20ppm and the federal 1 hour standard is 35 ppm, not to be exceeded more than one day per year. The 8 hour standard for the state is 9.0ppm and the federal standard is 9 ppm. For CO, the County is designated as unclassifiable / attainment under federal standards and unclassified under state standards.

Ozone

Ground-level ozone, or O3, is the principal component of smog. O3 is not directly emitted into the atmosphere, but instead forms through a photochemical reaction of reactive organic gases (ROG) and nitrogen oxides (NOx), which are known as O3 precursors. O3 levels are highest from late spring through autumn when precursor emissions are high and meteorological conditions are warm and stagnant.

Motor vehicles create the majority of ROG and NOx emissions in Colusa County and the City of Williams. Exposure to levels of O3 above current ambient air quality standards can lead to human health effects such as lung inflammation and tissue damage and impaired lung functioning. O3 exposure is also associated with symptoms such as coughing, chest tightness, shortness of breath, and worsening of asthma symptoms. Outdoor workers, athletes, children, and others who spend large amounts of time outdoors during smoggy periods are at the greatest risk of these harmful health effects. Elevated O3 levels can reduce crop and timber yields, damage native plants, and damage materials such as rubber, fabrics, and plastics.

State and federal standards for ozone have been set for 1- and 8-hour averaging times. The state 1-hour ozone standard is 0.09 ppm, not to be exceeded. EPA recently replaced the 1-hour ozone standard with an 8-hour standard of 0.075ppm. However, the California 1-hour standard will remain in effect. The state 8-hour standard is 0.070 ppm, not to be exceeded. The County is designated as “nonattainment-transitional” for the state O3 standards, and unclassifiable / attainment under federal standards.

Nitrogen Dioxide

Nitrogen oxides (NOx) are a family of highly reactive gases that are primarily O3 precursors and react in the atmosphere to form acid rain. Peak readings of nitrogen dioxide (NO2) occur in areas that have a high concentration of combustion sources, such as motor vehicle engines, power plants, refineries and other industrial operations.

NO2 can irritate and damage the lungs, and lower resistance to respiratory infections such as influenza. The health effects of short-term exposure are still unclear. Chronic exposure to NO2 may aggravate eyes and mucus membranes and cause pulmonary dysfunction. The County is designated as unclassifiable / attainment under federal standards and attainment for state NO2 standards.

Particulate Matter

Particulate matter (PM) is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, and dust. Particles 10 microns or less in diameter are defined as “respirable particulate matter,” or PM10. Fine particles are 2.5 microns or less in diameter (PM2.5) and can contribute significantly to regional haze and visibility reduction. Inhalable particulates come from smoke, dust, aerosols and metallic oxides. Although particulates are found naturally in the air, most PM found in the Williams area is emitted either directly or indirectly by motor vehicles, construction, agricultural activities, and wind erosion of disturbed areas. Most PM2.5 is comprised of combustion products, such as smoke.

Particulate matter affects human health through outdoor exposure and is associated with lung and heart-related respiratory illnesses, including asthma. Besides the human health impacts, PM exposure can reduce visibility and the acidic portion of PM can harm crops, forests, aquatic, and other ecosystems.

The state PM10 standards are 50 micrograms per cubic meter as a 24-hour average and 20 micrograms per cubic meter as an annual arithmetic mean. The federal PM10 standards are 150 micrograms per cubic meter as a 24-hour average. The federal PM2.5 standards are 15 micrograms per cubic meter for the annual average and 35 micrograms per cubic meter for the 24-hour average. The state PM2.5 standard is 12 micrograms per cubic meter for the annual arithmetic mean. The County is unclassified for the federal PM10 standards, but nonattainment for the state PM10 standards. For PM2.5, the County is designated as unclassifiable / attainment under federal standards and attainment for the state PM2.5 standards.

Sulfur Dioxide

Sulfur oxides, primarily SO2, are a product of high-sulfur fuel combustion. The main sources of SO2 are coal and oil used in power stations, industry, and for domestic heating, as well as motor vehicle exhaust and other combustion processes. The health effects of SO2 include lung disease and breathing problems for asthmatics. SO2 in the atmosphere contributes to the formation of acid rain. In the Sacramento Valley Air Basin, there is little use of coal and oil, and SO2 is of lesser concern than in many

other parts of the country. The County is designated as unclassifiable under federal standards and attainment for state SO2 standards.

Toxic Air Contaminants

Toxic Air Contaminants (TAC) are a broad class of compounds known to cause morbidity or morality, usually because they cause cancer. They include both organic and inorganic chemical substances, and they may be emitted from a variety of common sources. These include gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. TACs are regulated separately from the criteria air pollutants at both the federal and state levels.

TACs are found in ambient air, especially in urban areas. Diesel exhaust is the predominant TAC in urban air and is estimated to represent about two-thirds of the cancer risk from TACs, based on the statewide average. According to CARB, the exhaust from diesel engines contains hundreds of different gaseous and particulate components, many of which are toxic. Many of these compounds adhere to the particles and because diesel particles are so small, they penetrate deep into the lungs. Diesel particulate matter (DPM) has been identified as a human carcinogen. Mobile sources, such as trucks, buses, automobiles, trains, and farm equipment are by far the largest source of diesel emissions. DPM concentrations are much higher near heavily traveled highways and intersections.

In cool weather, smoke from residential wood combustion can be a source of TACs. Localized high TAC concentrations can result when cold stagnant air traps smoke near the ground. This occurs in valleys during the winter. Wood smoke also contains a significant amount of PM10 and PM2.5. Wood smoke is an irritant and is implicated in worsening asthma and other chronic lung problems.

Local Air Quality Monitoring Data

Colusa County has an air quality monitoring site on Sunrise Boulevard north of the Colusa County Airport. This monitoring site collects data for two pollutants: ozone and PM. Table X.X summarizes data from the monitoring station. The data includes information covering the most current three years of data (2007-2009).

Table 4.5.2 Ambient Air Quality Monitoring Data for the Colusa-Sunrise Boulevard Station

Pollutant Standards	2007	2008	2009
1-Hour Ozone			
Maximum 1-hour concentration (ppm)	0.080	0.091	0.078
1-hour California designation value	0.08	0.09	0.09
1-hour expected peak day concentration	--	--	--
Number of days standard exceeded [a] CAAQA 1-hour (<0.09)	0	0	0
8-Hour Ozone			
National maximum 8-hour concentration (ppm)	0.067	0.081	0.068
National second highest 8-hour concentration (ppm)	0.067	0.075	0.068
State maximum 8-hour concentration (ppm)	0.068	0.082	0.069
State second highest 8-hour concentration (ppm)	0.067	0.076	0.069

Table 4.5.2 Ambient Air Quality Monitoring Data for the Colusa-Sunrise Boulevard Station			
Pollutant Standards	2007	2008	2009
8-hour national designation value	0.067	0.069	0.068
8-hour California designation value	0.077	0.077	0.076
8-hour expected peak day concentrations	--	--	--
Number of days standard exceeded [a]			
NAAQS 8-hour (>0.075 ppm)	0	1	0
CAAQS 8-hour (>0.070 ppm)	0	6	0
Carbon Monoxide (CO)			
National [b] maximum 8-hour concentration (ppm)	--	--	--
National [b] second highest 8-hour concentration (ppm)	--	--	--
State [c] maximum 8-hour concentration (ppm)	--	--	--
State [c] second highest 8-hour concentration (ppm)	--	--	--
Maximum 1-hour concentration (ppm)	--	--	--
Second-highest 1-hour concentration (ppm)	--	--	--
Number of days standard exceeded [a]			
NAAQS 8-hour (≥9 ppm)	0	0	0
CAAQS 8-hour (≥9.0 ppm)	0	0	0
NAAQS 1-hour (≥35 ppm)	0	0	0
CAAQS 1-hour (≥20 ppm)	0	0	0
Particulate Matter (PM10)[d]			
National [b] maximum 24-hour concentration (μg/m^3)	43.0	90.3	56.5
National [b] second highest 24-hour concentration (μg/m^3)	42.0	80.2	54.2
State [c] maximum 24-hour concentration (μg/m^3)	43.0	90.3	56.6
State [c] second highest 24-hour concentration (μg/m^3)	42.0	81.8	54.1
State annual average concentration (μg/m^3) [e]	22.0	30.5	22.1
National annual average concentration (μg/m^3)	21.5	30.4	--
Number of days standard exceeded [a]			
NAAQS 24-hour (>150 μg/m^3) [f]	--	--	0
CAAQS 24-hour (>50 μg/m^3) [f]	0	62.4	18.4
Particulate Matter (PM2.5)			
National [b] maximum 24-hour concentration (μg/m^3)	30.0	54.5	21.5
National [b] second highest 24-hour concentration (μg/m^3)	28.0	35.2	14.6
State [c] maximum 24-hour concentration (μg/m^3)	58.0	169.6	34.0
State [c] second highest 24-hour concentration (μg/m^3)	41.1	99.9	28.1
National annual designation value (μg/m^3)	7.2	--	--
National annual average concentration (μg/m^3)	6.7	--	--
State annual designation value (μg/m^3)	11	9	10
State annual average concentration (μg/m^3) [e]	9	--	10.3
Number of days standard exceeded [a]			
NAAQS 24-hour (>35 μg/m^3) [f]	0	--	--

CAAQS: California ambient air quality standards

NAAQS: National ambient air quality standards

--: Insufficient data available to determine the value.

Table 4.5.2 Ambient Air Quality Monitoring Data for the Colusa-Sunrise Boulevard Station			
Pollutant Standards	2007	2008	2009

Notes:

a. An exceedance is not necessarily a violation.

b. National statistics are based on standard conditions data. In addition, national statistics are based on samplers using federal reference or equivalent methods.

c. State statistics are based on local conditions data, except in the South Coast Air Basin, for which statistics are based on standard conditions data. In addition, State statistics are based on California approved samplers.

d. Measurements usually are collected every 6 days.

e. State criteria for ensuring that data are sufficiently complete for calculating valid annual averages are more stringent than the national criteria.

f. Mathematical estimate of how many days concentrations would have been measured as higher than the level of the standard, had each day been monitored. Values have been rounded.

Source:

California Air Resources Board 2009, US Environmental Protection Agency 2009.

Sensitive Receptors

Sensitive receptors are facilities that house or attract children, the elderly, and people with illnesses, or others who are especially sensitive to the effects of air pollutants. Hospitals, schools, convalescent facilities, and residential areas are examples of sensitive receptors. Residential uses are considered sensitive because people in residential areas are often at home for extended periods of time, so they can be exposed to pollutants for extended periods. Land uses in the project area where sensitive receptors may be exposed to increased levels of pollutants during construction include residences, schools, and parks.

4.5.4 Regulatory Setting

This section summarizes key federal, state and regional regulations and policies that would apply to the proposed General Plan Update. Air quality is regulated on many levels including the federal (EPA), state (CARB) and regionally (CCAPCD). Each jurisdiction has rules, regulations, policies and / or goals imposed upon them through legislation. Federal regulations may not be superseded, but state or regional regulations may be more restrictive. Local air districts have been given the authority to manage their own stationary source emissions. CARB requires the local air districts to develop rules and regulations for compliance with the NAAQS and CAAQS, but maintains regulatory authority over those regulations.

Federal

The Environmental Protection Agency (EPA) is responsible for implementing the Federal Clean Air Act (FCCA), first enacted in 1955 and amended numerous times thereafter. The FCAA established federal air quality standards known as the National Ambient Air Quality Standards (NAAQS). In order to protect the public health and welfare, these standards identify maximum levels of ambient (background) criteria pollutants that are considered safe, with an adequate margin. These criteria pollutants are Ozone (O3), Carbon Monoxide (CO), Nitrogen Dioxide (NO2), Sulfur Dioxide (SO2), Particulate Matter (PM10), Fine Particulate Matter (PM2.5) and Lead (Pb).

Federal clean air laws require areas with unhealthy levels of ozone, inhalable PM, CO, N20, and S20 to develop plans, known as State Implementation Plans (SIPs). SIPs are comprehensive plans that describe how an area will attain NAAQS. The 1990 amendments to the CAA set deadlines for attainment based on the severity of an area's air pollution problem.

State of California

The California Clean Air Act (CCAA) was approved in 1988 and requires local air district to prepare and maintain Air Quality Management Plans (AQMP) to achieve compliance with the CARB. Similar to the EPA, CARB designates areas within California as either attainment or non-attainment for each criteria pollutant based on whether the California Ambient Air Quality Standards (CAAQS) have been achieved. The CCAA requires that each local air district prepare and maintain an AQMP to achieve compliance with CAAQS. These AQMPs also serve as the basis for preparation of the California State Implementation Plan (SIP).

The CCAA also requires that once every three years the AQMDs assess their progress toward attaining the air quality standards. The triennial assessment is to report the extent of air quality improvement and the amounts of emission reductions achieved from control measures for the preceding three year period.

In compliance with the CCAA, the Northern Sacramento Valley Air Pollution Districts (NSVPA) jointly prepared and adopted the 2009 triennial update of the NSVPA Air Quality Attainment Plan, which addresses the progress made in implementing the 2006 Air Quality Plan and proposes modifications to the strategies necessary to attain the California AAQS for the 1-hour ozone standard at the earliest practicable date. The 2009 AQAP identifies those portions of the NSVPA designated as "non-attainment" for the CAAQS and discusses the health effects related to the various air pollutants. It identifies the air pollution problems which are to be cooperatively addressed on as many fronts as possible, and focuses on the adoption and implementation of control measures for stationary sources, area wide sources, and indirect sources, and addresses public education and information programs. The 2009AQAP also address the effect that pollutant transport has on the ability of the NSVPA to meet and attain the CAAQS.

Local

Local air districts are responsible for implementing strategies for air quality improvement and recommending mitigation measures for new growth and development. At the local level, air quality is managed through and use and development planning practices. The Colusa County Air Pollution Control District (CCAPCD) implements the rules and regulations regarding air quality in Colusa County. As such, the District has established preconstruction review requirements for new and modified stationary sources of air pollution for use of Best Available Control Technology (BACT), analyzes air quality impacts and ensures that the operation of such sources does not interfere with the attainment or maintenance of ambient air quality standards. The CCAPCD issues permits such as an Authority to Construct and a Permit to Operate for stationary sources of emissions. It monitors all pollutant levels through its

monitoring site on Sunrise Boulevard near Colusa. The CCAPCD also does long-range planning, education and public information activities.

Colusa County is designated by the state as nonattainment / transitional for ozone, moderate nonattainment for 1-hour ozone, and nonattainment for PM10. It is designated by the state as attainment for PM2.5 and CO. The County is federally designated as unclassified / attainment for 8-hour ozone and CO, unclassifiable / attainment for PM2.5 and unclassified for PM10.

4.5.5 Greenhouse Gases and Climate Change

Climate change has been recently more widely accepted and recognized as an imminent threat to the global climate, economy, and population. Thus, the climate change regulatory setting – nationally, regionally and locally – is continuing to evolve. This section will discuss the legislation, and executive orders relevant to Greenhouse Gas emissions.

Federal

Draft Council on Environmental Quality Guidance

In 2010, the Chair of the White House Council on Environmental Quality issued a memorandum providing guidance on consideration of the effects of climate change and GHG emissions under NEPA. The Memorandum indicates that the effects of projects directly emitting GHGs in excess of 25,000 tons annually be considered in a qualitative and quantitative manner. While not proposing this reference as a threshold for determining significance, it does promote the amount as a minimum standard for reporting emissions under the CAA. The Memorandum also recommends the evaluation of a project's cumulative effects; however, this Memorandum is undergoing public comment and is not effective until issued in final form.

National Tailpipe Standards

The EPA and the Department of Transportation, in 2010, adopted the first National Tailpipe Standard for new cars and trucks sold in the United States. The program applies to passenger cars, light-duty trucks, and medium-duty passenger vehicles for the model years 2012-2016. The regulations require these vehicles to meet combined average fuel economy of 35.5 miles per gallon. It is estimated that the standards will cut GHG emissions by 960 million metric tons over the lifetime of the vehicles.

State of California

Executive Order S-3-05

This Executive Order was designed to reduce California's GHG emissions to 2000 levels by 2010, 1990 levels by 2020 and 80% below 1990 levels by the year 2050.

Assembly Bill 32

This law establishes in regulation the same overall GHG emissions reduction goals as the Executive Order S-3-05, but it also mandates that CARB create a plan that includes market mechanisms, and implements rules to achieve reductions to GHGs. AB32 directs state agencies and the CAT to adopt GHG reduction

measures such as those relating to truck efficiency, port electrification, tire inflation, and reduction of PFCs, propellants and SF6.

California Energy Efficiency Standards for Residential and Non-Residential Buildings (Title 24)
Title 24 standards were most recently updated in 2008 to include the nation's first green building standards. These standards went into effect in 2010 with a second part of the code established as voluntary actions (Tier 1 and 2), designed to achieve a higher level of efficiency and sustainability. This includes planning and design for sustainable site development, energy efficiency, water conservation, material conservation and internal air contaminants. The Tier 1 and 2 voluntary requirements became mandatory in 2011.

AB 1493
This law requires the CARB to adopt regulations to reduce GHG emissions from noncommercial passenger vehicles and light-duty trucks for model year 2009 and beyond.

SB 375
This law establishes that regional transportation plans developed by Metropolitan Planning Organizations (MPOs) to include a sustainable communities strategy in their regional transportation plans that will achieve GHG emission reduction targets set the CARB.

Local

The CCAPCD has not established guidelines for evaluating the impacts of GHGs and has not established any rules or regulations specifically related to climate change.

4.5.6 Standards of Significance

The proposed General Plan would result in significant impacts to air quality if it would:

a. Conflict with or obstruct implementation of the applicable air quality plan.
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation.
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable NAAQS or CAAQS (including releasing emissions that exceed quantitative thresholds for ozone precursors).
d. Expose sensitive receptors to substantial pollutant concentrations.
e. Create objectionable odors affecting a substantial number of people.
f. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
g. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

As discussed previously in this section, the NAAQS and CAAQS were established by the federal and state governments to improve local and regional air quality. These standards are concentration-based (ie grams of pollutant per unit volumes) rather than mass-emission based (i.e., tons per year). Because

many air quality models estimate mass emissions, the majority of local air quality management districts have published mass emissions-based thresholds of significance to help determine whether project-level emissions would exceed the NAAQS or CAAQS and thus result in an air quality effect.

The CCAPCD has established the following thresholds for specific pollutants:

Threshold Type	ROG	NOx	PM10	CO
Construction	25 lb/day	25 lb/day	80 lb/day	500 lb/day
Operational	25 lb/day	25 lb/day	80 lb/day	500 lb/day

4.5.7 Impacts and Mitigation

The following discussion provides an analysis of potential project and cumulative air quality impacts that could occur as a result of the proposed General Plan Update for the 2030 time horizon. Potential impacts resulting from the increased traffic from planned development are evaluated and are based on the traffic model discussed in Section 4.4, Circulation. Motor vehicles, which are the primary contributors to air pollution, cross many jurisdictional boundaries. Additional information and data used in this air quality analysis can be found in Appendix B.

Conflict with Applicable Air Quality Plans

IMPACT 4.5.1:	**Implementation of the proposed City of Williams General Plan Update could conflict with or obstruct implementation of the applicable air quality plan.**
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	General Plan Policies and Recommended Actions
Level of Significance After Policies/Mitigation:	Less Than Significant

Impact Analysis and Mitigation Measures

The assessment of air quality plan consistency in this section is based on an analysis of impacts resulting from the projected build-out of the proposed General Plan Update. In accordance with the CCAA, an air quality attainment plan is required to be prepared for areas designated as nonattainment or maintenance areas with regards to the NAAQS or CAAQS. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date. Typically, a General Plan is deemed inconsistent with air quality plans if it would result in population, VMT, or emissions that exceed the estimates included in the applicable air quality plan, since such exceedances would hinder achievement of federal and state air quality standards.

The Northern Sacramento Valley Planning Area (NSVPA) 2006 Air Quality Attainment Plan (NSVPA Plan) is the most recent air quality planning document for the City of Williams area and the Colusa County Air District. The NSVPA Plan includes forecasted ROG and NOx emissions for the entire NSVPA region through the year 2020. These emission estimates are not apportioned by county or municipality. In addition, the NSVPA Plan does not include VMT or population projections. Given the data shortcomings and the regional scope of the current plan, population and growth estimates were utilized to correlate the City of Williams' growth projections.

These projections are considered a reasonable proxy for the NSVPA Plan because the pollutant emissions regulated by the NSVPA Plan are generated primarily by people living and driving in the region. In addition, these predictions reflect land use policies and long-range transportation improvements and conform to applicable SIPs.

Therefore, county-specific pollutant emissions, VMT, and population forecasts for 2030 were used to evaluate whether the City of Williams General Plan Update would exceed countywide growth estimates. The City of Williams and the Colusa County General Plan have shown growth for the Williams area in the existing documents for over ten years that has not yet come to fruition. As discussed previously in this document, while Williams is anticipating growth into the future, the growth is a continuation of planned growth from decades before that has been, to a point, unrealized to this time.

Mitigation/Policies and Recommended Actions in the Proposed General Plan Update:

Policies

3.52 Potential adverse impacts on adjacent land use types should be considered in the City's development review process (including factors such as noise, odor, pollution, excessive light, traffic, etc.)

3.58 Walkability and good connectivity will be promoted through continuity of the street and pedestrian system, together with a compact community form.

3.60 Residential development should be oriented away from I-5 and other primary streets without adequate transitioning standards and situated within the roadway network and relative to other land uses so as to minimize high volumes of through traffic.

7.12 A comprehensive, interconnected trail system will offer pedestrian walkways, bike paths, and equestrian trails throughout the community.

7.13 The creation of inter-city trails will enhance recreational opportunities and promote walking as a viable travel mode.

7.15 The local trail system will connect local residents to regional, state, and federal trail systems.

Actions

7.as Support green roofs on new developments as a method of stormwater mitigation, as well as reduction of the urban "heat island" effect. For new construction, use of green roofs should result in a reduction in the extent of stormwater facilities that need to be constructed to meet standards.

8.b Establish complete street subdivision criteria for new development and improve convenience, energy efficiency, an safety for multi-modal travel in existing neighborhoods.

8.b-5 Upon signalization improvements, the City shall optimize traffic signal performance to increase traffic flow and reduce vehicular emissions.

8.b-7 The City shall coordinate bicycle and pedestrian paths to logically link to the County's plans for bicycle and pedestrian travel.

8.c Monitor the operation and performance of the multi-modal circulation system.

8.c-7 All transportation improvement projects proposed for inclusion in the City's Capital Improvement Program shall be consistent with air quality, land use, circulation, and other goals and policies of the General Plan.

8.d-2 New development shall construct and dedicate streets that accommodate the full range of locally available travel modes.

8.d-3 New development shall construct and dedicate and / or contribute to a connected bicycle / pedestrian network that is designed to promote travel to schools, parks, and other major destinations.

8.d-7 The City shall integrate local bikeway planning with regional plans.

8.d-11 Provide dedicated pedestrian and bike lanes on the E Street overpass of I-5, as recommended in Chapter 5, Open Space and Conservation.

8.f-2 The City shall designate by ordinance truck routes to direct trucks to routes that maintain sufficient carrying capacity and to discourage truck traffic on local residential streets.

8.h-4 The City shall plan and require construction of bikeways, sidewalks, and pedestrian access ways to major destination points with emphasis on providing connecting access to schools, parks and shopping centers from residential neighborhoods.

8.i Encourage the continued development and expansion of local and regional public transit systems.

8.i-1 The City shall review and comment on proposed changes to the Colusa County Transit Authority (CCTA) bus system.

8.i-2 The City will consult with the California Public Utilities Commission, Amtrak, Union Pacific Railroad Company, and any other relevant agencies to encourage and accommodate any future opportunities for establishing passenger rail service in Colusa County and create a central multi-modal transit station in Williams.

8.i-3 The City should actively engage in the restoration of passenger rail service along the California Northern Pacific Railroad tracks within Williams.

8.l Coordinate transportation planning with regional and local plans.

8.l-4 The City will coordinate with Caltrans, the Colusa County Air Pollution Control District and the Colusa County Regional Transportation Commission to minimize air quality and transportation impacts associated with planned and existing transportation facilities.

8.o Provide parking in a way that balances the needs of motorists, pedestrians, bicyclists, transit users and community aesthetics.

Violation with Air Quality Standards

IMPACT 4.5.2:	**Implementation of the proposed City of Williams General Plan Update could violate an air quality standard or contribute substantially to an existing or projected air quality violation.**
IMPACT 4.5.3:	**Implementation could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)**
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	General Plan Policies and Recommended Actions
Level of Significance After Policies/Mitigation:	Significant

Impact Analysis and Mitigation Measures

As discussed above, implementation of the City of Williams General Plan Update would result increases in traffic, manufacturing activities, construction and additional energy demands which would result in increase in emissions of criteria pollutants. This EIR is a program level EIR and information about specific projects is not known at this time. Increases in emissions as a result of implementation of the General Plan Update could result in violations of air quality standards. As shown in Table 4.X, the primary operational emissions associated with proposed project are CO, PM_{10}, $PM_{2.5}$, and ozone precursors (ROG and NOx) emitted as vehicle exhaust. For this analysis, emissions of these pollutants for the existing conditions and for the buildout of the General Plan were evaluated using the traffic data provided by the project traffic engineers. Appendix B contains the technical modeling discussion and data. Vehicle

Table 4.5.3: Existing Conditions: Daily Emissions

Speed	ROG		CO		NOx		PM10		CO2/GHG	
(MPH)	g/mile	lbs/day	g/mile	lbs/day	g/mile	lbs/day	g/mile	lbs/day	g/mile	lbs/day
25	0.125	25.5	1.041	212.2	1.722	351.1	0.042	8.6	812.093	165,558
30	0.11	22.4	0.98	199.8	1.568	319.7	0.041	8.4	740.549	150,972
40	0.09	18.3	0.932	190.0	1.357	276.6	0.044	9.0	659.291	134,407
55	0.088	17.9	1.094	223.0	1.286	262.2	0.062	12.6	657.674	134,077

Table 4.5.4: Future Conditions (General Plan Buildout): Daily Emissions

Speed	ROG		CO		NOx		PM10		CO2/GHG	
(MPH)	g/mile	lbs/day	g/mile	lbs/day	g/mile	lbs/day	g/mile	lbs/day	g/mile	lbs/day
25	0.092	43.6	0.815	386.1	0.604	286.1	0.022	10.4	872	413,072
30	0.081	38.4	0.76	360.0	0.551	261.0	0.021	9.9	800	378,965
40	0.066	31.3	0.704	333.5	0.477	226.0	0.021	9.9	716	339,173
55	0.061	28.9	0.766	362.9	0.447	211.7	0.0252	11.8	707	334,910

emission rates are anticipated to lessen in future years due to continuing improvements in engine technology and the phasing out of older, higher-emitting vehicles. These decrease in emission rates are sufficient to offset the increases between the existing and project buildout conditions, resulting in a decrease in NOx. Colusa County is listed as a nonattainment / transitional for the state O3 levels. However, a couple of the precursors and majority contributors to ozone is the ROG and NOx compounds both of which are expected to be reduced in the future due to improved innovations and implementation of the policies and goals of the Updated General Plan.

With the inclusion of the mitigation measures listed below would reduce this impact, however, it may not reduce the impact to a less-than-significant level. This impact is considered to be significant.

Mitigation/Policies and Recommended Actions in the Proposed General Plan Update:
Policies

3.52 Potential adverse impacts on adjacent land use types should be considered in the City's development review process (including factors such as noise, odor, pollution, excessive light, traffic, etc.)

7.12 A comprehensive, interconnected trail system will offer pedestrian walkways, bike paths, and equestrian trails throughout the community.

7.13 The creation of inter-city trails will enhance recreational opportunities and promote walking as a viable travel mode.

7.15 The local trail system will connect local residents to regional, state, and federal trail systems.

Actions

7.as Support green roofs on new developments as a method of stormwater mitigation, as well as reduction f the urban "heat island" effect. For new construction, use of green roofs should result in a reduction in the extent of stormwater facilities that need to be constructed to meet standards.

8.b Establish complete street subdivision criteria for new development and improve convenience, energy efficiency, an safety for multi-modal travel in existing neighborhoods.

8.c-7 All transportation improvement projects proposed for inclusion in the City's Capital Improvement Program shall be consistent with air quality, land use, circulation, and other goals and policies of the General Plan.

8.d-2 New development shall construct and dedicate streets that accommodate the full range of locally available travel modes.

8.d-3 New development shall construct and dedicate and / or contribute to a connected bicycle / pedestrian network that is designed to promote travel to schools, parks, and other major destinations.

8.d-7 The City shall integrate local bikeway planning with regional plans.

8.d-11 Provide dedicated pedestrian and bike lanes on the E Street overpass of I-5, as recommended in Chapter 5, Open Space and Conservation.

8.i Encourage the continued development and expansion of local and regional public transit systems.

8.i-1 The City shall review and comment on proposed changes to the Colusa County Transit Authority (CCTA) bus system.

8.i-2 The City will consult with the California Public Utilities Commission, Amtrak, Union Pacific Railroad Company, and any other relevant agencies to encourage and accommodate any future opportunities for establishing passenger rail service in Colusa County and create a central multi-modal transit station in Williams.

8.i-3 The City should actively engage in the restoration of passenger rail service along the California Northern Pacific Railroad tracks within Williams.

8.k Publicize major transportation issues and solicit public input.

8.l Coordinate transportation planning with regional and local plans.

8.l-4 The City will coordinate with Caltrans, the Colusa County Air Pollution Control District and the Colusa County Regional Transportation Commission to minimize air quality and transportation impacts associated with planned and existing transportation facilities.

8.o Provide parking in a way that balances the needs of motorists, pedestrians, bicyclists, transit users and community aesthetics.

Sensitive Receptors

IMPACT 4.5.4: Implementation of the proposed City of Williams General Plan Update would expose sensitive receptors to substantial pollutant concentrations.	
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	General Plan Policies and Recommended Actions
Level of Significance After Policies/Mitigation:	Less Than Significant

Impact Analysis and Mitigation Measures

Sensitive receptors within the proposed Updated General Plan area include residential uses, schools, parks, places of worship, and libraries. Carbon monoxide (CO) emissions from traffic are a pollutant of concern at the local level. CO emissions are a function of vehicle idling time, meteorological conditions and traffic flow. Under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels and adversely affect residents, school children, or the elderly. Because traffic congestion is highest at intersections where vehicles queue and are subject to reduced speeds, CO hotspots are typically produced at intersections.

There has been a trend of decline in CO emissions since the late 1980s . California has been consistent with the national trends; CO emissions declined 20 percent in California from 1985 through 1997 while vehicle miles traveled increased 18 percent in the 1990s. Three major control programs have contributed to reduced per-vehicle CO emissions: exhaust standards, cleaner burning fuels and motor vehicle inspection/ maintenance programs. Additionally, since integrated planning coordinates transportation decisions at a municipal and county level, roadway issues are efficiently addressed, thus helping to improve the transportation network and reduce potential emissions associated with traffic problems.

Although emissions can be projected for the overall growth anticipated in the proposed General Plan Update, this potential impact is localized and requires project-specific information to conduct the impact analysis. Future development projects will be subject to CEQA review, at which time an analysis will be conducted, if necessary, based on project-level information.

With the inclusion of the mitigation measures listed below would reduce this impact, however, it may not reduce the impact to a less-than-significant level. This impact is considered to be significant.

Mitigation/Policies and Recommended Actions in the Proposed General Plan Update:
Policies

3.52 Potential adverse impacts on adjacent land use types should be considered in the City's development review process (including factors such as noise, odor, pollution, excessive light, traffic, etc.)

7.12 A comprehensive, interconnected trail system will offer pedestrian walkways, bike paths, and equestrian trails throughout the community.

8.b Establish complete street subdivision criteria for new development and improve convenience, energy efficiency, an safety for multi-modal travel in existing neighborhoods.

8.c-7 All transportation improvement projects proposed for inclusion in the City's Capital Improvement Program shall be consistent with air quality, land use, circulation, and other goals and policies of the General Plan.

8.d-2 New development shall construct and dedicate streets that accommodate the full range of locally available travel modes.

8.d-3 New development shall construct and dedicate and / or contribute to a connected bicycle / pedestrian network that is designed to promote travel to schools, parks, and other major destinations.

8.d-7 The City shall integrate local bikeway planning with regional plans.

8.d-11 Provide dedicated pedestrian and bike lanes on the E Street overpass of I-5, as recommended in Chapter 5, Open Space and Conservation.

8.i Encourage the continued development and expansion of local and regional public transit systems.

8.i-1 The City shall review and comment on proposed changes to the Colusa County Transit Authority (CCTA) bus system.

8.i-2 The City will consult with the California Public Utilities Commission, Amtrak, Union Pacific Railroad Company, and any other relevant agencies to encourage and accommodate any future opportunities for establishing passenger rail service in Colusa County and create a central multi-modal transit station in Williams.

8.i-3 The City should actively engage in the restoration of passenger rail service along the California Northern Pacific Railroad tracks within Williams.

8.k Publicize major transportation issues and solicit public input.

8.l Coordinate transportation planning with regional and local plans.

8.l-4 The City will coordinate with Caltrans, the Colusa County Air Pollution Control District and the Colusa County Regional Transportation Commission to minimize air quality and transportation impacts associated with planned and existing transportation facilities.

Odors

IMPACT 4.5.5:	Implementation of the proposed City of Williams General Plan Update would expose a substantial number of people to objectionable odors.
Level of Significance Before Policies/Mitigation:	Less Than Significant
Mitigation Measures:	None
Level of Significance After Policies/Mitigation:	Less Than Significant

The assessment of odor generation in this section is based on an analysis of the spatial location of development allowed by the proposed Updated General Plan. Odors are typically generated from constructions activities related to the diesel exhaust, agricultural operations and some industrial uses. It is typically accepted that residential uses are not generators of odors. The Updated General Plan has been crafted to include many provisions for protecting the character of the existing community and the use of land buffers. This type of stipulated land use design would limit the potential of odor exposure.

The inclusion of larger lots as the urban development occurs along the outer edges of the planning area will provide a sense of buffer for the agricultural activities in the area. Many times agricultural odors, other than large feedlot operations and dairies, are temporary in nature and are not generally considered offensive. Emissions from farming equipment would occur during daytime hours only and would be isolated to the area and activity.

Due to the types of odors that would occur within the General Plan area and the limited exposure, implementation of the proposed Updated General Plan would not create objectionable odors affecting a substantial number of people. This impact is considered to be less than significant.

Greenhouse Gas Emissions and Climate Change

IMPACT 4.5.6:	Implementation of the proposed City of Williams General Plan Update would generate greenhouse gas emissions, either directly or indirectly.
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	General Plan Policies and Recommended Actions
Level of Significance After Policies/Mitigation:	Potentially Significant

Climate change is the result of cumulative global emissions. There is no single project, when taken in isolation, that can "cause" global warming because a single project's emissions are insufficient to change the radiative balance of the atmosphere. Because global warming is the result of GHG emissions, and GHGs are emitted by innumerable sources worldwide, global climate change is a significant cumulative impact of human development and activity. The global increase in GHG emissions that has occurred and

will occur in the future are the results of the actions and choices of individuals, businesses, local governments, states, and nations.

In order to reduce GHG, there will have to be widespread reductions of GHG emissions from many sources in various sectors across the California economy. Some of those reductions will need to come from vehicle emissions and mileage, changes in the source of energy and electricity, increases in energy efficiency across all segments of society, as well as other measures. In the upcoming years, the State is expected to adopt comprehensive regulations to reduce the GHG emissions from vehicles, industry, buildings and other sources.

The City's actions can help to reduce GHG from the existing amounts. However, existing development is not under the discretionary land use authority of the City and, therefore, most of the City's opportunity to reduce GHGs will come from requiring new development to have a lower carbon intensity than the existing conditions.

A certain amount of environmental change is inevitable in Williams due to the current GHG emissions worldwide and regionally. Some of these changes may affect agriculture, flooding, extreme weather fluctuations, and wildfire potential. Population growth and associated development within the Williams area will result in additional GHG emissions primarily from on-road vehicles, electricity and natural gas consumption by homes and businesses, and increased emissions associated with landfilling of solid waste. Impacts will also be realized with the conversion of agricultural lands into urban land uses.

As discussed previously, vehicle emissions are a key indicator and contributor to the GHGs. The development of the Updated General Plan would provide a better mixture of commercial and industrial land uses which allows for a more balanced jobs-housing ratio. Along with the policies to encourage alternative modes of transportation and mass transportation to and through the Williams area would reduce the amount vehicle emissions. Combined with the recent legislative and legal action on national and statewide fuel economy standards, significant increase in fuel economy which in turn would reduce the GHGs are currently being introduced by the car manufactures.

Energy and the source of that energy is a large contributor to GHG. GHG emissions due to the consumption of electricity in California are controlled by a variety of factors. The carbon intensity of electricity is related to the ratio of power produced within California to that produced from out of state sources. Currently, power produced within California has a lower carbon intensity than the national average. Factors influencing the ability of in-state providers to meet demands include water resources for hydropower and temperature in the peak season in the summer. The State of California has implemented building code provisions that will improve the energy conservation of new buildings that would be part of the implementation of the Updated General Plan.

Development allowed by the Updated General Plan could subject property and persons to risk from climate change related issues. However, the Updated General Plan does contain policies that would reduce the risks of GHGs and climate change through energy conservation and the reduction in the NOx and CO generated from vehicles in the area.

With the inclusion of the mitigation measures listed below would reduce this impact, however, it may not reduce the impact to a less-than-significant level. This impact is considered to be significant.

Mitigation/Policies and Recommended Actions in the Proposed General Plan Update:

3.7 The City will continue to facilitate developments that offer a variety of living options and environments provided they contribute positively to the intended community character.

3.52 Potential adverse impacts on adjacent land use types should be considered in the City's development review process (including factors such as noise, odor, pollution, excessive light, traffic, etc.)

3.58 Walkability and good connectivity will be promoted through continuity of the street and pedestrian system, together with a compact community form.

8.d-7 The City shall integrate local bikeway planning with regional plans.

8.d-11 Provide dedicated pedestrian and bike lanes on the E Street overpass of I-5, as recommended in Chapter 5, Open Space and Conservation.

8.i Encourage the continued development and expansion of local and regional public transit systems.

8.i-1 The City shall review and comment on proposed changes to the Colusa County Transit Authority (CCTA) bus system.

8.i-2 The City will consult with the California Public Utilities Commission, Amtrak, Union Pacific Railroad Company, and any other relevant agencies to encourage and accommodate any future opportunities for establishing passenger rail service in Colusa County and create a central multi-modal transit station in Williams.

8.i-3 The City should actively engage in the restoration of passenger rail service along the California Northern Pacific Railroad tracks within Williams.

8.k Publicize major transportation issues and solicit public input.

8.l Coordinate transportation planning with regional and local plans.

8.l-4 The City will coordinate with Caltrans, the Colusa County Air Pollution Control District and the Colusa County Regional Transportation Commission to minimize air quality and transportation impacts associated with planned and existing transportation facilities.

8.o Provide parking in a way that balances the needs of motorists, pedestrians, bicyclists, transit users and community aesthetics.

4.6 Noise

4.6.1 Introduction

This section discusses and analyzes the ambient noise characteristics of the City of Williams Planning Area and evaluates noise impacts associated with the adoption of the City of Williams General Plan Update.

4.6.2 Technical Setting – Acoustical Fundamentals

Background and Terminology

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and hence are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second, called Hertz (Hz).

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals of pressure), as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers is a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in levels (dB) correspond closely to human perception of relative loudness. Table 1 shows examples of noise levels for several common noise sources and environments. Table 2 provides definitions of acoustical terminology used in this section.

Table 4.6.1: Typical A-Weighted Sound Levels of Common Noise Sources

`	Description
130	Threshold of pain
120	Jet aircraft take-off at 100 feet
110	Riveting machine at operators position
100	Shotgun at 200 feet
90	Bulldozer at 50 feet
80	Diesel locomotive at 300 feet
70	Commercial jet aircraft interior during flight
60	Normal conversation speech at 5 - 10 feet
50	Open office background level
40	Background level within a residence
30	Soft whisper at 2 feet
20	Interior of recording studio
Source: Bollard Acoustical Consultants, Inc.	

Table 4.6.2: Acoustical Terminology	
Terminology	**Definition**
Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space, consisting of all noise sources audible at that location. In many cases, the term "ambient" is used to describe an existing or pre-project condition, such as the setting in an environmental noise study.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound-level meter that conditions the output signal to approximate human response. (A-weighted decibels are referred to in this EIR as "dBA.")
Community Noise Equivalent Level (CNEL)	The 24-hour average noise level with noise occurring during evening hours (7–10 p.m.) weighted by a factor of 3 and noise occurring during nighttime hours (10 p.m.–7 a.m.) weighted by a factor of 10 before averaging.
Decibel (dB)	A fundamental unit of sound. A bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A decibel is one-tenth of a bell.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.
L_{dn}	Day/night average sound level. Similar to CNEL but with no evening weighting.
L_{eq}	Equivalent or energy-averaged sound level.
L_{max}	The highest root-mean-square sound level measured over a given period of time
Loudness	A subjective term for the sensation of the magnitude of sound.
Noise	Unwanted sound.
Sound Exposure Level (SEL)	A rating, in decibels, of a discrete event, such as an aircraft flyover or train pass-by, that compresses the total sound energy of the event into a 1-second time period.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.
Source: Bollard Acoustical Consultants, Inc.	

Effects of Noise Exposure and Community Noise

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by weighing the frequency response of a sound level meter by means of the standardized A-weighing network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels in decibels.

Noise in a community has been cited as being a health problem, not in terms of actual physiological damages such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in a community arise from interference with human activities such as sleep, speech, recreation and tasks demanding concentration or coordination. When community noise interferes with human activities or contributes to stress, public annoyance with the noise source increases, and the acceptability of the environment for people decreases. This decrease in acceptability and the threat to public well-being are the bases for policies preventing exposures to excessive community noise levels. The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance and dissatisfaction;

- Interference with activities such as speech, sleep, learning; and
- Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise, or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists, and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to a baseline noise condition (typically the existing environment) to which one has adapted. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise would be judged by those hearing it. With regard to increases in a weighted noise level, the following relationships occur:

- Under controlled conditions in an acoustics laboratory, the trained healthy human ear is able to discern changes in sound levels of 1 dBA;
- It is widely accepted that the average healthy ear, however, can barely perceive noise level changes of 3 dBA;
- A change in level of *5* dBA is a readily perceptible increase in noise level; and
- A 10 dBA change is recognized as twice as loud as the original source.

These relationships occur in part because of the logarithmic nature of sound and the decibel system. Because the decibel scale is based on logarithms, two noise sources do not combine in a simple linear fashion, but rather logarithmically. For example, if two identical noise sources produce noise levels of 50 dBA, the combined sound level would be 53 dBA, not 100 dBA. Stationary "point" sources of noise, including stationary mobile sources such as idling vehicles, typically attenuate (decrease) at a rate of 6 dBA per doubling of distance from the source. Widely distributed noises, such as a large industrial facility spread over many acres or a street with moving vehicles (a "moving point" or "line" source), typically attenuate at a lower rate, approximately 3 to 4.5 dBA per doubling distance from the source.

4.6.3 Environmental Setting - Existing and Future Noise Environments

Overview of Noise Environment in Williams

In addition to traffic on I-5 and trains on the CFNR, the ambient noise environment in Williams is defined primarily by traffic on SR 20, local traffic on City streets, commercial and industrial uses, active recreation areas of parks and outdoor play areas of schools, and to a small extent, aircraft operations associated with the Williams Soaring Center. With the exception of the Williams Soaring Center, there are no airports within the Williams City Limits, and the nearest known airport is the Colusa County Airport south of the City of Colusa. Because existing traffic volumes on City streets are relatively low, the ambient noise environments in the residential areas of the City of Williams – which are somewhat distant from I-5 and SR 20 – are similarly low. The major noise sources affecting the City of Williams are discussed individually below.

Roadways

The Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA-RD-77-108) with the Calveno vehicle noise emission curves was used to predict traffic noise levels within the Williams City Limits. The FHWA-RD-77-108 Model is considered acceptable for the development of General Plan traffic noise predictions.

Interstate 5, SR 20, E Street, and Husted Road are the most heavily traveled roadways in the City of Williams. The FHWA Model was used with existing traffic data to develop L_{dn} contours for these roadways as well as other smaller roadways in the City. The FHWA Model input data for the studied roadways is provided in Appendix C. The predicted existing L_{dn} values at a reference distance of 100 feet and the distances from the centerlines of the major roadways to the 60, 65, and 70 dB L_{dn} contours are summarized in Table 4.6.3.

Table 4.6.3: Existing Traffic Noise Levels and Contour Distances City of Williams, California

Seg.	Roadway	Segment Description	L_{dn} @ 100 feet from C/L (dB)	Distance (Feet)		
				70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}
1	SR 20	West of E St.	63	33	70	151
2	SR 20	E St. to Old Hwy 99W	62	27	59	127
3	SR 20	Old Hwy 99W to I-5	62	29	63	135
4	SR 20	I-5 to Husted Rd./Freshwater Rd.	60	22	47	101
5	SR 20	East of Husted Rd./Freshwater Rd.	64	40	86	184
6	E St.	SR 20 to 9th St. (N)	57	15	32	68
7	E St.	9th St. (N) to 9th St. (S)	57	15	31	67
8	E St.	9th St. (S) to 7th St.	58	16	34	74
9	E St.	7th St. to 5th St.	58	17	36	78
10	E St.	5th St. to I-5	59	20	42	91
11	E St.	I-5 to Vann St.	58	16	34	72
12	E St.	Vann St. to Husted Rd.	55	10	22	48
13	Freshwater Rd.	North of SR 20	53	7	15	33
14	Husted Rd.	SR 20 to E St.	60	21	45	97
15	Husted Rd.	E St. to Husted Lateral Rd.	56	12	27	58
16	Husted Rd.	Husted Lateral Rd. to Abel Rd.	57	13	29	62
17	Husted Rd.	Abel Rd. to Crawford Rd.	57	13	28	60
18	Husted Rd.	Crawford Rd. to Old Hwy 99W	57	13	29	62
19	Husted Rd.	Old Hwy 99W to I-5	56	12	27	58
20	Husted Rd.	South of I-5	52	7	14	31
21	Old Hwy 99W	North of Husted Rd.	58	16	35	74
22	Old Hwy 99W	South of Husted Rd.	57	15	31	68

Table 4.6.3: Existing Traffic Noise Levels and Contour Distances City of Williams, California						
23	Abel Rd.	East of Husted Rd.	53	8	17	36
24	9th St.	North of E St.	45	2	5	10
25	9th St.	South of E St.	53	7	15	33
26	7th St.	North of E St.	54	9	19	41
27	7th St.	South of E St.	54	9	19	41
28	5th St.	North of E St.	52	6	13	28
29	5th St.	South of E St.	51	5	11	24
30	Vann St.	South of E St.	54	9	20	42
31	I-5	Husted Rd. to SR 20	76	234	505	1088
Source: Bollard Acoustical Consultants, Inc.						

Railroads

According to the Railroad Atlas of North America, the railroad tracks running north-south through the City of Williams are operated by the California Northern Railroad (CFNR). Please refer to Figure 1.

Measurements of CFNR railroad activity, collected in February 2010 at the Close Lumber, Inc. facility (333 6th Street), recorded a total of four train events over a continuous two day period (two daytime events per day), producing an average sound exposure level (SEL) of 106 dB and 24-hour average noise exposure of approximately 56-61 dB (L_{dn}) at a distance of 42 feet from the center of the tracks.

It is difficult to report existing, or predict future, railroad noise exposure in the City of Williams without knowing if, or to what degree, railroad activity currently exists or may change in the future. Table 4 was developed to estimate the distances to the 60 and 65 dB L_{dn} railroad noise contours for various numbers of daily trains in Williams. The Table 2 data assume that, since this is not a main line, additional railroad operations in Williams would likely occur primarily during daytime hours (7 am to 10 pm). The Table 4 data also assume a mean train SEL of 100 dB at a distance of 100 feet, which is consistent with the measurement data reported above.

Table 4.6.4: Railroad Noise Exposure as a Function of the Number of Daily Trains City of Williams, California				
Number of daily Trains	L_{dn} at 100 feet (dB)		Distance to 60 dB L_{dn} Noise Contour (Feet)	
	Without Horn	With Horn	Without Horn	With Horn
1	51	56	24	51
2	54	59	38	81
3	55	60	49	106
5	58	63	69	150
7	59	64	87	187
10	61	66	110	237

Note:
The predicted distances to the Ldn contours assume a mean railroad sound exposure level (SEL) of 100 dB without horn usage and 105 dB with horn usage at a reference distance of 100 feet from the tracks and that all train operations occur during daytime hours. The SEL of 100 dB at 100 feet matches the train noise level measurement results completed for this project.

Non-Transportation Noise Sources

The production of noise is a result of many processes and activities, even when the best available noise control technology is applied. Noise exposures within industrial facilities are controlled by Federal and State employee health and safety regulations (OSHA), but exterior noise levels may exceed locally acceptable standards. Commercial, recreational, and public service facility activities can also produce noise which affects adjacent sensitive land uses.

From a land use planning perspective, fixed-source noise control issues focus on two goals: to prevent the introduction of new noise-producing uses in noise-sensitive areas, and to prevent encroachment of noise-sensitive uses upon existing noise-producing facilities. The first goal can be achieved by applying noise performance standards to proposed new noise-producing uses. The second goal can be met by requiring that new noise-sensitive uses in proximity to noise-producing facilities include mitigation measures to ensure compliance with those noise performance standards.

Descriptions of existing fixed noise sources in the City of Williams are provided below. These uses are intended to be representative of the relative noise generation of such uses, and are intended to identify specific noise sources which should be considered in the review of development proposals. Site specific noise analyses should be performed where noise sensitive land uses are proposed in proximity to these (or similar) noise sources, or where similar sources are proposed to be located near noise-sensitive land uses.

Bar Ale, Inc. Operations at the Bar Ale, Inc. facility consist primarily of the manufacturing of livestock and equine feeds. Typical noise-producing equipment associated with the facility includes the main

manufacturing plant, and forklifts and heavy trucks. The plant may operate 24-hours a day, and produces a noise exposure level of approximately 62 dB L_{eq} at a distance of 165 feet (from the main plant equipment). This facility is located at 1011 5th Street in an industrial area of the City.

DePue Warehouse Company. The DePue Warehouse Company operates several rice drying and storage facilities throughout the City of Williams. Known locations include 1700 E Street, 401 C Street, 602 5th Street, and 5999 Freshwater Road. It is our understanding that these facilities operate during the rice harvesting season (approximately October thru February). These facilities were not in full operation during our noise level measurements (February 2010); however, loading of dried rice onto a transport truck at the 602 5th Street facility produced noise exposure of approximately 66 dB L_{eq} and 77 dB L_{max} at a distance of 75 feet. It is assumed that these facilities have the potential to produce much higher noise exposure during the rice harvest.

Morning Star Packing. Morning Star Packing is a large tomato processing and packing facility located at 2211 Old Hwy 99 on the southeast corner of the City limits. The facility processes raw tomatoes into canned tomato pastes and canned diced tomato products. This facility includes large processing and packaging plants, substantial storage areas, and a rail spur to the CFNR for transport to and from the facility. This facility may operate 24-hours a day, and is expected to be busiest during the primary northern California tomato harvest of June thru October.

American Commodity Company (ACC). American Commodity Company (ACC) is a large rice drying and storage facility located at 6133 Abel Road on the east side of the City limits. Like the DePue Warehouse Company facilities, it is expected that this facility is busiest during the rice harvest (approximately October thru February). This facility may operate 24-hours a day. Noise exposure from drying and loading operations at the facility was measured to be approximately 64 dB L_{eq} at a distance of 550 feet from truck loading and assumed drying equipment. This facility may produce substantially higher noise exposure during busier times, and would be expected to produce significant heavy-truck operations.

Williams Redi-Mix. The Williams Redi-Mix facility located at 2385 Husted Road is a concrete batch plant and aggregate/landscape materials supplier. Typical hours of operations are 7 a.m. to 3 p.m. Noise produced by this facility is primarily associated with plant equipment operation, front loader use, and heavy truck movements. Typical noise exposure associated with this type of facility is 75 dB L_{eq} and 80 dB L_{max} at a distance of 100 feet from the plant, with heavy equipment operations (e.g., front loader and trucks) producing similar noise exposure.

Christman Drier. Christman Drier is a large rice drying and storage facility located at the corner of 5th Street and B Street in the central part of the City. Like the DePue Warehouse Company and ACC facilities, it is expected that this facility is busiest during the rice harvest (approximately October thru February). This facility may operate 24-hours a day during peak times.

General Service Commercial & Light Industrial Uses. Noise sources associated with service commercial uses such as automotive and truck repair facilities, tire installation centers, car washes,

loading docks, corporation yards, recycle center, and hardware and feed stores are found at various locations within the City of Williams. Many of these sources are located on E Street, 5th Street, and 7th Street. The noise emissions of these types of uses are dependent on many factors, and are therefore, difficult to quantify precisely. Nonetheless, noise generated by these uses contributes to the ambient noise environment in the immediate vicinity of these uses, and should be considered where either new noise-sensitive uses are proposed nearby or where similar uses are proposed in existing residential areas.

Parks and Schools. There are several park and school uses within the City limits. These uses are distributed throughout the City. Noise generated by these uses depends on the age and number of people utilizing the respective facility at a given time, and the types of activities they are engaged in. School playing field activities tend to generate more noise than those of neighborhood parks, as the intensity of school playground usage tends to be much higher. At a distance of 100 feet from an elementary school playground being used by 100 students, average and maximum noise levels of 60 dB (L_{eq}) and 75 dB (L_{max}), respectively, can be expected. At organized events such as high-school football games with large crowds and public address systems, the noise generation is often significantly higher. As with service commercial uses, the noise generation of parks and schools is variable.

Airports

The only airstrip located near the City of Williams is located at the Williams Soaring Center at the corner of E Street and Husted Road, near the eastern City limit. This facility is primarily used for the operation of gliders and their tow planes. Although Williams Soaring Center aircraft overflights of the City occur, these flights are by small, single-engine planes, and are infrequent. As a result, the existing ambient noise environment of the City of Williams is not significantly influenced by aircraft noise.

4.6.4 Community Noise Survey

To quantify existing noise levels in the quieter parts of the City of Williams, a community noise survey was performed at eight locations in the City which are removed from major noise sources. These survey locations were chosen to provide adequate representation of the entire City. Three of the eight locations were monitored over a continuous 24-hour period, while the other five locations were each monitored for two short term periods during daytime and nighttime hours. The community noise survey noise measurement locations are illustrated in Figure 1. The results of the community noise survey are provided in Table 4.6.5.

Table 4.6.5: Community Noise Measurement Survey results Williams, California – January 27-28, 2010						
Site	Location	Time Period	L_{eq}	L_{max}	L_{dn}	Noise Sources
1	East of ACC facility on Abel Rd.	Daytime	42-48	53-54	53	distant traffic (I-5), natural sounds
		Nighttime	47	57		
2	Southwest of residential development at Husted Lateral Rd. and Theater Rd.	Daytime	53-58	59-65	63	I-5 traffic
		Nighttime	57	62		
3	Corner of Redinger Way and I St.	Daytime	48-53	62-66	57	local and distant traffic
		Nighttime	50	56		
4	South terminus of Davis Rd.	Daytime	41-43	53-57	49	distant traffic, natural sounds
		Nighttime	43	52		
5	West of Zumwalt Rd./Walnut Dr. Intersection	Daytime	42-50	52-58	51	distant traffic (I-5)
		Nighttime	44	53		
A	425 San Antonio Dr.	Daytime	56-62	63-75	64	I-5 traffic
		Nighttime	52-61	63-68		
B	165 8th St.	Daytime	49-57	60-78	58	distant traffic, community sounds
		Nighttime	48-56	56-65		
m	Residence on Zumwalt Rd. South of Crawford Rd.	Daytime	48-56	63-76	55	distant traffic, natural sounds
		Nighttime	40-55	48-70		

Notes:

- L_{dn} values for short-term measurement sites (Sites 1-5) were estimated based on average measured values. Two measurement sessions were completed during daytime hours for these sites to better assess daytime noise exposure – one in the morning and one in the afternoon.
- L_{dn} for long-term measurement sites (Sites A-C) were calculated based on measured Hourly L_{eq} data.

4.6.5 Regulatory Setting

Federal

To address the human response to groundborne vibration, the Federal Transit Administration of the U.S. Department of Transportation has set forth guidelines for maximum-acceptable vibration criteria for different types of land uses. These guidelines allow 65 vibration decibels (VdB), referenced to 1 microinch per second and based on the root-mean-square velocity amplitude, for land uses where low ambient vibration is essential for interior operations (e.g., hospitals, high-tech manufacturing, laboratory facilities); 80 VdB for residential uses and buildings where people normally sleep; and 83 VdB for institutional land uses with primarily daytime operations (e.g., schools, churches, clinics, offices) (FTA 2006).

Standards have also been established to address the potential for groundborne vibration to cause structural damage to buildings. These standards were developed by the Committee of Hearing, Bio Acoustics, and Bio Mechanics (CHABA) at the request of the U.S. Environmental Protection Agency (FTA

2006). For fragile structures, CHABA recommends a maximum limit of 0.25 inch per second (in/sec) peak particle velocity (PPV) (FTA 2006).

State of California

The State of California General Plan Guidelines (OPR 2003), published by the Governor's Office of Planning and Research, provides guidance for the acceptability of projects within specific Ldn contours. This document does not represent an adopted standard; rather, it provides guidelines for each city and county to use in the development of its own standards. Table 6 summarizes the recommended range of acceptable and unacceptable community noise exposure limits for various land use categories.

Generally, residential uses (e.g., mobile homes) are considered to be acceptable in areas where exterior noise levels do not exceed 60 dBA Ldn. Residential uses are normally unacceptable in areas exceeding 70 dBA Ldn and conditionally acceptable within 55–70 dBA Ldn. Schools are normally acceptable in areas up to 70 dBA Ldn and normally unacceptable in areas exceeding 70 dBA Ldn.

Commercial uses are normally acceptable in areas up to 70 dBA CNEL. Levels between 67.5 and 77.5 dBA Ldn for commercial uses are conditionally acceptable, depending on the noise insulation features and the noise reduction requirements. The guidelines also present adjustment factors that may be used to determine noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution.

Table 4.6.6: Summary of Land Use Noise Compatibility Guidelines

Land Use Category	Community Noise Exposure (dBA L_{dn} or CNEL)			
	Normally Acceptable[1]	Conditionally Acceptable[2]	Normally Unacceptable[3]	Clearly Unacceptable[4]
Residential—Low Density Single Family, Duplex, Mobile Home	<60	55–70	70–75	75+
Residential—Multifamily	<65	60–70	70–75	75+
Transient Lodging—Motel, Hotel	<65	60–70	70–80	80+
Schools, Libraries, Churches, Hospitals, Nursing Homes	<70	60–70	70–80	80+
Auditoriums, Concert Halls, Amphitheaters		<70	65+	
Sports Arena, Outdoor Spectator Sports		<75	70+	
Playgrounds, Neighborhood Parks	<70		67.5–75	72.5+
Golf Courses, Riding Stables, Water Recreation, Cemeteries	<75		70–80	80+
Office Building, Business Commercial, and Professional	<70	67.5–77.5	75+	
Industrial, Manufacturing, Utilities, Agriculture	<75	70–80	75+	

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibels; L_{dn} = day-night average noise level

[1] Specified land use is satisfactory based on the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

[2] New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and after needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh-air supply systems or air conditioning, will normally suffice.

[3] New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design. Outdoor areas must be shielded.

[4] New construction or development should generally not be undertaken.

Source: OPR 2003

Title 24, Part 2, of the California Building Code establishes noise standards for all new multifamily residential units. Where exterior noise levels exceed 60 dBA CNEL/Ldn, the code stipulates that an acoustical analysis shall be performed and submitted before construction. The acoustical analysis must establish mitigation measures that will limit maximum CNEL/Ldn levels to 45 dBA in any inhabitable room. Although there are not generally applicable interior noise standards pertinent to all uses, California communities typically adopt a CNEL/Ldn standard of 45 dBA as a maximum limit on interior noise in all residential units.

For the protection of fragile, historic, and residential structures, the California Department of Transportation recommends a more conservative threshold of 0.2 in/sec PPV for normal residential buildings and 0.08 in/sec PPV for old or historically significant structures (Caltrans 2002). These standards are more stringent than the federal standard established by CHABA, presented above.

The state has also established noise insulation standards for new multifamily residential units, hotels, and motels that would be subject to relatively high levels of transportation-related noise. These requirements are collectively known as the California Noise Insulation Standards (Title 24 of the California Code of Regulations). The noise insulation standards set forth an interior standard of 45 dBA Ldn in any habitable room. They require an acoustical analysis demonstrating how dwelling units have been designed to meet this interior standard where such units are proposed in areas subject to noise levels greater than 60 dBA Ldn. Title 24 standards are typically enforced by local jurisdictions through the building permit application process.

The State of California also establishes noise limits for vehicles licensed to operate on public roads, with those limits contained in Division 12, Chapter 5, Article 2.5 (Noise Limits) of the Motor Vehicle Code. These standards are implemented through controls on vehicle manufacturers and by legal sanction of vehicle operators by state and local law enforcement officials. This article establishes limits for cars, motorcycles, and trucks (of various weight categories), and includes different noise level limits for these vehicle types depending on the age of the vehicle.

Local Plans

The Current City of Williams General Plan Noise Element (Adopted September 7, 1988 and incorporated by reference), contains land use compatibility standards typically equal to or within 5 dB of those recommended by the State of California (Table 6). In addition, the Noise Element policies require construction activities to occur between 7 am and 7 pm, require a conditional use permit for new stationary noise sources which may produce noise levels in excess of the land use compatibility standards, and which limit future land uses along I-5 to Highway Commercial, Commercial and Industrial designations.

Thresholds for Determination of a Significant Project-Related Noise Level Increase

Based on studies of test subject's reactions to changes in environmental noise levels, the Federal Interagency Commission on Noise (FICON) developed the following recommendations for thresholds to be used in assessing the significance of project-related noise level increases for transportation noise

sources. Where background noise levels without the project would be less than 60 dB Ldn, a 5 dB or greater noise level increase due to the project is considered significant. Where background noise levels without the project would range from 60 to 65 dB Ldn, a 3 dB or greater noise level increase due to the project is considered significant. Finally, where background noise levels without the project would exceed 65 dB Ldn, a 1.5 dB or greater noise level increase due to the project is considered significant. This graduated scale is based on findings that people in quieter noise environments would tolerate larger increases in noise levels without adverse effects, whereas people already exposed to elevated noise levels exhibited adverse reactions to noise for smaller increases.

4.6.6 Impact Methodology

Because this DEIR considers the impacts associated with adoption of the Draft General Plan, including new noise policies and the development of both noise-sensitive and noise-generating land uses, the following methodology was employed for the impact analysis. Noise impacts were identified for new noise-sensitive developments located within areas affected by substantial existing or future noise sources (e.g., aircraft, automobile or truck traffic, railroad lines, and industrial uses). Noise impacts were also identified for noise-producing projects proposed near existing or proposed noise-sensitive areas. Noise impacts were also identified where implementation of Draft General Plan policies pertaining to noise would themselves result in the exposure of people to excessive noise levels. Finally, noise impacts were evaluated by comparing traffic noise generation associated with implementation of the Draft General Plan relative to existing conditions. The analysis assumes that businesses, industries, and residents would comply with City noise standards identified in the Draft General Plan Noise Element.

Analysis of Future Traffic Noise Levels

The FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108), with CALVENO noise emission levels, was used to predict traffic noise levels within Williams following General Plan Buildout. Table 9 shows the predicted Ldn values at a reference distance of 100 feet from the roadway centerlines. Table 9 also shows the existing traffic noise levels and the degree by which existing levels will increase upon General Plan Buildout.

Table 4.6.7
Existing and Future Traffic Noise Levels and Increases
City of Williams, California

Seg.	Roadway	Segment Description	L_{dn} @ 100 feet from C/L (dB)		
			Existing	G.P. Buildout	Increase
1	SR 20	West of E St.	63	65	2
2	SR 20	E St. to Old Hwy 99W	62	66	4
3	SR 20	Old Hwy 99W to I-5	62	66	4
4	SR 20	I-5 to Husted Rd./Freshwater Rd.	60	65	5
5	SR 20	East of Husted Rd./Freshwater Rd.	64	69	5
6	E St.	SR 20 to 9th St. (N)	57	62	5
7	E St.	9th St. (N) to 9th St. (S)	57	62	5
8	E St.	9th St. (S) to 7th St.	58	63	5
9	E St.	7th St. to 5th St.	58	65	7
10	E St.	5th St. to I-5	59	66	7
11	E St.	I-5 to Vann St.	58	67	9
12	E St.	Vann St. to Husted Rd.	55	66	11
13	Freshwater Rd.	North of SR 20	53	59	6
14	Husted Rd.	SR 20 to E St.	60	70	10
15	Husted Rd.	E St. to Husted Lateral Rd.	56	68	12
16	Husted Rd.	Husted Lateral Rd. to Abel Rd.	57	67	10
17	Husted Rd.	Abel Rd. to Crawford Rd.	57	66	9
18	Husted Rd.	Crawford Rd. to Old Hwy 99W	57	65	8
19	Husted Rd.	Old Hwy 99W to I-5	56	67	11
20	Husted Rd.	South of I-5	52	64	12
21	Old Hwy 99W	North of Husted Rd.	58	63	5
22	Old Hwy 99W	South of Husted Rd.	57	60	3
23	Abel Rd.	East of Husted Rd.	53	61	8
24	9th St.	North of E St.	45	51	6
25	9th St.	South of E St.	53	58	5
26	7th St.	North of E St.	54	60	6
27	7th St.	South of E St.	54	59	5
28	5th St.	North of E St.	52	56	4
29	5th St.	South of E St.	51	55	4
30	Vann St.	South of E St.	54	58	4

Source: Bollard Acoustical Consultants, Inc. with FHWA-RD-77-108

4.6.7 Significance Criteria

The Williams General Plan will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in the CEQA Guidelines, Appendix G, "Environmental Checklist Form", and based on the professional judgment of the City of Williams and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

a Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies;

b Expose persons to or generate excessive groundborne vibration or groundborne noise levels;

c Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;

d Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;

e Be located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels; or

f Be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels.

4.6.8 Proposed General Plan Noise Policies and Actions

Policies

6.1 All noise analyses prepared to determine compliance with the noise level standards contained within this Noise Element should be prepared as described in Action 6.

6.3. For City projects that involve capacity enhancing roadways, or the construction of new roadways, an acoustical analysis should be prepared. If the project would result in a significant noise level increase as defined below, or if the project would cause noise levels to exceed the noise standards of Table 4.6.7, Noise Guidelines for New Uses Affected by Transportation Noise Sources, noise mitigation measures should be considered to reduce traffic noise levels to a state of compliance with Table 4.6.7. A significant increase is defined as follows:

Pre-Project Noise Environment (Ldn)	Significant Increase
Less than 60 dB	*5+ dB*
60 - 65 dB	*3+ dB*
Greater than 65 dB	*1.5+ dB*

There are various factors which may affect the feasibility or reasonableness of the mitigation which should be considered including the following:

1. The severity of the impact;

2. The cost and effectiveness of the mitigation;
3. The number of properties which would benefit from the mitigation; and
4. Aesthetic, safety, and engineering considerations.

6.4. If noise-reducing pavement is to be utilized in conjunction with a roadway improvement project, the acoustical benefits of such pavement should be included in the noise analysis prepared for the project.

6.5. The City of Williams should work with the State to mitigate noise levels to within acceptable levels as described in this chapter when the State expands or extends roadways that impacts existing residential development.

6.6. For capacity enhancing rail, or the construction of new rail, a acoustical analysis should be prepared. If the project would result in a significant noise level increase as defined below, or if the project would cause noise levels to exceed the noise standards of Table 4.6.7, Noise Guidelines for New Uses Affected by Transportation Noise Sources, noise mitigation measures should be considered to reduce rail noise levels to a state of compliance with the Table 4.6.7. A significant increase is defined as follows:

Pre-Project Noise Environment (Ldn)	Significant Increase
Less than 60 dB	*5+ dB*
60 - 65 dB	*3+ dB*
Greater than 65 dB	*1.5+ dB*

There are various factors which may affect the feasibility or reasonableness of the mitigation which should be considered including the following:

1. The severity of the impact;
2. The cost and effectiveness of the mitigation;
3. The number of properties which would benefit from the mitigation; and
4. Aesthetic, safety, and engineering considerations.

6.8. In the event that an airport locates in or near Williams, new residential development proposed in airport noise environments between 55 and 60 dB CNEL should be subject to the following conditions:

1. Provide minimum noise insulation to 45 dB CNEL within new residential dwellings, including detached single family dwellings, with windows and exterior doors closed in any habitable room.
2. Provide disclosure statements to prospective buyers that the parcel is located in an area which may be exposed to frequent aircraft noise events (arrivals, departures, overflights, engine runups, etc.).

3. An Avigation Easement prepared by the Williams Counsel's Office granted to the City of Williams, recorded with the Williams Recorder, and filed with the City Planning Department should be obtained from each residential parcel. The Avigation Easement should acknowledge the property location near a source of aircraft noise and should grant the right of flight and unobstructed passage of all aircraft into and out of the subject Airport.

6.9. Prevent the introduction of new industrial uses in noise-sensitive areas.

6.10. Prevent the introduction of new noise-producing uses in noise-sensitive areas.

6.11. Prevent encroachment of noise-sensitive uses upon existing noise-producing facilities.

6.12. When siting a new public park, the City should consider separating the park from a noise-sensitive area if intense activities are to occur in the park.

6.13. Prevent encroachment of noise-sensitive uses upon existing industrial facilities.

6.14. Noise associated with construction activities should adhere strictly to the City Code restrictions regarding prohibited operating hours.

Actions

6.a. The City of Williams should develop requirements for an acoustical analysis to be prepared with subdivision processes and site plan applications. This analysis should include the following provisions:

1. Be prepared by qualified persons experienced in the fields of environmental noise assessment and architectural acoustics.
2. Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions.
3. Estimate projected future (20 year) noise levels, and compare those levels to the adopted policies of this general plan and adopted ordinance standards.
4. Recommend appropriate mitigation to achieve compliance with the adopted policies and standards of this general plan and ordinance standards.
5. Estimate interior and exterior noise exposure after the prescribed mitigation measures have been implemented.

6.b. Any extreme noise producer not specifically exempt should be discouraged or prohibited by City Codes and policies.

6.c. The City of Williams should adopt regulations to require implementation of noise mitigation to newly constructed roadways in new subdivision developments.

6.d. Adopt noise performance standards for new industrial uses.

6.e. Where noise mitigation measures are required to satisfy the noise level standards of this Noise Element, development standards for new industrial sites should require the use of setbacks and site design, and thereby keep the use of noise barriers at a minimum.

6.f. Adopt noise performance standards for new noise-producing uses.

6.g. Adopt noise mitigation measures that will apply to new noise-sensitive uses if placed in proximity to noise producing facilities.

6.h. Where noise mitigation measures are required to satisfy the noise level standards of this Noise Element, development standards for new commercial sites should require the use of setbacks and site design, and thereby keep the use of noise barriers at a minimum.

6.i. Any noise regulations adopted by the City should specifically exempt public parks and park activities.

6.j. Adopt an ordinance amendment to require sound wall regulations when new subdivisions are proposed adjacent to existing or proposed highways or major roads.

6.k. Where noise mitigation measures are required to satisfy the noise level standards of this Noise Element, development standards for new residential subdivisions, additional setbacks should be considered in addition to the sound barrier wall to further protect future residents.

6.l. Adopt noise mitigation measures that will apply to new noise-sensitive uses if placed in proximity to existing industrial facilities, commercial facilities.

6.m. Noise analyses prepared for multi-family residential projects, town homes, mixed-use projects, condominiums, or other residential projects where floor/ceiling assemblies or party-walls are common to different owners/occupants, should address satisfaction with the State of California Noise Insulation standards.

Table 4.6.8: Noise Standards for New Uses Affected by Transportation Noise Sources City of Williams Noise Element

New Land Use	Sensitive[1] Outdoor Area - CNEL	Sensitive Interior Area[2] - CNEL	Notes
Residential	60	45	5
Residences in Ag. Zones	65	45	6
Transient Lodging	65	45	3,5
Hospitals & Nursing Homes	60	45	3, 4, 5
Theaters & Auditoriums	---	35	3
Churches, Meeting Halls Schools, Libraries, etc.	60	40	3
Office Buildings	65	45	3
Commercial Buildings	65	50	3
Playgrounds, Parks, etc.	70	---	
Industry	65	50	3

Notes:

1. Sensitive areas are defined acoustic terminology section.
2. Interior noise level standards are applied within noise-sensitive areas of the various land uses, with windows and doors in the closed positions.
3. Where there are no sensitive exterior spaces proposed for these uses, only the interior noise level standard shall apply.
4. Hospitals are often noise-generating uses. The exterior noise level standards for hospitals are applicable only at clearly identified areas designated for outdoor relaxation by either hospital staff or patients.
5. If this use is affected by railroad or aircraft noise, a maximum (L_{max}) noise level standard of 70 dB shall be applied to all sleeping rooms with windows closed to reduce the potential for sleep disturbance during nighttime noise events.
6. Due to the noise-generating nature of agricultural activities, it is understood that residences constructed on agriculturally-designated land uses may be exposed to elevated noise levels. As a result, a 65 dB CNEL exterior noise level standard is applied to noise-sensitive outdoor areas of these uses.

Table 4.6.9: Non-Transportation Noise Standards City of Williams Noise Element Average (Leq) / Maximum (Lmax)[1]				
Receiving Land Use	**Outdoor Area[2]**		**Interior[3]**	
	Daytime	**Nighttime**	**Day & Night**	**Notes**
All Residential	55 / 75	50 / 70	35 / 55	
Transient Lodging	55 / 75	---	35 / 55	4
Hospitals & Nursing Homes	55 / 75	---	35 / 55	5, 6
Theaters & Auditoriums	---	---	30 / 50	6
Churches, Meeting Halls, Schools, Libraries, etc.	55 / 75	---	35 / 60	6
Office Buildings	60 / 75	---	45 / 65	6
Commercial Buildings	55 / 75	---	45 / 65	6
Playgrounds, Parks, etc.	65 / 75	---	---	6
Industry	60 / 80	---	50 / 70	6

Notes:
1. The Table 4.6.2 standards shall be reduced by 5 dB for sounds consisting primarily of speech or music, and for recurring impulsive sounds. If the existing ambient noise level exceeds the standards of Table 2, then the noise level standards shall be increased in 5 dB increments to encompass the ambient.
2. Sensitive areas are defined in the Acoustic Terminology section.
3. Interior noise level standards are applied within noise-sensitive areas of the various land uses, with windows and exterior doors in the closed positions.
4. Outdoor activity areas of transient lodging facilities are not commonly used during nighttime hours.
5. Hospitals are often noise-generating uses. The exterior noise level standards for hospitals are applicable only at clearly identified areas designated for outdoor relaxation by either hospital staff or patients.
6. The outdoor activity areas of these uses (if any), are not typically utilized during nighttime hours.

4.6.9 Impacts and Mitigation

Establishment of New Noise-Sensitive Areas

IMPACT 4.6.1: The plan will result in the development of Noise-Sensitive Land Uses within Areas Subject to Noise Impacts.	
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	Policies and Recommended Actions in the proposed General Plan Update
Level of Significance After Policies/Mitigation:	Less than Significant

Impact Analysis

Description Future development of new noise-sensitive land uses would occur under the Draft General Plan within areas that either are currently affected by noise from both transportation and non-transportation noise sources, or will be in the future. However, the Draft General Plan would also include Noise Element Policies and Actions as outlined previously in this section to reduce the potential for noise levels to exceed established standards. As a result, this impact would be less than significant.

Discussion Under the General Plan, future development of noise-sensitive uses (e.g., residential dwellings, schools, hospitals, parks, hotels, places of worship, libraries), in areas containing noise-generating land uses (e.g., roadways, industries, commercial loading docks, automotive maintenance facilities, recreational areas, wastewater treatment plants, etc.) could cause noise levels to exceed acceptable limits as defined in Tables 7 and 8, above.

However, policies and actions contained within the City of Williams General Plan Update require use of project-specific noise mitigation measures to mitigate this impact. Implementation of those policies and actions would reduce the potential for noise levels at new noise-sensitive land uses to exceed the noise standards contained in Tables 7 and 8. Therefore, this impact would be less than significant.

Mitigation Measures

No mitigation beyond the Draft General Plan policies and actions is required.

Establishment of New Noise-Producing Land Uses

IMPACT 4.6.2: The plan will result in the development of Noise-Producing Uses near Existing Noise-Sensitive Land Uses.	
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	Policies and Recommended Actions in the proposed General Plan Update
Level of Significance After Policies/Mitigation:	Less than Significant

Impact Analysis

Description Under the Draft General Plan Update, future development of new noise-generating land uses could occur within areas containing noise-sensitive land uses. However, the Draft General Plan would also include Noise Element Policies and Actions to reduce the potential for noise levels to exceed established standards. This impact would therefore be less than significant.

Discussion Under the General Plan, future development of noise-generating uses (e.g., industries, commercial loading docks, automotive maintenance facilities, recreational areas, wastewater treatment plants, etc.), in areas containing noise-sensitive land uses (e.g.,

residential dwellings, schools, hospitals, parks, hotels, places of worship, libraries) could cause noise levels to exceed acceptable limits as defined in Tables 7 and 8, above.

However, policies and actions contained within the City of Williams General Plan Update require use of project-specific noise mitigation measures to mitigate this impact. Implementation of those policies and actions would reduce the potential for noise levels from new noise-generating land uses to exceed the noise standards contained in Tables 7 and 8. Therefore, this impact would be less than significant.

Mitigation Measures

No mitigation beyond the Draft General Plan policies and actions is required.

Increases in Traffic Noise Levels

IMPACT 4.6.3: The Plan will result in traffic Noise Level Increases under build-out.	
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	Policies and Recommended Actions in the proposed General Plan Update
Level of Significance After Policies/Mitigation:	Significant

Impact Analysis

Description Implementation of the Draft General Plan would result in greater traffic volumes on City roadways than currently exist. The greater traffic volumes would result in increased traffic noise on City roadways. This impact would be **significant**.

Discussion Implementation of the General Plan, along with regional growth and traffic conditions, would cause increases in traffic noise levels generally ranging from 2 to 12 dB Ldn, as indicated in Table 9. Because a traffic noise level increase of 1.5 dBA to 5 dBA L_{dn} is commonly considered the threshold of significance, depending on existing levels without the project, the project thresholds of significance would be exceeded. As a result, this impact would be significant.

Mitigation Measure #6.1 -- Adopt Citywide Noise Reduction Program.

The City shall adopt a citywide noise reduction program to reduce traffic and other noise levels at existing noise-sensitive land uses within the City. The program shall include, but shall not be limited to, the following specific elements for noise abatement consideration where reasonable and feasible:

- Noise barrier retrofits
- Truck usage restrictions
- Reduction of speed limits
- Use of quieter paving materials
- Building façade sound insulation
- Traffic calming
- Additional enforcement of speed limits and exhaust noise laws

- Signal timing

It is recognized that the Draft General Plan policies and Mitigation Measure 6.1, used individually or collectively, can result in a reduction of traffic noise levels at affected sensitive receptor locations. Nonetheless, despite the implementation of such a noise abatement program, it is infeasible to ensure that existing residential uses will not be exposed to future traffic noise levels exceeding the City's noise standards or significantly exceeding levels they are exposed to today. For example, it may not be possible to construct a noise barrier at an existing residence due to engineering constraints (utility easements or driveway openings), and building façade sound insulation would only benefit interior spaces, so outdoor activity areas may still be affected.

It may also be infeasible to reduce speed limits in areas where speed surveys would not safely support the reduction. In addition, busy streets tend to also serve commercial uses, so restricting trucks on the busier streets may be impractical. Although a combination of the listed measures could be highly effective in reducing traffic noise levels on a citywide basis, it is not possible to state with absolute certainty that it would be possible to mitigate this impact at every noise-sensitive use within the City. As a result, this impact would remain significant and unavoidable.

Vibration

IMPACT 4.6.4: The plan will result in possible Temporary, short-term exposure of sensitive receptors to vibration.	
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	Policies and Recommended Actions in the proposed General Plan Update
Level of Significance After Policies/Mitigation:	Less than Significant

Impact Analysis

Description Construction of projects under the City of Williams General Plan Update could cause a temporary, short-term disruptive vibration if it were to occur near sensitive receptors. This impact would be potentially significant.

Discussion Construction and demolition activities associated with future projects implemented under the Draft General Plan have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used, the location of construction activities relative to receptors, and the operations involved. Vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. Also, the type and density of soil can affect the transmission of energy. Table 4.6.10 displays vibration levels for typical construction equipment.

Table 4.6.10: Typical Vibration Levels for Construction Equipment			
Equipment		**PPV at 25 Feet (in/sec)**	**Approximate L_v at 25 Feet**
Pile Driver (Impact)	Upper Range	1.518	112
	Typical	0.644	104
Pile Driver (Sonic)	Upper Range	0.734	105
	Typical	0.170	93
Large Bulldozer		0.089	87
Drill		0.089	87
Truck		0.076	86
Jackhammer		0.035	79
Small Bulldozer		0.003	58
Significance Threshold		0.2/0.08 [1]	80

Notes:
in/sec = inches per second; Lv = the velocity level in decibels referenced to 1 microinch per second and based on the root mean square velocity amplitude; PPV = peak particle velocity
[1] For normal residential buildings and for buildings more susceptible to structural damage, respectively.
Sources: Caltrans 2002, FTA 2006

The required construction equipment for future projects is not known at this time, but it could include maximum generation of vibration from trucks and earthmoving equipment. According to the Federal Transit Administration, vibration levels associated with the use of such equipment would be approximately 0.089 in/sec PPV and 87 VdB (referenced to 1 µin/sec and based on the root mean square velocity amplitude) at 25 feet, as shown in Table 10. Using FTA's recommended procedure for applying a propagation adjustment to these reference levels, predicted worst-case vibration levels would not exceed 0.2 in/sec PPV (Caltrans's recommended standard with respect to the prevention of structural damage for normal buildings), but would exceed 80 VdB (FTA's maximum-acceptable vibration standard with respect to human annoyance for residential uses) within 60 feet of vibration-sensitive receptors.

Depending on the nature of the future projects, existing vibration-sensitive receptors could be within 60 feet of proposed construction sites. Temporary, short-term vibration levels from project construction sources could exceed FTA's maximum-acceptable vibration standard of 80 VdB with respect to human response for residential uses (i.e., annoyance) at vibration-sensitive land uses. More importantly, if construction activities were to occur during the more noise-sensitive hours, vibration from construction sources could annoy and/or disrupt the sleep of occupants of existing and proposed residences and expose persons to excessive groundborne vibration or groundborne

noise levels. No policies or implementation programs of the Draft General Plan are available to reduce this impact. Therefore, this impact would be potentially significant.

Mitigation Measure 6.2: -- Require Implementation of Measures to Reduce Temporary, Short-Term Project-Generated Vibration Levels from Construction.

To reduce impacts associated with vibration generated during construction/demolition activities, the City shall require future project applicants to conform to the following requirements:

- All construction activities shall be limited to the hours of 7 a.m.–6 p.m. Painting, interior finish work, and other generally quiet activities may be allowed outside of these hours provided that construction noise does not exceed ambient noise levels by 10 dBA at nearby sensitive receptors.
- All construction equipment shall be properly maintained and equipped with noise control, such as mufflers, in accordance with manufacturers' specifications.
- Construction equipment shall be staged and construction employee parking shall be located as far as possible from any sensitive receptors. For the purposes of this project, sensitive receptors are residential dwellings and the community park.
- Stationary equipment with substantial potential to result in vibration (e.g., pile drivers) shall be placed away from existing vibration-sensitive receptors (including residences constructed during earlier phases) and/or acoustical shielding shall be provided.
- A disturbance coordinator shall be designated and the name and phone number of this person shall be posted conspicuously at the site. The disturbance coordinator shall respond to complaints about vibration and shall take the steps necessary to mitigate the problem in a timely fashion.
- Access to the site by construction-related truck traffic shall be limited to the hours of 7 a.m.–6 p.m., Monday–Sunday, unless a special permit is issued to the project applicant by the City.

Implementation of this mitigation measure would reduce the impact to a less-than-significant level.

4.7 Geology and Soils

4.7.1 Introduction

This section discusses the general topographical, geologic and seismic issues related to the implementation of the proposed City of Williams General Plan Update. The City's geologic setting and location relative to faults are described, as well as how underlying materials could contribute to erosion, subsidence, settlement, and seismic hazards such as ground shaking, liquefaction, and landslides.

4.7.2 Environmental Setting

Topography

The City of Williams lies on a generally flat terrain located in the Central Valley of California. The benchmark elevation of the City is 80 feet. Changes in elevation across town vary slightly with gradient averages in the range of about 0.05% to 0.5%. Elevations across the project area range from 110 feet above mean sea level to approximately 60 feet above mean sea level. The City is traversed by several seasonal streams.

Geology

The City of Williams lies in the Central Valley and is describes as Quaternary sedimentary deposits of igneous and metamorphic rocks. These deposits are within a historic alluvial floodplain of the Sacramento River and various other channels. The Quaternary alluvial deposits of the Central Valley occupy the eastern one-half of Colusa County. The soil is primarily characterized by finely textured, clay soils with slow water infiltration and transmission rates.

The soils have been assigned to Group D – hydrologic group, or high runoff potential soils, that have a high clay content, high swelling potential, soils with a permanent high water table, soils with a clay pan or clay layer at or near the surface, and shallow soils over nearly impervious material.

There are no significant mineral resource zones mapped in the project area.

Soils

The date of the last soil survey for Colusa County was 1998 according to the NRCS (National Resource Conservation Service from the U.S. Department of Agriculture). Most of the soil in the Williams area are Copay clay loam 0 to 1 percent slopes and Willows silty clay 0 to 1 percent slopes. Both of these soils types are found within areas that experience approximately fourteen to sixteen inches of annual precipitation. The typical vegetation on this soil type is irrigated crops. Flood-control structures on the Sacramento River have changed flooding frequency and duration for these alluvial soils.

Seismic and Geologic Hazards

Surface Rupture, Ground Shaking, Tsunamis and Seiches

The impacts of earthquakes in Williams depend on the particular fault, fault location, distance from the City, and magnitude of the earthquake. These factors determine the degree of shaking that would occur in the City. Surface rupture is the breakage of ground that results due to an earthquake. In addition, the

soil and geologic structure underlying Williams influence the amount of damage that the City may experience.

Table 4.7.1: Modified Mercalli Intensity Scale

Intensity Value	Intensity Description	Richter Scale
I	Not felt except by a very few persons under especially favorable circumstances.	0.1-.09
II	Felt only by a few persons at rest, especially on upper floors on buildings. Delicately suspended objects may swing.	1.0-2.9
III	Felt noticeably indoors, especially on upper floors of buildings, but many people do not recognize it as an earthquake. Standing motor cars may rock slightly, vibration similar to a passing truck. Duration estimated.	3.0-3.9
IV	During the day felt indoors by many, outdoors by few. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.	4.0-4.5
V	Felt by nearly everyone, many awakened. Some dishes and windows broken; a few instances of cracked plaster; unstable objects over-turned. Disturbances of trees, poles may be noticed. Pendulum clocks may stop.	4.6-4.9
VI	Felt by all, many frightened and run outdoors. Some heavy furniture moved; and fallen plaster or damaged chimneys. Damage slight	5.0-5.5
VII	Everybody runs outdoors. Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving motor cars.	5.6-6.4
VIII	Damage slight in specially designed structures; considerable in ordinary substantial buildings, with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Persons driving motor cars disturbed	6.5-6.9
IX	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb; great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken.	7.0-7.4
X	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations; ground badly cracked. Rails bent. Landslides considerable from riverbanks and steep slopes. Shifted sand and mud. Water splashed (slopped) over banks.	7.5-7.9
XI	Few, if any, (masonry) structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipelines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.	8.0-8.4
XII	Damage total. Practically all works of construction are damaged greatly or destroyed. Waves seen on ground surface. Lines of sight and level are distorted. Objects are thrown upward into the air.	8.5+

Surface rupture, ground shaking, ground failure, tsunamis and seiches may be caused by earthquake activity and cause hazards for life and property. These occurrences have the potential to occur anywhere in California. However, there are no active faults in Williams or Colusa County. The northern Sacramento Valley does experience low-intensity shocks from time to time. Faults located in the Sacramento Valley are known as quaternary or pre-quaternary referring to the fact that they were active 200,000 to two million years ago. The nearest known fault is at Sutter Buttes, located between Colusa

and Yuba City. This fault has a maximum credible earthquake magnitude estimated at 5.7 on the Richter scale.

Damage an earthquake, the size of the one mentioned in the prior paragraph, could be moderate to major with damage to building foundations, partial to complete collapse of unreinforced masonry structures, and partial damage to reinforced masonry structures. The City addresses the potential for earthquakes and other geologic hazards through enforcement of the Uniform Building Code. Williams is not at risk for tsunamis or seiches due to the lack of nearby large bodies of water.

Earthquake-Induced Settlement

Settlement of the ground surface can be accelerated and accentuated by earthquakes. During an earthquake, settlement can occur as a result of the relatively rapid compaction and settling of subsurface materials (particularly loose, non-compacted, and variable sandy sediments) due to the rearrangement of soil particles during prolonged ground shaking. Settlement can occur both uniformly and differentially (i.e., where adjoining areas settle at different rates). Typically, areas underlain by artificial fills, unconsolidated alluvial sediments, slope wash, and areas with improperly engineered construction fills are susceptible to this type of settlement. Clean layers of granular materials older than Holocene, such as are found in the Williams area, are of higher relative densities and are thus of low liquefaction potential.

Liquefaction Hazards

Liquefaction is a phenomenon whereby unconsolidated and/or near-saturated soils lose cohesion as a result of severe vibratory motion. The relatively rapid loss of soil shear strength during strong earthquake shaking results in temporary, fluid-like behavior of the soil. Soil liquefaction causes ground failure that can damage roads, pipelines, underground cables, and buildings with shallow foundations. Liquefaction more commonly occurs in loose, saturated materials. These areas require consideration in the siting and construction of various land uses and infrastructure, as well as analysis by qualified geotechnical engineers due to the potential for liquefaction hazards.

Landslides

A landslide or slope failure is a mass of rock, soil and debris displaced down slope by sliding, flowing, or falling. The area around Williams is relatively flat, with very little change in elevation across town, thus, the risk of slope failure and earthquake-induced landslides is considered low within this area.

4.7.3 Regulatory Setting

State of California

Surface Mining and Reclamation Act

The California Surface Mining and Reclamation Act (SMARA) of 1975 requires that all cities incorporate into their general plans mapped mineral resources designations approved by the State Mining and Geology Board. SMARA was enacted to limit new development in areas with significant mineral deposits. The State Geologist classifies land in California based on availability of mineral resources.

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (formerly the Alquist-Priolo Special Studies Zones Act), signed into law in December 1972, requires the delineation of zones along active faults in California. The purpose of the Alquist-Priolo Act is to regulate development on or near fault traces to reduce the hazard of fault rupture and to prohibit the location of most structures for human occupancy across these traces. Cities and counties must regulate certain development projects within the zones, which includes withholding permits until geologic investigations demonstrate that development sites are not threatened by future surface displacement. The risk of surface fault rupture is not necessarily restricted to the area within a Fault Rupture Hazard Zone, as designated under the Alquist-Priolo Act.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act, passed in 1997 primarily as a result of the 1994 Northridge Earthquake, was developed to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other ground failure, and from other hazards caused by earthquakes. This act requires the State Geologist to delineate various seismic hazard zones and requires cities, counties, and other local permitting agencies to regulate certain development projects within these zones. Before a development permit is granted for a site within a Seismic Hazard Zone, a geotechnical investigation of the site must be conducted and appropriate mitigation measures incorporated into the project design. Geotechnical investigations conducted within Seismic Hazard Zones must incorporate standards specified by CGS Special Publication 117, Guidelines for Evaluating and Mitigating Seismic Hazards.

Hospital Facilities Seismic Safety Act of 1973

Hospitals, unlike most other buildings, must not only be safe for patients but also be able to provide care to the community in the event of a major disaster, including earthquakes. The 1971 San Fernando earthquake severely damaged four major modern hospitals in Southern California. To ensure that hospitals in California conform to high construction standards, the Alfred E. Alquist Hospital Facilities Seismic Safety Act (HSSA) was passed in 1973. The intent of the HSSA is to assure that hospitals are reasonably capable of providing services to the public after a disaster. The HSSA requires the establishment of rigorous seismic design regulations for hospital buildings and requires that new hospitals and additions to hospitals have the capacity, as far as is practical, to remain functional after a major earthquake. The City of Williams does not currently have hospital facilities within the City boundary.

California Building Code

The California Building Code (CBC) has been codified in the California Code of Regulations as Title 24, Part 2, which is a portion of the California Building Standards Code. Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under state law, all building standards must be centralized in Title 24 or they are not enforceable. The purpose of the CBC is to provide minimum standards to safeguard property and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of building and structures within its jurisdiction.

The Uniform Building Code

Published by the International Code Council (formerly the International Conference of Building Officials), the Uniform Building Code is a widely adopted building code throughout the United States. The CBC is based on the UBC, with necessary California amendments. These amendments include significant building design criteria that have been tailored for California earthquake conditions. The national standards adopted into Title 24 apply to all occupancies in California, except for modifications adopted by State agencies and local governing bodies.

4.7.4 Impact Methodology

The potential for geologic and seismic impacts as a result of implementation of the proposed General Plan was reviewed and evaluated using readily available background information, such as pertinent geologic and seismic hazard maps. Key sources of information included the California Department of Conservation, Division of Mines and Geology (CDMG) and the United States Geologic Survey (USGS).

In order to reduce or mitigate potential hazards from earthquakes or other local geologic hazards, the City ensures that development will continue to be completed in compliance with local and State regulations. The regulations include the California Building Code, the Uniform Building Code, the Alquist-Priolo Earthquake Fault Zoning Act, and the Seismic Hazard Mapping Act. Goals and recommendations developed for the proposed General Plan include continued conformance with these applicable local and State building regulations.

4.7.5 Standards of Significance

The City of Williams General Plan Update would result in significant impacts if it would:

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
    - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42).
    - Strong seismic ground shaking.
    - Seismic-related ground failure, including liquefaction.
    - Landslides.
b. Result in substantial soil erosion or the loss of topsoil.
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1997), creating substantial risks to life or property.
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

f. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
g. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

4.7.6 Impacts and Mitigation

Rupture of Known Earthquake Faults

IMPACT 4.7.1:	**Fault Rupture: Future development resulting from implementation of the proposed General Plan Update could result in geologic or seismic hazards with respect to rupture of a known earthquake fault.**
Level of Significance Before Policies/Mitigation:	Less than Significant
Mitigation Measures:	None required
Level of Significance After Policies/Mitigation:	Less than Significant

Impact Analysis

Although geologic hazards exist within the City of Williams General Plan area, as described in the Geologic Setting section, all future development would have to comply with the building codes including those related to seismic activity. Compliance with these standards would ensure this impact would be less than significant. No mitigation is required.

Exposure to Ground Shaking and Liquification

IMPACT 4.7.2:	**Seismic Ground Shaking: The City of Williams could be subject to high levels of ground shaking and minor liquefaction during a seismic event. This could result in substantial damage to some buildings within the community.**
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	Goals and Recommended Actions in the proposed General Plan Update
Level of Significance After Policies/Mitigation:	Less than Significant

Impact Analysis

Major faults exist throughout California and fault activity has the potential to create regional ground shaking in most areas. Development under the proposed General Plan Update may result in up to 734 acres of residential and approximately 1,282 acres of non-residential uses, thereby exposing more people (residents and employees) to the effects of ground shaking from regionally generated earthquakes. The effects of seismically induced ground shaking are probably the most critical potential seismic hazards for the City. Seismic hazards include secondary effects of seismically induced ground failure including liquefaction and landslides. Property damage, personal injury, and loss of life may result from such events.

Strong seismic ground shaking could result in substantial damage to some buildings within the City. The effects of ground shaking would be sufficiently mitigated for structures and infrastructure designed and

constructed in compliance with current building codes and engineering standards. However, there is the possibility of partial to total collapse of some buildings that were built prior to the adoption of modern building codes and design standards. For this reason, the City has identified additional protective measures within the goals and recommended actions incorporated into the proposed General Plan Update. These acknowledge safety concerns due to seismic activity and would minimize potential seismic hazards in the City to less than significant levels.

Mitigation Measures/Goals and Recommended Actions in the Proposed General Plan Update

4.13 The City will continue to coordinate with the Colusa county Office of Emergency Services and the California State Office of Emergency Services to collect, account for, and distribute geologic data for use in preparedness and hazard mitigation planning.

4.14 Geotechnical investigation will be required by the City for any development proposed to occur in an area of known subsidence for which engineering modification may be necessary to mitigate or eliminate adverse impacts.

4.15 All building permits for new buildings or the expansion or reconstruction of existing buildings will ensure conformance with the seismic requirements of the California Building Code and applicable fire and building codes.

4.16 The City will comply with state seismic and building standards n the design and citing of its critical emergency response facilities, and coordinate with other local agencies, such as the Williams Unified School District, to facilitate their compliance as well.

4.u Update from time to time the City's building standards to stay current with amendments to the California Building Code.

Landslide Hazards

IMPACT 4.7.3:	**Landslides: The proposed General Plan Update could result in geologic or seismic hazards with respect to landslides.**
Level of Significance Before Policies/Mitigation:	No Impact
Mitigation Measures:	None Required
Level of Significance After Policies/Mitigation:	No Impact

Impact Analysis:

The landslide susceptibility of an area is dependent upon several variables including: slope steepness, slope material, material structure and layering, water content, vegetation, erosion areas/man-made cuts, and seismic activity. These areas require consideration in the siting and construction of various land uses and infrastructure, as well as analysis by qualified geotechnical engineers due to the potential for landslides.

Williams is relatively flat, with changes in elevation varying less than fifty feet across town. In these areas, the threat of landslide is not significant. There would be no impact and no mitigation is required.

Soil Erosion and Loss of Topsoil

IMPACT 4.7.4:	**Soil Erosion: Future development resulting from implementation of the proposed General Plan Update could result in impacts related to soil erosion or the loss of topsoil.**
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	Goals and Recommended Actions in the Proposed General Plan Update
Level of Significance After Policies/Mitigation:	Less Than Significant

Impact Analysis

Topographically, the City of Williams is quite similar; with a flat developed area within the City boundary, and likewise, flat agricultural areas surrounding the built environment. The urbanized area within the City boundary is predominately flat with minimal slope change and is likely to consist of Copay silty clay and Willows silty clay, which have only slight erosion potential. Future development resulting from implementation of the proposed General Plan Update would occur on vacant and underutilized land throughout the urbanized portion of the City and into the areas surrounding the City where existing rural residential is present. Much of the area available for new development on infill sites would be covered by landscaped vegetation or impermeable surfaces. This would result in minimal soil erosion or loss of topsoil.

New development in the surrounding agricultural area, has the potential to generate impacts associated with soil erosion. However, these projects would be limited and required to conduct project-level environmental review that would evaluate and adequately mitigate impacts. Grading plans for proposed development projects would include an approved drainage and erosion control plan to minimize the impacts from erosion and sedimentation during grading. Plans would be required to conform to all standards adopted by the City and meet the requirements set by Storm Water Pollution Prevention Plans (SWPPP) mandated by California State Water Resources Control Board. No significant impacts to topsoil are anticipated.

Goals and recommended actions identified in the proposed General Plan Update would further reduce any potential impacts resulting from soil erosion or loss of topsoil to less than significant.

Mitigation Measures/Policies and Recommended Actions in the Proposed General Plan Update:

4.1 The City will require applicants for development to submit drainage studies that adhere to storm water design requirements and incorporate measures from the Storm Drainage Master Plan to prevent on- or off-site flooding.

4.f Begin identifying Best Management Practices (BMPs), particularly construction site storm water runoff control and post-construction storm water management, to reduce the discharge of pollutants to the storm water system. These should be integrated as standards into the City's subdivision regulations.

4.4 New development shall not cause downstream property, watercourses, channels, or conduits to receive storm water runoff at a higher peak flow rate than would have resulted from the same storm event occurring over the development site with the land in its natural, undeveloped condition.

4.g Through improved land development practices and regulations, establish a hierarchy for managing storm water with the following priorities: minimize impervious surfaces, attenuate flows by use of open, vegetated swales and natural depressions and preserve existing natural stream channels, infiltrate runoff, provide storm water retention and then detention structures, provide velocity dissipation structures or channel design, and construct storm sewers.

Loss of Mineral Resources

IMPACT 4.7.5: Minerals: The proposed General Plan Update could result in the loss of availability of a known mineral resource.	
Level of Significance Before Policies/Mitigation:	No Impact
Mitigation Measures:	None Required
Level of Significance After Policies/Mitigation:	No Impact

Impact Analysis:

There are no mapped mineral resources in the City of Williams General Plan area. There would be no impact and no mitigation is required.

4.8 Hydrology and Water Quality

4.8.1 Introduction

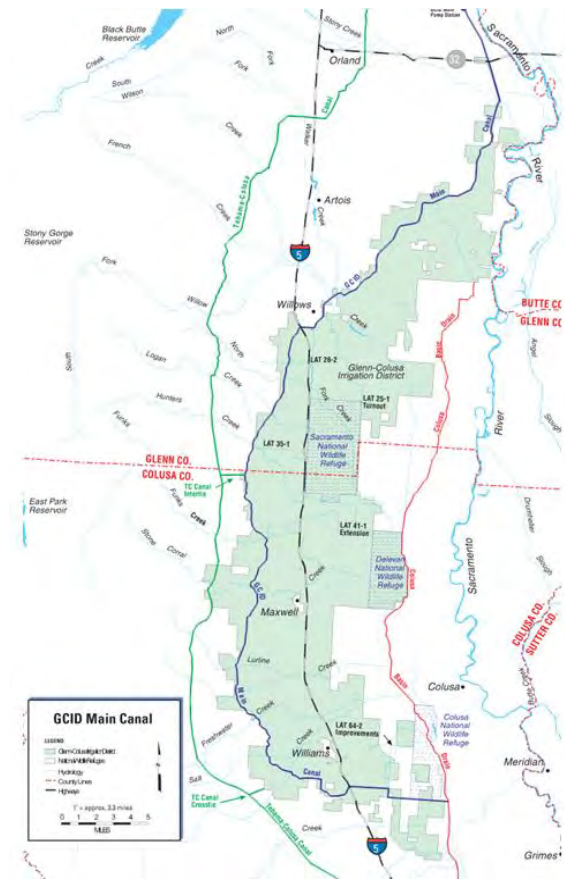
Future development, as proposed by the Updated General Plan will increase the City's water demand. It is important that plans and provisions are made to expand the water supply, as needed, to accommodate this growth without adversely affecting aquifers and other potential water sources.

4.8.2 Environmental Setting

Surface Water

Williams is primarily situated in the Freshwater Creek Basin. One of its tributaries, Salt Creek, runs through the City limits and flows into the Sacramento River, which drains in a southerly direction toward the San Francisco Bay. Spring Creek merges into Salt Creek to the southwest of the City, and Freshwater Creek merges into Salt Creek further downstream to the northeast of the City. See Figure 4.8.1, Rivers.

Figure 4.8.1: Rivers and Streams



The Glenn Colusa Canal, illustrated in Figure 4.8.1, mainly pumps water from the Sacramento River and distributes water across both Glenn and Colusa counties, including Williams. Agriculture is the primary use of water in the County, and the canal is the primary source for irrigation, offering a more affordable option than pumping groundwater. The canal is governed by the Glen Colusa Water District, which is the largest water district in the Sacramento Valley and has a 175,000-acre jurisdiction. It operates on a $15 million budget and is led by a five-member board of directors.

Groundwater Supply

Groundwater for Williams' residents is drawn from the Sacramento River groundwater basin. The source has been historically reliable and of generally good quality, although groundwater closer to Salt Creek is sometimes affected by drainage from saline springs in the upper part of the watershed. The water is generally very shallow within the Planning Area, with depths estimated to be as shallow as five or six feet below ground surface. The actual depth to groundwater varies across the Planning Area and is subject to seasonal fluctuation.

The City operates three regular production wells and two standby wells. The three active wells include numbers 8, 9 and 10, which collectively pump approximately 2,800 gallons per minute (GPM). The two standby wells have a total pump capacity of 820 GPM, although they each have poor water quality and thus, are not included as normally-producing wells. The wells draw ground water from depths ranging from 120 feet to as deep as 500 feet. The source of groundwater is recharge from the hills to the west. Each well pumps directly to the distribution system, which largely includes eight inch water lines.

The average daily water draw by the City's municipal water system is about 400,000 gallons, which increases substantially to 1.2 to 1.5 million gallons on a peak day. The month of July is usually the peak month with around 36.5 million gallons pumped during that month.

Potable Water Quality

Created by the State Legislature in 1967, the State Water Resources Control Board protects water quality by setting statewide policy, coordinating and supporting regional water board efforts throughout the State, and reviewing petitions that contest regional board actions. The State Board is also solely responsible for allocating surface water rights. The State Water Board has four major programs, among them is water quality. The State Water Board works in coordination with the regional water boards to preserve, protect, enhance and restore water quality. Their major areas of focus include: stormwater, wastewater treatment, water quality monitoring, wetlands protection, ocean protection, environmental education, environmental justice, clean up contaminated sites such as brownfields, and low-impact development.

Wastewater Treatment

The City provides wastewater collection, treatment, and disposal services to approximately 1,250 connections and serves a population of approximately 4,800, including both residential and nonresidential users. The wastewater treatment plant, located at 701 B Street, has a permitted flow and design capacity of 0.5 MGD of tertiary treated, disinfected effluent to Salt Creek.

The existing plant will soon be replaced by a new plant that will, initially, have the same capacity. City build-out plans are to eventually expand the plant up to 1.0 MGD, although it could be expanded beyond that level in the future (General Plan Background Report page 2.24). To accomplish this, existing Regional Water Quality Control Board Permits will need to be amended.

Stormwater Management

The Williams storm drainage infrastructure is limited to overland sheet flow from southwest to northeast, roadside ditches, valley gutters, siphons, and surface drainage in the streets. There are few underground storm drains for collecting and disposing storm water runoff. The only neighborhoods that are served by underground storm sewers are those that have been developed more recently, including the development to the west and north of the school property (generally including Virginia Street, Nicolaus Drive, Brenda Way, Andrew Drive, and Celle Way), as well as the Valley West Neighborhood. There is also a storm sewer line extending southward to Morning Star Tomatoes. Other existing drainage infrastructure includes several existing drainage outfalls and the following two detention basins:

- The Eastside Project Detention Basin, which is located within the Valley Ranch Neighborhood. This facility also serves as a neighborhood park and walking trail for nearby residents.
- The Nicolaus Estates Detention Basin, which is located on the west side of Virginia Street south of Nicolaus Street. This facility is dry-bottom and is fenced and gated.

Flooding

The northern portion of the community is subject to flooding from Salt Creek. Flowing from west to east, Salt Creek is the most significant drainage feature in the study area. During storms and high water events the culverts beneath the Union Pacific Railroad (UPRR) and north of SR 20 exceed capacity causing water to flow southward along the west side of the railroad tracks and inundating the area north of E Street. The Flood Insurance Rate Maps (FIRM) published by the Federal Emergency Management Agency (FEMA) reflect the areas of flooding to encompass the areas west of Brenda Way (north of E Street) and west of Davis Road (south of E Street), along the northern edge of North Street to Seventh Street where it follows the railroad as far south as I Street. On the east side of I-5 it follows the northern boundary of the East Side Main Drain of the Glenn Colusa Irrigation District (GCID) east to Husted Road and north toward SR 20.

4.8.3 Regulatory Setting

Federal

Clean Water Act of 1972. This Act is the principle law governing pollution control and water quality of the Nation's waterways. The objective of the Act is to restore and maintain the chemical, physical and biological integrity of the Nations waters (33 U.S.C. 1251). Section 402 of the Clean Water Act controls water pollution through the National Pollutant Discharge Elimination System (NPDES), by regulating point sources that discharge pollutant into waters of the U.S. Implementation of the act is the responsibility of the Environmental Protection Agency (EPA), which has delegated much of the authority to state and regional agencies.

Executive Order 11900, Floodplain Management. The Major requirements of this Federal order are to avoid support of floodplain development; to prevent uneconomic, hazardous, or incompatible use of floodplains; to protect and preserve the natural and beneficial floodplain values; and to be consistent with the standards and criteria of the National Flood Insurance Program, as administered by the Federal Emergency Management Agency (FEMA).

State of California

State Water Resources Control Board Construction General Permit, 99-08-DWQ. Construction activities that disturb one or more acres of land that could impact hydrologic resources must comply with the requirements of this permit. To be in compliance, the applicant for a construction permit must file a complete and accurate Notice of Intent with the state Water Resources Control Board. Compliance requires conformance with applicable best management practices (BMPs) and development of a Storm Water Pollution Prevention Plan. These prevention plans are to contain a site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge point, general topography both before and after construction, and drainage patterns across the project.

The California Legislature enacted the Urban Water Management Planning Act (Water Code Sections 10610 - 10656) in 1983. Essentially, the Act requires most urban water suppliers to prepare urban water management plans (UWMPs) to ensure near and long term viability and reliability of local water supplies.

California's Updated Model Water Efficient Landscape Ordinance AB1881 was approved by the Office of Administrative Law on September 10, 2009. It is mainly aimed at requiring the utilization of appropriate irrigation technology that will solve common problems such as such as swing joints, so when risers are broken off, they do not gush unnoticed for weeks; it is mostly aimed at new construction and commercial landscapers. Existing landscapes and irrigation systems will not be forced to retrofit under AB 1881 unless there is a renovation. AB 1881 does, however, have a budget as to how much water may be applied to those plants and reduces the statewide evapotranspiration factor from 0.8 to 0.7.

Regional

Wastewater treatment is subject to the requirements of the California Regional Water Quality Control Board, Central Valley Region. Williams is currently under an order by this agency to improve the quality of its treated discharge by replacing its existing treatment plant.

Local

The basic tools for regulating construction in potentially hazardous floodplain areas are local zoning techniques. Proper floodplain zoning can be beneficial in the preservation of open space, retention of floodplains as groundwater recharge areas, and directing of development to less flood-prone areas.

The City has adopted FEMA flood hazard boundaries. The Flood Insurance Rate Maps (FIRM) published by FEMA reflect the areas of flooding to encompass the areas west of Brenda Way (north of E Street)

and west of Davis Road (south of E Street), along the northern edge of North Street to Seventh Street where it follows the railroad as far south as I Street. On the east side of I-5 it follows the northern boundary of the East Side Main Drain of the Glenn Colusa Irrigation District (GCID) east to Husted Road and north toward SR 20. See Figure 2.6, Storm Drainage System, of the Updated General Plan.

4.8.4 Impact Methodology

Water Supply and Distribution

Hydrologic, water supply and water delivery impacts were evaluated using information provided in the City of Williams Municipal Service Review, the Updated General Plan Background Report, and the Williams 2010 Annual Water Quality Report. These reports conclude that the Williams water supply is sufficient in quantity and, with exception of manganese content, sufficient in quality to meet current demands. The projected increase in population of 4,535 persons by 2030 will result in an increase in daily water demand of approximately 500,000 gallons per day. This increase can be accommodated by the addition of wells and/or pumping capacity, additional elevated storage, and new distribution facilities to serve the developing areas.

Stormwater Management

In November 2007, a Storm Drainage Master Plan was completed for the City. This Master Plan outlined recommended storm drainage facilities intended to serve new development within the City's Sphere of Influence (SOI). The plan document addressed storm drainage facilities and necessary upgrades to accommodate storm runoff generated under fully developed (build-out) conditions. This study preceded the General Plan update process, and the assumptions of future land use that were provided by City staff assumed a higher intensity of future development (and implicit population growth) than that of the Updated General Plan. Nevertheless, the Storm Drainage Master Plan is intended as a guideline document to identify storm drainage facilities needed to serve future development and reduce flooding in existing developed areas.

The Storm Drainage Master Plan included the following five recommendations:

1. Additional detention basins to store runoff in a manner that reduces peak flows that would otherwise exceed the capacity in downstream drainage channels. These detention basins are to be included within the framework of any future subdivisions or land development plans.
2. Underground storm sewers to serve new development areas. This recommendation should be considered in the context of the development character. For instance, rural and clustered suburban developments may be designed to have sufficient open space to accommodate their drainage without underground infrastructure.
3. Open channels, which are proposed to be concrete-lined to convey storm runoff to or between detention basins. Depending on the character and scale of development it may be prudent to evaluate an alternative of dechannelization. Effectively, the same or more volume may be conveyed with broader channels. Given the open space ratios in the rural and clustered suburban districts this

may be accomplished. These would serve as an amenity to the adjacent development rather than an unsightly utility structure.

4. Pump stations to assist in draining the detention basins where gravity flow is not possible due to the topography.
5. Use of existing outfalls with controlled outlets and discharge rates recognizing the limited capacity of downstream outfalls.

Flooding

The 2007 Storm Water Master Plan included the following recommendations to reduce existing flooding problems:

1. A new detention basin on the north side of North Street, with an open channel parallel to North Street;
2. A new detention basin near the intersection of B Street and I-5;
3. A new manhole and flap gate at the existing 48 inch storm drain pipe near Seventh Street and State Highway 20, which would prevent surcharging of Salt Creek into the City via the storm drain the overpass at SR 20 over Seventh Street and the UPRR;
4. Upgrades to existing cross drainage culverts along existing drainage ditches to improve capacity.

4.8.5 Standards of Significance

The Williams Updated General Plan establishes development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, “Environmental Checklist Form”, of the CEQA Guidelines. The Updated General Plan would result in a significant impact if it would:

a. Violate any water quality standards or waste discharge requirements?
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
f. Otherwise substantially degrade water quality?

g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

j. Inundation by seiche, tsunami, or mudflow?

4.8.6 Impacts and Mitigation

Violation of Water Quality Standards

IMPACT 4.8.1:	**Future development would violate any water quality standards or waste discharge requirements.**
Level of Significance Before Policies/Mitigation:	Potentially Significant Impact
Mitigation Measures:	Required
Level of Significance After Policies/Mitigation:	Less than Significant Impact

Impact Analysis and Mitigation

The existing wastewater treatment does not comply with regional, state, and federal water quality standards, and the City began significant repairs to the wastewater collection system in 2010. These repairs included a replacement of the existing 0.5 MGD treatment plant. The future capacity of the plant will allow for the projected population growth as well as commercial and industrial users at roughly the same ratio as exists today.

These improvements and future expansions in treatment capacity are referenced in the Updated General Plan's policy and action statements:

Policies:

5.1 The City of Williams will provide utilities concurrently with development.

5.2 The City of Williams will provide utility service in logical order and therefore will not extend trunk facilities through significant expanses of vacant land. Exceptions will be made for industries that will make a significant contribution to the sustainability of the community.

5.3 Improvements to the collection, distribution, treatment, and conveyance system will be commensurate with the demands of new development.

5.4 The City will identify non-development related NPDES permitting requirements to ensure they coordinate with development related regulations. Work to align all NPDES related efforts shall be a continuing effort.

5.5 The City's ongoing efforts to improve the drainage system and to coordinate them with parks and recreational needs shall be communicated to all decision makers and City staff to ensure alignment.

5.6 The City will amend its Storm Drainage Master Plan to take into consideration the Central Valley Flood Protection Plan and to incorporate design standards that go beyond engineering to incorporate aesthetic features.

Actions:

5.b Continue developing the City's Capital Improvement Program (CIP) to repair and replace aging and deteriorated sewer lines, which will improve the flow efficiency, reduce inflow and infiltration into the collection and treatment systems, and help to mitigate ground water impacts.

5.e Amend the zoning ordinance to include ground water protection measures in site development standards. Include open space provisions in the density standards.

5.f Amend the subdivision ordinance to include ground water protection measures in future subdivisions.

5.g In accordance with AB 1881, the Water Conservation Landscaping Act of 2006, water efficient landscape standards shall be developed to reduce water consumption for new development.

Depletion of Groundwater Supplies

IMPACT 4.8.2:	**Future development would substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.**
Level of Significance Before Policies/Mitigation:	Potentially Significant Impact
Mitigation Measures:	Policies Presented in the General Plan
Level of Significance After Policies/Mitigation:	Less than Significant Impact

Impact Analysis and Mitigation Measures

The existing supply for Williams' water distribution system has been determined to be adequate for current needs and can be expanded to meet future requirements without harming the aquifer. Because of the distances between Williams and other communities in Colusa County, future increases in water supply pumping will not impede the availability of water supplies for other systems. The groundwater is recharged in the Planning Area regularly through the irrigation of crops with surface water. Furthermore, the following Updated General Plan Policies and actions would mitigate the impacts from future development.

5.1 The City of Williams will provide utilities concurrently with development.

5.2 The City of Williams will provide utility service in logical order and therefore will not extend trunk facilities through significant expanses of vacant land. Exceptions will be made for industries that will make a significant contribution to the sustainability of the community.

5.3 Improvements to the collection, distribution, treatment, and conveyance system will be commensurate with the demands of new development.

5.b Continue developing the City's Capital Improvement Program (CIP) to repair and replace aging and deteriorated sewer lines, which will improve the flow efficiency, reduce inflow and infiltration into the collection and treatment systems, and help to mitigate ground water impacts.

5.e Amend the zoning ordinance to include ground water protection measures in site development standards. Include open space provisions in the density standards.

5.f Amend the subdivision ordinance to include ground water protection measures in future subdivisions.

5.g In accordance with AB 1881, the Water Conservation Landscaping Act of 2006, water efficient landscape standards shall be developed to reduce water consumption for new development

Alteration of Drainage, Stormwater, and Water Quality

IMPACT 4.8.3:	**Future development would substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.**
IMPACT 4.8.4.	**Future development would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.**
IMPACT 4.8.5	**Future development would otherwise substantially degrade water quality.**
Level of Significance Before Policies/Mitigation:	Less than Significant Impact
Mitigation Measures:	Required
Level of Significance After Policies/Mitigation:	Less than Significant Impact

Impact Analysis and Mitigation Measures

Future urban and non-clustered development, as specified in the Updated General Plan, has the potential of altering runoff or drainage patterns in a manner that could cause damage to adjoining properties, exceed the capacity of storm drainage facilities, or compromise public safety. To avoid these potentially adverse impacts, the City has adopted a stormwater management plan and improvement program, with supporting zoning and subdivision regulations, which provide for improvements to alleviate existing drainage/flooding problems and ensure that future growth is accommodated without significantly altering drainage patterns or creating erosion conditions.

These measures are also supported by the following General Plan policy and action statements:

Policies

5.1 The City of Williams will provide utilities concurrently with development.

5.5 The City's ongoing efforts to improve the drainage system and to coordinate them with parks and recreational needs shall be communicated to all decision makers and City staff to ensure alignment.

Actions

5.g In accordance with AB 1881, the Water Conservation Landscaping Act of 2006, water efficient landscape standards shall be developed to reduce water consumption for new development

5.h Develop design standards for detention basins based on type – aesthetic design for single use basins and recreational standards (development requirements) for joint use.

5.i For joint use detention basins, on a case-by-case basis, determine the proper cost share between drainage mitigation to be borne by future development versus public benefit of additional recreational infrastructure. Distinguish cost participation depending on the number of dwelling units that will be served by the recreational use. Establish guidelines for parkland dedication credit in future residential areas.

5.j Develop different sets of standards and specifications for drainage features. Draft the standards to correspond with the Land Use Plan character – rural, suburban, auto-urban, and urban.

5.k Incorporate into City standards and specifications means for addressing storm water quality, including a first preference for non-structure best management practices such as bio-retention, vegetated swales and buffer strips, constructed wetlands, and other environmentally sensitive design and construction practices.

Flood Hazards

IMPACT 4.8.6:	**Future development would place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.**
IMPACT 4.8.7:	**General Plan Update adoption would result in the placement within a 100-year flood hazard area structures which would impede or redirect flood flows.**
Level of Significance Before Policies/Mitigation:	Less than Significant Impact
Mitigation Measures:	Required
Level of Significance After Policies/Mitigation:	Less than Significant Impact

Impact Analysis and Mitigation Measures

Future development, as provided for in the Updated General Plan, will be subject to the floodplain protection provisions of the City's zoning regulations. New development will not be allowed in the 100-year flood hazard areas. Additionally, the City's capital improvements plan includes the construction of stormwater management facilities that will alleviate existing flooding conditions. These are recognized in the following goal statements presented in Section 3, Land Use and Character, and Section 5, Public Facilities:

3.43 Future development and redevelopment should be planned and implemented with appreciation for the physical environment and natural features of the community and with recognition of potential physical constraints to ensure appropriate siting of various types of development.

3.45 Sensitive resources, including floodplains, wetlands, riparian buffer areas along stream channels, and valued view sheds, will be protected and preserved.

5.1 The City of Williams will provide utilities concurrently with development.

5.5 The City's ongoing efforts to improve the drainage system and to coordinate them with parks and recreational needs shall be communicated to all decision makers and City staff to ensure alignment.

5.6 The City will amend its Storm Drainage Master Plan to take into consideration the Central Valley Flood Protection Plan and to incorporate design standard that go beyond engineering to incorporate aesthetic features.

Endangerment of Life Safety

IMPACT 4.8.8:	**Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.**
IMPACT 4.8.9:	**Future development would expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.**
IMPACT 4.8.10:	**Future development would be affected inundation by seiche, tsunami, or mudflow.**
Level of Significance Before Policies/Mitigation:	No Impact
Mitigation Measures:	Not Required
Level of Significance After Policies/Mitigation:	No Impact

Impact Analysis

These are not factors affecting existing or future development in Williams. There are no significant levees or dams in the area that would be affected by flooding, large water bodies that would be affected by offshore events, or geological formations that are conducive to damaging mudslides.

4.9 Public Services

This section evaluates potential impacts to the provision of law enforcement, fire protection, school services, and healthcare services to the study area associated with adoption of the Updated General Plan.

4.9.1 Environmental Setting

Law Enforcement

Police protection services within the City of Williams are handled by the City's Police Department. The department is managed by the Police Chief, plus two sergeants and one detective. There are 10 sworn officers within the department and three non-sworn authorized positions.

The service area of the Department consists of the City limits, which is approximately 4.2 square miles. Areas outside of the City limits is patrolled by the Colusa County Sheriff's Department. The California High Patrol is responsible for highway patrol along I-5. The City has an unwritten mutual aid agreement with Colusa County for patrol and response.

The Police Headquarters is located at 700 North Street. This 5,400 square foot facility that was constructed in 2008. It was designed to allow expansion as the City grows in the future. There are no holding cells onsite as all offenders are transported to the Colusa County Jail. The Colusa County Sherriff's Department handles the City's dispatch services.

Fire Protection

The Williams Fire Protection Authority (WFPA) was formed In 1994 with the merger of the City of Williams and the Williams Rural Fire District. The authority has a district area that includes the city limits of Williams, together with the surrounding rural area that encompasses approximately 135 square miles. In addition, the WFPA has a service area that extends west to Lake County and south to Yolo County, which expands the entire service area to over 200 square miles. The Authority is part of the California Master Mutual Aid Agreement to provide and seek assistance to and from other fire departments within the state.

The authority is staffed by a full-time Fire Chief, four full-time firefighters, a two-thirds time administrative assistant, and 41 volunteer firefighters.

Equipment housed at the main station includes two Type I and two Type III engines, a 77-foot ladder truck, one water tender and one reserve water tender, a light rescue vehicle, and two command vehicles. The authority has in place a replacement plan, which has resulted in newer, well-maintained equipment.

Schools

Chapter 2, Background Analysis, of the Updated General Plan provides a summary of the 2007 Williams Unified School District (WUSD) facilities needs study and master plan. The existing 52-acre school complex in Williams, situated along E Street in the heart of the community. The site accommodates all

of the City's public schools – elementary, middle, and high schools. Approximate enrollments are shown in table 4.9.1.

Table 4.9.1 Williams Public School Enrollments	
Level/Facility	Students
Elementary (K-3):	373
Upper Elementary (4-6):	290
Junior High (7-8):	165
High School (9-12):	346
Mid-Valley Alternative High School:	24
Opportunity High School (county program)	11
TOTAL	1,209

There is sufficient capacity on the site roughly double the enrollment by expanding the existing schools. The projections for Williams' population growth have been adjusted in this General Plan to roughly half of the population than had been anticipated at the time (2007) of an earlier school facilities study. Since there was enough facility expansion capacity on the existing school complex to accommodate 100% growth according to the 2007 Master Plan, the new population projection of 9,822 by 2030 should not necessitate further expansion until after 2030.

Healthcare Facilities and Services

The City offers a range of healthcare options from internal medicine to specialties such as elder care, minor surgery, and lab work. Hospitals in the region provide options for higher levels of service. Following is a listing of healthcare facilities available to Williams residents:

- Valley West Care Center is a 99-bed nursing home facility in Williams a major employer in the region.
- Urgent Care and Medical Center is the Williams branch of the Colusa Regional Medical Center, which opened in 2006 and serves the local area. Services include adult medicine, family planning, lab collection services, minor surgery, pediatrics, physical exams, women's health, and workers compensation.
- Colusa Regional Medical Center is a county-wide hospital system with the main 48-bed facility located in Colusa. Services include emergency medicine, adult medical and surgical care, childbirth services, physical rehabilitation, imaging and radiographic services, and other specialties.
- Enloe Medical Center is a six-county regional hospital system, with the main 382-bed facility in Chico. Services include cardiac and stroke care, cancer, emergency medicine, and trauma.
- Woodland Memorial Hospital is a 122-bed hospital facility that is part of the Woodland Healthcare organization, offering the full range of health services.

4.3.3 Standard of Significance

The criteria used to determine the significant of an impact were based on the criteria presented in Appendix G of the CEQA Guidelines as follows:

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- Fire protection?
- Police protection?
- Schools?
- Parks?
- Other public facilities?

4.3.4 Impacts and Mitigation

Adverse Physical Impacts

IMPACT 4.9.1:	**Future development would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services.**
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	Policies and Recommended Actions in the proposed General Plan Update
Level of Significance After Policies/Mitigation:	Less than Significant

Impact Analysis

Proposals of the General Plan Update include no provisions that would not result in the overcrowding of public facilities or place adverse stress on public services. Many of the recommended policies and actions are intended to expand these services to accommodate a growing population. Examples of policy and action statements to implement this include the following:

Policies

5.6 The City will provide facilities and services at a minimum of its current manpower ratio per 1000 persons.

5.7 The City will evaluate service provision annually with its budget process to determine necessary additions to the workforce and facility expansion to meet increasing demands of growth.

5.8 The City will determine enhancements annually with its budget process to identify necessary growth in its services to continue to meet service needs.

5.10 The City of Williams remains open to all opportunities to coordinate efforts to continuously improve public education.

5.13 The City will consider adding a new program to educate community leaders of the services the City provides.

5.14 The City recognizes there continues to be need to fill gaps in the provision of health care within a reasonable distance.

Actions

5.l Identify and then evaluate specific areas of the City as potential "City Center" sites.

5.m Workshop the concepts with the City Council and further develop a long range plan for city facilities.

5.n Identify expansion options for all facilities in the short run for the interim needs that will present themselves prior to having accomplished consolidation.

5.o Estimate the City's population annually and project a one, two, five, ten, and twenty year population to recalibrate the City's future needs for facilities and services. Include development pressures and gauge the likelihood that they will come to fruition in the estimates and projections

5.p Support WUSD efforts to expand permanent buildings on site to decrease the need for temporary buildings.

5.q Maintain the City/WUSD relationship to continue sharing school and City facilities and services.

5.r Create written agreements with WUSD regarding school facility use as public parks.

5.s Take steps to lay out a program for an annual "Williams 101" that targets community leaders and teaches them about all City functions, including SOI residents.

5.t Streamline development approvals by eliminating lengthy review processes and allowing staff-level approval for all health and social service related uses.

5.u Ensure that all staff members understand that health and social service providers are a priority for the City so that they may facilitate establishment and retention of such uses.

5.v Continue to evaluate significant gaps and address those that the market has not covered through programming and the Community Center.

5.w Monitor and reevaluate services provided at the Community Center annually and adjust as appropriate.

5.x Consider an additional City staff position that can act as a clearinghouse of contact information for assistance that is available in the City, County, and region.

4.10 Cultural Resources

4.10.1 Introduction

This section contains information about the cultural resources of the City of Williams relevant to the proposed General Plan Update. It provides an overview of the current regulatory framework, describes existing conditions and analyzes the potential impacts of the proposed General Plan Update.

4.10.2 Environmental Setting

This section describes the existing paleontological, archaeological and historical resources in Williams.

One or more of the early archaeological cultures dating back 10,000-12,000 years, Clovis, Folsom or Plano, have been recognized by archaeologists in widely scattered locations across the state. The best known site that is in close proximity to Williams is the Borax Lake site (CA-LAK-36) in the Coast Ranges to the west of Colusa County. At this location, Clovis fluted projectile points have been recovered. Furthermore, D. L. True, has summarized the local prehistory by stating, “There is evidence of occupancy and utilization extending back in time perhaps as much as 5,000 years along the easternmost margins of the north coast range province.” However, published references on archaeological research for Colusa County are limited largely to sites along the Sacramento River.

As stated in the Background Report on Cultural Resources by Ric Windmiller, RPA, the earliest settlers in the region surrounding Williams was M.A. Britton, who located in Spring Valley which is located about four miles southwest of Williams in 1852. William Henry Williams, founder of Williams, settled in the area in 1853 as a farmer and proceeded to purchase or otherwise received homesteaded lands granted to veterans of the War of 1812 and the Mexican War.

The town of Williams, originally named, “Central,” was established when the train tracks were laid from Arbuckle northward in 1876. As the terminus of the train tracks the community quickly grew and sported a full range of commercial and industrial buildings and enterprises. After the initial establishment, the town was ravaged by a number of substantial fires during the years 1877-1885.

The early 1900’s brought continued modest growth to Williams. In 1918, Williams was the second largest town in Colusa County and had electric lights, water works, and more paved streets than any other town its size in the state. 1938 saw the completion of the new City of Williams City Hall. During the two World Wars, Williams continued to experience growth and prosperity with the increase in agricultural production and the construction of the Glenn-Colusa Canal which brought more surface water to the region.

With the advent of the automobile, the town continued to prosper along the Highway 99 route with many buildings and stores being built that were associated with the automobile culture along 99. However, the construction of Interstate 5 probably had much to do with the demise of many businesses and buildings as the travelers were moved outside of the downtown.

Cultural resources are defined as prehistoric and historic sites, structures, and districts, or any other physical evidence associated with human activity considered important to a culture, a subculture, or a

community for scientific, traditional, religious, or any other reason. For analysis purposes, cultural resources may be categorized into three groups: archaeological resources, historic resources, and contemporary Native American resources.

Paleontological Resources

Paleontological resources are the mineralized (fossilized) remains of prehistoric plant and animal life exclusive of human remains or artifacts. Fossil remains such as bones, teeth, shells, and leaves are found in geologic deposits (rock formations) where they were originally buried. Fossil remains are important as they provide indicators of the Earth's chronology and history. These limited and nonrenewable resources provide invaluable scientific and educational data, and are afforded protection under CEQA. Paleontological resources have been documented in the region. As such, there is a likelihood of encountering or damaging unidentified fossils during construction of new development.

Contemporary Native American resources, also called ethnographic resources, can include archaeological resources, rock art, and the prominent topographical areas, features, habitats, plants, animals, and minerals that contemporary Native Americans value and consider essential for the preservation of their traditional values.

Naturalist C. Hart Marriam wrote that the territory of the Ko'ru or Colusa people extended from south of Princeton on the Sacramento River to Meridian and Sycamore. The northern boundary was estimated as the boundary between Colusa and Glenn counties. From east to west, the Colusa people occupied the low-lying valley country from east of Williams to the Marysville Buttes.

Archaeological Resources

Archaeological resources are places where human activity has measurably altered the earth or left deposits of physical remains. Archaeological resources may be either prehistoric (before the introduction of writing in a particular area) or historic (after the introduction of writing). The majority of such places in this region are associated with either Native American or Euro-American occupation of the area. The most frequently encountered prehistoric and early historic Native American archaeological sites are village settlements with residential areas and sometimes cemeteries; temporary camps where food and raw materials were collected; smaller, briefly occupied sites where tools were manufactured or repaired; and special-use areas like caves, rock shelters, and sites of rock art. Historic archaeological sites may include foundations or features such as privies, corrals, and trash dumps.

No Native American cultural resources were reported by the Native American Heritage Commission or by the tribes consulted within the City of Williams General Plan Update area. Neither was any Native American archaeological resources reported by the Northwest Information Center, California Historical Resources Information System.

Historic Resources

Historic resources are standing structures of historic or aesthetic significance. Architectural sites dating from the Spanish Period (1529-1822) through the early years of the Depression (1929-1930) are generally considered for protection if they are determined to be historically or architecturally significant.

Post-depression sites may also be considered for protection if they could gain significance in the future. Historic resources are often associated with archaeological deposits of the same age.

Williams has approximately 40 commercial buildings remaining from the period before 1960. Most of these are arranged along 7th Street north and south of E and along E Street west of the tracks. Approximately the same number of industrial buildings may exist along the railroad tracks. Most of the downtown buildings retained their original detailing above the street-level store fronts. However, the street-level portions of these buildings contain evident alterations.

According to Ric Windmiller, Williams retains a number civic and religious buildings constructed in the 1950s and earlier. The Methodist Church on the corner of 9th and G Street was constructed in the 1880s and, may be the oldest of the remaining historic civic and religious buildings in Williams. The City Hall was completed in 1938 and contains Spanish and Mexican heritage of California. Williams has a fairly diverse collection of residential buildings. Most of the buildings built prior to 1960 were for single-families. Since the City developed over a period of time, the houses of different times and styles are encountered on adjacent parcels creating a mix of housing styles.

4.10.3 Regulatory Framework

This section describes the federal, State and local environmental laws and policies that are relevant to the CEQA review process for cultural resources.

Federal Regulations

National Historic Preservation Act (NHPA)

The National Historic Preservation Act (NHPA) is the most prominent federal law dealing with historic preservation. The NHPA established guidelines to “preserve important historic, cultural, and natural aspects of our national heritage, and to maintain, wherever possible, an environment that supports diversity and a variety of individual choice.” The NHPA includes regulations specifically for federal land-holding agencies, but also includes regulations (Section 106) which pertain to all projects that are funded, permitted, or approved by any federal agency and which have the potential to affect cultural resources. All projects that are subject to the National Environmental Policy Act (NEPA) are also subject to compliance with Section 106 of the NHPA. At the federal level, the Office of Historic Preservation (OHP) carries out reviews under Section 106 of the NHPA. Additionally, the NHPA authorizes the Secretary of the Interior to establish a National Register of Historic Places (The National Register), an inventory of districts, sites, buildings, structures, and objects significant on a national, State, or local level in American history, architecture, archeology, engineering, and culture. The National Register is maintained by the National Park Service, the Advisory Council on Historic Preservation, State Offices of Historic Preservation, and grants-in-aid programs.

State Regulations

In the State of California, the process of reviewing projects and decisions that may impact cultural resources, including historic, archaeological, and paleontological resources, is conducted under several

different federal, State, and local laws. CEQA requires that public agencies consider the effects of their actions on historical resources eligible for listing on the California Register of Historical Resources. Additionally, California Public Resources Code 5024 requires consultation with OHP when a project may impact historical resources located on State-owned land. California State law (SB 18) requires cities and counties to notify and consult with California Native American Tribes about proposed local land use planning decisions for the purpose of protecting Traditional Tribal Cultural Places ("cultural places").

CEQA Guidelines

Section 15064.5 of the CEQA Guidelines further defines criteria for determining the significance of impacts on archaeological and historic resources. Section 15064.5 provides that, in general, a resource not listed on state or local registers of historical resources shall be considered by an agency to be historically significant if the resource meets the criteria for listing on the California Register of Historical Resources.

CEQA guidelines define three ways that a property can qualify as a significant historical resource for the purposes of CEQA review: (1) if the resource is listed in or determined eligible for listing in the California Register of Historical Resources (CRHR); (2) if the resource is included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code, or is identified as significant in a historical resource survey meeting the requirements of section 5024.1(g) of the Public Resources Code unless a preponderance of evidence demonstrates that it is not historically or culturally significant; or (3) if the lead agency determines the resource to be significant as supported by substantial evidence (California Code of Regulations, Title 14, Division 6, Chapter 3, section 15064.5).

For a historical resource to be eligible for listing on the CRHR, it must be significant at the local, state, or national level under one or more of the following four criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. It is associated with the lives of persons important in our past;
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual or possesses high artistic values; or
4. It has yielded, or may be likely to yield, information important in prehistory or history.

Historical resources automatically listed in the CRHR include those historic properties listed in, or formally determined eligible for listing in, the NRHP (PRC Section 5024.1).

Section 15126.4 of the CEQA Guidelines states that "Public agencies should, whenever feasible, seek to avoid damaging effects on any historical resources of an archeological nature." The guidelines further state that preservation in place is the preferred approach to mitigating impacts on archaeological resources. However, according to Section 15126.4, if data recovery through excavation is "the only feasible mitigation," then a "data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the historical resources, shall be prepared and adopted prior to any excavation being undertaken."

Data recovery is not required for a resource of an archaeological nature if "the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the archaeological or historical resource. The section further states that its provisions apply to those archaeological resources that also qualify as historic resources.

California Register of Historic Resources (CRHR)

California State law also provides for the protection of cultural resources by requiring evaluations of prehistoric and historic resources identified in CEQA documents. Under CEQA, a cultural resource is considered an important historical resource if it meets any of the criteria found in Section 15064.5(a) of the CEQA Guidelines. Criteria identified in the CEQA Guidelines are similar to those described under the NHPA. The State Historic Preservation Office (SHPO) maintains the CRHR. Historic properties listed, or formally designated for eligibility to be listed, on The National Register are automatically listed on the CRHR. State Landmarks and Points of Interest are also automatically listed. The CRHR can also include properties designated under local preservation ordinances or identified through local historical resource surveys.

Health and Safety Code, Section 7050.5

Section 7050.5 of the California Health and Safety Code requires that construction or excavation be stopped in the vicinity of discovered human remains until the county coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the California Native American Heritage Commission (NAHC). CEQA Guidelines (Public Resources Code Section 5097) specify the procedures to be followed in case of the discovery of human remains on non-federal land. The disposition of Native American burials falls within the jurisdiction of the NAHC.

Native American Heritage Commission

Additional state regulations include the Native American Heritage Act (NAHA) of 1976, which established the Native American Heritage Commission (NAHC) and protects Native American religious values on state property (see California Public Resources Code 5097.9). In accordance with the Tribal Consultation Guidelines and SB 18, government to government consultation between local governments and Native American tribes prior to the adoption or amendment of a general plan is required. The Lead agency is required to request consultation with responsible and trustee agencies, such as NAHC, during initial study and EIR process (PRC 21080.3, 21080.4). The NAHC has jurisdiction with regard to treatment and disposition of human remains (PRC 5097.94, 5097.98).

California Historical Resources Information System

The California Historical Resources Information System (CHRIS) is a statewide system for managing information on the full range of historical resources identified in California. CHRIS is a cooperative partnership between the citizens of California, historic preservation professionals, twelve Information Centers, and various agencies. This system bears the following responsibilities: integrate newly recorded sites and information on known resources into the California Historical Resources Inventory; furnish

information on known resources and surveys to governments, institutions, and individuals who have a justifiable need to know; and supply a list of consultants who are qualified to do work within their area.

Typically, the initial step in addressing cultural resources in the project review process involves contacting the appropriate Information Center to conduct a record search. A record search should identify any previously recorded historical resources and previous archaeological studies within the project area, as well as provide recommendations for further work, if necessary. Depending on the nature and location of the project, the project proponent or lead agency may be required to contact appropriate Native American representatives to aid in the identification of traditional cultural properties.

If known cultural resources are present within the project area, or if the area has not been previously investigated for the presence of such resources, the Information Center may recommend a survey for historical, archaeological and paleontological sites. Cultural resources that may be adversely affected by an undertaking should be evaluated for significance. For archaeological sites, a significance evaluation typically involves conducting test excavations. For historical sites or standing structures, historical research should be conducted and an architectural evaluation may be warranted. If significant, the resource should be protected from adverse impacts. Data recovery excavations may be warranted in the case of unavoidable damage to archaeological sites. If human burials are present, the appropriate Coroner's office should be contacted. A professional archaeologist and appropriate Native American representatives should also be consulted.

When an initial study identifies the existence, or the probable likelihood, of Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission as provided in Public Resources Code 5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the Native American Heritage Commission.

Local Policies

There are no historic landmarks registered in the Williams project area through the State of California's Office of Historic Preservation or the National Park Service of the US Department of the Interior. The background report for this project completed by Ric Windmiller does list a number of buildings that contribute to the community's present and future cultural identity. Of these items, two were specifically identified as described below:

- The Southern Pacific Railroad-this line of the railroad was built in 1878 by the California Northern Railroad company. The line is active today, and runs north from Davis to Red Bluff.
- Historic KK-Temp2 power line-located 25 feet east of PG&E transmission line at pole A7/122 south of the intersection of Old Highway 99 and Highway 20. This resource contains intact wood poles with glass insulators that were used between 1900-1950.

There are no City ordinances related to cultural resources.

4.10.4 Standards of Significance

The proposed project would have a potentially significant cultural resources impact if it would:

a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5.

b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5.Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

c. Disturb any human remains, including those interred outside of formal cemeteries.

Section 15064.5 of the CEQA Guidelines further defines criteria for determining the significance of impacts on archaeological and historic resources. Section 15064.5 provides that, in general, a resource not listed on state or local registers of historical resources shall be considered by an agency to be historically significant if the resource meets the criteria for listing on the California Register of Historical Resources. The section also provides standards for determining what constitutes a "substantial adverse change" that must be considered a significant impact on a historic resource. The section states further that its provisions apply to those archaeological resources that also qualify as historic resources.

4.10.5 Impacts and Mitigation Measures

This section discusses the potential impacts of the proposed General Plan Update on cultural and paleontological resources in the area. Because this EIR is a Program EIR on a general plan, site-specific analysis of potential impacts on cultural, historical, and paleontological resources is not appropriate. Instead, this analysis identifies the type and magnitude of impacts that may result from the proposed General Plan as a whole. The discussion of potential project impacts is organized by, and responds to, each of the potential impact categories identified in the Standards of Significance.

Historical Resources

IMPACT 4.10.1:	**The proposed General Plan Update could change substantially the significance of a historical resource, defined as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historic resource would be materially impaired.**
Level of Significance Before Policies/Mitigation:	Potentially Significant Impact
Mitigation Measures:	Goals and Recommended Actions in the Proposed General Plan Update
Level of Significance After Policies/Mitigation:	Less than Significant Impact

Impact Analysis

Most of the City's identified and potentially historic resources are located in proximity to the Downtown area and surrounding older residential neighborhood. While registered historic sites are protected by State law, downtown intensification could potentially threaten additional historic structures not yet registered or deemed eligible for the National Register of Historic Places, but which are sites of local importance. Subsequent project-related demolition or alteration of historic buildings or structures or

their immediate surroundings could impair the significance of a historic resource or adversely alter its physical characteristics. However, new development within the City and its SOI would be subject to CEQA, minimizing any potential impacts on historic resources to less than significant.

Mitigation Measures/Recommended Actions in the Proposed General Plan Update:

3.11. Preserve the historic significance of downtown through development and employment of preservation guidelines for alterations to existing buildings. Utilize the guidelines also to ensure the architectural appropriateness of newly constructed buildings.

3.12. Retain the urban character of the existing buildings along 7th and 8th Streets and establish new standards to guide new development to occur in an urban context.

3.15. Redevelopment priority will be given to the rehabilitation and reuse of empty buildings before new buildings are constructed, provided its warrant and feasibility.

3.16. All reasonable and feasible avenues will be explored to save and reuse historic buildings.

3.17. Vacant parcels will be developed in a manner that embraces the urban fabric of downtown.

3.19. The uses and height and area standards will be adapted to preserve the downtown environment.

Archaeological/Paleontological Resources

IMPACT 4.10.2: The proposed Williams General Plan Update could cause a substantial adverse change in the significance of an archaeological resource, destroy a paleontological resource, or disturb human remains.	
Level of Significance Before Policies/Mitigation:	Potentially Significant Impact
Mitigation Measures:	Measures Identified Below
Level of Significance After Policies/Mitigation:	Less than Significant Impact

Impact Analysis

The City of Williams has a possibility of containing paleontological Native American resources and human remains due to its location in a region which was inhabited during prehistoric times by several Native American tribes. Because the locations of sites within the City of Williams General Plan update area potentially containing paleontological resources, archaeological resources or human remains are unknown, construction-related excavation for buildings, infrastructure, or other projects, could result in the disruption or destruction of these resources prior to their identification and/or assessment for uniqueness. Any direct or indirect damage to a paleontological or archaeological resource, as well as the disturbance of human remains, could have adverse effects on the City's cultural resources. Although human remains, fossils and other paleontological resources are considered to be nonrenewable resources and the disruption or destruction of these resources would be considered significant; new development within the City and its SOI would be subject to CEQA and would be required to undergo a project-specific analysis of environmental impacts, which would minimize any further damage or

disturbance from impacting the cultural resources after the original discovery of those resources. The below mitigation measures would be implemented on a project-by-project basis as new development occurs, reducing the potential impacts to cultural resources in the project area to a less-than-significant level.

It can be assumed that there is a probability of uncovering and identifying additional archaeological deposits and paleontological Native American resources within the study area. Existing national, state and local laws as well as the goals and recommended actions in the proposed General Plan reduce these potential impacts on historic, archaeological and paleontological resources to less than significant levels.

Mitigation Measures/Recommended Actions in the Proposed General Plan Update:

M.1 In the event that undiscovered cultural resources are found during construction activities on the project site, for example, during road or utilities excavations, the responsible field manager shall order discontinuation of all activities within a minimum of ten (10) meters of the discovery and promptly contact a qualified archaeologist to evaluate the find.

M.2 Project construction personnel shall receive pre-construction orientation regarding cultural resources, their recognition, avoidance, and treatment in the event of fortuitous discoveries of cultural resources. A note to this effect shall be included on all project related plans including, but not limited to grading plans, improvement plans and final map.

M.3 In the event that human skeletal remains, however fragmentary they may be, or disturbed from their original context, the Colusa County Coroner and the Native American Heritage Commission in Sacramento are to be notified immediately as per Section 7050.5[c] of the California Health and Safety Code. All work within a minimum of ten (10) meters shall be discontinued until the representatives of these agencies have been consulted and a work plan has been identified.

4.11 – Biological Resources

4.11.1 Introduction

This section addresses the potential direct and indirect effects of implementation of the proposed General Plan on biological resources in the Williams study area. Relevant governmental policies and regulations are discussed as well as impacts to biological resources that may result from implementation of the proposed General Plan at a program level. Project level analysis of future development sites would be required through the City of Williams development approval process.

4.11.2 Environmental Setting

Vegetation

The city of Williams is located in the northern portion of the Great Central Valley Bioregion (USDA US Forest Service, 1997) and is in a predominately active agricultural area. The lands surrounding the built out portion of the city is primarily in irrigated crop lands. This area is located in the Sacramento Valley subregion of the California Floristic Province (Hickman 1993) with characteristic vegetation communities of annual grasslands and agricultural habitats such as agricultural croplands, fallow agricultural lands, orchards, horticultural / landscaped, and seasonal wetland.

The Colusa Basin subsection of the Sacramento Valley, where the City of Williams is located, is on the overflow plain of the Sacramento River. This basin lies between the levees of the Sacramento River and alluvial fans from the northern California Coast Ranges. The area is underlain by a nearly level basin floor with alluvial fans along the western edge of the subsection. The soils are mostly moderately well to poorly drained (USDA Forest Service, 1997). Historically, the Sacramento River, before it was controlled by dams, artificial levees, and diversions) overflowed onto portions of the Colusa basin when it flooded. Today, the river is contained by levees and streams draining eastward from the northern California Coastal Ranges, which are diverted southward in overflow channels that run parallel to the Sacramento River. Most of the streams are dry during the summer. There are no lakes, but winter ponding occurs.

According to ECO:LOGIC (2007), The Sacramento Valley is a prominent site for winter fowl, attracting more than 1.5 million ducks and 750,000 geese to the marshes along the Pacific Flyway. Now predominantly agricultural, the biological communities of the Sacramento Valley once supported vast areas of grassland, marshes, riparian habitat, and woodlands. Specifically, the predominant natural plant communities in the Colusa Basin are needlegrass grasslands. Fremont cottonwood series occurs along streams with emergent aquatic communities common.

Today Colusa County still contains seasonal marshes, oak woodlands, riparian forests, vernal pools and grasslands. However, the City of Williams General Plan area is principally an agricultural setting. Colusa County is ranked in the top 20 agricultural producing counties. Typical harvests yield rice, tomatoes and olives.

Irrigated Row and Field Crops

This vegetation category dominates the agricultural area around the City of Williams and includes agricultural cropland, fallow agricultural land, irrigated ditches, irrigated pasture and annual grassland. Agricultural cropland occurs interspersed throughout the rural residential areas of the City and in the surrounding Sphere of Influence, with the majority occurring on the outer boundary area. Because this habitat is intensively managed, vegetation is limited to cultivated crops, predominately grains, rice, and orchards. Fallow agricultural land occurs throughout the proposed area primarily within areas adjacent to rural residential properties and undeveloped areas. Fallow agricultural land provides breeding, cover, and foraging habitat for a variety of wildlife species. The expected species in this habitat are similar to those that would be anticipated in the annual grassland habitat.

Annual Grassland

Annual grassland is the only major herbaceous-dominated habitat in the Williams area. Annual grassland is fairly common at low elevations (i.e., below 2,500 feet elevation). This habitat comprises mostly non-native annuals, primarily of Mediterranean origin, but can also include a variety of native herbaceous species. The most common valley grasses are now annuals, whereas their native counter-parts were often perennial grasses. According to the Colusa County General Plan Background Report, Avena Barb and A. fatua are common oats and bromes include ripgut brome and red brome as well as soft chess and foxtail chess.

Many wildlife species forage and hunt in the annual grasslands of Colusa County; however, grasslands are most productive, in terms of wildlife, when they are associated with woodlands, wetlands or riparian habitat. Colusa County's grasslands support a number of bird species. According to the California Natural Diversity Database (CNDDB), the tricolored blackbird, Swainson's hawk, the giant garter snake and the vernal pool tadpole shrimp were Special-Status Species that were identified within a two mile area surrounding the City of Williams. However, according to CNDDB and CNPS, there are no occurrences of special-status plants within the city limits (City of Williams, 2010).

Other Habitats

Irrigated Ditches and Pasture

Irrigation ditches flow through the Proposed General Plan Update area. These ditches are mostly devoid of vegetation; however, it is common for the banks to support hydrophytic vegetation. Along with the irrigation ditches, are irrigated pastures or croplands. While the croplands and orchards tend to be regularly disturbed and contain crop specific species, the pastures or fallow agricultural land tend to be used for the grazing of livestock. Grass and herbaceous species tolerant to year-round wet conditions are sometimes associated with this habitat. This condition might have resulted in the establishment of seasonal or perennial wetlands in some pastures.

Seasonal Wetland

Seasonal wetland habitat is typically associated with shallow drainages, swales, or depressions, which are wet long enough to support soils and hydrophytic vegetation. These are traditionally topographic depressions underlain by soils with slow water permeability that promote ponding or soil saturation

during the wet season. Seasonal wetland habitat occurs within the annual grassland and irrigated pasture habitats and can be the result of some degree of grading, levee construction or past excavation activities. Plant species identified in this area include perennial pepperweed (Lepidium latifolium) and rough cockle bur (Xanthium strumarium). Other common species include curly dock (Rumex pulcher), spearscale (Atriplex triangularis) and pitseed goosefoot (Cheopodium). Wildlife species use seasonal wetlands for temporary water sources and cover and are similar to those species that would occur in the annual grassland and irrigated pasture habitats.

Perennial Streams

Salt Creek is a perennial stream that drains west to east from the Coast Range towards the Sacramento River. It passes through the Colusa Drainage Basin and within the project area. Salt Creek is used by Glenn Colusa Irrigation District (GCID) to convey irrigation waters to rice growers east of I-5. Large volumes of water are discharged from the GCID canal into Salt Creek. These water deliveries create artificial high creek flows and because of this action, the stream is turbid and can flow rapidly when the nearby irrigation canals are feeding into it and therefore is principally devoid of emergent vegetation (ECOLogic 2007).

Sensitive Natural Communities

Sensitive natural communities in the Williams area were identified through a review of the California Natural Diversity Database (CNDDB) and the California Department of Forestry and Fire Protection's Fire and Resource Assessment Program (FRAP) land cover data. The list of California Terrestrial Natural Communities Recognized by the CNDDB was used to identify CNDDB communities that are listed as high priority for inventory by the CNDDB (i.e., rare and worthy of consideration). No Sensitive plant habitats were identified within the city limits of Williams; however, five special-status species have historical occurrences within a 5-mile radius of the city limits.

Table 4.11.1 Special -Status Plant Species with Potential to Occur in Planning Area

Species Scientific Name	Status	Habitat	Potential to Occur
Ferris' milk-vetch Astragalus tener var. ferrisae	CNPS List 1B	Vernally mesic meadows and seeps, suballkaline flats within valley and foothill grasslands.	Low
Brittlescale Atriplex depressa	CNPS List 1B	Chenopod scrub, meadows and seeps, playas, valley and foothill grasslands, vernal pools.	Low
Palmate-bracted bird's beak Cordylanthus palmatus	CNPS List 1B	Chenopod scrub, valley and foothill grasslands	Low
Rose Mallow Hibiscus lasiocarpus	CNPS List 1B	Freshwater marshes and swamps	Low
Coulter's Goldfields Lasthenia glabrata ssp. Coulteri	CNPS List 1B	Marshes and swamps, playas, vernal pools	Low

Wildlife

Based on a records search of the CNDDB database and species distribution and habitat requirements data, a total of 15 special-status wildlife species were determined to have potential to occur in a ten-mile radius around the City of Williams project area. One active nest occurrence was reported in 2010 between I-5 and Highway 99W (7th Street) north of Crawford Road. Non-special-status migratory birds, including raptors, also have the potential to nest in trees in the project area. Although these species are not considered special-status wildlife, their occupied nests and eggs are protected under either California Fish and Game Code, Sections 3503 and 3503.5 or the federal Migratory Bird Treaty Act.

As this EIR is a Program EIR, biological surveys would need to be conducted to determine which, if any, of the sixteen special-status wildlife species identified are present because of suitable habitat.

Table 4.11.2 Special –Status Plant Species with Potential to Occur in Planning Area

Species Scientific Name	Status	Habitat	Potential to Occur
Birds			
Swainson's Hawk (Buteo swainsoni)	State Threatened	Nests in valley oaks, cottonwoods, and other trees; forages in grasslands, and a variety of agricultural row and field crops	High
Northern harrier (Circus cyaneus)	CSC*	Year-round resident in Central Valley; nests in marshes; forages in grasslands, wetlands and agricultural fields	Low
White-tailed kite (Elanus leucurus)	State Fully Protected	Year-round resident in Central Valley; nests in mature trees near suitable foraging habitat; forages in grasslands, and agricultural fields	Low
Greater sandhill crane (Grus Canadensis tabida)	Threatened/ Fully Protected	Breeds in northeastern California and winters in Central Valley; winters in agricultural croplands, irrigated pastures and wetlands	Low
White-faced ibis (Plegadis chihi)	CSC	Breeds in northeastern California and winters in Central Valley; forages in agricultural croplands and flooded pastures	Low
Mountain plover (Chardadrius montanus)	CSC	Winter resident of short grasslands and plowed fields in the Central Valley	Low
Burrowing owl (Athene cunicularia)	CSC	Year-round resident of the Central Valley; occupies mammal burrows year-round; may also use artificial structures for burrows	Low
Loggerhead shrike (Lanius ludovicianus)	CSC	Year-round resident of the Central Valley and foothills; foraging in open habitats	Low
Song sparrow (Modesto population) (Melospiza melodia)	CSC	Year-round resident Butte Sink south to Stanislaus County; habitat includes marshes, riparian thickets, ditches and canals	Low
Tricolored blackbird	CSC	Breeds and winters in Central Valley and coastal valleys;	High

Table 4.11.2 Special –Status Plant Species with Potential to Occur in Planning Area			
Species Scientific Name	Status	Habitat	Potential to Occur
(Agelaius tricolor)		nests in cattails and tules or in sites with blackberries, nettles or thistles; nomadic during breeding season.	
Reptiles			
Giant garter snake (Thamnophis gigas)	Federally / State Threatened	Year-round resident of Central Valley; habitats include low-gradient streams and sloughs, mud bottoms and vegetated dirt banks; requires sufficient water during the active summer season to supply food and cover, emergent vegetation, bank side burrows and upland refugia (uplands and levees within 200 feet of aquatic habitats)	High
Western pond turtle (Clemmys marmorata)	CSC	Year-round resident of Central Valley and foothills; habitat is aquatic areas such as ponds, marshes, sloughs, irrigation ditches and wetlands.	Low
Amphibians			
California tiger salamander (Ambystoma californiesnse)	Federally Threatened / CSC	Year-round resident of Central Valley and foothills; breeds in vernal pools and ponds, typically lacking predatory fish; seeks cover in rodent burrows in grasslands near breeding pools and ponds	Low
Invertebrates			
Valley elderberry longhorn beetle (Desmocerus californicus dimorphus)	Federally Threatened	Associated exclusively with elderberry shrubs in Central Valley and foothills during its entire life cycle.	Moderate
Vernal pool tadpole shrimp (Lepidurus packardi)	Federally Endangered	Associated with vernal pools and swales. Habitat includes human-made ditches and wetlands in the Sacramento Valley	Moderate
*CSC- California Species of Special Concern			

Raptors and Other Migratory Birds

Raptors, including the Swainson's hawk, are protected under the Migratory Bird Treaty Act (MBTA) and Section 3503.5 of the California Fish and Game Code. Suitable raptor nesting and foraging habitat occurs in the proposed General Plan Update area. Migratory birds forage and nest in multiple habitats such as annual grasslands, seasonal wetland, and agricultural lands. A number of Swainson's hawk nest have been identified within a ten mile radius of the project area (CNDDB). The Tri-colored blackbird is considered a species of concern by the CDFG. This species is mostly abundant in the Central Valley. These birds tend to nest in highly colonial nesting sites and require foraging areas with insect prey. This species has been identified within the planning area of the proposed General Plan Update.

Reptiles, Amphibians, and Invertebrates

The giant garter snake is state and federally listed as a threatened species. It is the most aquatic of the garter snakes in California. It has adapted to drainage canals and irrigation ditches (CDFG). The giant garter snake inhabits marshes, sloughs, ponds, small lakes, low gradient streams, other waterways and agricultural wetlands such as irrigation and drainage canals and rice fields and the adjacent uplands. There are a couple of registered sightings within the vicinity of the General Plan Update planning area including one at Salt Creek and Old Highway 99 approximately a mile north of the City of Williams city limits.

The vernal pool tadpole shrimp is federally listed as an endangered species. These invertebrates are found scattered throughout the Central Valley. CNDDB lists a site just north of the existing City of Williams city limits. Habitat for this species is vernal pools and swales containing clear to highly turbid water. They are commonly found in grass-bottomed swales of unplowed grasslands. The life history of this species is linked to the seasonal cycle of the vernal pool. The cysts hatch in the spring when water is abundant and then live 20-30 days, mate, shed their cyst and die in the early spring. The resting cysts may lie dormant for several years or in the next spring hatch depending on the water available. (USFWS).

Elderberry beetles are found in association with their host plants, elderberry shrubs. This species is generally found within or close to riparian habitats along Central Valley rivers and their tributaries. The valley elderberry longhorn beetles depend on its host plant throughout its entire life cycle. Elderberry shrubs often occur in clumps. Beetles remain hidden within the stems and trunks of the shrubs as larvae and pupae for one to two years. Generally the only sign of beetle occupancy is the exit hole created by the larva just before the pupal stage. Due to the location of the Salt Creek and its tributaries within the City of Williams planning area, some elderberry bushes may be present; however, the CNDDB does not have any registered occurrences within a five mile area surrounding the City of Williams. The closest registered valley elderberry longhorn beetle was north of the City of Colusa within the Colusa National Wildlife Refuge.

4.11.3 Regulatory Setting

Federal

Federal Clean Water Act (CWA)

The federal CWA was enacted as an amendment to the federal Water Pollution Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to waters of the United States. The CWA serves as the primary federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands.

> **Section 401.** The State Water Resources Control Board (SWRCB) has authority over wetlands through Section 401 of the CWA, as well as the Porter-Cologne Act, California Code of Regulations Section 3831(k), and California Wetlands Conservation Policy. The CWA requires that an applicant for a Section 404 permit (to discharge dredged or fill material into waters of

the United States) first obtain a CWA, Section 401 water quality certification from the State Water Resources Control Board (SWRCB) or one of the nine Regional Water Quality Control Boards (RWQCB). A request for certification or waiver is submitted to the State or regional board at the same time that an application is filed with the Corps. The water board has 60 days to review the application and act on it. Because no Corps permit is valid under the CWA unless "certified" by the State, these boards may effectively veto or add conditions to any Corps permit.

Section 402. This section regulates construction related storm water discharges to surface waters through the National Pollutant Discharge Elimination System (NPDES), which is administered through the US Environmental Protection Agency (EPA). This program is administered through the Central Valley Regional Water Quality Control Board. NPDES permits are required for projects that disturb more than one acre of land. An applicant is required to file a notice of intent (NOI) to discharge storm water and prepare the associated storm water pollution prevention plan (SWPPP). This plan includes the description of the best management practices (BMPs) that will be implemented to prevent soil erosion and discharge of construction-related pollutants that could contaminate nearby water resources.

Section 404. The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. Section 404 of the CWA regulates activities that result in discharge of dredged or fill material into waters of the United States. The United States Army Corps of Engineers (Corps) is responsible for permitting certain types of activities affecting wetlands and "other waters of the United States." Under Section 404 of the CWA, the Corps has the authority to regulate activity that could discharge fill or dredge material or otherwise adversely modify wetlands or other waters of the U.S. The Corps implements the federal policy embodied in Executive Order 11990, which, when implemented, is intended to result in no net loss of wetland values or acres.

Federal Endangered Species Act (FESA)

The U.S. Fish and Wildlife Service (USFWS) administers the Federal Endangered Species Act (16 USC Section 153 et seq.) and thereby has jurisdiction over federally-listed threatened, endangered, and proposed species. Projects that may result in "take" of a listed species must consult with the USFWS. Federal agencies that propose a project that may affect a listed species are required to consult with the USFWS under Section 7 of the Federal Endangered Species Act. If it is determined that a federally listed species may be adversely affected by the federal action, the USFWS will issue a Biological Opinion to the federal agency that describes minimization and avoidance measures that must be implemented as part of the federal action. Projects that do not have a federal nexus must apply for a take permit under Section 10 of the Act. Section 10 of the Act requires that the project applicant prepare a habitat conservation plan as part of the permit application.

Under the Federal Endangered Species Act, the USFWS designates Critical Habitat as areas that are essential for the conservation of a threatened or endangered species and which may require special

management considerations. A Critical Habitat designation only applies to projects with a federal nexus; it has no specific regulatory impact on landowners who take actions on their land that do not involve federal funding, permits, or other federal action. However, federal agencies must consult with the USFWS before taking actions that could harm or kill protected species or destroy their habitat.

Federal Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act

The Migratory Bird Treaty Act (16 U.S.C., Sec. 703, Supp. I, 1989) prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the U.S. Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs. Birds of Prey are protected in California under the State Fish and Game Code (Section 3503.5, 1992). Section 3503.5 state that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Disturbance that causes nest abandonment and/or loss of reproductive effort is considered a "taking" by the CDFG. The Bald and Golden Eagle Protection Act (16 USC Section 668) protects these birds from direct take. The Bald and Golden Eagle Protection Act prohibits the take or commerce of any part of these species. The USFWS administers both acts, and reviews federal agency actions that may affect species protected by the acts.

State of California

California Fish and Game Code - Streambed Alteration Agreement

The CDFG regulates the modification of streams, rivers, and lakes under Sections 1600 – 1616 of the California Fish and Game Code. Modification includes diverting, obstructing, or changing the natural flow or bed, channel, or bank of a regulated feature. While most of the features regulated by the Fish and Game Code meet the definition of other waters of the U.S., the Code may regulate some ephemeral features that do not have all the criteria to qualify as other waters of the U.S. A project proponent, including both private parties and public agencies, proposing an activity that may modify a feature regulated by the Fish and Game Code must notify the CDFG before project construction.

The CDFG will then decide whether to enter into a Streambed Alteration Agreement with the project proponent. The State Water Resources Control Board (SWRCB), acting through the Regional Water Quality Control Board (RWQCB), must certify that a Corps permit action meets State water quality objectives (Section 401 of the federal Clean Water Act).

California Fully Protected Species

Prior to the enactment of the California Endangered Species Act (CESA), the CDFG used the designation of "Fully Protected" to identify species that had been given special protection by the California legislature by a series of statutes codified in Sections 3503, 3503.5, 3505, 3511, 3513, 4700, 4800, 5050, and 5515 of the California Fish and Game Code. Many fully protected species have also been listed as threatened or endangered species under the more recent endangered species laws and regulations; however, because the original statutes have not been repealed, the legal protection they give the species identified within them remains in place. Fully protected species may not be taken or possessed at any time, and no licenses or permits may be issued for their take except for collecting these species

for necessary scientific research and relocation of the bird species for the protection of livestock. Because endangered or threatened species can be "taken" for development purposes with the issuance of a permit by the CDFG, fully protected species actually enjoy a greater level of legal protection than listed species.

California Endangered Species Act (CESA)

The California Department of Fish and Game (CDFG) administers the California Endangered Species Act of 1984 (Fish and Game Code Section 2080), which regulates the listing and "take" of endangered and threatened species. A "take" may be permitted by CDFG through implementing a management agreement. Under the State laws, the CDFG is empowered to review projects for their potential impacts to listed species and their habitats.

CDFG maintains lists for Candidate-Endangered Species and Candidate-Threatened Species. California candidate species are afforded the same level of protection as listed species. California also designates Species of Special Concern (CSC) which are species of limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. These species do not have the same legal protection as listed species, but may be added to official lists in the future. The CSC list is intended by CDFG as a management tool for consideration in future land use decisions.

CEQA Guidelines Section 15380

Although threatened and endangered species are protected by specific Federal and State statutes, CEQA Guidelines section 15380(b) provides that a species not listed on the Federal or State list of protected species may be considered rare, endangered, or threatened if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants or animals. This section was included in the Guidelines primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example, a "candidate species" that has not yet been listed by either the USFWS or CDFG. Thus, CEQA provides an agency with the ability to protect a species from a project's potential impacts until the respective government agencies have an opportunity to designate the species as protected, if warranted.

California Native Plant Protection Act

The legal framework and authority for the State's program to conserve plants are woven from various legislative sources, including CESA, the California Native Plant Protection Act (Fish and Game Code Section 1900 – 1913), the CEQA Guidelines, and the Natural Communities Conservation Planning Act.

Vascular plants listed as rare or endangered by the California Native Plant Society (CNPS), but which may have no designated status or protection under federal or State endangered species legislation, are defined as follows:

- List 1A: Plants Presumed Extinct.
- List 1B: Plants Rare, Threatened, or Endangered in California and elsewhere.
- List 2: Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere.

- List 3: Plants About Which More Information is Needed – A Review List.
- List 4: Plants of Limited Distribution – A Watch List.

In general, plants appearing on CNPS List 1A, 1B, or 2 are considered to meet the criteria of Section 15380 of the CEQA Guidelines, which define endangered, rare and threatened species. Additionally, plants listed on CNPS List 1A, 1B or List 2 meet the definition of Section 1901, Chapter 10 (Native Plant Protection Act) and Sections 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code.

Oak Woodlands Conservation Act

The Oak Woodlands Conservation Act was added to the State of California Public Resources Code (Section 21083.4) on February 18, 2004 and requires that a County determine whether a project in its jurisdiction may result in a conversion of oak woodlands that will have a significant effect on the environment. A County must then require one or more alternatives to mitigate the significant effect of the conversion of oak woodlands. This Act exempts specified activities from its requirements, including:

- Projects undertaken pursuant to an approved Natural Community Conservation Plan (NCCP) or approved sub-area plan within an approved Natural Community Conservation Plan that includes oaks as a covered species or that conserves oak habitat through natural community conservation preserve designation and implementation and mitigation measures that are consistent with this section.
- Affordable housing projects for lower income households, as defined pursuant to Section 50079.5 of the Health and Safety Code, that are located within an urbanized area, or within a sphere of influence as defined pursuant to Section 56076 of the Government Code.
- Conversion of oak woodlands on agricultural land that includes land that is used to produce or process plant and animal products for commercial purposes.
- Projects undertaken pursuant to Section 21080.5 of the Public Resources Code.

Local

Existing Williams General Plan

The adopted City of Williams General Plan currently is used as the “blueprint” to guide future development within the City limits and in the Sphere of Influence. The proposed General Plan Update would replace the existing goals, policies, implementing actions and land use map in the City’s adopted General Plan. Proposed policies and action items relevant to biological resources are identified under the specific impact analyses below.

City of Williams Municipal Code

Title 6 of the City’s Municipal code establishes ordinances related to domestic and wild animals. Ordinance 6.44 states:

It is unlawful for any person to keep any wild animal within the city, with the following exceptions:

- Persons who use wild animals for diagnostic or research purposes, when the use has been approved by the Board of Public Health of the state pursuant to applicable law;
- Persons who use wild animals for teaching purposes in recognized educational institutions;
- Veterinarians who keep wild animals for boarding or treatment;
- Persons operating game farms or game breeding establishments licensed by the state;
- Persons operating nonprofit zoological gardens open to the public;
- Persons who use wild animals for a permitted circus or entertainment events.

The City of Williams Municipal Code contains protections and regulations for the various public places and parks including trees. In particular, Ordinance 12.35 of the Williams Municipal code states:

- The city council is hereby authorized to prepare, adopt and periodically revise a master list of trees approved for planting in the public rights-of-way, alley, boulevard, parkway or parking strip, or any other public place. The city council may adopt and enforce a master plan for tree planting in such public rights-of-way or other public places.
- All dead or hazardous trees and shrubs on any parking strip, street or boulevard, alley, pleasure ground, park or public place will be removed by the city at its expense, and the wood therefrom shall be subject to the disposition of the city council.
- Any request for the removal or trimming of trees affecting any commercial enterprise, when trees are growing on or adjacent to any parking strip, street, boulevard, alley, park, pleasure grounds or public place shall be made, in writing, to the city administrator, seven days in advance of the time such removal or trimming is to be done. Approval shall be given in writing, by the superintendent of public works and the city administrator, before any work may be done.
- No person shall fasten or attach any wires, pipes, signs, placards or structure of any kind to any tree, shrub or plant growing on any parkway, parking strip, boulevard, park, pleasure ground or alley in the city, without first having obtained written permission from the superintendent of public works or city administrator.
- No person shall cause, authorize or procure any brine water, oil, liquid dye or other substance which is deleterious to tree life to lay, leak, pour, flow or drip upon or into the soil about the base of any tree, shrub or plant in any street, park, pleasure ground, boulevard, parking strip, public place or alley in the city, or on to any sidewalk, road or pavement within the city, at a point from which substance may be laying upon, or by flowing, dripping or seeping into such soil injure such trees, shrubs or plants or otherwise harm or kill any such tree, shrub or plant. No person without approval of the tree commission shall place or maintain any stone, cement or other substance so that it shall impede the fee access of water or air to the roots of any tree or shrub or plant in any street, park, pleasure ground, boulevard, parking strip, alley, or public place in the city.

4.11.4 Impact Methodology

To determine the level of significance of an identified impact, the criteria outlined in the CEQA Guidelines were used. The following is a discussion of the approaches to, and definitions of, significance of impacts to biological resources, drawn from several distinct CEQA Guidelines sections.

CEQA (§15065) directs lead agencies to find that a project may have a significant effect on the environment if it has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory.

CEQA (§15380) provides that a plant or animal species, even if not on one of the official lists, may be treated as "rare or endangered" if, for example, it is likely to become endangered in the foreseeable future. Additional criteria to assess significant impacts to biological resources due to the proposed project are specified in the CEQA Guidelines §15382 (Significant Effect on the Environment) "…a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance."

4.11.5 Standards of Significance

The proposed General Plan would result in significant impacts to biological resources if it would:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service.
c. Have a substantial adverse effect on federally protected wetlands as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

In addition to the above criteria, CDFG and USFWS guidelines consider a project to have a significant impact if it were to:

g. Cause a change in species composition or result in the measurable degradation of sensitive habitats such as wetlands, oak woodlands, and/or perennial grasslands.

4.11.6 Impacts and Mitigation

Candidate, Sensitive or Special Status Plant Species

IMPACT 4.11.1:	**Implementation of the proposed City of Williams General Plan Update could result in a substantial adverse effect on species identified as candidate, sensitive, or special status plant species by the California Department of Fish and Game or U.S. Fish and Wildlife Service, their habitats, or other sensitive vegetation communities.**
Level of Significance Before Policies/Mitigation:	Potentially Significant Impact
Mitigation Measures:	Goals and Recommended Actions in the Proposed General Plan Update
Level of Significance After Policies/Mitigation:	Less than Significant Impact

Impact Analysis

Buildout of the Williams General Plan will allow for the introduction of development into agricultural lands. Such construction has the potential to result in a significant impact on sensitive habitats, individual plants, and wildlife species. The primary impact would be the removal of sensitive habitats for the construction of buildings, infrastructure, and roadways. Additional impacts will result from increased erosion from roadways, and the introduction of non-native weed species. The introduction of developed land uses will also result in the elimination of habitat and food resources for wildlife through the removal of vegetative communities.

Several species identified as a candidate, sensitive, or special status species by the California Department of Fish and Game, the California Native Plant Society or U.S. Fish and Wildlife Service (shown in Table 4.11-1, Special Status Species) have been known to occur in the Williams study area. Subsequent development under the proposed General Plan could result in direct loss of habitat areas associated with these special-status plant species, since these habitat conditions do occur in areas planned for development. In addition to the direct impacts, indirect impacts could occur with implementation of the proposed General Plan Update that may include habitat degradation as a result of impacts to agricultural lands, introduction of non-native species, and increased human presence.

Special-status species receive protection from various federal and state laws and regulations, including FESA and CESA. These regulations generally prohibit the taking of these plant species without a special permit. Compliance with Federal and State law through obtaining required permits, as well as the goals and recommended actions in the proposed General Plan (listed below) would reduce the potential for adverse impacts. As part of the development review process, site-specific biological resources assessments are required to consider the impacts on sensitive habitats and special status species in

compliance with CEQA requirements. Appropriate mitigation measures to reduce impacts to special status species, habitats used as wildlife corridors, and sensitive natural communities would be imposed on a project-by-project basis according to William's environmental review process and consultation with appropriate State and Federal regulatory agencies. With these mitigation measures, and the application of the following General Plan goals and recommended actions, potential impacts on sensitive status species, sensitive natural communities, and wildlife corridors would be reduced to less than significant levels.

Mitigation/Policies and Recommended Actions in the Proposed General Plan Update:

3hh Establish minimum open space standards within each district, which may be used for storm water detention, resource protection (e.g. riparian buffers along streams, bufferyards, and / or parks, trails, and open space. The amount of private or common open space relates to the character of development. For instance, in the Agriculture and Estate Residential districts, there is a high proportion or private open space whereas the Suburban Residential and Urban Residential districts have increasing percentages of common (public or semi-public) open space.

3.jj Incorporate development options within each zoning district. Different lot sizes and percentages of open space maintain the district character while allowing market flexibility and adjustment to site conditions. In other words, a smaller lot may be used and clustered to set aside adequate open space to preserve agricultural resources, such as orchards, or to fulfill the City's storm water management objectives, a comparable density, and character is achieved.

3.kk Utilize density bonuses as an incentive for promoting open space preservation, more efficient, clustered development and housing choice.

3.43 Future development and redevelopment should be planned and implemented with appreciation for the physical environment and natural features of the community and with recognition of potential physical constraints to ensure appropriate siting of various types of development.

3.44 Development will occur in a manner that is compatible with the existing agricultural resources, including agricultural cropland, orchards, and ranchlands.

3.45 Sensitive resources, including floodplains, wetlands, riparian buffer areas along stream channels, and valued view shed, will be protected and preserved.

3.48 Resources will be protected and integrated as amenities to development.

4.1 The City will require applicants for development to submit drainage studies that adhere to storm water design requirements and incorporates measures from the Strom Drainage Master Plan to prevent on- or off-site flooding.

4.4 New development shall not cause downstream property owners, watercourses, channels, or conduits to receive storm water runoff at a higher peak flow rate than would have resulted from the same storm event occurring over the development site with the land in its natural, undeveloped condition.

4.8 The City will promote and encourage the use of natural drainage configurations such as depression areas, wetlands, and natural swales versus underground storm drainage infrastructure.

4.9 The design of drainage improvements will be sensitive to community aesthetics, aquatic habitat, recreation (trails, playing fields), wetlands and water quality mitigation.

4.f Begin identifying Best Management Practices (BMPs), particularly construction site storm water runoff control and post-construction storm water management, to reduce the discharge of pollutants to the storm water system.

7.4 Prime farmland should be prioritized for agricultural (rather than industrial or residential) uses to ensure the most efficient use of land.

7.o Locate new parks in the presence of natural amenities while preserving environmental resources and site features. Continue to emphasize natural resource protection as a key objective of ongoing parkland acquisitions and enhancement of existing park locations.

7.14 The creation of linear greenways will serve as a vehicle to protect natural resources and provide for natural scenic corridors.

7.al Prohibit the re-location or removal of endangered species unless replacement provisions are in place.

7.am Discourage the introduction of invasive species and prevent the spread of non-native invasive species that have become established.

Candidate, Sensitive or Special Status Wildlife Species

IMPACT 4.11.2:	**Implementation of the proposed City of Williams General Plan Update could result in an adverse effect on species identified as candidate, sensitive, or special status wildlife species by the California Department of Fish and Game or U.S. Fish and Wildlife Service, and their habitats.**
Level of Significance Before Policies/Mitigation:	Potentially Significant Impact
Mitigation Measures:	Goals and Recommended Actions in the Proposed General Plan Update
Level of Significance After Policies/Mitigation:	Less than Significant Impact

Impact Analysis

Suitable vernal pool and wetland habitat for special-status vernal pool invertebrates, including the vernal pool tadpole shrimp, occurs within the proposed Planning Area. Subsequent development under the proposed General Plan Update could result in direct loss of habitat areas associated with these special-status species. In addition to direct impacts, indirect impacts to special –status species could occur with implementation of the proposed General Plan Update which may include habitat degradation

as a result of impacts to water quality, introduction of non-native species and increased human presence.

The Giant garter snake is a threatened species. Suitable habitat occurs within the proposed planning area (e.g., freshwater marsh, streams, sloughs, and irrigation ditches). Subsequent development under the proposed General Plan could result in disturbance, degradation, and removal of wetland features and adjacent habitat. In addition, an in direct loss would also result from an increase in incidental take from additional traffic, increased human presence, and degradation of suitable habitat. The active period for Giant garter snakes is between May 1 and October 1. Direct impacts due to construction activities would be lessened during this time, because snakes are actively moving and avoiding danger. More danger is posed to snakes during their inactive period, because they are occupying underground burrows or crevices and are more susceptible to direct effects, especially during excavation.

Implementation of the proposed General Plan Update may result in disturbance, degradation, and removal of suitable habitat for tri-colored blackbird (freshwater marsh and other wetlands). These actions could result indirect take of tri-colored blackbird through habitat degradation as well as increase incidental take from additional traffic, increased human presence, and degradation of suitable habitat.

Disturbance, degradation, and removal of large trees for nesting and foraging habitat for Swainson's hawk would occur with the implementation of the proposed General Plan Update. Swainson's hawks prefer low growing cropland such as alfalfa and fallow fields for foraging. Increased conversion of farmland into residential and commercial development would reduce the foraging habitat for this species.

Migratory birds and raptors use this area for nesting and foraging habitat. The implementation of the proposed General Plan Update would impact these species through the removal of large trees used for nesting and foraging habitat. Migratory bird species receive protection from various federal and state laws and regulations, particularly the Migratory Bird Treaty Act (MBTA). These regulations generally prohibit the taking of these species unless a special permit is obtained. Raptor bird species receive protection from various federal and state laws and regulations.

The introduction of new sources of light and glare could affect nesting habitat and migratory corridors. These effects may be particularly pronounced for wildlife species with low tolerance for habitat modification or disturbance, especially some riparian bird and reptile species. Special-status species receive protection from various federal and state laws and regulations including FESA and CESA.

Compliance with Federal and State law through obtaining required permits, as well as the policies and recommended actions in the proposed General Plan (listed below) would reduce the potential for adverse impacts. As part of the development review process, site-specific biological resources assessments are required to consider the impacts on sensitive habitats and special status species in compliance with CEQA requirements. Appropriate mitigation measures to reduce impacts to special status species, habitats used as wildlife corridors, and sensitive natural communities would be imposed on a project-by-project basis according to William's environmental review process and consultation with

appropriate State and Federal regulatory agencies. With these mitigation measures, and the application of the following General Plan goals and recommended actions, potential impacts on sensitive status species, sensitive natural communities, and wildlife corridors would be reduced to less than significant levels.

Mitigation/Policies and Recommended Actions in the Proposed General Plan Update:

7.17 The preservation and protection of rare, threatened, or endangered species within the planning area, including candidate species and species of special concern, warrants design consideration with developing new land.

7.18 Animal corridors along waterways, tree groves, and grasslands should be developed to ensure safe animal travel.

7.x Designate animal reserves or habitat areas in public parks and open space, effectively limiting recreation activities to provide undisturbed refuges for animal wildlife.

7.y Coordinate with regional authorities to create interconnected wildlife corridors both within and outside the City limits.

7.z Promote and support Habitat Conservation Plans between landowners and the US Fish and Wildlife Service. Habitat Conservation Plans (HCP) are long-term agreements designed to offset any harmful effects that a proposed activity might have on federally-listed threatened and endangered species.

7.ad Promote landowner education regarding the benefits and potential applicability of conservation easements within subdivisions and for individual properties.

7.ae Develop a “land bank” program whereby owners of flood-prone property may deed land to the “bank” for long-term conservation.

7.27 In the removal and relocation of plants and trees, special consideration will be given to endangered species.

7.ah Establish a public advisory committee to develop landscape guidelines, standards, and measures for protecting plant and wildlife communities on public and private properties.

7.ai Adopt design practices that are compatible with the environment, including an emphasis on native and drought-tolerant species.

Wetland and Other Waters of the US

IMPACT 4.11.3: Implementation of the proposed City of Williams General Plan Update could result in the loss of wetlands and other waters of the US.	
Level of Significance Before Policies/Mitigation:	Potentially Significant Impact
Mitigation Measures:	Goals and Recommended Actions in the Proposed General Plan Update
Level of Significance After Policies/Mitigation:	Less than Significant Impact

Impact Analysis

Implementation of the proposed Williams General Plan Update would result in impacts on wetlands, irrigation canals and ditches and other waters of the US. Development within the proposed General Plan Planning Area has the potential to impact wetlands and areas such as irrigation canals and drainage ditches. This future development could physically affect these waters, which are potentially subject to the jurisdiction of the US Army Corps of Engineers (CORPS). Activities that have impacts on these wetlands and other jurisdictional waters would require a Section 40 permit from CORPS and a Section 401 Water Quality Certification from the Regional Water Quality Control Board. CORPS and DBFG have a "no net loss" policy applicable to jurisdictional waters, particularly wetlands.

The proposed General Plan Update goals and recommended actions (listed below) would reduce the potential for adverse impacts. As part of the development review process, site-specific biological resources assessments are required to consider the impacts on wetlands in compliance with CEQA requirements. Appropriate mitigation measures to reduce impacts would be imposed on a project-by-project basis according to William's environmental review process and consultation with appropriate State and Federal regulatory agencies. With these mitigation measures, and the application of the following General Plan policies and recommended actions, potential impacts on sensitive status species, sensitive natural communities, and wildlife corridors would be reduced to less than significant levels.

Mitigation/Goals and Recommended Actions in the Proposed General Plan Update:

3.hh Establish minimum open space standards within each district, which may be used for storm water detention, resource protection (e.g. riparian buffers along streams, bufferyards, and / or parks, trails, and open space. The amount of private or common open space relates to the character of development. For instance, in the Agriculture and Estate Residential districts, there is a high proportion or private open space whereas the Suburban Residential and Urban Residential districts have increasing percentages of common (public or semi-public) open space.

3.43 Sensitive resources, including floodplains, wetlands, riparian buffer areas along stream channels, and valued view shed, will be protected and preserved.

3.46 Resources will be protected and integrated as amenities to development.

4.4 New development shall not cause downstream property, watercourses, channels, or conduits to receive storm water runoff at a higher peak flow rate than would have resulted from the same

storm event occurring over the development site with the land in its natural, undeveloped condition.

4.8 The City will promote and encourage the use of natural drainage configurations such as depression areas, wetlands, and natural swales versus underground storm drainage infrastructure.

4.9 The design of drainage improvements will be sensitive to community aesthetics, aquatic habitat, recreation (trails, playing fields), wetlands, and water quality mitigation.

4d Begin identifying Best Management Practices (BMPs), particularly construction site storm water runoff control and post-construction storm water management, to reduce the discharge of pollutants to the storm water system.

7p Locate new parks in the presence of natural amenities while preserving environmental resources and site features. Continue to emphasize natural resource protection as a key objective of ongoing parkland acquisitions and enhancement of existing park locations.

7.14 The creation of linear greenways will serve as a vehicle to protect natural resources and provide for natural scenic corridors.

7.al Prohibit the re-location or removal of endangered species unless replacement provisions are in place.

7.am Discourage the introduction of invasive species and prevent the spread of non-native invasive species that have become established.

7.17 The preservation and protection of rare, threatened, or endangered species within the planning area, including candidate species and species of special concern, warrants design consideration with developing new land.

Conflict with Adopted Policies, Ordinances or Plans

IMPACT 4.11.4: Implementation of the proposed Williams General Plan Update could conflict with adopted policies, ordinances or plans protecting biological resources, Habitat Conservation Plan, or Natural Community Conservation Plan.	
Level of Significance Before Policies/Mitigation:	No Impact
Mitigation Measures:	No Mitigation Required
Level of Significance After Policies/Mitigation:	No Impact

Impact Analysis

To date, the City of Williams has not adopted a plan dealing with the conservation of natural resources or sensitive habitats, and therefore the proposed General Plan Update does not conflict with any policies in such a plan. Such a plan may be drafted in the future, however; if this is done, it would be done so according to the policies, and recommended actions contained within the General Plan Update and would not include any conflicting language. The proposed General Plan Update does include policies and goals related to conservation and future Habitat Conservation Plans as noted below:

7.x Designate animal reserves or habitat areas in public parks and open space, effectively limiting recreation activities to provide undisturbed refuges for animal wildlife.

7.y Coordinate with regional authorities to create interconnected wildlife corridors both within and outside the City limits.

7.z Promote and support Habitat Conservation Plans between landowners and the US Fish and Wildlife Service. Habitat Conservation Plans (HCP) are long-term agreements designed to offset any harmful effects that a proposed activity might have on federally-listed threatened and endangered species.

7.ad Promote landowner education regarding the benefits and potential applicability of conservation easements within subdivisions and for individual properties.

7.ae Develop a “land bank” program whereby owners of flood-prone property may deed land to the “bank” for long-term conservation.

With the implementation of these policies and actions, the City of Williams will be improving its protection and regulation of the natural resources found within its area.

4.12 Agriculture

4.12.1 Introduction

This section discusses impacts the General Plan Update would have on agricultural resources in the study area including any Williamson Act contract lands. The General Plan goals and recommended actions pertaining to management of agriculture lands and compatibility between agriculture operations are identified in this section to demonstrate the plan's commitment to context sensitive development and preservation of environmentally sensitive lands, open space and agriculture areas.

Existing Conditions

Agriculture is the leading industry in the City of Williams and Colusa County, with rice, fruit, nuts, and vegetables as the major crops grown and processed in the City. Approximately 1,500 acres of land within the City limits and particularly the surrounding area within the Planning Area is occupied by farming and agricultural operations.

- The City's relatively flat topography and fertile soil promotes rice production, one of the largest crops for the region.
- The 1950 construction of the Glen Colusa Canal propagated this trend, bringing more surface water to the region. Today, a predominance of rice fields continues to populate the 25 square mile region around Williams.
- Several large tree orchards are located immediately to the south of the City limits, including almond, walnut, prune, grape, and nut production.
- Tomatoes, seed crops, and alternative fresh market vegetables are a major component of the economy. In 1995, the Morning Star Packing Company located the State's largest tomato processing facility in Williams.

Prime Farmland is defined as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. Farmland of Statewide Importance is similar in quality but has minor shortcomings, such as greater slopes or less ability to store soil moisture.

The eastern half of Colusa County largely composed of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance. Land areas having these U.S. Department of Agriculture designations literally surround the City of Williams' urbanized core, as illustrated in Map 7.2, Important Farmlands, which is presented in Chapter 7 of the General Plan Update report. As the country has developed, high-quality farmland has been gradually lost to industrial and urban uses.

4.12.3 Standards of Significance

The criteria used to determine the significant of an impact were based on the criteria presented in Appendix G of the CEQA Guidelines. The City of Williams General Plan Update would result in significant adverse impacts if it results in any of the following:

a. Conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract.
c. Involvement of other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

4.12.4 Impacts and Mitigation

Loss of Prime Farmland

IMPACT 4.12.1:	**The plan would result in conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.**
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	Policies and Recommended Actions in the proposed General Plan Update
Level of Significance After Policies/Mitigation:	Significant

Impact Analysis and Mitigation

The Future Land Use Plan presented in Chapter 3, Land Use and Character, designates future areas for development through the year 2030 and beyond. The following policy statements in Chapters 3 and 7 of the General Plan Update are intended to reduce the impact of conversions:

3.32 The City will grow contiguously to manage the efficiency of public services and municipal infrastructure provision, to maintain a compact and well defined community form, and to oblige its fiscal responsibility.

3.33 Priority in the form of infrastructure and other capital improvements will be given to the redevelopment of blighted structures or properties and infill development of vacant parcels or underutilized tracts.

3.34 Development will occur first within the existing corporate limits where the infrastructure and services are readily available.

3.38 Development or individual uses outside the corporate limits will not be prematurely provided municipal infrastructure until annexation is warranted and executed, subject to conformance with the Future Land Use and Growth Plan. Services will be provided to these areas through mutual aid and other agreements and mandates.

3.41 The City's land use pattern should focus new development and significant redevelopment where adequate public services and utility capacity are already in place or projected for improvement, including streets, water, wastewater, and drainage infrastructure.

3.46 The agricultural use and rural character of the City's perimeter should be maintained through the strict enforcement of zoning, as applicable, and influence exerted by the City within its sphere of influence.

7.3 Agriculture and ranching activities will be supported through financial incentives and access to municipal venues and facilities.

7.4 Prime farmland should be prioritized for agricultural (rather than industrial or residential) uses to ensure the most efficient use of land.

While the growth policies stated above are intended to encourage to preserve agricultural lands by directing infill forms of development into vacant, non-agricultural areas, it is recognized that a limited supply of Prime farmland is available and that ultimately, statewide, significant areas of prime, unique, or important farmland within the Planning Area may eventually be converted to non-agricultural uses. Though the impacts for this category would be reduced by these policies, they will remain significant.

Development Conflict with Agriculture

IMPACT 4.12.2: Future Development would conflict with existing zoning for agricultural use, or a Williamson Act contract.	
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	Policies and Recommended Actions in the proposed General Plan Update
Level of Significance After Policies/Mitigation:	Impacts are Less than Significant

Impact Analysis and Mitigation

The introduction of non-agricultural uses into areas that have been farmed for many years creates the potential for conflict. Residents of new subdivisions that adjoin farmland become concerned about dusts, chemical sprays, odors, noise, and other normal characteristics of agricultural activities. As urban development extends to agricultural land, the City intends to take an active role in promoting sensible development practices that respect the rural infrastructure and needs of neighboring farmers and ranchers.

Growth management strategies contained in the General Plan Update include the use of clustered or "conservation" subdivisions to protect open space while permitting appropriate residential development intensities. Natural and man-made buffers can help to mitigate potential conflicts between active farms and high-density residential development, including the strategic placement of vegetation and roadways. Setbacks can also reduce the negative impacts of agricultural impacts, such as aerial spraying, by ensuring a safe distance from houses to farm fields.

While several Williamson Act contracted properties are located within the Williams Planning Area, none have been designated for development in the Future Land Use and Growth Plan presented in Chapter 3, Land Use and Character.

Zoning is another way to minimize conflicts with adjacent land uses. The City's zoning regulations currently include an "Agricultural / Rural" (AR) district, which is intended to preserve the rural, character of designated areas and to manage a contiguous and efficient pattern of future growth. The AR district's regulations require buffers, building setbacks, and density restrictions, among other regulatory tools, to help to reinforce agricultural character and provide a smooth transition from urban to rural demands on the land.

These strategies are expressed as mitigation measures through the following General Plan policy statements:

3.44 Development will occur in a manner that is compatible with the existing agricultural resources, including agricultural cropland, orchards, and ranchlands.

3.45. Agricultural resources will be observed so as not to unnecessarily encroach upon their operations or create nuisance conditions.

3.55. New development or redevelopment on "in-fill" parcels in developed areas should maintain compatibility with existing uses and the prevailing land use pattern in the area.

3.56. Land uses with unusual characteristics or a higher likelihood of raising compatibility issues should be subject to more focused review and approval through a special approval process. Reasonable conditions or permit provisions should be applied to mitigate potential adverse impacts on nearby properties and uses.

7.1 Zoning regulations will be used to preserve the rural scale and character of the "Agricultural/Rural" zoning district, including adequate transitions and buffering areas between different character types.

Other Environmental Changes Agricultural Land Conversion

IMPACT 4.12.3:	**Involvement of other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.**
Level of Significance Before Policies/Mitigation:	Not Applicable
Mitigation Measures:	Not Applicable
Level of Significance After Policies/Mitigation:	Not Applicable

Impact Analysis and Mitigation

An example of an impact in this category would be the acquisition of agricultural land for an electrical transmission line, bypass road, stormwater detention facility, or other infrastructure element that indirectly supports future growth and development. No specific facilities of this nature are being proposed or sited as a part of this General Plan Update. Impacts for utility services, including stormwater detention, that are directly related to the Future Land Use and Growth Plan are included as part of Impact 4.12.1, which was described earlier in this section. Any project that includes these types of infrastructure improvements and/or expansions would require additional Project level environmental analysis.

4.13 Hazards and Hazardous Materials and Solid Waste

4.13.1 Introduction

This section discusses hazardous materials and non-hazardous solid waste issues related to the implementation of the proposed General Plan Update, including its consistency with applicable local, State, and Federal plans, policies, and regulations. Industrial or commercial operations that involve the use of hazardous materials are described, and potential public health and environmental issues related to these uses are assessed and analyzed.

4.13.2 Environmental Setting

Hazardous Substances

Hazardous Materials and Wastes

A material is considered hazardous if it appears on a list of hazardous materials prepared by a Federal, State, or local agency, or if it has characteristics defined as hazardous by such an agency. The California Code of Regulation (CCR) defines a hazardous material as a substance that, because of physical or chemical properties, quantity, concentration, or other characteristics, may either (1) cause an increase in mortality or an increase in serious, irreversible, or incapacitating, illness or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of, or otherwise managed (CCR, Title 22, Division 4.5, Chapter 10, Article 2, Section 66260.10). Hazardous materials have been and are commonly used in commercial, agricultural, and industrial applications and, to a limited extent, in residential areas.

Hazardous wastes are defined in the same manner. Hazardous wastes are hazardous materials that no longer have practical use, such as substances that have been discarded, discharged, spilled, contaminated, or are being stored prior to proper disposal. Hazardous materials and hazardous wastes are classified according to four properties: toxic (causes human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or damage to materials), and reactive (causes explosions or generates toxic gases) (CCR, Title 22, Chapter 11, Article 3).

As of 2011, there were five LUST sites, one land disposal site, and no toxic release sites within Williams or its SOI, as shown in Table 4.13-1, LUST, Land Disposal, and other Cleanup Sites. LUST sites are generally associated with retail and commercial uses (e.g., gas stations, convenience stores, car washes, etc.) though some sites may be associated with local industrial and agricultural uses. In all cases, the substance being leaked is gasoline.

Table 4.13.1: LUST, Land Disposal, and Other Cleanup Sites in Williams		
Facility Name	**Address**	**Status**
Leaking Underground Tank (LUST) Cleanup Sites		
ARCO #2143	455 E ST (AKA: 5TH & E)	OPEN - REMEDIATION
CHEVRON #9-0795	505 4TH ST (AKA: 4TH & E ST)	OPEN - VERIFICATION MONITORING
TOSCO FACILITY #11135	495 4TH ST	OPEN - REMEDIATION
WAHL TRUCKING	863 7TH ST	OPEN - VERIFICATION MONITORING
WILLIAMS SHELL	570 E ST	OPEN - REMEDIATION
Land Disposal Sites		
JADE AIR/ HARMON AVIATION	HUSTED AND RD E	OPEN
Other Cleanup Sites		
CALDWELL FLYING SERVICE	HANKINS & DAVIS RD	OPEN - INACTIVE
CHARTER AVIATION	1600 FRESH WATER ROAD	OPEN - INACTIVE
ENDEMAN'S FEED & PELLET MILL	6TH & F & G ST.	OPEN - INACTIVE
JADE AIR/ HARMON AVIATION	HUSTED ROAD	OPEN - INACTIVE
Source: Geotracker website: http://geotracker.swrcb.ca.gov;		

Hazardous materials also include many household products such as cleaning fluids, insecticides, car batteries, paints, aerosols, electronic equipment, etc. These too, may be hazardous if disposed of improperly. If disposed of improperly, these substances can do serious damage to the health of humans, wildlife, and the environment. Colusa County periodically hosts free collections of household hazardous wastes, which is essential since these items are now banned from California landfills. Furthermore, hazardous wastes may also be disposed of at a publicly available facility in Oroville.

In May 2000, Colusa County Public Works published a hazard materials policy for the purpose of protecting life, environment, and property from the dangers of a hazardous materials incident. The policy sets forth the jurisdictional responsibilities, indicating that the Fire Chief for the City of Williams will assume command responsibilities for all hazardous material incidents within the City limits. Outside of the City limits is the responsibility of the Colusa County Office of Emergency Services. The Colusa County Environmental Health Department is then responsible for performing all assessments of environmental contamination and/or human exposure and providing oversight of cleanup activity and coordination with the lead state agency having cleanup jurisdiction.

In the ordinary course of training the firefighters of the WFPA all full-time staff and volunteers are trained as Firefighter I and First Responder, which includes basic hazardous materials fire training. There is no hazardous materials team within Colusa County, which draws on the master mutual aid system for any incidents.

All hazardous materials handlers who store in excess of 55 gallons, 500 pounds, or 200 cubic feet of gas are required to submit Hazardous Materials Management Plans. These plans provide emergency responders like the WFPA emergency contact information, site specific chemical inventories, and vicinity and facility maps. Furthermore, owners/operators of above ground tanks containing in excess of 660 gallons of petroleum hydrocarbons must comply with the state Aboveground Petroleum Storage Act, which requires preparation of a Spill Prevention and Countermeasure Plan.

Hazardous Materials Transportation

DOT regulates the transportation of hazardous materials between states and foreign countries. DOT regulations govern all means of transportation, except packages sent by mail, which are governed by U.S. Postal Service regulations. The State of California has adopted DOT regulations for the intrastate movement of hazardous materials. In addition, the State of California regulates the transportation of hazardous waste originating in the state and passing through the state. State regulations are contained in Title 26 of the California Code of Regulations.

The California Highway Patrol (CHP) and the California Department of Transportation (Caltrans) are the two State agencies that have primary responsibility for enforcing Federal and State regulations and responding to hazardous materials transportation emergencies. CHP enforces hazardous material and hazardous waste labeling and packing regulations to prevent leakage and spills of material in transit and to provide detailed information to cleanup crews in the event of an accident. Vehicle and equipment inspection, shipment preparation, container identification, and shipping documentation are all part of the responsibility of the CHP, which conducts regular inspections of licensed transporters to assure regulatory compliance. Caltrans has emergency chemical spill identification teams at as many as 72 locations throughout the state that can respond quickly in the event of a spill.

There are currently no designated routes for the transportation of hazardous materials within the City of Williams. Most materials are transported by truck for which designated truck routes have also not been established within the City. Although both I-5 and State Highway 20 are in travel routes that are used regularly for transport.

Lead-Based Paint and Asbestos-Containing Materials

Based on the age and nature of existing buildings in Williams, lead-based paint or asbestos may be present. In general, structures constructed before December 31, 1978 are at-risk for lead-based paint. In addition, asbestos-containing materials (ACMs) can be present in thermal systems insulation, as well as wall and floor materials. Asbestos is a naturally occurring fibrous material used as a fireproofing and insulating agent in building construction before such uses were banned by the Environmental Protection Agency (EPA) in the late 1970s. Asbestos and lead-based paint can seep into the soil and/or be released into the air, providing a potential threat to the health of workers, as well as persons in the vicinity. Asbestos clean-up is regulated by Federal and State laws that include the Clean Air Act and California Occupational Safety and Health Administration (Cal-OSHA). Cal-OSHA is a division of the State Department of Industrial Relations. Both the Federal OSHA and Cal-OSHA regulate worker exposure

during construction activities that affect lead-based paint, including demolition, removal, surface preparation for repainting, renovation, cleanup, and routine maintenance.

Development within Williams would be required to comply with Section 19827.5 of the California Health and Safety Code, which requires that local agencies not issue demolition or alteration permits until an applicant has demonstrated compliance with notification requirements under applicable Federal regulations regarding hazardous air pollutants, including asbestos. Also required is full compliance with Title 17 and Title 8 of the California Code of Regulations, which includes work practice standards related to the evaluation and abatement of lead in public and residential buildings; and covers construction work where an employee may be exposed to lead, including metallic lead, inorganic lead compounds, and organic lead, respectively.

Hazardous Materials Business Plan Program

State codes require all businesses to disclose the use, handling, or storage of hazardous materials, and/or waste. This information is essential to the City's fire fighters, health officials, planners, elected officials, workers, and their representatives so that they can plan for and respond to potential exposures to hazardous materials. In addition, it provides information to the community on chemical use, storage, handling, and disposal.

Hazardous Waste Handling

The Federal Resource Conservation and Recovery Act of 1976 (RCRA) created a major new federal hazardous waste "cradle-to-grave" regulatory program administered by U.S. EPA. Under RCRA, U.S. EPA regulates the generation, transportation, treatment, and disposal of hazardous waste, and the investigation and remediation of hazardous waste sites. Individual states may apply to U.S. EPA to authorize them to implement their own hazardous waste programs in lieu of RCRA, as long as the state program is at least as stringent as federal RCRA requirements.

California has been authorized by U.S. EPA to implement its own hazardous waste program, with certain exceptions. In California, DTSC regulates the generation, transportation, treatment, storage, and disposal of hazardous waste, and the investigation and remediation of hazardous waste sites. DTSC has established criteria for identifying, packaging, labeling, treating, storing, and disposing of hazardous wastes. These are supplemented by Federal Hazardous and Solid Waste Amendments of 1984 requirements, which are not yet a part of the State's authorized program.

The Emergency Planning and Community Right-to-Know Act (EPCRA) requires detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of to prevent or minimize adverse effects to human health or the environment in the event such materials are accidentally released. California has developed an emergency response plan to coordinate emergency services provided by Federal, State, and local governments and private agencies. Responding to hazardous materials incidents is one part of this plan. The plan is administered by the State Office of Emergency Services, which coordinates the responses of other agencies, including Cal EPA, CHP, Department of Fish and Game, Colusa County Department of Health and Human Services, and the Williams Fire Protection Authority (WFPA).

Medical Waste

The transportation and disposal of medical waste is regulated under the California Medical Waste Management Act (MWMA, Sections 117600 et seq. of the California Health and Safety Code). Within the statutory framework of the MWMA, the Medical Waste Management Program of the California Department of Health Services (DHS) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste generators, offsite treatment facilities, and transfer stations throughout the state. The DHS also oversees all medical waste transporters.

California Accidental Release Prevention Program (CalARP)

The goal of the CalARP program is to reduce the likelihood and severity of consequences of extremely hazardous materials releases. Any business which handles Regulated Substances (including federally-listed Extremely Hazardous Substances and State-listed Acutely Hazardous Materials) is required to prepare a Risk Management Plan. The Risk Management Plan describes current and past practices and releases, what the impact of releases may be, and what they do or plan to do to prevent releases and minimize their impact if one occurs.

Aerometric Information Retrieval System (AIRS)

The AIRS database is maintained by the EPA and provides information on facilities that produce and release air pollutants. The AIRS data comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, refineries, universities, and other facilities both large and small. There are no such facilities located in the City Williams or its planning SOI.

Aboveground Storage Tanks

The Aboveground Petroleum Storage Act was enacted to protect the State's people and natural resources from aboveground petroleum storage tank spills. Facilities storing petroleum products (gasoline, diesel, lubricants, etc.) in aboveground tanks with a capacity greater than 1,320 gallons or the total capacity for the facility greater than 1,320 gallons are subject to the Act. Owners or operators of aboveground tanks are required to file a storage statement with the State Water Quality Control Board (SWQCB) and prepare and implement a Spill Prevention Control and Countermeasure Plan (SPCCP) in accordance with Federal regulations.

Underground Storage Tanks

Federal laws and regulations relating to underground storage tanks used to store hazardous materials (including petroleum products) require that tank owners and operators register their tanks with the U.S. EPA or delegated agencies. Federal regulations require extensive remodeling and upgrading of underground storage tanks, including installation of leak detection systems. Tank removal and testing procedures are specified by the regulations.

State laws relating to underground storage tanks include permitting, monitoring, closure, and cleanup requirements. Regulations set forth construction and monitoring standards, release reporting requirements, and closure requirements. Old tanks must eventually be replaced. All new tanks must be double-walled, with an interstitial monitoring device to detect leaks. All soil and groundwater contamination must be cleaned up. The regulations for this program are contained in Chapter 6.7,

Division 20 of the Health and Safety Code and Subchapter 16 of Title 23 of the California Code of Regulations, California Underground Storage Tank Regulations, and are implemented by the Regional Water Quality Control Boards (RWQCB). Underground storage tank permitting is handled through local governmental agencies.

Spills, Leaks, Investigations, and Cleanups (SLIC)

The Spills, Leaks, Investigations, and Cleanups (SLIC) Section of the RWQCB oversees activities at non-UST sites where soil or groundwater contamination has occurred. Many of these sites are former industrial facilities or dry cleaners, where chlorinated solvents were spilled, or have leaked into the soil or groundwater. The SLIC Program is set up so that reasonable expenses incurred by SWRCB and RWQCBs in overseeing water quality matters can be recovered from the responsible party. Facilities are assigned a site specific program cost account to track expenditures. There are no such sites located in Williams or its surrounding SOI.

Polychlorinated Biphenyls (PCBs)

PCBs are organic oils that were formerly placed in many types of electrical equipment, including transformers and capacitors, primarily as electrical insulators. Years after their widespread and commonplace use, it was discovered that exposure to PCBs may cause various health effects, and that PCBs are highly persistent in the environment.

In 1979, U.S. EPA banned the use of PCBs in most new electrical equipment and began a program to phase out certain existing PCB-containing equipment. The use and management of PCBs in electrical equipment is regulated pursuant to the Toxic Substances Control Act (40 CFR). These regulations generally require labeling and periodic inspection of certain types of PCB equipment and set forth detailed safeguards to be followed in disposal of such items.

Pesticides

Pesticides contain chemicals formulated specifically to be toxic to certain living things. As the use of modern chemical-based pesticide products has grown, attention has been drawn to their potential adverse side effects. Legislative and regulatory efforts to regulate the use and application of pesticides have sought to retain the benefits while minimizing the potential harm to public health and the environment.

Pesticides are subject to Federal and State legislation. Pesticide controls begin with a screening of the toxic ingredients on pesticides to ensure that they do not present undue hazards to human health or non-targeted species. After screening, the use of pesticides is regulated to ensure that workers are trained in proper application techniques; the pesticides are properly handled and stored; and the location and content of chemicals is made known to workers, emergency response units, and medical personnel who may be exposed to the chemicals. The resulting array of license, permit, and registration requirements, together with the manifold restrictions on the application, use, and handling of pesticides, reflect a growing desire to evaluate environmental effects accurately and to oversee all pesticide-related activities. Because of the presence in groundwater and surface water and air, pesticides are regulated in California under Federal and State water quality laws, safe drinking water

laws, and air quality laws. The following major Federal and State statutes and regulations control pesticides:

1. Federal Insecticide, Fungicide, and Rodenticide Act;
2. Pesticide Contamination Prevention Act; and
3. Birth Defects Prevention Act.

Given the extent of agricultural operations and activities around the community another public health concern is related to the aerial spray application of agricultural pesticides. The use of crop duster aircraft near the town may allow drifting into adjacent residential areas. The use of buffers and other approaches is prudent to minimum conflicts between urban and agricultural uses activities.

Non-Hazardous Waste Collection and Disposal

Refuse collection and disposal is provided by Recology, a private company that serves many communities throughout northern California. Services include weekly garbage pickup, biweekly recycling waste pickup, and biweekly yard waste pickup. After pickup, refuse is hauled to a transfer station in Maxwell and then to Recology's Ostrem Road Landfill, six miles outside of Yuba City.

The Ostrem Road Landfill has been recognized as one of the most modern landfills in California, and it was the first facility to be built to meet current federal requirements for landfill liner systems to protect subsurface aquifers and other resources. This facility is permitted to accept 3,000 tons of material per day but is currently accepting about 800 tons per day from communities in five northern California communities. Recently proposals have been forwarded to accept refuse from San Francisco at this facility by means of rail transport, but even with this added tonnage, the company has stated that the Ostrem Road Landfill will have sufficient capacity for the next 61 years.

Occupational Safety

Federal and State laws define occupational safety standards to minimize worker safety risks from both physical and chemical hazards in the workplace. The California Division of Occupational Safety and Health (Cal-OSHA) and the Federal Occupational Safety and Health Administration (OSHA) are the agencies responsible for assuring worker safety in the workplace. OSHA regulations (29 CFR 1910 and 1926) contain requirements concerning the use of hazardous materials in the workplace and during construction that mandate employee safety training, safety equipment, accident and illness prevention programs, hazardous substance exposure warnings, emergency action and fire prevention plan preparation, and a hazard communication program.

The hazard communication program regulations contain training and information requirements, including procedures for identifying and labeling hazardous substances, and communicating hazard information relating to hazardous substances and their handling. The hazard communication program also requires that Material Safety Data Sheets be available to employees, and that employee information and training programs be documented. These regulations require preparation of emergency action plans (escape and evacuation procedures, rescue and medical duties, alarm systems, and training

in emergency evacuation). Cal-OSHA assumes primary responsibility for developing and enforcing standards for safe workplaces and work practices.

Wildfire Hazards

According to the California Department of Forestry and Fire Protection, the City of Williams is within a Local Responsibility Area (LRA) that is unzoned as to its fire hazard severity zone. Essentially, this means that the City is at low risk for wild land fires. Areas further west in the foothills and mountains of Colusa County have an increased potential for fire hazard, but these areas are located outside of the Williams SOI.

Urban Fire Hazards

Urban fires primarily involve the uncontrolled burning of residential, commercial, and industrial structures due to human-made causes. Factors that exacerbate urban structural fires include substandard building construction, highly flammable materials, delay in response time from emergency response providers, and inadequate fire protection services. Many structures in Williams were built prior to the fire hazard measures included in present building codes and fire prevention policies. Because of this, the risk of losing property and lives due to an urban fire hazard is increased.

Fire protection services in Williams are managed by the Williams Fire Protection Authority (WFPA) from one station located at 810 E Street. While a one and one-half mile radius covers the entire City limits from this location, the response time to East Williams is dependent upon whether or not there is a train crossing E Street. If so, fire response must be rerouted north to Old Highway 20, which lengthens the trip and increases the time of response.

The Insurance Services Organization (ISO) rating is four within the City (within 1,000 feet of a fire hydrant) and six for a distance up to five miles from the fire station. The WFPA has established a response time standard to determine the effectiveness of fire services in Williams. A six minute response time on 90 percent of its calls has been determined to be the target for the purpose of saving lives and structures. Currently, the Authority has a response time of approximately seven minutes. Another station location on the east side of I-5 would improve response time.

As the community expands eastward a second station is warranted on the east side of town. This is so as the Insurance Services Organization (ISO) states that a fire station can cover one and one-half road miles from the existing station. New growth will occur beyond these limits during the horizon of this general plan thereby warranting a second fire station.

Seismic and Geologic Hazards

The State of California has identified five areas of critical seismic concern including surface ruptures, ground shaking, ground failure, tsunamis, and seiches. Each of these is caused by earthquake activity thereby creating hazards for life and property, which has the potential anywhere in California. While there are no active faults in Williams or Colusa County, the northern Sacramento Valley is to expect low-intensity shocks from time to time. Williams is not at risk for tsunamis or seiches due to its inland location and the absence of nearby large bodies of water.

Surface Rupture and Ground Shaking

See Section 4.7 of this Chapter for additional impact assessment and commentary on seismic and geological hazards.

The faults that are in the Valley are what are referred to as quaternary, meaning they were active 200,000 years ago, or even pre-quaternary (active two million years ago). Much of the earthquake preparedness efforts conducted in the area to date have considered earthquakes that occur outside of Colusa County. The nearest known fault is at Sutter Buttes (lying midway and slightly north between Colusa and Yuba City) for which the maximum credible earthquake could measure a magnitude of 5.7 on the Richter scale. Ground shaking from this level of earthquake would be felt and observed as to its cause. The damage would be moderate to major, with general damage to foundations, partial to complete collapse of unreinforced masonry structures, partial damage to reinforced masonry structures, and underground pipes broken. Therefore, there are seismic risks in Williams and throughout Colusa County for which preparedness is wise and warranted.

In 2004, the City adopted a resolution to adopt the Colusa County Operational Area Local Hazard Mitigation Plan. This plan was required by Federal law as a prerequisite for the receipt of Federal grant funds, and establishes parameters of O.E.S. to carry out post disaster mitigation activities. The goals of the plan is to provide the basis for funding pre-mitigation priorities for projects that save lives and reduce damage.

This plan includes a series of mitigation strategies that are applicable to the City of Williams. These primarily relate to enforcing earthquake preparedness activities and inspections based on city and county codes, public education and preparedness drills, bringing buildings to code, preparing to reduce flood damage, and enforcing wild fire defensible zones around homes. Specifically related to Williams, the mitigation measure identified is to maintain the integrity of stream banks to protect against flooding. This plan is required to be updated in 2010, which is the sole responsibility of the Colusa County Office of Emergency Services. It is advisable for the City to actively engage in this update process.

Landslides, Earth Subsidence, and Other Geological Events

Williams' flat land form is absent of the topographic conditions that are conducive to landslides, earth settlement, and other damaging and unsafe conditions. There are no karst formations or history of underground mining that would cause foundation instabilities or cave-in situations.

Inland Flooding

Williams is confronted with persistent flood hazards due largely to the upstream watershed. In general, there are approximately 125 square miles of mountains and farmland that drain into the network of creeks and drainage canals above the City. Therefore, rainfall events often exceed the capacity of the conveyance systems, which results in overflows of storm waters that flow into developed portions of the City. As a result, the City has had several disaster declarations, which have resulted in costly damages and emergency construction.

The City lies mostly within the Freshwater Creek Basin. Two of the basin's tributaries include Salt Creek and Spring Creek, both of which flow through the City and its sphere of influence. As the primary conveyances, the capacity of these stream channels is often exceeded, even with modest rainfall events. This is due, in part, to the external hazards attributed to the runoff generated in areas of the watersheds that are outside of the City. Since these areas are largely rural and have less affect on property, these watersheds have not been extensively studied nor have significant, near-term improvements been identified. Secondly, flooding is caused by a lack of storm drainage infrastructure within the City. Since much of the drainage within the City is by way of overland sheet flow and above ground facilities like roadside ditches, valley gutters, and surface drainage in streets, there is simply an insufficient capacity to adequately handle the volume of storm water that is generated outside of and within the City.

The City participated in the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) program. As part of its administration of the National Flood Insurance Program (NFIP), FEMA publishes flood hazard maps (known as FIRMs). The purpose of a FIRM is to show the areas in Williams that are subject to flooding and the risk associated with these flood hazards. One of the areas shown on the FIRM is a Special Flood Hazard Area (SFHA). The SFHA is the area that has a 1-percent or greater chance of flooding in any given year; this area is also referred to as the 100-year floodplain. The flood hazard and risk information presented on the FIRMs is the result of engineering studies that are performed by engineering companies, other Federal agencies, or communities, which are reviewed for compliance with FEMA guidelines and approved by FEMA.

The City's involvement in NFIP requires it to adopt and enforce minimum floodplain management standards. These floodplain management requirements are designed to prevent new development from increasing the flood threat and to protect new and existing buildings from anticipated flood events. The City must therefore, require permits for all development in the SFHA and ensure that construction materials and methods used will minimize future flood damage. In return, the Federal Government makes flood insurance available for almost every building and its contents within the community. No insurance may be obtained for structures built within the designated floodway or below the elevation of the 100-year flood. However, insurance is available in the 100-year floodplain for homes built with the first floor of living area above the 100-year flood elevation.

Land development results in an increase in the amount of impervious surfaces and decreased ground cover and vegetation. These conditions limit infiltration and, without adequate mitigation, can increase storm water run-off rates and volumes, and decrease the time required to reach and surpass the capacities of the drainage conveyance systems. For this reason, the City must be cognizant of the impacts of new development, and adequately prepare for and plan to mitigate these impacts with good design principles and adequate, up-to-date standards.

There have been a large number of studies undertaken to address the flooding conditions in and around Williams. Two of the more recent include Preliminary Technical Memorandum for Flood Hazard Mitigation Study Project Alternatives and the Storm Drainage Master Plan. These two studies offer recommendations regarding the design capacities for sizing storm drainage infrastructure and detention

basins, structure and non-structural measures to reduce existing flooding problems, preparation of a storm water management plan, and considerations applicable to new development. Many of these recommendations warrant consideration concurrent with the implementation of this general plan update.

4.13.3 Standards of Significance

The criteria used to determine the significant of an impact were based on the criteria presented in Appendix G of the CEQA Guidelines. The City of Williams General Plan Update would result in significant adverse impacts if it results in any of the following:

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
e. Produce substantive solid waste that would exceed the permitted capacity of a landfill serving the study area; or conflict with Federal, State, and local statutes and regulations related to solid waste.
f. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?
g. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?
h. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
i. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

4.13.4 Impacts and Mitigation

Hazardous Material Safety

IMPACT 4.13.1:	**Creation of a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.**
IMPACT 4.13.2:	**Creation of a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.**
IMPACT 4.13.3:	**Creation of hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.**
IMPACT 4.13.4:	**Development on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.**
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	Policies and Recommended Actions in the proposed General Plan Update
Level of Significance After Policies/Mitigation:	Less than Significant

Impact Analysis and Mitigation

Because the four impacts listed above are closely related to each other, the listing of impacts and mitigation measures have been merged to avoid unnecessary repetition.

Lists of contaminated sites within the planning area are available through the Colusa County Department of Health and Human Services, the U.S. EPA, and the Department of Toxic Substances Control, and are summarized in Table 4.13-1, LUST, Land Disposal, and Other Cleanup Sites in Williams. Businesses such as dry cleaners, gas stations, and other auto oriented commercial uses are often contaminated.

Although a number of businesses within the planning area that routinely store, handle, and transport hazardous substances are likely to increase as Williams grows, the use of these hazardous materials is controlled and permitted by Williams Fire Protection Authority, which conducts Uniform Fire Code inspections of these facilities and otherwise ensures that risks associated with the use of hazardous materials in the community are minimized.

The transportation, use, and disposal of new hazardous materials are subject to State and Federal hazardous materials laws and regulations. Future development under the General Plan would continue to be subject to regulatory programs such as the Hazardous Materials Business Plan, aboveground and under-ground storage tank programs, and Resource Conservation and Recovery Act (RCRA) hazardous waste generator programs.

As a result of the effective regulatory framework that is in place, along with the proposed General Plan policies listed below; the implementation of the hazardous materials goals and recommended actions

within the proposed General Plan Update would not cause a significant adverse effect on the environment due to hazardous materials.

The City will coordinate with appropriate federal, state, and regional agencies to address local sources of groundwater and soil contamination, including underground storage tanks, septic tanks, agriculture, and industrial uses.

4.31. The Williams Fire Protection Authority will assume responsibility for hazardous materials incidents that occur within the City limits, and provide assistance, as needed, in the instance of an incident in proximity to yet outside of the City.

4.32. The City will work with the Colusa County Office of Emergency Services to coordinate their response to any hazardous materials incidents.

4.33. The City will continue to cooperate with Colusa County in the acceptance of household hazardous wastes at the Road Department in Williams.

4.34. The City will continue to train its firefighters in basic hazardous materials fire training.

4.35. The City will establish hazardous materials routes, which should be listed in the National Hazardous Materials Registry managed by the U.S. Department of Transportation Federal Motor Carrier Safety Administration (FMCSA).

4.36. The City will establish designated truck routes through and around the City via an ordinance adopted by the City Council.

Solid Waste

IMPACT 4.13.5:	**Implementation of the General Plan would produce substantive solid waste that would exceed the permitted capacity of a landfill serving the study area; or conflict with Federal, State, and local statutes and regulations related to solid waste.**
Level of Significance Before Policies/Mitigation:	Less than Significant
Mitigation Measures:	None Required
Level of Significance After Policies/Mitigation:	Less than Significant

Impact Analysis and Mitigation

Provided that current or comparable programs are kept in place, implementation of the proposed Project is estimated to add approximately 4,500 additional people to the study area. Currently, the average American produces 4.6 pounds of solid waste per day (EPA, 2005). Based on this average rate, population growth associated with the General Plan would result in an additional 3,780 tons per year of solid waste, with industrial and commercial land uses producing additional amounts of solid waste per year. Application of a 50% diversion rate (compliance with AB 939) would also result in the diversion of a significant amount of this waste. Based on

the existing use of the Ostrem Road Landfill, the additional solid waste generated by the additional population will not create a significant increase that would exceed the permitted capacity of the landfill serving Williams. Buildout of the General Plan would result in a less than significant impact to Solid Waste and the disposal of said waste.

Areas Near Public Airports

IMPACT 4.13.6:	**For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the project result in a safety hazard for people residing or working in the project area.**
Level of Significance Before Policies/Mitigation:	No Impact
Mitigation Measures:	None Required
Level of Significance After Policies/Mitigation:	No Impact

Impact Analysis

Williams is not located within the boundaries of an airport land use plan or within two miles of a public airport.

Areas Near Private Airstrips

IMPACT 4.13.7:	**For a project within the vicinity of a private airstrip, the project results in a safety hazard for people residing or working in the project area.**
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	Policies and Recommended Actions in the proposed General Plan Update
Level of Significance After Policies/Mitigation:	Less than Significant

Impact Analysis and Mitigation

A north-south 2,300 foot paved private airstrip is located at the eastern edge of Williams, east of the intersection of Husted Rd. and E St. This facility is owned by the Williams Soaring Center and used primarily as a sailplane launch, landing and training facility. It is also available as a facility for light aircraft; however, no refuel service is available on site.

The Future Land Use Plan component of the Williams General Plan Update excludes future development at both ends of the strip. Assuming that development in Williams adheres to the Plan's policies stated below, impacts to the airstrip would be less than significant.

3.32 The City will grow contiguously to manage the efficiency of public services and municipal infrastructure provision, to maintain a compact and well defined community form, and to oblige its fiscal responsibility.

3.33 Priority in the form of infrastructure and other capital improvements will be given to the redevelopment of blighted structures or properties and infill development of vacant parcels or underutilized tracts.

3.34 Development will occur first within the existing corporate limits where the infrastructure and services are readily available.

3.35 Annexation will occur in strict adherence with the Future Land Use and Growth Plan. Requests for annexation in areas not shown in this plan will warrant further study, a showing of cause to support the request, and require a general plan amendment.

3.38 Development or individual uses outside the corporate limits will not be prematurely provided municipal infrastructure until annexation is warranted and executed, subject to conformance with the Future Land Use and Growth Plan. Services will be provided to these areas through mutual aid and other agreements and mandates.

Interference with Emergency Response or Evacuation Plans

IMPACT 4.13.8: Impairment of the implementation of or physically interference with an adopted emergency response plan or emergency evacuation plan.	
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	Policies and Recommended Actions in the proposed General Plan Update
Level of Significance After Policies/Mitigation:	Less than Significant

Impact Analysis and Mitigation Measures

In 2008 the City received a technical memorandum identifying deficiencies in pressure in portions of the water distribution system. The consultants preparing the study found that, while in general the existing system can meet maximum daily and peak hour demands, there is no emergency back-up equipment. If one of the City's well fails, it will result in the loss of adequate fire flow. Specific areas of the City that were shown to have deficiencies included the commercial and industrial areas along I-5, Fifth Street, and Virginia Street. To increase capacity and improve flows, the City plans to install an additional well and a new storage tank or booster pump system. The Updated General Plan includes the following recommended actions, which will improve the City's ability to respond to fire emergencies:

Flood Protection

The City currently has sufficient resources and procedures in place to respond to seismic, flooding, release of hazardous substances, or other emergency events. As future growth and development occur, additional resources will be deployed in accordance with the following General Plan Update policies:

4.1 The City will require applicants for development to submit drainage studies that adhere to storm water design requirements and incorporate measures from the Storm Drainage Master Plan to prevent on- or off-site flooding.

4.2 Future development will include adequate provisions for on- and/or off-site collection, storage, and conveyance of storm water, in accordance with the City's policies and standards.

4.3 Land within the floodplain that is indicated for future development in this general plan will mitigate flooding conditions through the means required by the City and FEMA.

4.4 New development shall not cause downstream property owners, watercourses, channels, or conduits to receive storm water runoff at a higher peak flow rate than would have resulted from the same storm event occurring over the development site with the land in its natural, undeveloped condition.

4.5 Storm retention/detention facilities will be integrated into the open space set-asides of future land developments and used as amenities and recreational areas.

4.6 Storm detention basins will be jointly used as public open space and recreational facilities where such improvements are determined by the City to be needed and warranted.

4.7 The City will continue to participate in the National Flood Insurance Program and in so doing with maintain their regulations in compliance with the standards of the Federal Emergency Management Agency (FEMA).

4.8 The City will promote and encourage the use of natural drainage configurations such as depression areas, wetlands, and natural swales versus underground storm drainage infrastructure.

4.9 The design of drainage improvements will be sensitive to community aesthetics, aquatic habitat, recreation (trails, playing fields), wetlands, and water quality mitigation.

4.10 The City will encourage design strategies to reduce the impact of impervious surfaces on storm water quality through the use of water gardens, rain barrels or cisterns, pervious pavement, vegetated swales, swale blocks, and green roofs, among others.

Protection from and Response to Seismic Events

4.11. The City will continue to coordinate with the Colusa County Office of Emergency Services and the California State Office of Emergency Services to collect, account for, and distribute geologic data for use in preparedness and hazard mitigation planning.

4.12. Geotechnical investigation will be required by the City for any development proposed to occur in an area of known subsidence for which engineering modifications may be necessary to mitigate or eliminate adverse impacts.

4.13. All building permits for new buildings or the expansion or reconstruction of existing buildings will ensure conformance with the seismic requirements of the California Building Code and applicable fire and building codes.

4.14. The City will comply with state seismic and building standards in the design and citing of its critical emergency response facilities, and coordinate with other local agencies, such as the Williams Unified School District, to facilitate their compliance as well.4.16. The City will coordinate with the Colusa County Office of Emergency Services to identify and establish

evacuation routes and operational plans to be used in case of a fire (or other) public safety hazard.

Fire Prevention and Protection

4.17. The City will continue to minimize its risk for wild land and urban fires through the administration and enforcement of Chapter 15.24, Fire Code, which should be amended from time to time, concurrent with the amendments of the California Fire Code.

4.18. The City will continue to plan for the provision of water infrastructure to support the fire fighting capabilities of the WFPA.

4.19. The City will continue to actively participate in the California Master Mutual Aid Agreement.

4.20. The City will observe responsible land use planning as it relates to the management and protection against fire hazards.

5.c Execute plans to install a new water supply well.

5.d Further develop plans for a second water storage tank.

Prevention of and Responses to Hazardous Substance Events

4.38. New development adjacent to areas of ongoing agricultural development shall provide agricultural buffers that are adequate to protect residents from the harmful effects of agricultural chemical use.

4.39. The City will educate the public as to the types of household hazardous waste and the proper means of disposal.

4.40. The City will require that development project proposals address existing hazardous materials concerns, particularly past agricultural uses, through preparation of Phase I or Phase II hazardous materials studies.

Wildland Fires

IMPACT 4.13.9:	**Exposure of people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.**
Level of Significance Before Policies/Mitigation:	No Impact
Mitigation Measures:	None Required
Level of Significance After Policies/Mitigation:	No Impact

Impact Analysis

As earlier stated in this Section, Williams is surrounded by cultivated farmland, used primarily for growing rice. The threat of wildland fires is considered to be minimal.

4.14 Parks and Recreation

4.14.1 Introduction

This section provides an inventory of parks and recreation facilities, as well as open space resources available to residents. Analysis and recommendations for parks, recreational facilities, and open space in Williams are presented in Chapter 7, Open Space and Conservation, of the General Plan Update. Effects on parks and open space, or population growth without comparable increases in recreational acreage and facilities, are analyzed as potential impacts of the proposed General Plan Update.

4.14.2 Environmental Setting

Existing Parks

Chapter 2, Background Analysis, of the General Plan Update lists the City's current inventory of parkland. There are five parks in all, covering a total of 28 acres. Land devoted to public parks comprises approximately 2.8% of the City's developed property.

The National Recreation and Park Association (NRPA) established criteria for the provision of parks and recreation facilities. A Community park should be 5-8 acres in size and a city should have one community park for every 1,000 persons of population. A Neighborhood park should be 1-2 acres in size and a city should have one Neighborhood park for every 1,000 persons of population. A Pocket park should be 0.25-0.50 acres in size and a city should have one Pocket park for every 1,000 persons of population. Four of the parks in Williams are classified as neighborhood parks, taking the NRPA size standards and the existing equipment into consideration. In Williams, most of the neighborhood parks exceed the NRPA neighborhood park standards in terms of size. The City currently provides 1.85 acres of neighborhood parkland for every 1,000 persons, which falls within the national standard. One park, Valley Vista, is classified as a community park.

The City provides 2.08 acres of community-wide parkland for every 1,000 persons, falling significantly below the national standard. To bring the City's community park system up to national standards, an additional 15 acres of community parkland would need to be added.

In general, the City's parks are conveniently located within walking distance of most developed residential areas, with the exception of the neighborhood area east of Williams Elementary School and north of D Street. Some of these gaps in parkland service can be covered by a continuation of the City's current coordination efforts to share school and City resources.

4.14.3 Standards of Significance

The criteria used to determine the significant of an impact were based on the criteria presented in Appendix G of the CEQA Guidelines. The City of Williams General Plan Update would result in significant adverse impacts if it results in any of the following:

a. Would the proposed plan increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
b. Does the proposed plan include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

4.13.4 Impacts and Mitigation

Overuse of Existing Neighborhood and Regional Parks

IMPACT 4.13.1:	**Increased use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.**
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	Policies and Recommended Policies in the proposed General Plan Update
Level of Significance After Policies/Mitigation:	Less than Significant

Impact Analysis and Mitigation

The City's current parkland dedication requirements of one acre per 1,000 residents will allow the City to remain within the overall standards for neighborhood parkland. Also, as the City grows it will consider expanding its community-wide park acreage in order to meet NRPA standards for community-wide parks.

According to the information gathered from stakeholders during initial meetings of the General Plan Advisory Committee (GPAC), the need for additional recreational facilities was recognized. For example, tennis is one sport where there was an interest in enhancing but that the existing tennis courts in Williams are currently underutilized. This led to the recognition that further, detailed analysis of specific park and recreational needs would be appropriate, in light of the significant growth that is anticipated by 2030. The City would benefit from the preparation and adoption of a specialized Parks and Recreation Master Plan.

The potentially adverse impacts of future growth and development in Williams would be mitigated through General Plan implementation in accordance with the following policies:

7.5 The financial support and development of future parks will follow the long-range, Parks and Recreation Master Plan (and subsequent updates) to accommodate a diversity recreational activities and support the interests of all age ranges, including youth, singles, families, and retirees. The annual budget under the City of Williams Parks Improvement Project should complement the Plan.

7.6 The City will continue to expand its parks and recreational facilities and services in proportion to population growth and state and national standards.

7.8 Parks and open space should be evenly distributed, with regard to location, size, and amenities, to reflect population density and nearby land uses.

7.9 The City will lead efforts to pursue grant and other funding opportunities to improve and expand facilities, gain additional staff support, and finance community events.

7.10 A collaboration of government entities, public agencies, and local community groups will maximize the efficiency of resources.

7.11 Parkland dedication and development fee requirements should be used to increase quantity and quality, sustaining a high level of service across the entire system.

7.12 A comprehensive, interconnected trail system will offer pedestrian walkways, bike paths, and equestrian trails throughout the community.

Park Construction of Expansion Impacts

IMPACT 4.13.2: Construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	Policies and Recommended Policies in the proposed General Plan Update
Level of Significance After Policies/Mitigation:	Less than Significant

Impact Analysis and Mitigation

The locations of future or expanded recreational facilities will be determined in accordance with the Land Use and Character element of the General Plan, along with the outcome of the recommended Parks and Open Space Master Plan. New neighborhood parks will be conveniently located to best integrate with developing residential areas or on infill sites within established residential areas. The location(s) of any larger, community-wide parks will be selected in a manner that ensures adequate arterial/collector street access and utility services. The following policy or action statements presented in the General Plan mitigate the potential impacts:

Policies

3.41 The City's land use pattern should focus new development and significant redevelopment where adequate public services and utility capacity are already in place or projected for improvement, including streets, water, wastewater, and drainage infrastructure.

3.66 Schools, parks, golf courses, and community facilities should be located close to or within residential neighborhoods for accessibility and to provide a focal point for effective and cohesive neighborhood design.

3.67 Uses that commonly have moderate- to large-scale assemblies of people such as churches, funeral homes, membership organizations, and other institutions, should be appropriately located on adequate size parcels with sufficient space to accommodate the off-street parking and accessory needs. Such uses should be located so as to minimize any adverse or undue significant burden on adjacent or adjoining land uses, as well as that portion of the street network.

3.69 Parks and open spaces will be well distributed and conveniently accessible to all neighborhoods, including provisions for pedestrian connectivity.

Action

7.o Locate new parks in the presence of natural amenities while preserving environmental resources and site features. Continue to emphasize natural resource protection as a key objective of ongoing parkland acquisition and enhancement of existing park locations.

4.15 Municipal Utilities and Service Systems

4.15.1 Introduction

This section of the Williams General Plan Update Program EIR addresses the following sections. Each section includes subsections addressing the Setting, General Plan policies, Standards of Significance and potential impacts and their associated mitigation.

- Wastewater Collection and Disposal
- Water Supply and Delivery

A third municipal utility system, storm drainage and stormwater management is addressed in EIR Section 4.8, Hydrology and Water Quality

4.15.2 Environmental Setting

Sanitary Sewers and Waste Treatment

The City provides wastewater collection, treatment, and disposal services to approximately 1,250 connections, including both residential and nonresidential users. The limits of municipal wastewater service mostly coincide with the developed portions of the City limits, generally extending from North Street to Theatre Drive on the south, and from Nicolaus Drive on the west to Husted Road on the east (including the Valley Ranch development). The system mainly includes 6 to 10 inch collection lines, with a 21-inch main line to the wastewater treatment plan. In the original town area the pipes are made of transite, which is manufactured from asbestos and concrete.

Due to their age many segments are breached and in some cases failing, which has caused significant inflow and infiltration into the wastewater collection system. This is evidenced by an average daily flow or 0.45 million gallons per day (MGD), which balloons to as high as 1.5 MGD during wet weather conditions. Generally, inflow and infiltration is caused by groundwater seeping into sewer pipes through cracks, pipe joints, and other system leaks. In addition, although not verified, there may also be inflow of rainwater into the wastewater system from sources such as yard and patio drains, roof gutter downspouts, uncapped clean-outs, pond or pool overflow drains, footing drains, cross-connections with storm drains, and cracks in manhole covers. Infiltration and inflow are the primary factors driving peak flows to the wastewater system, which is a significant consideration in capacity planning and plant operating efficiency.

The wastewater treatment plant, located at 701 B Street, has a flow capacity of 0.5 MGD. Planned improvements to the wastewater treatment plant to bring the City in compliance with Requirements of the California Regional Water Quality Board, Central Valley Region, have not been finalized, but the cost has been estimated to be approximately $16,000,000.

The City began significant repairs to the wastewater collection system in 2010. These repairs included a replacement of the existing 0.5 MGD treatment plant. The Existing Facility was designed to provide an equivalent to secondary level of treatment for up to the average daily design flow of 0.5 mgd. The facility is required to upgrade their facility to provide a tertiary level of treatment for up to the average

daily design flow of 0.5 mgd. The December 2008 Regional Board Order contains an Average Dry Weather Maximum Daily Discharge Flow effluent limit of 0.5 mgd. The order was subsequently amended to allow for a UV disinfection system instead of a continuous effluent monitoring for Total Residual Chlorine. Current build-out plans are to expand the plant up to 1.0 MGD, although it may be further expanded in the future.

Water Storage and Distribution

A description and potential impacts on the City's aquifers and potable water supply are presented in Section 4.6 of this EIR. The City distributes water to residences and business, including approximately 2,100 meters. The limits of service are mostly the same as the wastewater service, providing service to the developed portions of the City limits.

The system includes a 100,000 gallon elevated water storage tank, together with three active and two standby groundwater wells.

In 1995, a majority of the older four and six inch lines in the original town area were replaced, leaving a few remaining transite and cast iron four and six inch pipes. There are no plans at this time for replacement of these lines.

As previously stated in Section 4.6 of this EIR, the average annual water flow is about 400,000 gallons, which increases substantially to 1.2 to 1.5 million gallons on a peak day. The highest water demands are experienced during the month of July, with monthly production of 36.5 million gallons. The water system generally runs at 90 percent capacity. The existing elevated water storage tank has an ultrasonic level controller, which monitors the water level and controls the well pumps. As the community develops, an additional ground storage tank and booster pumps will be necessary, preferably measuring up to a 1 million gallon tank.

4.15.3 Regulatory Setting

Federal

As authorized by the Clean Water Act (CWA), the National Pollutant Discharge Elimination System (NPDES) Permit Program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources are discrete conveyances such as pipes or ditches. Since its introduction in 1972, the NPDES Program has been responsible for significant improvements to our Nation's and State's water quality.

State of California

The California State Water Resources Control Board.

The California State Water Resources Control Board (State Water Board) has been formed to preserve and enhance the quality of California's water resources and ensure their proper allocation and efficient use for the benefit of present and future generations. One aspect to accomplishing this mission is to ensure that operators of wastewater treatment facilities in the State meet the minimum level of competence; thereby, protecting the public health and the environment. The Legislature has given the

State Water Board this responsibility. The State Water Board adopted regulations to define the experience and training requirements necessary to meet the minimum levels of competence. To administer this responsibility, the State Water Board established the Office of Operator Certification in the Division of Financial Assistance.

Central Valley Regional Water Quality Control Board.
The Williams treatment plant operates under a permit from the Central Valley Regional Water Quality Control Board (RWQCB). Wastewater generators must obtain a permit to discharge their wastewater. Pursuant to the federal Clean Water Act and California's Porter-Cologne Water Quality Control Act, the Central Valley RWQCB regulates wastewater discharges to surface waters through its administration of the National Pollutant Discharge Elimination System (NPDES) program.

Williams' NPDES permit governs the quantity and quality of treated wastewater that can be discharged into Salt Creek. The Central Valley RWQCB requires reissuance of its NPDES permits every five years; Williams' current wastewater treatment facility permit became effective on December 5, 2008 and amended on August 13, 2009. It is scheduled to expire in December 1, 2013.

California State Senate Bill 7.
Enacted in late 2009, Senate Bill 7 (SB 7) requires the State of California as a whole to achieve a 20 percent reduction in urban per capita water use by December 31, 2020. The law also requires the State to make incremental progress towards this goal, namely achieving a 10 percent per capita reduction in urban water use on or before December 31, 2015. To achieve these goals, the law includes a requirement that urban retail water suppliers would not be eligible for state water grants or loans on and after July 1, 2013, unless they demonstrate compliance with the water conservation requirements of the bill.

SB 7 was enacted as part of a package of statewide water reform legislation in the Extraordinary Legislative Session of fall 2009 (and is thus also referred to as SB X7 7). SB 7 stipulated that its goals would not go into effect without adoption of Senate Bills 1 and 6, each of which were enacted in November 2009. Briefly, among SB 1's tenets, it establishes a new legislative framework for the provision of a more reliable statewide water supply and an enhanced Sacramento-San Joaquin Delta ecosystem. SB 1 also created the "Delta Stewardship Council," a new board charged with developing a Delta plan that furthers the co-equal goals of Delta restoration and water supply reliability. SB 6 establishes new requirements for the monitoring of groundwater, for water districts which utilize groundwater in their groundwater supply.

California State Senate Bills 610 and 221.
The purpose and legislative intent of Senate Bill 610 (SB 610) and Senate Bill 221 (SB 221) is to preclude projects from being approved without specific evaluations being performed and documented by the local water provider proving that water is available to serve the project. However, since general plans do not involve the issuance of any entitlements, the general plan is exempt from a water supply assessment. It is not practical to require analysis of the water supply for all of the land uses covered by

these long-range, large-scale regional planning documents (Buckman). Future projects would be required to follow the following SB 610/ SB 221 requirements.

SB 610 (codified at Section 10910 – 10915 of the California Water Code) requires the preparation of a Water Supply Assessment (WSA) for large-scale development projects, typically defined as any project involving a water demand increase equivalent to that associated with 500 or more dwelling units. The WSA evaluates the water supply available for new development based on anticipated demand. For the broad range of projects that are subject to this law, the statutory WSA must be requested by the lead agency from the local water provider at the time the lead agency determines that an EIR is required for the project under CEQA.

SB 221 (codified at California Government Code Section 66473.7) requires verification from applicable public water systems that a sufficient long-term water supply is available to meet projected demand associated with a proposed subdivision comprising water demand equivalent to 500 or more dwelling units.

Future development within the plan area will be subject to the requirements of these provisions; the preparation of WSAs and water supply verifications will be required for qualifying projects.

4.15.4 Impact Methodology

Water distribution and wastewater collection and treatment impacts were evaluated using information provided in the General Plan Background Report (Chapter 2) and the Williams 2010 Municipal Services Review, included as Appendix D.

4.15.5 Standards of Significance

The Williams 2030 General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in “Appendix G - Environmental Checklist Form”, of the CEQA Guidelines and based on the professional judgment of the City of Williams and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

a. Exceed wastewater treatment requirements of the Central Valley Regional Water Quality Control Board;
b. Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or
c. Require additional capacity to serve the project’s projected demand in addition to existing commitments.

4.15.6 Impacts and Mitigation

Exceedance of Water Quality Standards

IMPACT 4.15.1: Future development could result in the exceedance of wastewater treatment requirements of the Central Valley Regional Water Quality Control Board.	
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	General Plan Goals and Recommended Actions
Level of Significance After Policies/Mitigation:	Less Than Significant

Impact Analysis and Mitigation

Future development in accordance with the Updated General Plan will be required to comply with City subdivision regulations, which require the installation of utility infrastructure; developers will be required to install water distribution lines and sanitary sewer facilities that will sufficiently serve their projects. The presence of these facilities will gradually increase water demands, and sanitary sewer flows, and wastewater treatment.

Additionally, the General Plan Update recommends proceeding with plans to correct the current deficiencies in the wastewater treatment plan and to provide appropriate expansions as development proceeds.

Policies

5.1 The City of Williams will provide utilities concurrently with development.

5.3 Improvements to the collection, distribution, treatment, and conveyance system will be commensurate with the demands of new development.

5.4 The City will identify non-development related NPDES permitting requirements to ensure they coordinate with development related regulations. Work to align all NPDES related efforts shall be a continuing effort.

Actions

5.a Adopt best management practices for piping, manholes, bedding and backfill materials, and incorporate these standards into the City's technical specifications for construction projects. Subsequently, implement additional checklist items related to NPDES compliance.

5.b Continue developing the City's Capital Improvement Program (CIP) to repair and replace aging and deteriorated sewer lines, which will improve the flow efficiency, reduce inflow and infiltration into the collection and treatment systems, and help to mitigate ground water impacts.

Expansion of or Improvements to Wastewater Treatment

IMPACT 4.15.2:	**Future development could result in the requirement for and construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.**
IMPACT 4.15.3:	**Future development could require additional capacity to serve the project's projected demand in addition to existing commitments.**
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	General Plan Goals and Recommended Actions
Level of Significance After Policies/Mitigation:	Less Than Significant

Impact Analysis and Mitigation

At present, these issues are not applicable to Williams, as the City is currently engaged in efforts to upgrade its existing facility. Once appropriate improvements are completed, continued growth and development will require the gradual expansion of utility system capacities and other infrastructure. Major improvements, such as future expansions to the wastewater treatment plant, will be subject to further environmental impact analysis to minimize or mitigate specific impacts related to their respective projects.

The following policy and action statements presented in the General Plan Update are intended to reduce future utility service demands or, when required, ensure that appropriate system expansions are provided.

Policies

5.1 The City of Williams will provide utilities concurrently with development.

5.2 The City of Williams will provide utility service in logical order and therefore will not extend trunk facilities through significant expanses of vacant land. Exceptions will be made for industries that will make a significant contribution to the sustainability of the community.

5.3 Improvements to the collection, distribution, treatment, and conveyance system will be commensurate with the demands of new development.

Actions

5.b Continue developing the City's Capital Improvement Program (CIP) to repair and replace aging and deteriorated sewer lines, which will improve the flow efficiency, reduce inflow and infiltration into the collection and treatment systems, and help to mitigate ground water impacts.

5.d Further develop plans for a second water storage tank.

5.g Develop and promote a voluntary water conservation program to include features such as:

- Aerators, to reduce the volume of water coming out of the tap;
- Hose spray nozzles, to cut off flow when the hose is not being used;
- Hose timers, to automatically shut off hoses that are used for irrigation;
- Rain gauges;

- Two gallon per minute showerheads;
- Shower shut-off valves, to allow users to maintain water temperature while temporarily cutting off the shower stream;
- "Toilet tank banks" that displace water in the toilet tank, reducing its flush volume;
- Toilet dye tablets, to detect flapper valve leaks;
- Shower timers, to help people cut down on the time they spend in the shower; and
- Irrigation system rain shutoffs, which shut off irrigation systems when a certain amount of water is present on the ground.

4.16 Energy

4.16.1 Introduction

This section describes the supply and use of energy in the City of Williams, as well as local actions to conserve energy and use it more efficiently. The California Environmental Quality Act (CEQA) Guidelines require the EIRs analyze energy conservation consistent with Public Resources Code Section 21100(b)(3). According to the Guidelines, EIRs do not need to address "lifecycle emissions," such as those embedded in the production of building materials used in projects.

The energy impacts of land use development and related activities that could occur under the 2030 General Plan are important to analyze under CEQA since motor vehicle use, energy production, land development, and other human activities result in direct and indirect emission and elevated concentrations of greenhouse gases (GHGs) in the atmosphere. Section 4.5 of this EIR, analyzes emissions impacts attributable to the General Plan Update.

This section of the EIR analyzes energy-related impacts attributable to policies and implementation measures of the Updated General Plan.

4.16.2 Regulatory Setting

Federal Plans, Policies, Regulations and Laws

The National Energy Act of 1978 was a legislative response by the US Congress to address the issues that arose during the 1973 energy crisis. It included a number of different regulations as noted below:

- Public Utility Regulatory Policies Act (PURPA)
- Energy Tax Act
- National Energy Conservation Policy Act (NECPA)
- Power Plant and Industrial Fuel Use Act
- Natural Gas Policy Act

Public Utility Regulatory Policies Act (PURPA)

PURPA was passed by Congress in 1978 as part of the National Energy Act ot promote great use of renewable energy. This law created a market for non-utility electric power producers to permit independent power producers to connect to their lines and to pay for the electricity that was delivered. Although PURPA is a federal law, implementation was left to the states and a variety of implementations methods have been employed.

Energy Tax Act

The Energy Tax Act was also passed in 1978 as part of the National Energy Act. It promoted fuel efficiency and renewable energy through taxes and tax credits.

National Energy Conservation Policy Act (NECPA)

NECPA was another part of the 1978 legislation that requires utilities to provide residential consumers with energy conservation audits and other services to encourage slower growth of electricity demand. NECPA was amended in 1985 by the Energy Policy and Conservation Act Amendments of 1985.

Federal Energy Management Program

The US Department of Energy's Federal Energy Management Program works to reduce the cost and environmental impact of the federal government by advancing energy efficiency and water conservation, promoting the use of distributed and renewable energy, and improving utility management decisions at federal sites.

Federal Energy Regulatory Commission (FERC)

FERC regulates and oversees energy industries in the economic, environmental, and safety interests of the American public. FERC is the federal agency with jurisdiction over interstate electricity sales, wholesale electric rates, hydroelectric licensing, natural gas pricing, and oil pipeline rates. FERC also reviews and authorizes liquefied natural gas terminals, interstate natural gas pipelines, and non-federal hydropower projects. Production of electricity is overseen by the states; however, FERC has jurisdiction over certain matters (FERC 2006).

State Plans, Policies, Regulations and Laws

California's Renewable Portfolio Standards (RPS), established in 2002 by Senate Bill 1078, requires electricity providers to procure an annual increase of at least 1% of their electricity supplies from renewable resources so as to achieve a 20% renewable mix by no later than 2017. The Energy Action Plan, approved by California Energy Commission (CEC), the California Public Utilities Commission (CPUC), and the California Power Authority (CPA), accelerated the 20% target date to 2010.

California Energy Commission (CEC)

Established in 1974 by the Warren-Alquist Act, CEC is the state's primary energy policy and planning agency. The commission has five major responsibilities: forecasting future energy needs and keeping historical energy data, licensing thermal power plants 50 megawatt (MW) or larger, promoting energy efficiency through appliance and building standards, developing energy technologies and supporting renewable energy, and planning for and directing the state response to an energy emergency.

California offered generous tax subsidies in the early 1980s for renewable power development. The state also ordered utilities to not only buy electricity from independent power generators, but also directed utilities to set a price and offer standard contracts. California's subsidies and the standard offer contracts launched the commercial wind industry in the country.

In 2003, the CEC released a report on renewable resource development summarizing technical potential and projected development from 2003 to 2017 (CEC2005d). The goal was to provide some preliminary statewide estimates for increasing renewable generation based on new resource assessments. The renewable resource report summarizes accelerated renewable energy needs to meet the statewide Energy Action Plan FPS goal of 20% by 2010, although it does not account for infrastructure improvements or operational enhancements needed to increase the use of renewable resources.

Title 24 (California Energy Code)

The California Energy Code (Title 24, Part 6, of the California Code of Regulations, California's Energy Efficiency Standards for Residential and Nonresidential Buildings), provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California. The

Code applies to the building envelope, space-conditioning systems, and water-heating and lighting systems of buildings and appliances.

The Code provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California. The Code provides guidance on construction techniques to maximize energy conservation. Minimum efficiency standards are given for a variety of building elements, including appliances; water and space heating and cooling equipment; and insulation for doors, pipes, walls and ceilings. The Code emphasizes savings energy at peak periods and seasons, and improving the quality of installation of energy-efficiency measures.

California Green Building Standards Code

The California Building Standards Code is published in its entirety every three years by order of the California Legislature. The California Legislature delegated authority to various State agencies, boards, commissions and departments to create building regulations to implement the State's statutes. These building regulations or standards have the same force of law, and generally apply to all new building construction in California. A city, county, or city and county may establish more restrictive standards reasonably necessary because of local climatic, geological or topographical conditions.

On July 17, 2008, the California Building Standards Commission adopted the California Green Building Standards Code for all new construction statewide, a voluntary implementation period was intended to give builders, local governments, and communities time to adapt to the new rules. The Code sets targets for energy efficiency; water consumption; dual plumbing systems for potable and recyclable water; diversion of construction waste from landfills, and use of environmentally sensitive materials in construction and design, including eco-friendly flooring, carpeting, paint, coatings, thermal insulation, and acoustical wall and ceiling panels.

Updates to the California Green Building Standards Code in 2010 took effect on January 1, 2011. This update to the Code set minimum standards for all new structures as part of a broad effort to significantly reduce California's carbon emissions. Key mandatory measures for residential and nonresidential buildings include:

- Reducing indoor water use within buildings by 20 percent.
- Diverting 50 percent of construction waste from landfills.
- Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with US EPA Phase II emission limits where applicable. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.
- Using building finish materials that emit low levels of volatile organic compounds.
- Increasing a structure's system efficiencies by using building commissioning;
- If the project is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 100 feet of the visitor's entrance, readily visible to passers-by, for 5 percent of visitor motorized vehicle parking capacity, with a minimum of one two-bike capacity rack;
- For buildings with over 10 tenant-occupants, provide secure bicycle parking for 5 percent of the motorized vehicle parking capacity, with a minimum of one space;
- Reducing wastewater by 20 percent;

- Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics and metals.

The updated Code also has a two-tiered system for jurisdictions that wish to adopt codes that go beyond the State mandatory provisions for energy use and potable water use, parking for clean-air vehicles, cool roofs, construction waste diversion, recycling and other topics.

State of California Energy Action Plan

In 2003, the three key energy agencies in California (CEC, CPA, and CPUC) jointly adopted an Energy Action Plan (EAP) that listed the goals for California's energy future and set forth a commitment to achieve these goals through specific actions. In 2005, the CPUC and the CEC jointly prepared the EAP II to identify the further actions necessary to meet California's future energy needs. EAP II describes the priority sequence for actions to address increasing energy needs, also known as "loading order." The loading order identifies energy efficiency and demand response, the state is to rely on renewable sources of power and distributed generation, such as combined heat and power applications. To the extent that efficiency, demand response, renewable resources, and distributed generation are unable to satisfy increasing energy and capacity needs, the EAP II supports the use of clean and efficient fossil-fired generation. The plan recognizes that concurrent improvements are required to the bulk electricity transmission grid and distribution facility infrastructure to support growing demand centers and the interconnection of new generation, both on the utility and customer side of the meter. The EAP II identifies key actions to be taken in all of these areas in order to meet the state's growing energy requirements.

California Global Warming Solutions Act of 2006

In September 2006, Governor Schwarzenegger signed Assembly Bill (AB) 32 which enacted Sections 38500-38599 of the California Health and Safety Code. AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in greenhouse gas (GHG) emissions and a cap on statewide GHG emission, requiring the reduction f statewide GHG emissions to 1990 levels by 2020, enforceable by a statewide cap on GHG emissions phased in, starting in 2012. The regulatory and reporting mechanisms contained in AB32 are relevant to subsequent regulations that affect the content and use of EIRs, such as Senate Bill (SB) 375.

To implement the cap, AB 32 directs the Air Resources Board (ARB) to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 requires a quantified cap on GHG emissions representing 1990 emissions levels and the changes needed to get to the cap. AB 32 includes guidance to institute emissions reductions in an economically efficient manner and conditions to ensure that businesses and consumers are not unfairly affected by the reductions.

Senate Bill 375

SB 375, signed in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and fair-share housing allocations under state housing law. The State's policies on

land use and transportation are important for this EIR section because transportation accounts for the largest energy-consuming sector and transportation and land use planning techniques that reduce vehicle miles traveled represent an opportunity to decrease energy use.

This bill also extends the minimum time period for the Regional Housing Needs Allocation cycle, which establishes regional and local housing planning objectives, to create a closer match with the timelines for revising RTPs. Revisions to CEQA create process streamlining advantages for certain projects that are consistent with the approved Sustainable Communities Strategy.

4.16.3 Environmental Setting

The generating capacity of a unit of energy is expressed in megawatts (MW) or kilowatts (kW). One MW provides enough energy to power roughly between 750 and 1,000 California homes, depending on the location, energy source, and energy efficiency of the homes being served. Generation is typically measured in megawatt-hours (MWh), kilowatt-hours (kWh), or gigawatt-hours (GWh).

Electric Use

California uses 250,384 kWh(millions) of electricity per year. Consumption for the state has been growing at a rate of 0.7% per year since 1990. Since 1990 the per capita consumption has dropped from 7,046 kWh to 6,721 kWh. Compared to the national average of the United States (12,146 kWh), California's per capita consumption is approximately forty-four (44%) percent less. In 2010, Colusa County used 258.21 kWh (millions) of electricity per year. Twenty-four percent of the electricity used in Colusa County is consumed for residential uses. The remaining seventy-six percent is consumed by nonresidential uses which include agricultural uses. There has been an increase in electricity consumption in Colusa County of 1.5% since 2006.

Electricity Sources

Natural gas is the main source for electricity generation in California. Natural gas-fired power plants account for about 56.7% of California's electricity generation, followed by nuclear (15.3%), large hydroelectric (12.2%), and coal (1.8%). California has developed a renewable energy source that in 2009 provide 13.9 percent of the electricity for the state. Only thirteen percent of the natural gas used in California for energy is generated in California. 68% of the natural gas used in California comes from the Rockies and the Southwest. The remaining 19% is imported from Canada.

The City of Williams and the surrounding areas in Colusa County receive their electricity from Pacific Gas & Electric Company (PG&E), a natural gas and electric utility. Approximately half of the electricity that PG&E delivers to its customers comes from a combination of renewable and greenhouse gas-free resources. In 2010, the power supplied by PG&E consisted of non-emitting nuclear generation (23.8 percent), large hydroelectric facilities (15.6 percent) and eligible renewable resources (15.9 percent), such as wind, geothermal, biomass and small hydro. The remaining portion came from natural gas / fossil (21.8 percent) and unspecified sources (22.9 percent).

Natural Gas Use

According to the CEC's Energy Consumption Data Management System, a total of 26.17 million therms of natural gas were used in Colusa County in 2010. This was a slight decrease from the 26.36 million therms that were consumed in Colusa County in 2006.

4.16.4 Methodology

Energy consumption in the City of Williams is a direct product of land use patterns, employment patterns, building energy efficiency, individual habits, and various environmental factors. This impact analysis examines the effect of land use patterns, building construction, and building operations envisioned in the 2010 General Plan Update on energy consumption and examines the increased energy demand and need for additional energy infrastructure to serve future population growth.

4.16.5 Thresholds of Significance

For the purpose of this analysis, the following applicable thresholds of significance have been used to determine whether implementing the proposed project would result in a significant impact. These thresholds of significance are based on Appendix F of the State CEQA Guidelines. An impact on energy resources or energy conservation is considered significant if implementation of the proposed project would do any of the following:

- Develop land uses and patterns causing wasteful, inefficient, and unnecessary consumption of energy; or
- Result in the need for new systems or substantial alterations to electrical, natural gas, or communication systems infrastructure, the construction or operation of which would have significant impacts.

4.15.6 Impacts and Mitigation

Energy Demand

IMPACT 4.16.1:	**Implementation of the Updated General Plan could result in an increased demand for energy. New residential, commercial, industrial and civic uses could increase local energy demands which could cause significant environmental effects.**
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	General Plan Goals and Recommended Actions
Level of Significance After Policies/Mitigation:	Less than Significant

Impact Analysis and Mitigation

Although implementation of the Updated General plan would result in an increase in demand for energy the Updated General Plan itself contains many policies and actions to increase energy efficiency and

reduce the energy demand from what it might be with more traditional, less energy-efficient development patterns. Land use patterns can significantly affect energy consumption in either a positive or negative manner. The transportation sector makes up the single largest consumer of energy in California, accounting for forty-one percent of the state's total energy demand. The location, density, mix of land uses, and quality of the multi-modal transportation system statewide is directly related to the amount of travel and transportation-related energy demands. When land uses are not mixed and development patterns have lower densities, people usually become dependent on automobiles for access to jobs and services (EPA 2001). Compact development can also greatly reduce transportation-related energy demands by locating residences near shopping and work centers and providing opportunities for transportation.

The Updated General Plan calls for the development intensities to be greatest around the core of the city of Williams with the intensity becoming less as it approaches the urban fringe. The Plan also places emphasis on the infill and redevelopment of areas already developed. The Plan encourages the development of the urban areas of the City of Williams and promotes the preservation of the surrounding agricultural community character.

Compliance with energy efficient components of the California Building Code would also increase energy efficiency of projects constructed under the Updated General Plan. All development would be required to comply with the current energy performance standards found in Title 24, resulting in reductions in energy demand.

Implementation of the Updated General Plan could result in an increased demand for energy. New residential, commercial, industrial and civic uses could increase local energy demands. However, policies and actions of the Updated General Plan that guide growth and development are designed to avoid wasteful, inefficient, and mitigate unnecessary consumption of energy.

Policies

3.32 The City will grow contiguously to manage the efficiency of public services and municipal infrastructure provision, to maintain a compact and well defined community form, and to oblige its fiscal responsibility.

3.34 Development will occur first within the existing corporate limits where the infrastructure and services are readily available.

3.37 Decisions to provide municipal infrastructure and public services will include, among others, the location of subject development relative to:

- Existing development; and
- The area of existing utility service; and
- The City limits; and
- Existing sphere of influence.

3.39 Development and future annexation will occur in areas that are most suitable for the extension of services and infrastructure, eg proximity and capacity of roads and utilities, fire and police response sites, etc.

3.74 Appropriate locations for low- and high-density residential development should be provided based on accessibility, site suitability, utility availability, and environmental factors.

4.29 The City's Police Department will continue to emphasize the use of modern technology in providing for effective law enforcement.

5.1 The City of Williams will provide utilities concurrently with development.

5.2 The City of Williams will provide utility service in logical order and therefore will not extend trunk facilities through significant expanses of vacant land. Exceptions will be made for industries that will make a significant contribution to the sustainability of the community.

5.10 The City recognizes the opportunity to consolidate services into a single area to streamline service delivery.

5.21 The City will anticipate and effectively manage its long-term pattern of growth in a forward-looking and fiscally responsible manner, while balancing the needs of current residents and existing infrastructure investments.

7.13 The creation of inter-city trails will enhance recreational opportunities and promote walking as a viable travel mode.

7.19 Subdivision regulations and design guidelines should be used as a tool to promote sustainable land planning and development practices.

7.28 Use of shade trees reduces radiation heating and encourages outdoor recreation.

8.b Establish complete street subdivision criteria for new development and improve convenience, energy efficiency, and safety for multi-modal travel in existing neighborhoods.

8.d Maintain roadways and circulation improvements to ensure safe, energy efficient and convenient daily travel for pedestrians, bicyclists, transit users and drivers as Williams grows.

Actions

4.u. Update from time to time the City's building standards to stay current with amendments to the California Building Code.

5.b Continue developing the City's Capital Improvement Program (CIP) to repair and replace again and deteriorated sewer lines, which will improve the flow efficiency, reduce inflow and infiltration into the collection and treatment systems, and help to mitigate ground water impacts.

5.g. In accordance with AB 1881, the Water Conservation Landscape Act of 2006, develop water efficient landscaping standards for new development.

7.f Consider funding a marketing campaign that promotes the purchase of "local" products from the City of Williams and Sacramento Valley region.

7.q Invest in a multi-use trail over the E Street Bridge, allowing for safe and accessible, multi-modal travel across the Interstate divide.

7.ap Plan trees in parking lots, parks and recreation areas, and pedestrian corridors to promote outdoor activity, reduce radiation heating, and encourage the reduction of greenhouse gases.

7.as Support green roofs on new developments as a method of stormwater mitigation, as well as reduction f the urban "heat island" effect.

8.i-3 The City shall encourage the restoration f passenger rail service along the California Northern Pacific Railroad tracks within Williams.

Additional Energy Infrastructure

IMPACT 4.16.2:	**Implementation of the Updated General Plan could result in an increased demand for energy and the need to extend services and infrastructure which could cause significant environmental effects.**
Level of Significance Before Policies/Mitigation:	Potentially Significant
Mitigation Measures:	General Plan Goals and Recommended Actions
Level of Significance After Policies/Mitigation:	Potentially Significant

Impact Analysis and Mitigation

Projects accommodated under the Updated General Plan would lead to increased population, housing, non-residential development and jobs in the City of Williams. This land use change would, in turn, increase the need for energy and communication infrastructure. Energy demand would be anticipated to increase for the city. Energy is consumed for heating, cooling, and electricity use in homes and businesses; for public infrastructure and service operations; and for agriculture.

PG&E is the utility that currently serves the area of Williams with electricity and natural gas services. As with all utilities, the "load" forecasts are periodically updated to ensure the reliability of its electricity and gas services. As implementation of the General Plan Update would take over a 20 year period, the projected incremental electric and gas demand would be incorporated into PG&E's forecasts.

The demand for and use of energy within the City of Williams planning area would occur with implementation of the Updated General Plan. Buildout would result in creased electricity demand from 34.4 million kWh to 63.2 million kWh. The natural gas demand under buildout of the Updated General Plan would increase from 307,380 (thousands) cubic feet to 564,900 (thousands) cubic feet. Overall the increase in energy would be approximately 45 percent.

Actual electricity and gas demand would vary substantially according to the types of operations within buildings, type of construction materials used in a building, whether buildings are reused or built new, the efficiency of all electricity consuming devices within a building and the local climate. PG&E has established energy conservation programs to encourage consumers to adopt energy conservation habits, install energy efficient appliances in their homes, and reduce energy consumption during peak demand periods.

As growth occurs in accordance with the Updated General Plan, new development will require additional electric infrastructure including new distribution lines and transformers and additional natural gas mains and distribution pipelines. Individual development projects proposed will be required to assess project impacts during the environmental review process to ensure that PG&E has sufficient electric and gas supplies and infrastructure to meet demand. The size, location, and types of facilities required to serve development are not knowable at this time, but would be determined in the context of development proposals.

Policies and actions of the Updated General Plan would assist the City of Williams in providing efficient and reliable electricity and natural gas service.

Policies

3.32 The City will grow contiguously to manage the efficiency of public services and municipal infrastructure provision, to maintain a compact and well defined community form, and to oblige its fiscal responsibility.

3.35 Development will occur first within the existing corporate limits where the infrastructure and services are readily available.

3.37 Decisions to provide municipal infrastructure and public services will include, among others, the location of subject development relative to:

- Existing development; and
- The area of existing utility service; and
- The City limits; and

- Existing sphere of influence.

3.39 Development and future annexation will occur in areas that are most suitable for the extension of services and infrastructure, eg proximity and capacity of roads and utilities, fire and police response sites, etc.

3.74 Appropriate locations for low- and high-density residential development should be provided based on accessibility, site suitability, utility availability, and environmental factors.

4.29 The City's Police Department will continue to emphasize the use of modern technology in providing for effective law enforcement.

5.1 The City of Williams will provide utilities concurrently with development.

5.2 The City of Williams will provide utility service in logical order and therefore will not extend trunk facilities through significant expanses of vacant land. Exceptions will be made for industries that will make a significant contribution to the sustainability of the community.

7.19 Subdivision regulations and design guidelines should be used as a tool to promote sustainable land planning and development practices.

Actions

4.u. Update from time to time the City's building standards to stay current with amendments to the California Building Code.

5.b Continue developing the City's Capital Improvement Program (CIP) to repair and replace again and deteriorated sewer lines, which will improve the flow efficiency, reduce inflow and infiltration into the collection and treatment systems, and help to mitigate ground water impacts.

The policies and actions described above would reduce local energy demand and would promote opportunities for increase production in ways that reduce the depletion of non-renewable resources. Federal, state, and local regulations and policies would also be implemented that would ensure the sufficient energy supplies are available to serve the City of Williams. However, energy demand would increase as a consequence of future growth associated with the Updated General Plan. Despite mitigating policies and actions, construction and operation of new or expanded energy production and delivery facilities may result in significant environmental effects.

Chapter 5
Alternatives

5.1 Introduction

The California Environmental Quality Act (CEQA) requires that an EIR analyze a range of reasonable alternatives to a project that could feasibly attain most of the basic objectives of the proposed project, while avoiding or substantially reducing any significant impacts. The same requirements apply to a Program EIR, even though the anticipated impacts tend to be more conjectural. This Chapter hypothesizes two conceivable plan alternatives and evaluates their comparative merits (CEQA Guidelines Section 15126.6).

CEQA requires considerations of alternatives that avoid or substantially reduce significant impacts, even if these alternatives would impede to some degree the attainment of project objectives or would be more costly (CEQA Guidelines Section 15126.6(b)). An EIR need not consider every possible alternative to a project, as an infinite number of them could be prepared. Rather, an EIR must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation (CEQA Guidelines Section 15126.6(a)). As required by CEQA, this chapter also includes an analysis of the No Project Alternative (Alternative 4).

The project, the Williams updated General Plan, has been described and analyzed in the previous chapters and sections of this EIR. (In this Chapter, the terms “the project” and the “updated General Plan” are used interchangeably). Significant environmental impacts have been identified, along with recommended mitigation measures to avoid, minimize, or lessen these impacts of development that are sanctioned by the preferred Plan alternative. The alternatives analysis descriptions are intended to inform the public and decision makers of alternatives to the project and to provide meaningful evaluation, analysis, and comparison of these alternatives with the preferred General Plan alternative.

The updated General Plan, in itself, is a document; producing it would result in no impacts other than the use of resources required to publish and distribute it—consultant travel, mileage traveled by the public to attend meetings, paper, etc. Much of this has already been expended. Adoption of and adherence to the updated General Plan—in the form of zoning and subdivision approvals, building permits, and new infrastructure—represent potentially significant impacts in many categories, including, but not limited to air quality, drainage, traffic/transportation, and utilities. Some of these significant, unavoidable impacts (as well as other impacts found to be less than significant with mitigation) could be avoided, minimized, or lessened by the four alternatives presented in this chapter.

5.2 Factors Considered in Identifying Project Alternatives

As described in Section 3.0, Project Description, the project is the adoption of a new General Plan to replace the outdated 1988 General Plan. In determining an appropriate range of feasible alternatives that would avoid or substantially lessen environmental effects of the proposed General Plan Update, the following project factors were considered:

- The need to accommodate approximately 1,100 additional housing units through the year 2030, while maintaining the integrity of the City’s existing housing stock.

- The desire to maintain a sustainable level of economic growth and employment opportunity;
- Recognition of the presence and importance of agriculture to the local economy and the community's agriculturally-based foundation;
- The alleviation of flooding problems and containment of the 100-year floodplain, thereby reducing the potential for both property and structural flooding;
- Protection of the integrity of the original town neighborhoods, including preservation of its unique character.
- Rehabilitation and reuse of empty downtown buildings along with further expansion of downtown to retain it as the commercial center and strengthen its status as a local and regional destination;
- Growing in a contiguous, seismically and fire safe, and fiscally responsible manner and in line with an orderly extension of streets, facilities and services; and
- Opportunity to expand the sphere of influence to protect the City's interests with respect to peripheral development.

5.3 Description of Alternatives

The following alternatives are evaluated as part of this EIR:

- Alternative 1 (Preferred): Shown on Figure 5.1, this alternative represents the selected plan, as described in Chapter 3, Project Description. It assumes population growth to 9,822 by 2030, reflecting an increase of 4,535 persons (186 percent) over the 2009 level. Under this alternative the City would grow contiguously, largely in a continued rectangular grid form, to better manage the efficiency of public services and provision of municipal streets and utility services, maintaining a compact and well defined community form. Priority in the form of infrastructure and other capital improvements would be given to the redevelopment of deteriorated structures or properties and infill development of vacant parcels or underutilized tracts, with development occurring within the existing corporate limits where infrastructure are readily available. This is illustrated in Figure 5-1.

- Alternative 2 (Extension Eastward): This alternative (Figure 5.2) was originally proposed and was used in projecting future traffic volumes and road system improvements needed to service an implied Williams population level of over 13,000. . It also approximates the alternative that has been proposed by Colusa County in its General Plan Update for the Williams SOI (Planning Area). The most prominent difference between this alternative and the preferred alternative (Alternative 1) is a 620 gross-acre rectangular area of proposed suburban residential growth east of Husted Road. Development would occur in a curvilinear pattern similar to the Valley Ranch Subdivision, with appropriately situated open areas dedicated for stormwater detention and neighborhood parks. This alternative was deemed unacceptable by the General Plan Advisory committee (GPAC) on account of the additional significant but unavoidable negative environmental impacts, along with the added costs required to enhance the City's circulation system to accommodate the higher population levels.

- Alternative 3 (Cluster): This alternative is a variant of the preferred development scenario (Alternative 1), with an identical assumption of future population. Future land development would proceed to the south and east with lower densities, in either suburban or clustered forms, as shown in Figure 5.3. Because the residential lots would be larger, the resulting lower density of future development would result in more gross land area being used for development. However, the use of clustered forms of development would result in significant amounts of open space preservation.
- Alternative 4 (Mixed Use Concentration): This alternative represents the opposite of Alternative 2; development to the south would be considerably reduced and be largely replaced by the establishment of a new, mixed-use residential-commercial area in the City's northeastern sector at the intersection of Interstate 5 and CA-20. This is shown in Figure 5.4. The introduction of this more urban form of development to Williams would result in generally higher onsite densities, which would occupy less land area but provide higher concentrations of activity and corresponding impacts.
- Alternative 5 (No Project): This alternative assumes that the updated General Plan (Alternative 1) would not be adopted and implemented. Instead, the City would continue to rely on its existing 1989 General Plan, which was adopted on September 7, 1988. This plan, shown on Figure 5.5 was based on a 2008 horizon year with a projected population level of 3,913 and has a future land use plan that is identical to the zoning map that was in effect at that time. Since Williams' current population has been estimated to be 5,287, the existing General Plan did not account for this additional growth—which is the reason for updating it. If, for some reason, the City was unable to adopt a new General Plan, it would rely informally on the deliberations and conclusions of the 2010 Plan update process and make its future regulatory and investment decisions on the basis of the unofficial document. In essence, Alternative 5 would become functionally equivalent to Alternative 1. For the purposes of this Program EIR becomes unworthy of further consideration, but in consideration of CEQA requirements is included in the comparison table (Table 5.2) and in the descriptive paragraphs that follow.

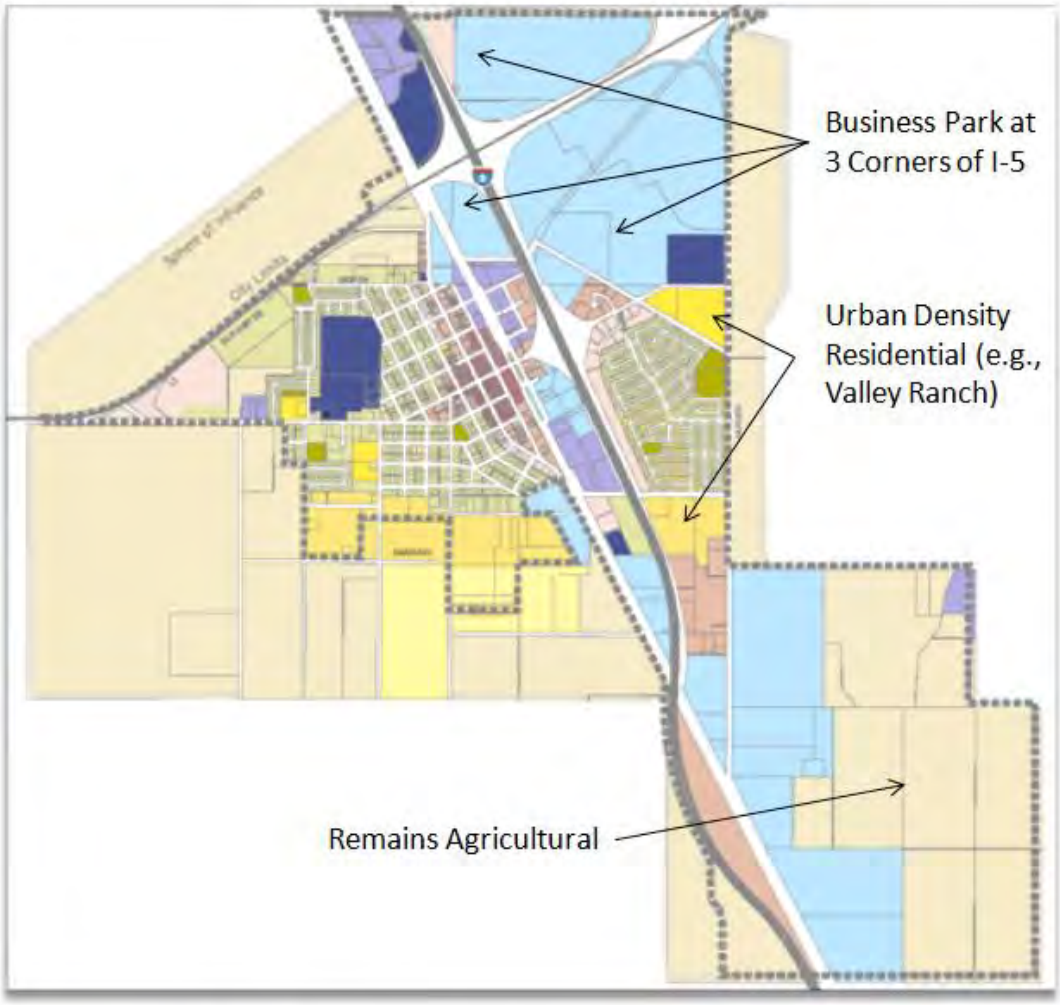
Following is a table that compares the land use/character acreages of the four alternatives:

Table 5.1 Future Development Acreages for Alternatives Considered (Acres)				
Category	**Alternative**			
	1 Preferred	**2 High Growth**	**3 Clustering**	**4 Mixed-Use**
Agriculture	2,119	1,778	2,009	2,119
Business Park	909	909	909	909
Commercial	173	173	173	173
Downtown Commercial	23	23	23	23
Estate Residential	176	176	292	96
Industrial	87	87	87	87
Institutional	114	114	114	114
Neighborhood Conservation	289	289	289	289
Parks and Recreation	62	62	62	62
Suburban Commercial	85	85	85	85
Suburban Residential	145	465	158	135
Urban Residential	69	89	49	139
Urban Residential - High Density	30	30	30	50
Total	4,280	4,280	4,280	4,280

(Alternative 5, the "No Project" alternative existing General Plan, has been excluded from this table because it utilizes a different land use classification system and cannot be compared with the others.)

Illustrations of the three considered alternatives are shown as Figures 5.1, 5.2, and 5.3 on the following pages.

Figure 5.1 Alternative 1 - Selected Plan (Preferred Project)



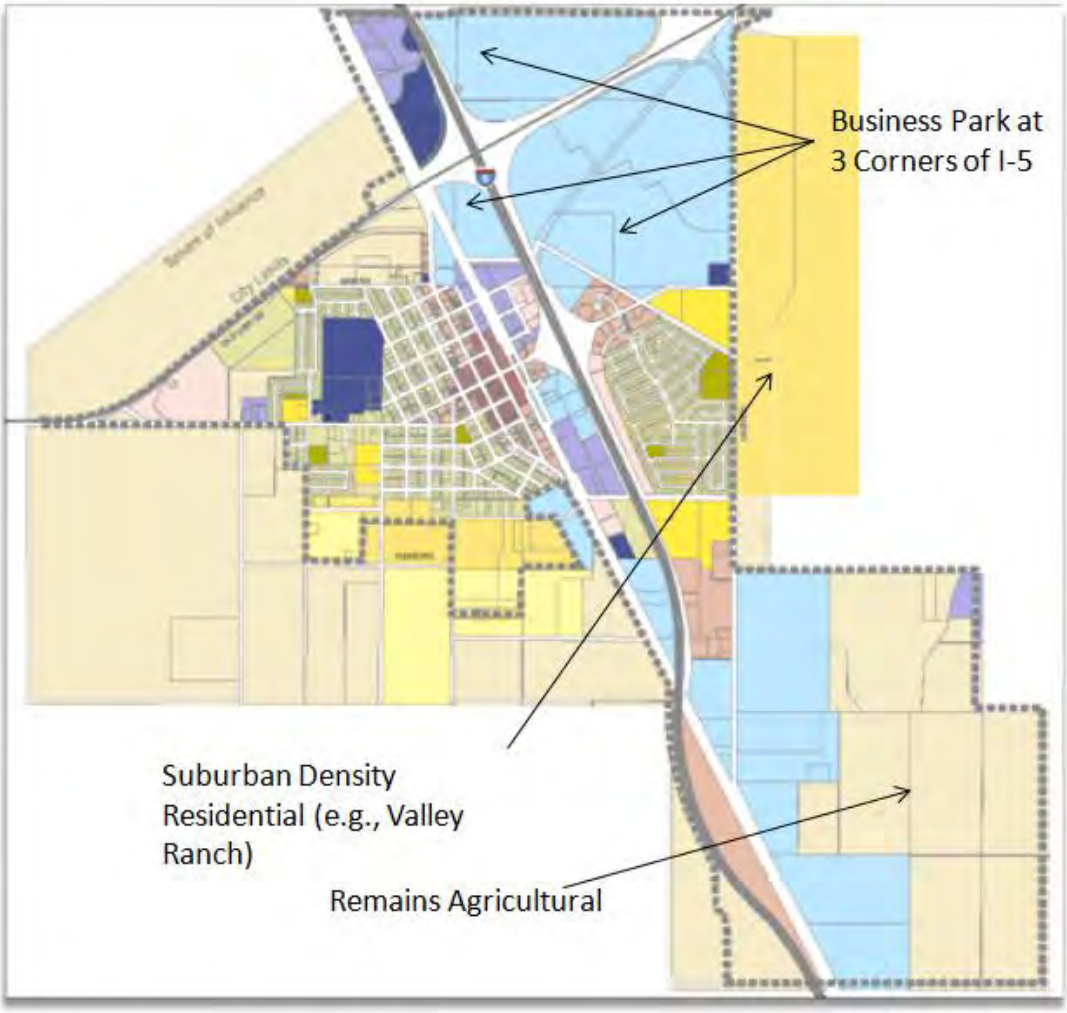
Density Range: .5 to 9 units/acre

Form: modified grid with standard lot sizes. OSR of .1

Commercial: Downtown infill/expansion and along Ruggleri Way.

Office/Industrial: on three corners of I-5. Down zone S.E. corner to agricultural

Figure 5.2 Alternative 2 - Significant Expansion East



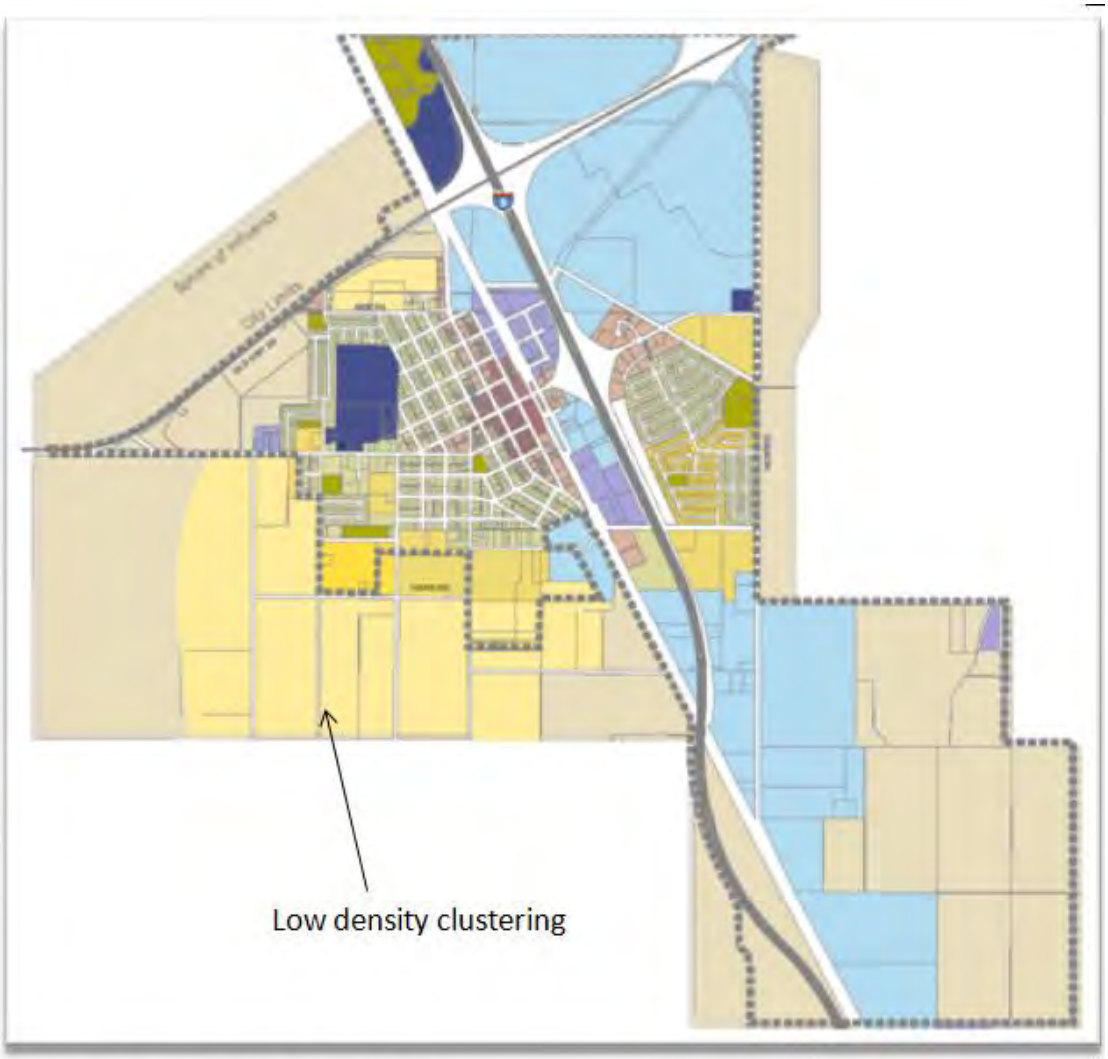
Density Range: .5 to 12 units/acre

Form: curvilinear streets with compact lot sizes. OSR of .05

Commercial: Downtown infill/expansion and along Ruggleri Way.

Office/Industrial: on three corners of I-5. Down zone S.E. corner to agricultural

Figure 5.3 Alternative 3 - Residential Clustering and Downtown Infill



Density Range: .7 to 1.8 units/acre

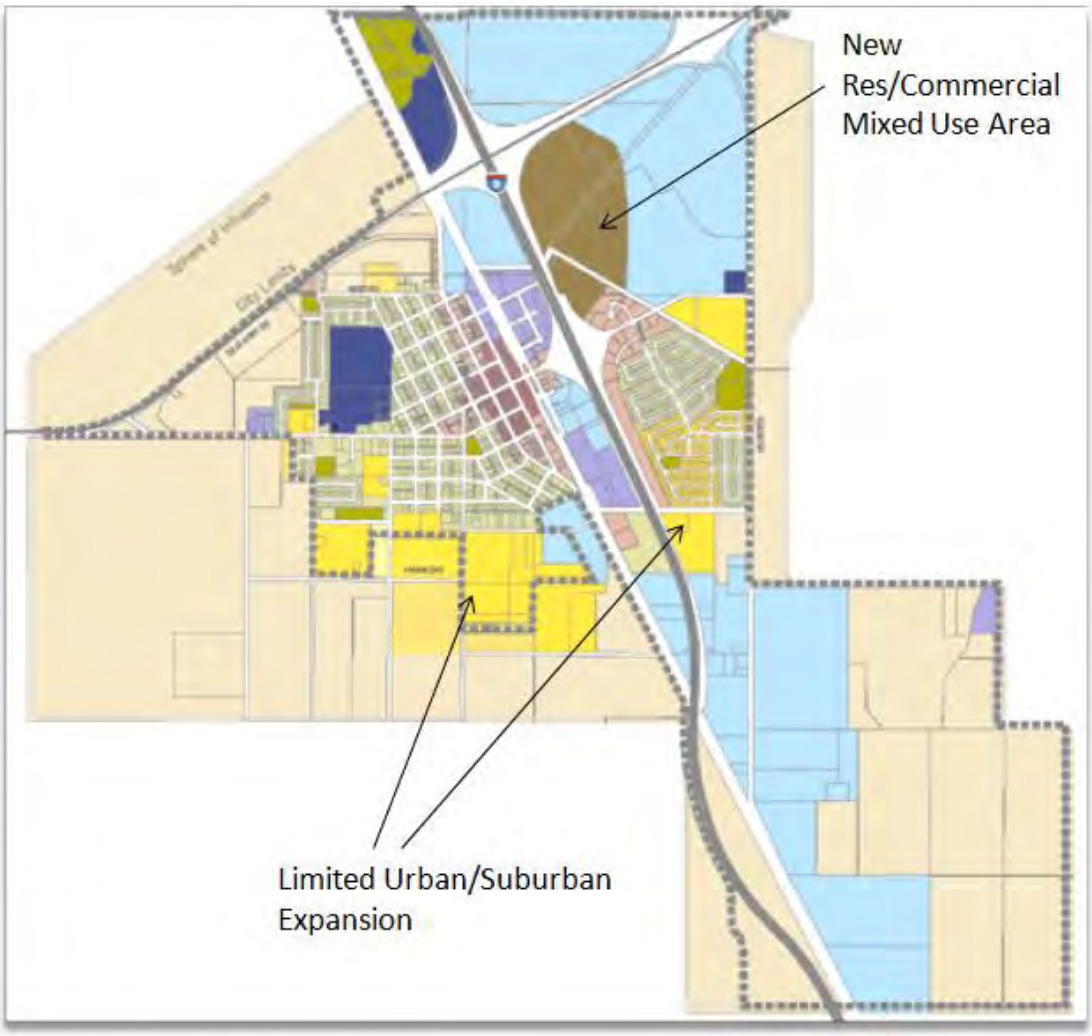
Form: Moderate clustering with .3 to .6 OSR

Commercial: Downtown infill and North Ruggleri Way.

Office/Industrial: East of I-5

- Agriculture
- Parks and Recreation
- Neighborhood Conservation
- Estate Residential
- Suburban Residential
- Urban Residential
- Suburban Commercial
- Commercial
- Downtown
- Business Park
- Industrial
- Institutional

Figure 5.4 Alternative 4 - Mixed Use Concentration



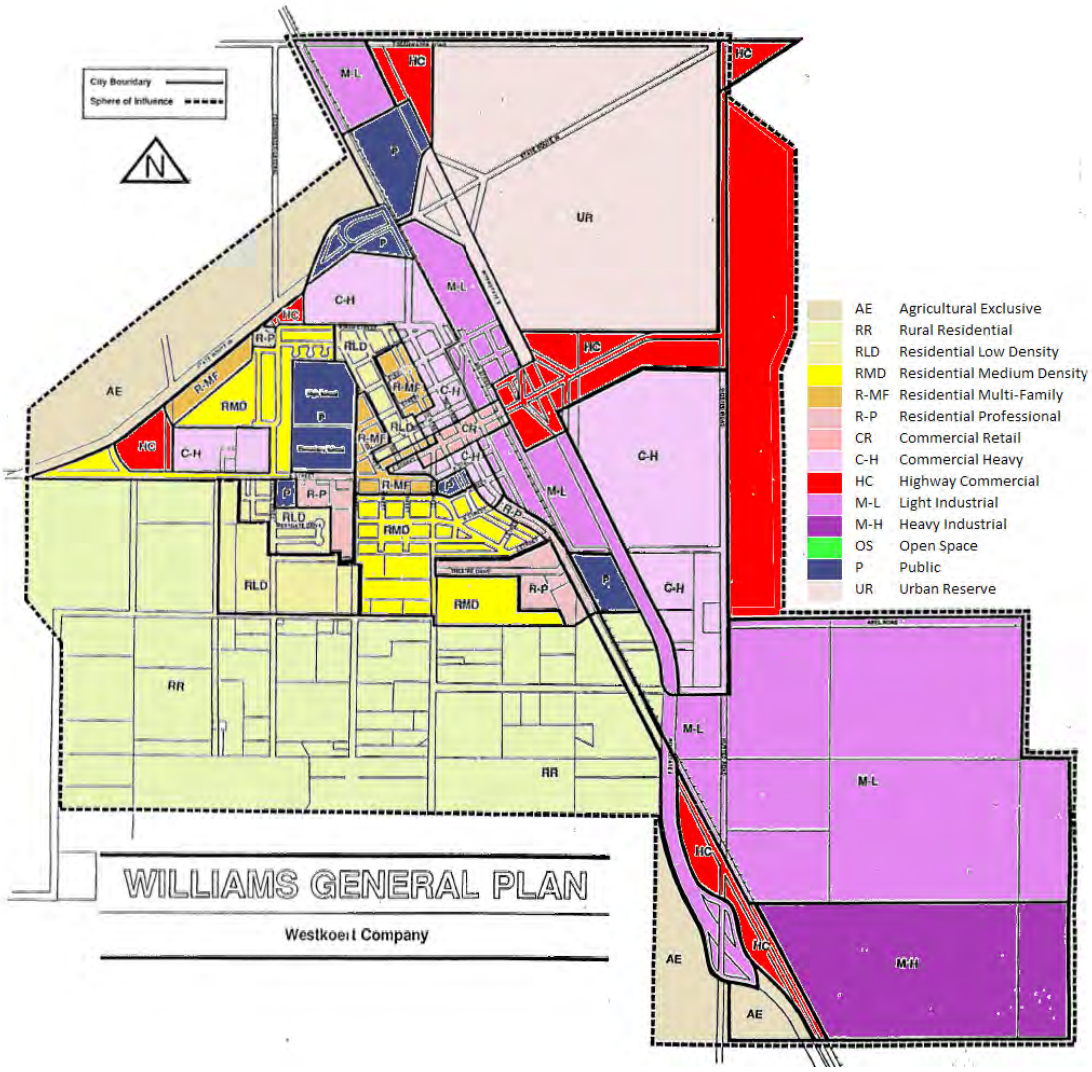
Density Range: 4 to 6 units/acre

Form: Urban mixed Use with suburban expansion southward

Commercial: New urban at I-5/CA-20 and along Ruggleri Way.

Office/Industrial: East of I-5

Figure 5.5 Alternative 5 – Current General Plan (Zoning Map)



5.4 Comparative Analysis

5.4.1 Comparison Table

Table 5.1 provides a comparisons of considered alternatives 2, 3 and 4 with the preferred plan, Alternative 1. Many of the impact categories are minor unchanged for the following reasons:

- All of the alternatives use the same assumptions of population growth. Requirements for investments in public services, waste treatment, and many other infrastructure elements would remain unchanged
- In recognition of marketplace realities, only a portion of future development (less than one-quarter) would be expected to occur in cluster form (Alternative 2) or as mixed-use development (Alternative 3).
- The environmental protection and mitigation policies specified in Chapter 4, Environmental Analysis, would apply equally to each alternative. For example, the same procedures for

Table 5.1 Comparison of Alternatives to Selected Plan

Impact Category	Plan Alternatives				
	1 (Selected)	2 (Expansion Eastward)	3 (Cluster)	4 (Mixed-Use Concentration)	5 (No Project)
Aesthetics	Base Case	Greater sense of suburban character	Greater sense of rural character due to clustering.	Greater sense of urban character.	Potentially adverse impacts related to new manufacturing uses in the southeast sector.
Agriculture	Base Case	Greater amount of conversion of agricultural land to residential development	Slight reduction in lands converted from agricultural use due to lower development densities.	Reduction in lands converted from agricultural use due to higher development densities.	Significantly greater amount of agricultural land to industrial development
Air Quality/ Greenhouse Gasses	Base Case	Adverse impacts, mainly due to greater traffic increases	No perceptible difference.	No perceptible difference	Adverse impacts do to traffic related to industrial development in southeastern sector.
Biological Resources	Base Case	Increased impact on habitats due to greater amounts of developed area.	Reduced impact on habitats due to cluster form of development.	Increased impact on habitats due to greater amounts of paved area.	Increased impact on habitats due to greater amounts of developed area.
Circulation	Base Case	Adverse impacts on street system due to increased trip generation	No perceptible difference. Traffic volumes unchanged.	No perceptible difference. Traffic volumes unchanged.	Adverse impacts on street system due to increased trip generation and absence of up to date recommendation for street system improvements.
Cultural Resources	Base Case	No perceptible difference.	No perceptible difference.	No perceptible difference.	No perceptible difference. Protection

Table 5.1 Comparison of Alternatives to Selected Plan					
Impact Category	Plan Alternatives				
	1 (Selected)	2 (Expansion Eastward)	3 (Cluster)	4 (Mixed-Use Concentration)	5 (No Project)
		Protection requirements and mitigation unchanged.	Protection requirements and mitigation unchanged.	Protection requirements and mitigation unchanged.	requirements and mitigation.
Geology and Soils	Base Case	No perceptible difference. Protection requirements and mitigation unchanged.	No perceptible difference. Protection requirements and mitigation unchanged.	No perceptible difference. Protection requirements and mitigation unchanged.	No perceptible difference. Protection requirements and mitigation unchanged.
Hazards and Hazardous Materials	Base Case	No perceptible difference. Protection requirements and mitigation unchanged.	No perceptible difference. Protection requirements and mitigation unchanged.	No perceptible difference. Protection requirements and mitigation unchanged.	No perceptible difference. Protection requirements and mitigation unchanged.
Hydrology and Water Quality	Base Case	Increased stormwater runoff and potable water supply requirements. Impacts will be less than significant due to implementation of mitigation measures	No perceptible difference. Protection requirements and mitigation unchanged.	No perceptible difference. Protection requirements and mitigation unchanged.	Increased stormwater runoff and potable water supply requirements. Impacts will be less than significant due to implementation of mitigation measures.
Land Use	Base Case	Increase in developed area by approximately 500 acres to support higher level of population growth	Increase in developed area by <100 acres to support same level of population growth	Decrease in developed area by <100 acres to support same level of population growth	Increase in developed area by >1,000 acres. Slightly lower residential densities.
Noise	Base Case	Unavoidable increases in noise levels due to higher traffic volumes associated with the higher population level implied by this alternative	Slight increases to noise. Protection requirements and mitigation unchanged.	Slight increases to noise. Protection requirements and mitigation unchanged.	Unavoidable increases in noise levels due to higher traffic volumes associated with the industrial development to the southeast.
Population and Housing	Base Case	Buildout of this alternative will result in approximately 5,000 additional residents and 1,600 additional dwelling units.	Population assumptions unchanged. Slightly higher ratio of single-family housing units to multifamily.	Population assumptions unchanged. Slightly higher ratio of multifamily housing units to single-family due to mixed-use form of development.	Existing plan is no longer valid. Impacts will be unchanged from the Base Case.
Public Services	Base Case	Increases in public service requirements due	No perceptible difference. Protection	No perceptible difference. Protection	Increased requirements for service and utilities

Table 5.1 Comparison of Alternatives to Selected Plan					
Impact Category	Plan Alternatives				
	1 (Selected)	2 (Expansion Eastward)	3 (Cluster)	4 (Mixed-Use Concentration)	5 (No Project)
		to increased population levels	requirements and mitigation unchanged.	requirements and mitigation unchanged.	extension.
Parks and Open Space	Base Case	Greater demand for parks and recreational facilities.	No difference in park proposals. Slightly greater amounts of protected open space due to clustering.	No difference in park proposals.	Same as Base Case
Utilities	Base Case	Increased utility demands due to higher population levels.	No changes in utility demands. Slightly less efficiency in water distribution and sanitary sewer lines due to clustering.	No changes in utility demands. Slightly greater efficiency in water distribution and sanitary sewer lines due to greater reliance on urban forms of development.	Increased utility demands due to higher industrial development levels.

5.4.2 Discussions of Impacts for each alternative

The following is a discussion of impacts, by impact category, for each Alternatives 2, 3, and 4 as compared with the preferred alternative (Alternative 1).

Alternative 2 Compared with Alternative 1

Aesthetics

Williams is an agricultural community with a rural, "small town" appearance that is evident both internally (when driving around town) and to passers-by in I-5. This characteristic is considered by residents to be of high value and worthy of preservation to the greatest extent possible. The proposed 620 gross-acre rectangular suburban area east of Husted will reduce the rural character, replacing farmland with residential neighborhoods. This localized impact will be slight, but nevertheless adverse.

Agriculture

All alternatives will result in the significant but avoidable reduction in agricultural land; however, the 620 gross acre area of proposed suburban development will substantially increase the amount of farmland that will be converted.

Air Quality/Greenhouse Gasses

Increased traffic is a major cause of air quality impacts and the production of greenhouse gasses. Other causes of greenhouse gasses (mainly carbon dioxide) include the combustion of fossil fuels for interior space heating and electrical power generation. Greater amounts of development and their implied population increases generally result in significant but unavoidable adverse impacts on air

quality and the generation of greenhouse gasses. The significant and unavoidable impacts in this category will be the greatest with Alternative 2, as the proposed 620 gross acre suburban development area will result in higher traffic levels, greater interior space heating requirements, and higher levels of electrical power consumption.

Biological Resources

The originally-natural biological habitats in and around Williams have been disturbed over the past 100 years by agriculture and urbanization. Nevertheless, there are small habitat areas along fencerows and roadways, within small isolated wetlands within farmlands, and vacant lots that support natural vegetation and animal wildlife species. Some of these plants and animals are listed by California as being important and worthy of protection. Alternative 2 will have the greatest potential impact on habitats and wildlife species, as its implementation will result in the greatest amount of new development. These impacts can usually be mitigated by the measures specified in Section 4 of this EIR, including the avoidance of wetland areas and the acquisition/preservation of new open space that would remain undeveloped.

Circulation

Traffic is directly proportional to the number of residents and amount of nonresidential development in a community. Earlier analysis of Alternative 2 indicates trip generation levels that were over 20,000 trips per day higher than Alternative 1. This resulted in a substantially greater amount of necessary street widening, intersection improvements, and new streets than the other alternatives in order to maintain the City's acceptable level of traffic congestion.

Cultural Resources

Cultural buildings and sites in Williams will be protected by the mitigation measures specified in EIR Section 4, irrespective of the alternative selected. The greater levels of new development proposed in Alternative 2 results in a greater chance of uncovering relicts or human remains, but the recommended mitigation measures, which are mandatory, will result in no increased impact from the preferred alternative.

Geology and Soils

Geological formations will be equally unaffected by any of the alternatives. Development in accordance with Alternative 2 will result in the greater potential for construction-related soil erosion; however, the required mitigation measures and best management practices will result in impacts that are less than significant.

Hazards and Hazardous Materials

Most issues related to this category are caused by existing conditions and practices. Irrespective of the alternative that is selected, the implementation of cleanup measures for current sites and future development conducted in accordance with current regulations will not be any different among the alternatives being considered in this EIR.

Hydrology and Water Quality

The main potential impacts in this category are stormwater runoff and groundwater consumption. The higher levels of growth and development implied by Alternative 2 will result in increased stormwater runoff and potable water supply requirements. Impacts will be less than significant due to implementation of mitigation measures.

Land Use

An increase in developed area by approximately 500 acres will be required to support higher levels of population growth and housing development implied by this alternative

Noise

Significant unavoidable increases in noise levels will result from this alternative due to higher traffic volumes associated with the higher population level.

Population and Housing

Buildout of Alternative 2 will result in approximately 5,000 additional residents and 1,600 additional dwelling units.

Public Services

In comparison to the preferred alternative (Alternative 1) the increases in public service requirements will be greater on account of the higher population levels. The impacts will be less than significant, as the funding for these increased public services will be obtained from the developers through impact fees or negotiation. Operating costs will be covered by the increased tax base and collection of user charges from the new residents.

Parks and Open Space

In comparison to the preferred alternative (Alternative 1) the increases in requirements for parks, open space, and recreational programs will be greater on account of the higher population levels. The impacts will be less than significant, as the funding for these increased public services will be obtained from the developers through impact fees or negotiation. Operating costs will be covered by the increased tax base and collection of user charges from the new residents.

Utilities

In comparison to the preferred alternative (Alternative 1) the increases in requirements for utilities and infrastructure will be greater on account of the higher population levels and increased amount of development. The impacts will be less than significant, as the funding for these increased public services will be obtained from the developers through impact fees or negotiation. Operating costs will be covered by the increased tax base and collection of user charges from the new residents.

Alternative 3 (Residential Clustering) Compared with Alternative 1

Aesthetics

Williams is an agricultural community with a rural, "small town" appearance that is evident both internally (when driving around town) and to passers-by in I-5. This characteristic is considered by residents to be of high value and worthy of preservation to the greatest extent possible. The

proposed area of residential clustering will maintain and enhance the existing aesthetic quality of the area.

Agriculture

All alternatives will result in the significant but avoidable reduction in agricultural land. This alternative will result in a somewhat higher impact than Alternative 1, due to the lower gross residential densities that are typical of clustered development forms.

Air Quality/Greenhouse Gasses

Increased traffic is a major cause of air quality impacts and the production of greenhouse gasses. Other causes of greenhouse gasses (mainly carbon dioxide) include the combustion of fossil fuels for interior space heating and electrical power generation. The significant but unavoidable adverse impacts on air quality and the generation of greenhouse gasses are, in general, proportional to increases in population levels and business. Impacts in this category for Alternative 3, will be comparable to those associated with the preferred alternative (Alternative 1), as there is no significant difference in the population and business development assumptions.

Biological Resources

The originally-natural biological habitats in and around Williams have been disturbed over the past 100 years by agriculture and urbanization. Nevertheless, there are small habitat areas along fencerows and roadways, within small isolated wetlands in farmlands, and vacant lots that support natural vegetation and animal wildlife species. Some of these plants and animals are listed by California as being important and worthy of protection. Alternative 3 could potentially impact habitats and wildlife species, but at the lowest level of all the alternatives considered. Cluster forms of development usually result in the greatest amount of vegetative habitat protection. Any impacts resulting from this alternative can be mitigated by the measures specified in Section 4 of this EIR, including the avoidance of wetland areas and the acquisition/preservation of new open space that would remain undeveloped.

Circulation

Traffic is directly proportional to the number of residents and amount of nonresidential development in a community. Because there is no difference in assumed population levels, development of this alternative will be comparable to that of the preferred alternative.

Cultural Resources

Cultural buildings and sites in Williams will be protected by the mitigation measures specified in EIR Section 4, irrespective of the alternative selected. The comparable levels of new development proposed in Alternative 3 results in an equivalent chance of uncovering relicts or human remains as Alternative 1. This factor, along with implementing the recommended mitigation measures, which are mandatory, will result in no increased impact from the preferred alternative.

Geology and Soils

Geological formations will be equally unaffected by any of the alternatives. Development in accordance with Alternative 3 will result in the equivalent potential for construction-related soil

erosion. Implementation of the required mitigation measures and best management practices will result in impacts that are less than significant.

Hazards and Hazardous Materials

Most issues related to this category are caused by existing conditions and practices. Irrespective of the alternative that is selected, the implementation of cleanup measures for current sites and future development conducted in accordance with current regulations will not be any different among the alternatives being considered in this EIR.

Hydrology and Water Quality

The main potential impacts in this category are stormwater runoff and groundwater consumption. Due to the greater quantities of protected open space associated with the cluster form of development, alternative 3 will result in slightly decreased stormwater runoff potential. Potable water supply requirements will be unchanged. Impacts will be less than significant due to implementation of mitigation measures.

Land Use

The lower gross densities usually associated with cluster forms of development will result in slightly higher gross residential development acreages. Total developed land for the build-out of Alternative 3 is about 100 acres greater than Alternative 1.

Noise

Significant unavoidable increases in noise levels will result from Alternative 4, due to higher traffic volumes that are associated with the increased population levels resulting from build-out. There will be no difference in impacts for Alternative 3 from Alternative 1, as the projected overall population levels and business activities are comparable.

Population and Housing

Buildout of Alternative 3 will result in approximately 5,000 additional residents and 1,600 additional dwelling units through the year 2030. This projected increase is identical to Alternative 1, unchanged from the preferred alternative.

Public Services

In comparison to the preferred alternative (Alternative 1) the increases in public service requirements will not be different. The impacts will be less than significant, as the funding for these increased public services will be obtained from the developers through impact fees or negotiation. Operating costs will be covered by the increased tax base and collection of user charges from the new residents.

Parks and Open Space

In comparison to the preferred alternative (Alternative 1) the increases in requirements for parks, open space, and recreational programs will not be different. The impacts will be less than significant, as the funding for these increased public services will be obtained from the developers through

impact fees or negotiation. Operating costs will be covered by the increased tax base and collection of user charges from the new residents.

Utilities

In comparison to the preferred alternative (Alternative 1) the increases in requirements for utilities and infrastructure will not be significantly different. The impacts will be less than significant, as the funding for these increased public services will be obtained from the developers through impact fees or negotiation. Operating costs will be covered by the increased tax base and collection of user charges from the new residents.

Alternative 4 (Urban Mixed Use Development) Compared with Alternative 1

Aesthetics

Williams is an agricultural community with a rural, "small town" appearance that is evident both internally (when driving around town) and to passers-by in I-5. This characteristic is considered by residents to be of high value and worthy of preservation to the greatest extent possible. The proposed area of residential/commercial mixed use development at the Highway 20/I-5 interchange will disrupt the rural appearance of Williams in this highly localized area.

Agriculture

All alternatives will result in the significant but avoidable reduction in agricultural land. This alternative will result in a somewhat lower impact than Alternative 1, due to the higher gross residential densities that are typical of urban mixed-use development forms.

Air Quality/Greenhouse Gasses

Increased traffic is a major cause of air quality impacts and the production of greenhouse gasses. Other causes of greenhouse gasses (mainly carbon dioxide) include the combustion of fossil fuels for interior space heating and electrical power generation. The significant but unavoidable adverse impacts on air quality and the generation of greenhouse gasses are, in general, proportional to increases in population levels and business. Impacts in this category for Alternative 4, will be comparable to those associated with the preferred alternative (Alternative 1), as there is no significant difference in the population and business development assumptions.

Biological Resources

The originally-natural biological habitats in and around Williams have been disturbed over the past 100 years by agriculture and urbanization. Nevertheless, there are small habitat areas along fencerows and roadways, within small isolated wetlands in farmlands, and vacant lots that support natural vegetation and animal wildlife species. Some of these plants and animals are listed by California as being important and worthy of protection. Alternative 4 could potentially impact habitats and wildlife species, but at a comparable, or slightly higher, level to the preferred alternative. Urban forms of development usually result in the greatest amount of vegetative habitat removal. Any impacts resulting from this alternative can be mitigated by the measures specified in Section 4 of this EIR, including the avoidance of wetland areas and the acquisition/preservation of new open space that would remain undeveloped.

Circulation

Traffic is directly proportional to the number of residents and amount of nonresidential development in a community. Because there is no difference in assumed population levels, development of this alternative will be comparable to that of the preferred alternative.

Cultural Resources

Cultural buildings and sites in Williams will be protected by the mitigation measures specified in EIR Section 4, irrespective of the alternative selected. The comparable level of new development proposed in Alternative 4 results in an equivalent chance of uncovering relicts or human remains as Alternative 1. This factor, along with implementing the recommended mitigation measures, which are mandatory, will result in no increased impact from the preferred alternative.

Geology and Soils

Geological formations will be equally unaffected by any of the alternatives. Development in accordance with Alternative 4 will result in the equivalent potential for construction-related soil erosion. Implementation of the required mitigation measures and best management practices will result in impacts that are less than significant.

Hazards and Hazardous Materials

Most issues related to this category are caused by existing conditions and practices. Irrespective of the alternative that is selected, the implementation of cleanup measures for current sites and future development conducted in accordance with current regulations will not be any different among the alternatives being considered in this EIR.

Hydrology and Water Quality

The main potential impacts in this category are stormwater runoff and groundwater consumption. Due to the greater urban forms of development associated with mixed-use development, alternative 4 will result in slightly increased stormwater runoff potential. Potable water supply requirements will be unchanged. Impacts will be less than significant due to implementation of mitigation measures, such as stormwater detention in accordance with Williams' adopted stormwater management plan.

Land Use

The higher gross densities usually associated with urban mixed-use forms of development will result in slightly lower gross residential development acreages. Total developed land for the build-out of Alternative 4 is about 40 acres less than Alternative 1.

Noise

Significant unavoidable increases in noise levels will result from Alternative 4, due to higher traffic volumes that are associated with the increased population levels resulting from build-out. There will be no difference in impacts for Alternative 4 from Alternative 1, as the projected overall population levels and business activities are comparable.

Population and Housing

Buildout of Alternative 3 will result in approximately 5,000 additional residents and 1,600 additional dwelling units through the year 2030. This projected increase is identical to Alternative 1, unchanged from the preferred alternative.

Public Services

In comparison to the preferred alternative (Alternative 1) the increases in public service requirements will not be different. The impacts will be less than significant, as the funding for these increased public services will be obtained from the developers through impact fees or negotiation. Operating costs will be covered by the increased tax base and collection of user charges from the new residents.

Parks and Open Space

In comparison to the preferred alternative (Alternative 1) the increases in requirements for parks, open space, and recreational programs will not be different. The impacts will be less than significant, as the funding for these increased public services will be obtained from the developers through impact fees or negotiation. Operating costs will be covered by the increased tax base and collection of user charges from the new residents.

Utilities

In comparison to the preferred alternative (Alternative 1) the increases in requirements for utilities and infrastructure will not be significantly different. The impacts will be less than significant, as the funding for these increased public services will be obtained from the developers through impact fees or negotiation. Operating costs will be covered by the increased tax base and collection of user charges from the new residents.

Alternative 5 (No Project Alternative) Compared with Alternative 1

This alternative assumes that the proposed General Plan Update would not be adopted, forcing the City to rely on the existing plan.

Aesthetics

Williams is an agricultural community with a rural, "small town" appearance that is evident both internally (when driving around town) and to passers-by in I-5. This characteristic is considered by residents to be of high value and worthy of preservation to the greatest extent possible. The proposed area of industrial, in the entire southeastern sector of the City, could potentially affect the rural characteristics of Williams in the localized area and to passers-by on I-5..

Agriculture

All alternatives will result in the significant but avoidable reduction in agricultural land. This alternative would potentially result in the greatest amount of agricultural land conversion as a result of the industrial development designated for the southeastern sector of the City.

Air Quality/Greenhouse Gasses

Increased traffic is a major cause of air quality impacts and the production of greenhouse gasses. Other causes of greenhouse gasses (mainly carbon dioxide) include the combustion of fossil fuels for interior space heating and electrical power generation. The significant but unavoidable adverse impacts on air quality and the generation of greenhouse gasses are, in general, proportional to increases in population levels and business. Impacts in this category for Alternative 5 will be significantly greater than those associated with the preferred alternative (Alternative 1), due to the greater amount of industrial development and the scattered pattern of residential development occurring in the large areas designated as Rural Residential.

Biological Resources

The originally-natural biological habitats in and around Williams have been disturbed over the past 100 years by agriculture and urbanization. Nevertheless, there are small habitat areas along fencerows and roadways, within small isolated wetlands in farmlands, and vacant lots that support natural vegetation and animal wildlife species. Some of these plants and animals are listed by California as being important and worthy of protection. Alternative 5 could potentially impact habitats and wildlife species at a significantly higher level to the preferred alternative. Rural residential and industrial forms of development usually result in the greatest amount of vegetative habitat removal. Any impacts resulting from this alternative can be mitigated by the measures specified in Section 4 of this EIR, including the avoidance of wetland areas and the acquisition/preservation of new open space that would remain undeveloped.

Circulation

Traffic is directly proportional to the number of residents and amount of nonresidential development in a community. Because there is no difference in assumed population levels, development of this alternative will be comparable to that of the preferred alternative. However, the existing General Plan does not include any current recommendations to alleviate existing and future street capacity issues, resulting in potentially greater impacts.

Cultural Resources

Cultural buildings and sites in Williams will be protected by the mitigation measures specified in EIR Section 4, irrespective of the alternative selected. The comparable level of new development proposed in Alternative 5 results in an a slightly higher chance of uncovering relicts or human remains as Alternative 1. The absence of recommended mitigating factors in the existing plan also increases the possibility of negative impact.

Geology and Soils

Geological formations will be equally unaffected by any of the alternatives. Development in accordance with Alternative 4 will result in the equivalent potential for construction-related soil erosion. The absence of stated mitigation measures and best management practices in the existing General Plan could result in impacts that are more significant than Alternative 1.

Hazards and Hazardous Materials

Most issues related to this category are caused by existing conditions and practices. Irrespective of the alternative that is selected, the implementation of cleanup measures for current sites and future development conducted in accordance with current regulations will not be any different among the alternatives being considered in this EIR.

Hydrology and Water Quality

The main potential impacts in this category are stormwater runoff and groundwater consumption. Due to the greater urban forms of development associated with mixed-use development, alternative 5 will result in increased stormwater runoff potential due to the significantly higher amount of recommended industrial land development. Potable water supply requirements will be unchanged. Impacts will be less than significant due to implementation of mitigation measures, such as stormwater detention in accordance with Williams' adopted stormwater management plan.

Land Use

The existing plan (Alternative 5) designates over 1,000 acres of land, which is currently in agricultural use, for future industrial development. Other agricultural areas south of existing development are designated for rural residential use. Development in accordance with this plan would result in slightly lower overall population densities and a greater amount of industrial area.

Noise

Significant unavoidable increases in noise levels will result from Alternative 4, due to higher traffic volumes that are associated with the increased population levels resulting from build-out. There will be a slightly greater impact for Alternative 5 than Alternative 1, as the projected increase in industrial-generated traffic will increase.

Population and Housing

This impact cannot be determined, as the current City's population already exceeds the amount projected in the existing General Plan. For example, the area now occupied by the Valley Ranch Subdivision was designated for commercial development in the existing plan. For this and man other reasons, the City will rely on the proposed General Plan Update, whether it is adopted or not, in making future land use and housing decisions.

Public Services

In comparison to the preferred alternative (Alternative 1) the increases in public service requirements will not be different. The impacts will be less than significant, as the funding for these increased public services will be obtained from the developers through impact fees or negotiation, irrespective of whether the plan is adopted or not. Operating costs will be covered by the increased tax base and collection of user charges from the new residents.

Parks and Open Space

Due to the obsolescence of the existing General Plan, the City will rely on the proposed update—whether adopted or not—in making future park and open space investments.

Utilities

In comparison to the preferred alternative (Alternative 1) the increases in requirements for utilities and infrastructure will significantly increased due the need to extend utility services to the industrialized southeastern sector. The impacts will nevertheless be less than significant, as the funding for these increased public services will be obtained from the developers through impact fees or negotiation. Operating costs will be covered by the increased tax base and collection of user charges from the new residents.

5.3 Environmentally Superior Alternative

CEQA requires the identification of an Environmentally Superior Alternative among the alternatives to the project. The Environmentally Superior Alternative must be an alternative to the project that reduces some of the environmental impacts of the project. Identification of the Environmentally Superior Alternative is an informational procedure; the alternative identified in the process may not be that which best meets the goals or needs of the City. If a No Project Alternative (in this case, Alternative 5) is determined to reduce the most impacts, CEQA requires that the EIR identify an Environmentally Superior Alternative from among the other alternatives considered.

The identification of the Environmentally Superior Alternative can potentially result from a comparison of the impacts associated with each alternative, as presented in Table 5-1. In this case, Alternative 2 can also be dismissed as being environmentally inferior. The others are generally comparable and can be considered Environmentally Superior. Alternative 1, which is superior, was selected because its overall development form and housing mix were considered by the Williams General Plan Advisory Committee (GPAC) as best meeting the marketplace for housing products.

5.4 Alternatives Considered and Rejected

CEQA does not set forth a required number of alternatives to be considered in an EIR but instead stipulates that alternatives should be governed by a “rule of reason.” Per CEQA Guidelines Section 15126.6(c), alternatives that do not meet most of the basic project objectives, are infeasible, or would be unable to avoid significant environmental impacts need not be considered as part of the alternatives evaluation. Nevertheless, to remove any doubt in the interpretation of this provision, Alternative 5 (No Project) was included for examination

For many development related projects, an alternative plan is sometimes considered as part of the CEQA alternatives analysis. In the present circumstances, the updated General Plan is intended to be the long-range planning document for the City. The essence of the updated General Plan is to set forth allowable land uses and identify transportation and other facility improvements for Williams specifically the planning area (including its sphere of influence area). Therefore, the "No Project" alternative and Alternative 2 plan options was construed as either infeasible or environmentally unacceptable and were therefore not considered further in this analysis.

Chapter 6

Cumulative Impacts

6.1 Introduction

This section identifies the cumulative impacts associated with the proposed Project. Cumulative impacts are the result of combining the potential effects of the Project with other planned developments, as well as foreseeable development projects. The following discussion considers the cumulative impacts on the relevant environmental issue areas.

The California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) contain an assessment of the cumulative impacts that could be associated with the proposed Project. According to CEQA Guidelines Section 15130(a), "an EIR shall discuss cumulative impacts of a project when the Project's incremental effect is cumulatively considerable." "Cumulatively considerable means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (as defined by Section 15130).

As defined in CEQA Guidelines Section 15355, a cumulative impact consists of an impact that is created as a result of the combination of the Project evaluated in the EIR together with other projects causing related impacts. A cumulative impact occurs from:

> …the change in the environment which results from the incremental impact of the Project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

In addition, Section 15130(b) identifies that the following three elements are necessary for an adequate cumulative analysis:

1) Either:
   a) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or,
   b) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.
2) A summary of the expected environmental effects to be produced by those project with specific reference to additional information stating where that information is available; and
3) A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the Project's contribution to any significant cumulative effects.

Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable. This EIR utilizes the "list"" approaches described above in the cumulative analysis.

6.2 Cumulative Setting

For the purposes of this EIR, the cumulative setting is based on a two-fold approach. For some impact issue areas (i.e., air quality, traffic, and water supply), the cumulative setting is defined by specific regional boundaries (air basin, regional roadway network, etc.) or projected regional or area-wide conditions, contributing to cumulative impacts. For the remaining impact issue areas, the cumulative setting is based on development anticipated within the vicinity of the City.

The City of Williams Draft General Plan provides for the long-range direction and development of land within the City. The Draft General Plan and the General Plan Land Use Map identify and plan for future development densities and intensities throughout the City. The following section evaluates the potential for the project to contribute significantly to cumulative impacts in the areas of agriculture, air quality, biological resources, transportation, land use, population and housing, noise, geology and soils, hydrology and water quality, public services, cultural resources, hazards and hazardous materials, mineral resources, recreation and public facilities and utilities.

6.3 Cumulative Impact Analysis

Identified below is a compilation of the cumulative impacts that would result from the implementation of the Project and future development in the vicinity. As described above, cumulative impacts are two or more effects that, when combined, are considerable or compound other environmental effects. Each cumulative impact is determined to have one of the following levels of significance: less than significant, significant, or significant and unavoidable. The reader is referred to Chapter 4.0 for a complete discussion of the Project's impacts.

Section 4.1 – Land Use and Character

As the primary planning document for the City, the Proposed General Plan Update would have a less-than-significant impact in relation to most potential conflicts with other applicable plans, policies and regulations, including Colusa County's General Plan. Other potential land use incompatibility issues resulting from implementation of the General Plan Update would be mitigated by policies contained in the Aesthetics, Agricultural Resources and Land Use sections of Chapter 4.

Specific goals and recommended actions in these General Plan elements are designed to prevent conflicts between various land uses, such as residential land uses and those associated with industrial uses or agricultural operations, and avoid significant environmental impacts at the project level. The General Plan also provides additional guidelines to the preservation of open space, which requires the preservation of open space areas and the buffering of agricultural land. Therefore, implementation of the Proposed Project would have a less than significant cumulative contribution to this cumulative impact.

Section 4.2 – Population and Housing

Implementation and build-out of the General Plan would result in accommodating 9,822 persons and a doubling of the number of housing units in the City Boundary, SOI and Proposed SOI.

The proposed plan includes these developments and recognizes that future growth may be appropriate outside the City Boundary, and has designated appropriate areas to accommodate this growth in the SOI and proposed SOI. The timing of future development will be dependent on market forces and the availability of an alternative water source. However, build-out of the General Plan Update is expected to occur well beyond the Year 2030. While build-out of the General Plan results in a significant increase in population when compared to current conditions, the policies included in the plan reduce the potential for negative impacts associated with directly induced growth. While the proposed project would result in an increase in growth, the policies included in the plan reduce the potential for cumulative impacts associated with this growth. Therefore, the project would have a less than significant cumulative contribution to population and housing.

Section 4.3 – Aesthetics

Implementation of the Proposed Plan would result in minor changes to the existing visual character from a more agricultural/rural setting to one that is more characterized by suburban or urban uses (i.e., streets, homes, and neighborhood shopping centers), with potential increases in light and glare sources. As more fully described Section 4.3 of the proposed Draft EIR, policies and actions, in conjunction with adopted State, County and City regulations to enhance the City's current community character and preserve open space, development permitted under the Proposed Plan would not result in a significant impact to the existing visual identity and character of the City due to the amount of growth allowed.

Similarly, development associated with the anticipated regional growth would not result in a substantial change to the visual character of the surrounding area of Colusa County. Continual urbanization of existing agriculture and open space land has the potential to permanently alter the character of the area. However, State and local regulations, such as the State Scenic Highway guidelines and local jurisdictions regulations would mitigate potential impacts along scenic corridors by preserving views and open space land. The Proposed Plan combined with the overall growth trends in Colusa County would not contribute considerably to cumulative aesthetic impacts (including additional sources of light and glare). The project would have a less than significant cumulative contribution to aesthetics.

Section 4.4 - Circulation

Cumulative traffic and transportation impacts of the Proposed Project are more fully described in Section 4.4 of this Draft EIR. The following section provides a summary of the information provided in this chapter of the EIR and what improvements will be required.

Proposed Street System Improvements
Interchange Improvements/Street Widening
I-5 Interchange Improvements
Husted Road (between SR 20 and E Street)
Husted Road from Freshwater Road to I-5 Southbound Ramps
Intersection Improvements
SR 20/E. Street
SR 20/Old Highway 99W
SR 20/1-5 SB Ramps
SR 20/I-5 NB Ramps
SR 20/Husted Rd./Freshwater Rd.
E Street/9th Street North
E Street/9th Street South
E Street/7th Street
E Street/5th Street
E Street/I-5 SB Ramps
E Street/I-5 NB Ramps
E Street/Vann Street
E Street/Husted Road
Husted Road/Husted Rd Lateral
Husted Road/Abel Road
Husted Road/Crawford Road
Husted Road/Old Highway 99W
Husted Road/I-5 NB Ramps
Husted Road/I-5 SB Ramps
E Street/Marguerite Drive
SR 20/Marguerite Drive

Section 4.5 – Air Quality

Contribution to Local Air Quality Conditions - Implementation of the proposed Project would not contribute to localized CO concentrations in excess of applicable standards, nor would the proposed Project contribute to existing localized concentrations of TACs or odors. As a result, this impact is considered less than significant.

Contribution to Regional Air Quality Conditions - Project-generated increases in VMT and associated emissions would not be anticipated to conflict with emissions inventories contained in regional air quality attainment plans. As a result, the Project's contribution to regional air quality conditions would be considered less than significant.

Potential Increase in Long-Term Atmospheric Greenhouse Gas Emissions - The Project, in addition to existing, approved, proposed, and reasonably foreseeable development in Colusa County may contribute to an increase in greenhouse gas (GHG) emissions in the earth's atmosphere and potentially hinder or delay implementation of reduction targets under AB 32. Higher concentrations of GHGs have

been linked to the phenomenon of climate change. Proposed Project would contribute considerably to a significant and unavoidable cumulative impact to Air Quality

Section 4.6 – Noise Quality

Traffic-related cumulative noise impacts are considered as part of the noise analysis provided in Section 4.6. Future noise level increases related to increases in traffic associated with roadway and intersection improvements facilitated by the General Plan Update would result in an overall significant and unavoidable noise impact at the project-level and cumulative level. Therefore, this impact is considered a significant cumulative impact to noise.

Section 4.7 – Geology and Soils

Regional development would increase the number of people and structures subject to geologic and soils-related risks. The policies contained in the General Plan Update, along with compliance with Federal, State and local regulations addressing building construction, runoff and erosion, reduce the potential project-level impact associated with geology and soils to a less-than significant level. Development in other communities in Colusa County would also be required to comply with Federal, State and local regulations that are designed to protect increases in people and structures from hazards related to such issues as earthquakes, landslides and soil erosion. As a result, conformance with adopted California building codes, and other measures to protect people and structures from geologic hazards, would reduce this impact to a less-than-significant level. The project's incremental contribution to these impacts will be a less than significant cumulative impact.

Section 4.8 – Hydrology and Water Quality

Water Supply

Future growth in Williams would generate an additional demand for water. A portion of this growth would be dependent on the groundwater basin for its primary water source. New development throughout the County would be subject to SB 610 and SB 221, which require adequate water supplies be identified prior to approval of the project. As a result of these existing regulations, there would not be a cumulative impact associated with water supplies. Therefore, this impact is considered to be a less than significant cumulative impact.

Regional Water Quality, Runoff Patterns and Flooding

Development in accordance with the General Plan Update, if conducted properly, will not significantly contribute to the cumulative effects of degradation of regional water quality, changes to runoff patterns, and the potential for increased flooding. This is considered a potentially significant cumulative impact. Implementation of mitigation measures included in Section 4.8 would ensure the Project's consistency with the City's Draft General Plan and City ordinances related to drainage and grading, and would reduce the Project's contribution to cumulative groundwater, water quality, and flooding impacts to less than significant cumulative impact. Requiring the use of BMPs and compliance with applicable regional, state and federal water quality standards would also reduce this impact to a less than significant cumulative impact.

Stormwater Management

Goals and recommended actions included as part of the Proposed Plan that would minimize stormwater impacts are summarized in Section 4.8, with a complete description of these goals and recommended actions in the General Plan Update. Specific policies include ensuring that adequate stormwater infrastructure planning, financing, and construction is included as part of all new development areas. Additional policies require the use of best management practices to improve stormwater quality, and develop standards for improving roadside drainage. All new development projects would be required to follow specific stormwater standards as well as best management practices to avoid erosion and polluted water runoff. The Proposed Project would have a less than significant cumulative impact on stormwater.

Section 4.9 – Public Services

Law Enforcement Service

Future regional growth would result in a need for expanded law enforcement service throughout Colusa County. As discussed in Section 4.9 the City will implement a variety of goals and recommended actions designed to address the adequate provision of a variety of public services as part of the Proposed Project. Development of the Project site in addition to existing, approved, proposed and reasonably foreseeable development in the City could require additional law enforcement related services and facilities in combination with planned and proposed development. This is considered a less than significant cumulative impact.

Fire Protection

Future regional growth would result in increased demand for fire services throughout Colusa County. As discussed in Section 4.9 the City will implement a variety of goals and recommended actions designed to address the adequate provision of a variety of public services as part of the Proposed Project. Development of the Proposed Project, in combination with existing, approved, proposed and reasonably foreseeable development within the service boundaries of the Williams Fire Protection Authority, could incrementally increase the demand for fire protection and emergency medical services under cumulative conditions. This is considered a less than significant cumulative impact.

Schools

Future growth would result in increased demand for schools within Williams and its SOI. To the extent allowed by State law, the City will continue to ensure that future development projects mitigate impacts on school facilities. The expansion of existing school facilities would be needed for complete build-out of the Preferred Land Use Alternative, but improvements to these facilities could be funded through impact fees collected from new development project. For these reasons, implementation of the Proposed Project including the adoption of the goals and recommended actions would result in a less than-significant cumulative impact.

Section 4.10 – Cultural Resources

Prehistoric Resources, Historic Resources, and Human Remains

Implementation of the Proposed Project could result in the potential disturbance of cultural resources (i.e., prehistoric sites, historic sites, historic buildings, and isolated artifacts and features) and human remains. Unless mitigated, this is considered a significant cumulative impact. Implementation of

mitigation measures included in Section 4.10 would address the unanticipated discovery of cultural resources and human remains and identify procedures that would ensure that any significant discovery is properly preserved and/or documented should cultural resources or human remains be discovered on the Project site. Implementation of these mitigation measures would reduce the Project's contribution to impacts to cultural resources and human remains to less than significant cumulative impact.

Section 4.11 – Biological Resources

Development associated with implementation of the Proposed Plan would contribute to the ongoing loss of natural and agricultural lands in Colusa County, which currently provide habitat for a variety of State listed special status species, as well as other wildlife and plant resources. Development under the Proposed Plan would result in the conversion of existing agriculturally-oriented habitats to urban uses. As more fully described in Section 4.11 goals and recommended actions in the General Plan Update and regional, State and federal regulations are available to mitigate impacts to biological resources at a project specific level. Development outside of the City would also be subject to the same regional, State and federal regulations addressing sensitive species.

Section 4.12 – Agriculture

With the implementation of the Proposed Project there would be a loss of the existing agricultural lands within the Study Area. The loss of agricultural land as a result of urban development is part of an overall trend within Colusa County and the County will continue to face development pressure in the foreseeable future. As more fully described in Section 4.12, the Proposed Project does include goals and recommended actions stating how the City will work at a regional level to control the conversion of agricultural uses. However, the loss of agricultural lands as a result of the Proposed Project would contribute to a significant and unavoidable cumulative impact to agricultural resources.

Section 4.13 – Hazards and Hazardous Materials

Cumulative hazardous materials used and hazardous materials waste generated by the Proposed Plan, in addition to other materials used and generated in the vicinity, would not contribute to cumulative human and environmental health and safety issues. Therefore, the Proposed Project impacts are a less than significant cumulative impact.

Section 4.14 – Recreation

The California Quimby Act allows a City to require land or in-lieu fees for a minimum of 3 acres per 1,000 residents, with the possibility of increasing the requirement to a maximum of 5 acres per 1,000 residents if the City already provides more than three acres per 1,000 residents. Given the parkland requirements of the City and neighboring communities which will ensure that new development provides adequate parkland for new residents to the extent allowed by State law, the General Plan Update would not contribute considerably to a significant cumulative impact associated with the demand for new parkland in the City or in neighboring areas. Therefore, this impact is considered to be a less than significant cumulative impact to recreation.

Section 4.15 – Public Facilities and Utilities

The following provides a cumulative analysis broken down by each category of service or utility.

Water Distribution

Future growth in Williams would generate an additional demand for water lines and elevated storage. The provision of piping and other infrastructure facilities are required by developers as a condition for project approval. Also, the water distribution system obtains revenues from customer billing for use in system improvements. As a result of these existing requirements and practices, there would not be a cumulative impact associated with water distribution. Therefore, this impact is considered to be a less than significant cumulative impact.

Wastewater Collection and Treatment

Future regional growth would result in increased demand for wastewater services in the Williams service area. In order to comply with existing regulations and provide adequate waste water service to for the projected increases in waste generated in the City, wastewater facility improvements are necessary. Based on project specific analysis, implementation of CEQA for Capital improvement projects, and implementation of applicable General Plan goals and recommended actions the project would have a less than significant cumulative impact.

Chapter 7

Growth Inducing Impacts

7.1 Introduction

Section 15126.2(d) of the CEQA Guidelines requires discussion of "the ways in which the proposed project could foster economic or population growth, or the construction of additional housing either directly or indirectly, in the surrounding environment". Included in this are projects which would remove obstacles to population growth – an example of this would include the expansion of a wastewater treatment facility which would allow for more construction in the area. Not all growth inducement is necessarily negative. Negative impacts associated with growth inducement only occur where the growth produces adverse environmental impacts.

The General Plan, which serves as the City's guide to future growth and development in the community, recognizes growth is inevitable as urbanization approaches. Implementation of the Updated General Plan would impact population growth as it refines existing land use designations in the City Limits and Sphere of Influence. It also designates a proposed expansion of the Sphere of Influence to accommodate additional growth on the fringe of the urban area. While the Updated General Plan induces growth, it encourages it to occur in a managed and sustainable fashion, ensuring preservation of environmental assets, open spaces and character of the community.

7.2 Population

Population in Colusa County has increased from 16,275 persons in 1990 to 21,997 persons in 2009, an increase of 35 percent. Population in Williams increased from 2,297 in 1990 to 5,287 persons in 2009. Future projections for the County vary depending on the source that is used. The California Department of Finance projects a countywide population of 29,588 by 2020 and 34,488 by 2035. As shown below in Figure 7.1, Population Projections, population in Williams is projected to range from 7,900 and 12,000 in the Year 2030 with a mid-point average of slightly under 10,000 persons.

Figure 7.1 Population Growth in Colusa County and Williams

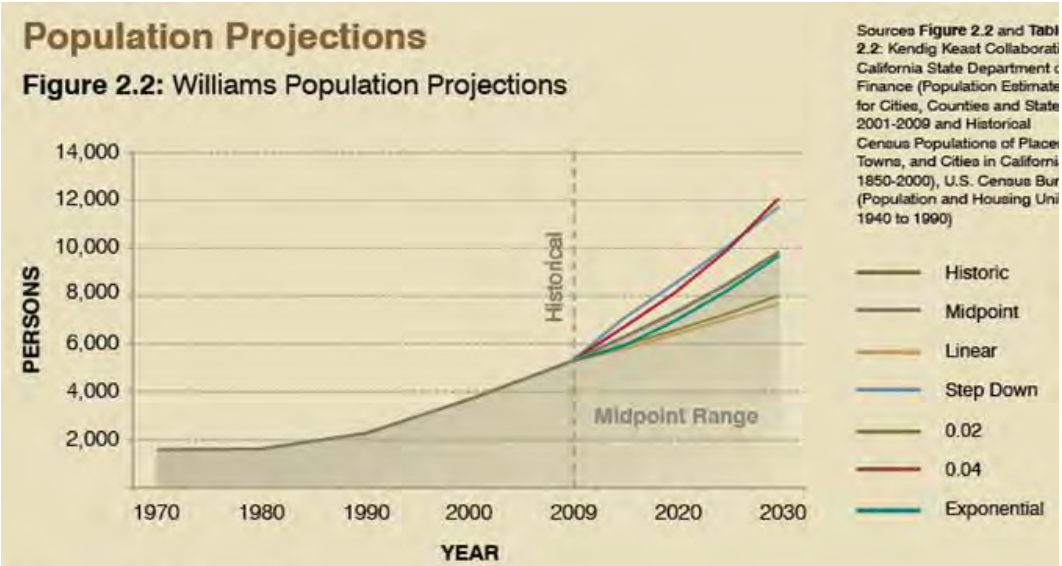


Table 2.2: Population Projections

	Colusa County	Williams	Midpoint	Linear	Step Down	0.02	0.04	Exp.
Year 1970	12,430	**1,571**						
1980	12,791	**1,658**						
1990	16,275	**2,297**						
2000	18,804	**3,670**						
2009	21,997		**5,287**	5,287	5,287	5,287	5,287	5,287
2015	26,616		**6,279**	5,776	7,062	5,954	6,690	5,913
2020	29,588		**7,322**	6,406	8,525	6,574	8,139	6,966
2025	32,070		**8,487**	7,035	:10,034	7,258	9,902	8,207
2030	34,488		**9,822**	7,664	11,717	8,013	12,048	9,669

7.3 Impacts

Implementation and build out of the General Plan would result in accommodating 9,822 persons in the City Boundary, SOI and Proposed SOI. The proposed General Plan Update takes this population growth into consideration and recognizes that future growth may be appropriate outside the City Boundary, and has designated appropriate areas to accommodate this growth in the SOI and proposed SOI. The timing of future development will be dependent on market forces. However, build-out of the General Plan is expected to occur well beyond the Year 2025, with the population in Williams projected to range between 7,000 and 10,000 people in the Year 2030. While build-out of the General Plan results in a significant increase in population when compared to current conditions, the policies included in the plan reduce the potential for negative impacts associated with directly induced growth. The plan advocates an overall compact development form as well as highly efficient, low impact developments. To achieve this end, this plan advocates a pattern of growth that is largely contiguous and logical in the timing and

sequencing of development. Furthermore, this plan provides a means for achieving more efficient developments by way of density bonuses for clustered development patterns. This manner of development accomplishes many City objectives including land use compatibility, preservation of open space, conservation of resources, and an enhanced rural small-town character.

With regard to indirect impacts, the plan does include proposed roadway and intersection improvements to accommodate anticipated growth in accordance with the General Plan. However, these infrastructure improvements are confined to the proposed Planning Area. Additionally the overall General Plan supports growth on the fringe of the current urban area surrounded by a rural environment. With regards to other infrastructure improvements, the plan recommends improvements or replacement of the City's wastewater treatment plant to comply with existing water quality regulations and to accommodate current and near term needs of the community. The plant improvements would serve existing developments and emerging growth areas as identified on the General Plan.

Another potential growth inducing impact results from the General Plan Update's inclusion of new areas designated for higher density housing development. The identification of specific areas for multifamily development will remove many of the political and legal obstacles to the implementation of housing development projects that might otherwise be delayed or even avoided altogether. Likewise, the recommendations for facilitated review of certain types of development and redevelopment projects tend to enhance their likelihood of realization.

While the proposed project would result in an increase in growth, implementation of the policies included in the plan would reduce the potential for negative impacts associated with this growth. Therefore, with the implementation of the policies and actions identified in the plan, the impacts are considered less than significant than the status quo.

Chapter 8

Significant Unavoidable Impacts

Public Resources Code section 21100(b) (2) and CEQA Guidelines section 15126.2(b) require that any significant and unavoidable effect on the environment must be identified. In addition, CEQA Guidelines 15093(a) allows the decision-making agency to determine if the benefits of a proposed project outweigh the unavoidable adverse environmental impacts of implementing the project. The City can approve a project with unavoidable adverse impacts if it prepares and adopts a "Statement of Overriding Considerations" setting forth the specific reasons for making such a judgment. For each of the unavoidable adverse impacts, the City must prepare and adopt a Statement of Overriding Considerations if the City approves the project. There are four Significant Unavoidable Impacts associated with the Proposed Project as identified below.

8.1 Agricultural Resources

The loss of agricultural land as a result of urban development is an overall consequence of growth, and the County will continue to face development pressure in the foreseeable future as the urbanization continues to reach out from Sacramento. As more fully described in Section 4.12, the Proposed General Plan Update includes goals and recommended actions addressing the conversion of agricultural uses. However, since the region is projected to continue urbanizing at a significant rate, the loss of agricultural lands as a result of the Proposed Project would contribute considerably to a significant and unavoidable cumulative impact to agricultural resources.

8.2 Air Quality

Air Quality impacts associated with Climate Change would exceed local air quality district significance thresholds. While the Proposed Project includes mitigation measures to minimize this impact, the following air quality impacts are considered significant and unavoidable:

The proposed project would result in a significant impact towards Climate Change. Per CAPCOA guidance, a significant impact towards Climate Change is an increase in per-capita GHG emissions based from 1990 levels to Proposed General Plan Update Build-out levels.

Potential Increase in Long-Term Atmospheric Greenhouse Gas Emissions - The Project, in addition to existing, approved, proposed, and reasonably foreseeable development in Colusa County may contribute to an increase in greenhouse gas (GHG) emissions in the earth's atmosphere and potentially hinder or delay implementation of reduction targets under AB 32. Higher concentrations of GHGs have been linked to the phenomenon of climate change. Proposed Project would contribute considerably to a significant and unavoidable cumulative impact to Air Quality.

8.3 Noise Quality

Implementation of the Draft General Plan would result in greater traffic volumes on City roadways than currently exist. The greater traffic volumes would result in increased traffic noise on City roadways. This impact would be significant. Implementation of the General Plan, along with regional growth and traffic conditions, would cause increases in traffic noise levels generally ranging from 2 to 12 dB Ldn. Because a traffic noise level increase of 1.5 dBA to 5 dBA Ldn is commonly considered the threshold of significance,

depending on existing levels without the project, the project thresholds of significance would be exceeded. As a result, this impact would be significant.

While the construction of noise barriers could theoretically reduce these impacts to an insignificant level, the frontages of affected streets and highways are fully developed. Construction of noise barriers would require the removal of a substantial number of residences and businesses--an expensive, disruptive, and unacceptable tradeoff.

8.4 Energy

While the policies in the proposed Updated General Plan would promote opportunities for energy conservation and efficient expansion of necessary infrastructure within the City of Williams, the overall impact of the increase in energy demand would contribute to the demands on non-renewable resources. Federal, state, and local regulations and policies would be implemented to ensure that sufficient energy supplies are available to serve the expanded need. The development and operation of energy facilities would be subject to additional environmental review. Although not anticipated to be built within the City of Williams planning area, the construction of new energy facilities and the operation of energy production facilities to support the Updated General Plan development are anticipated to have potentially significant impacts.

Compliance with Federal and State regulations and incorporation of the Updated General Plan policies and actions would mitigate some of the anticipated impacts. However, the overall impact of increased demand for energy and the anticipated activities to meet that demand is considered significant and unavoidable.

8.5 Irreversible Impacts

Irreversible impacts are those which result in the permanent commitment of a nonrenewable resource or the conversion of a resource in a manner in which it can never be restored to its original condition by future generations.

Most forms of urban and suburban land development is generally reversible, as evidenced by the occurrence of subsequent redevelopment of areas; and, in extreme instances, the reversion of land to a natural condition after many years of abandonment. As long as growth in Williams continues to expand over an extended period, reversion of land to an agricultural or natural state is unlikely.

The main types of irreversible impacts related to General Plan Update adoption are related to the commitment of nonrenewable fossil fuels and building materials for intended construction activities and subsequent occupancy by future residents and businesses. Examples include the following:

- The conversion of once-natural areas to agricultural use, as had occurred in the previous century.
- The utilization of limestone, coal, and aggregate rock for the production of concrete, which is used for streets, buildings, and other structures.
- The utilization of petroleum and aggregate for the production of asphalt.
- The utilization of fossil fuels for development activities and for the daily transportation requirements of new inhabitants

- The commitment of fossil fuels for the heating and air conditioning of enclosed structures.
- Permanent damage to or loss of a resource due to a catastrophic accident involving dangerous chemicals or nuclear materials.

Impacts in all of these categories are certain to result to varying degrees, regardless of location, as civilization continues to expand. Their prevention or mitigation are dependent on broad policies and market conditions related to energy conservation, conversion to renewable fuels and building materials, and accident prevention measures.

Chapter 9.0
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Appendices

Appendix A Omni-Means Transportation Memorandum

TECHNICAL MEMORANDUM

To:	City of Williams	**Date:**	August 23, 2011
Attn:	Gary Price, Chuck Bergson, P.E.	**Project:**	City of Williams
From:	OMNI-MEANS		On-Call Services
Re:	2010 Circulation Update Study	**Job No.:**	25-1731-02
		File No.:	C1163MEM007.DOC
CC:	Paula Danulek, Mac Birch		

INTRODUCTION

This technical memorandum is intended as a supplementary document to the Draft Citywide Circulation Study (Omni-Means 2007) to quantify the existing and future transportation conditions and facility needs within the City of Williams. Future traffic forecasts were prepared based upon proposed City General Plan buildout development assumptions as provided by Development Impact INC (June 1, 2011) following input from City officials, City staff and the General Plan Action Committee (GPAC). Omni-Means has updated the City travel demand model prepared for the 2007 Citywide Circulation Study based upon this data. Peak hour intersection turning movement volume projections were obtained from the updated model for updates to the intersection capacity models.

{Note: The 2007 Draft Citywide Circulation Study due to staff changes at the City was never finalized. This draft study included graphics depicting future roadway connections within the County south of the City's Sphere of Influence. These future roadway extensions of Hankins Road, Davis Road, and Walnut Drive along with a new east/west facility (not labeled) connecting Hankins Road (north/south portion) to Zumwalt Road were only concepts in the context of a draft circulation study and at the time had no standing either with the City or the County. For clarification, these future roadway connection concepts have been removed from all transportation facility graphics.}

EXISTING TRANSPORTATION SYSTEM

The City of Williams is located in Colusa County, located between Sacramento and Redding and along I-5 between the Husted Road and State Route 20 (SR 20) interchanges. The following roadways provide primary circulation through and within the City.

Interstate* 5 *(I-5) is a four-lane freeway that extends throughout California from Mexico to the Oregon border, providing regional access to the City of Williams from Redding, Sacramento, and the San Francisco Bay Area.. Within the City's sphere of influence, I-5 has interchanges at Husted Road, E Street and SR 20.

State Route 20 (SR 20) is a state highway facility that traverses in the east-west direction through central and northern California connecting Interstate Highway 5 with Interstate Highway 80. Regionally, SR 20 serves as an inter-regional auto and truck travel route that connects the Central Valley with the Cities of Williams, Marysville and Grass Valley, and Nevada City. Within the City's sphere of influence, SR 20 is predominantly a two-lane arterial.

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E Street (SR Business 20) is a two-lane roadway that extends east and west from I-5, connecting with SR 20 and Old Highway 99 to the west and Husted Rd. to the east. The posted speed limit on E Street varies from 25 mph to 35 mph. E Street forms all way stop controlled intersections with 7th Street and 5th Street. The facility has half street improvements as it crosses I-5, without any bicycle lanes.

Husted Road is a two-lane roadway that runs north-south and connects I-5, Old Highway 99, E Street, and SR 20. The facility does not have designated bike-lanes and sidewalks.

Old Highway 99 West is a two-lane north south arterial that traverses parallel to I-5, and connects to it via the Husted Road interchange ramps. Old Highway 99 West traverses through a mixed use commercial and residential areas. This roadway is designated as 7th Street between B Street and Theatre Road.

9th Street is a two lane north-south collector which provides connectivity between central Williams and areas south of the City. The roadway is designated as Zumwalt Road south of Theater Road. 9th Street is stop controlled at the intersection with E Street.

12th Street is a two lane north-south residential collector that begins in the south as a cul-de-sac, and then extends north to E Street. The roadway is designated as Engram Road, south of Hankins Road.

Freshwater Road is a two-lane collector facility that traverses in the east-west direction along the northern City Limits of Williams. Freshwater Road is stop controlled at the intersection with SR 20.

Davis Road is a two lane north-south collector that extends from E Street to the north and extends south of Hankins Road changing the orientation to east-west direction before terminating on Zumwalt Road. This roadway serves as a primary access for the residences along the street.

Hankins Road is a two lane east-west collector extends from Zumwalt Road to the east and changes its orientation to north-south beyond the city limit.

Crawford Road is a two lane east-west street and is split into two segments by I-5. This street extends up to 9th Street/Zumwalt Road to west and Husted Road to east. There are no plans to connect the eastern and western segments with a crossing of I-5 freeway. This street is stop controlled at the intersections with 9th Street and Husted Road.

Abel Road is a two lane east-west street which begins at Husted Road and extends beyond the City limits to east. This street is stop controlled at the intersection with Husted Road.

Specific intersections and roadway segments within the planning area have been selected for evaluation as a part of the Citywide Traffic Circulation Study and include the following:

1. SR 20/E. Street
2. SR 20/Old Highway 99 West
3. SR 20/I-5 SB Ramps
4. SR 20/I-5 NB Ramps
5. SR 20/Husted Road/Freshwater Road
6. E Street/9th Street North
7. E Street/9th Street South
8. E Street/7th Street
9. E Street/5th Street
10. E Street/I-5 SB Ramps
11. E Street/I-5 NB Ramps

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12. E Street/Vann Street
13. E Street/Husted Road
14. Husted Road/Husted Lateral Road
15. Husted Road/Abel Road
16. Husted Road/Crawford Road
17. Husted Road./Old Highway 99 West
18. Husted Road/I-5NB Ramps
19. Husted Road/I-5SB Ramps
20. E Street/Marguerite Drive (Cumulative Scenario)
21. SR 20/Marguerite Drive (Cumulative Scenario)

LEVEL OF SERVICE METHODOLIGIES

The Citywide Traffic Circulation Study quantifies current and projected future traffic operations through the determination of "level of service" (LOS). Level of service is a qualitative measure of traffic operating conditions, whereby, a letter grade "A" through "F" is assigned to an intersection or roadway segment representing progressively worsening traffic conditions.

Volume-to-Capacity (V/C) ratio will be the determining factor in assigning intersection level of service values. This analysis will be completed using methods documented in the Transportation Research Board (TRB) Publication *Highway Capacity Manual, Fourth Edition, 2000* (HCM-2000) and implemented in *Synchro Version 7* (Trafficware). For two-way-stop-controlled (TWSC) intersections, the "worst-case" movement V/C and LOS will be reported. For signalized intersections and all-way-stop-controlled (AWSC) intersections, the overall intersection V/C and LOS will be reported. The V/C-based LOS criteria for intersections are outlined in Table 1A. Table 1B presents the HCM based average daily traffic (ADT) based roadway level-of-service thresholds.

The current City of Williams General Plan does not identify a policy for acceptable LOS for transportation facilities.

The Caltrans published *Guide for the Preparation of Traffic Impact Studies* (dated December 2002) states the following:

> *"Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities, however, Caltrans acknowledges that this may not be always feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS."*

Based on the direction from City of Williams staff, for the analysis of transportation facilities within this memo, LOS D has been taken as the threshold for acceptable/tolerable operations *"herein referred to as Acceptable LOS. It is noted that the City will strive to meet a higher than LOS D and does for the most part through implementation of the various policies and programs identified in this study.*

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TABLE 1A
LEVEL OF SERVICE (LOS) CRITERIA FOR INTERSECTIONS

Level of Service	Type of Flow	Delay	Maneuverability	Volume-to-Capacity Ratio (V/C)
A	Stable Flow	Very slight delay. Progression is very favorable, with most vehicles arriving during the green phase not stopping at all.	Turning movements are easily made, and nearly all drivers find freedom of operation.	< 0.6
B	Stable Flow	Good progression and / or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.	Vehicle platoons are formed. Many drivers begin to feel somewhat restricted within groups of vehicles.	≥ 0.6 and < 0.7
C	Stable Flow	Higher delays resulting from fair progression and / or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, although many still pass through the intersection without stopping.	Back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted	≥ 0.7 and < 0.8
D	Approaching Unstable Flow	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	Maneuverability is severely limited during short periods due to temporary back-ups.	≥ 0.8 and < 0.9
E	Unstable Flow	Generally considered to be the limit of acceptable delay. Indicative of poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures are frequent occurrences.	There are typically long queues of vehicles waiting upstream of the intersection.	≥ 0.9 and < 1.0
F	Forced Flow	Generally considered to be unacceptable to most drivers. Often occurs with over saturation. May also occur at high volume-to-capacity ratios. There are many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors.	Jammed conditions. Back-ups from other locations restrict or prevent movement. Volumes may vary widely, depending principally on the downstream back-up conditions.	> 1.0

References: 2000 Highway Capacity Manual

TABLE 1B
LEVEL OF SERVICE (LOS) CRITERIA FOR ROADWAY FACILITIES

Roadway Type	Average Daily Traffic (ADT) – Total of Both Directions				
	A	B	C	D	E
Six-Lane Freeway	60,000	80,000	100,000	120,000	140,000
Eight-Lane Divided Arterial	44,000	50,000	58,000	65,000	72,000
Four-Lane Freeway	35,000	50,000	65,000	80,000	95,000
Six-Lane Expressway	36,000	42,000	48,000	54,000	60,000
Six-Lane Divided Arterial	32,000	38,000	43,000	49,000	54,000
Four-Lane Expressway	24,000	28,000	32,000	36,000	40,000
Four-Lane Divided arterial	22,000	25,000	29,000	32,500	36,000
Four-Lane Undivided arterial	18,000	21,000	24,000	27,000	30,000
Two-Lane Divided Arterial	11,000	12,500	14,500	16,000	18,000
Two-Lane Undivided Arterial	9,000	10,500	12,000	13,500	15,000
Four-Lane Collector	12,000	15,000	18,000	21,000	24,000
Two-Lane Collector	6,000	7,500	9,000	10,500	12,000
Two-Lane Residential/ Collector with Frontages	1,600	3,200	4,800	6,400	8,000
Two-Lane Residential/Local	600	1,200	2,000	3,000	4,500

Notes: 1. Based on Highway Capacity Manual, Fourth Edition, Transportation Research Board, 2000.

2. All volume thresholds are approximate and assume ideal roadway characteristics. Actual thresholds for each LOS listed above may vary depending on a variety of factors including (but not limited to) roadway curvature and grade, intersection or interch

EXISTING LEVEL OF SERVICE CONDITIONS

Existing AM and PM peak hour intersection volumes were obtained from the May 2007 Circulation Study. These volumes were revised to reflect 2010/2011 conditions based on a conservative annual growth obtained from Caltrans Average Daily Traffic along the SR 20 and I-5 corridors. Caltrans data indicated that the annual growth rate will be approximately 2.15%. This growth rate was applied to all study intersection and roadway volumes.

Existing lane geometrics and updated 2010 AM and PM traffic volumes and are illustrated in Figure 1 and Figure 2 respectively. Table 2A shown below provides a summary of existing intersection LOS.

TABLE 2A
2010 EXISTING CONDITIONS: INTERSECTION LEVEL OF SERVICE

#	Intersection	Control Type[1]	Acceptable LOS	AM Peak Hour			PM Peak Hour		
				V/C[2]	LOS	Warrant Met?[3]	V/C[2]	LOS	Warrant Met?[3]
1	SR 20/E. Street	TWSC	D	0.08	A	No	0.16	A	No
2	SR 20/Old Highway 99W	TWSC	D	0.13	A	No	0.19	A	No
3	SR 20/I-5 SB Ramps	TWSC	D	0.11	A	No	0.21	A	No
4	SR 20/I-5 NB Ramps	TWSC	D	0.14	A	No	0.33	A	No
5	SR 20/Husted Rd./Freshwater Rd.	TWSC	D	0.21	A	No	0.28	A	No
6	E Street/9th Street North	TWSC	D	0.15	A	No	0.18	A	No
7	E Street/9th Street South	TWSC	D	0.20	A	No	0.17	A	No
8	E Street/7th Street	AWSC	D	0.53	A	No	0.49	A	No
9	E Street/5th Street	AWSC	D	0.55	A	No	0.69	B	No
10	E Street/I-5 SB Ramps	TWSC	D	0.26	A	No	0.34	A	No
11	E Street/I-5 NB Ramps	TWSC	D	0.49	A	No	0.33	A	No
12	E Street/Vann Street	TWSC	D	0.35	A	No	0.34	A	No
13	E Street/Husted Road	TWSC	D	0.23	A	No	0.16	A	No
14	Husted Road/Husted Road Lateral	TWSC	D	0.06	A	No	0.10	A	No
15	Husted Road/Abel Road	TWSC	D	0.06	A	No	0.05	A	No
16	Husted Road/Crawford Road	TWSC	D	0.06	A	No	0.01	A	No
17	Husted Road/Old Highway 99W	TWSC	D	0.10	A	No	0.16	A	No
18	Husted Road/I-5 NB Ramps	TWSC	D	0.05	A	No	0.05	A	No
19	Husted Road/I-5 SB Ramps	TWSC	D	0.02	A	No	0.07	A	No

Notes:
1. TWSC = Two Way Stop Control; AWSC = All Way Stop Control
2. V/C = Volume to Capacity Ratio; V/C for TWSC = Ratio of "Worst Case Movement" at Intersection
3. Warrant = Based on California MUTCD Warrant 3, performed only when operating at unacceptable LOS

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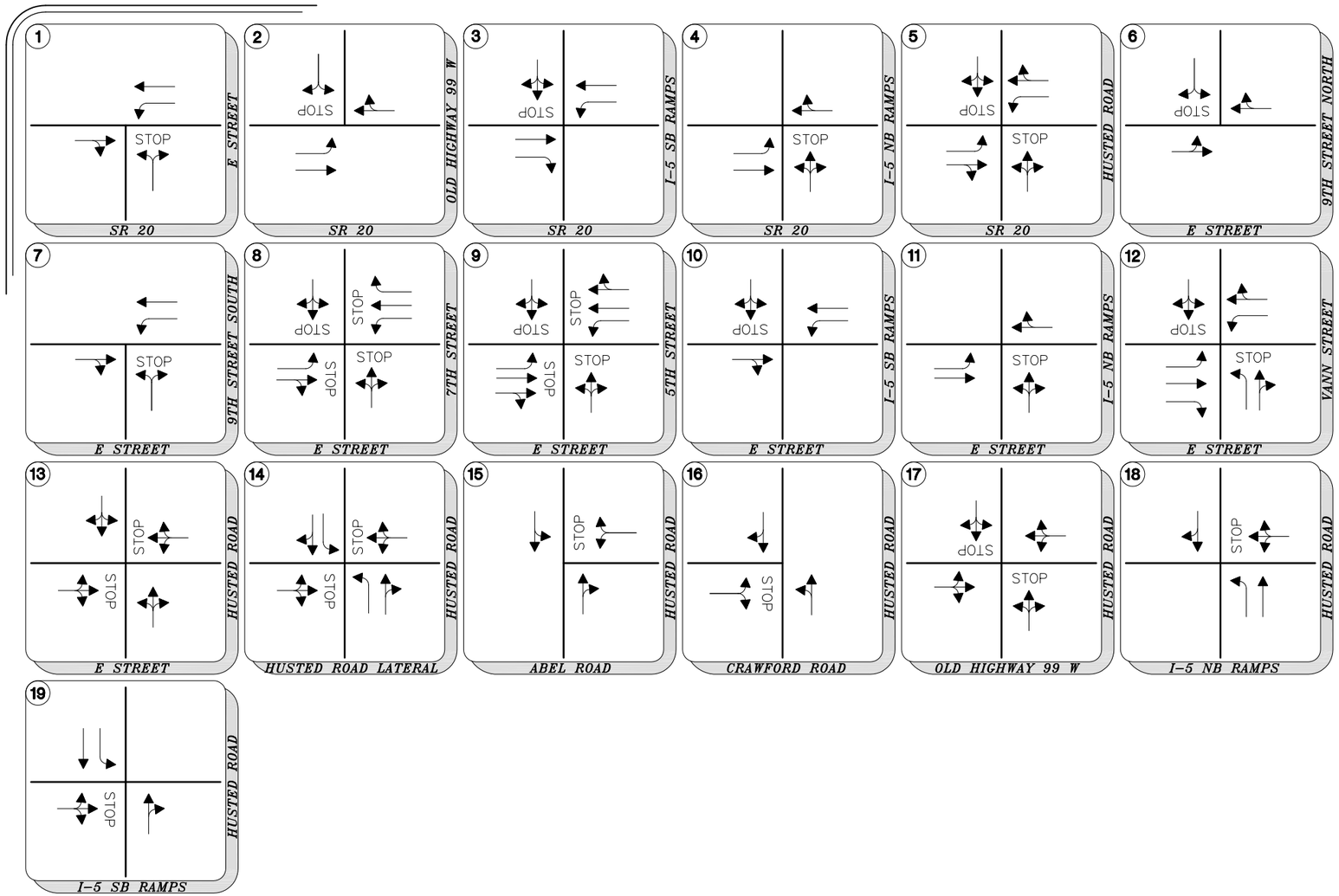

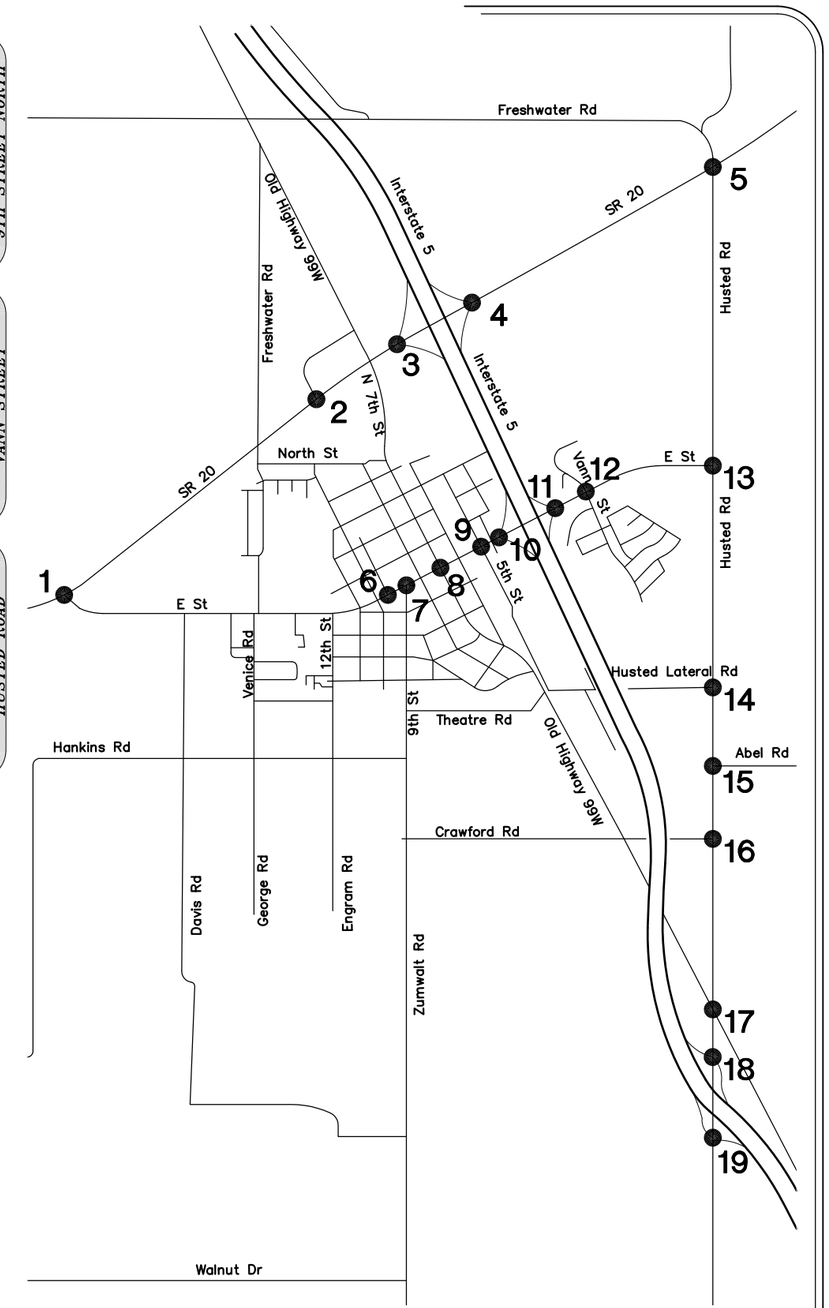

City of Williams On-Call Services

Figure 1

Existing Lane Geometrics and Control

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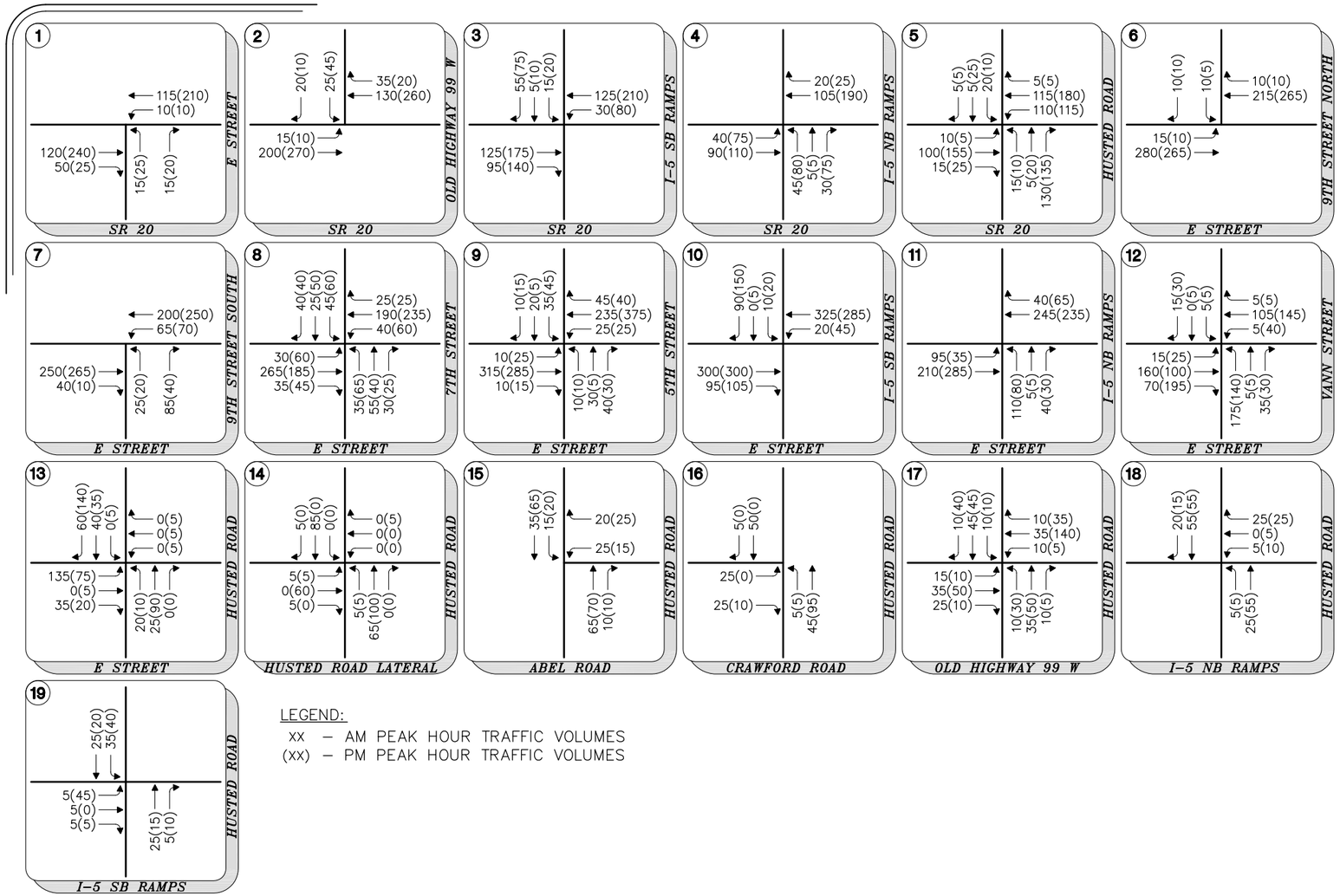
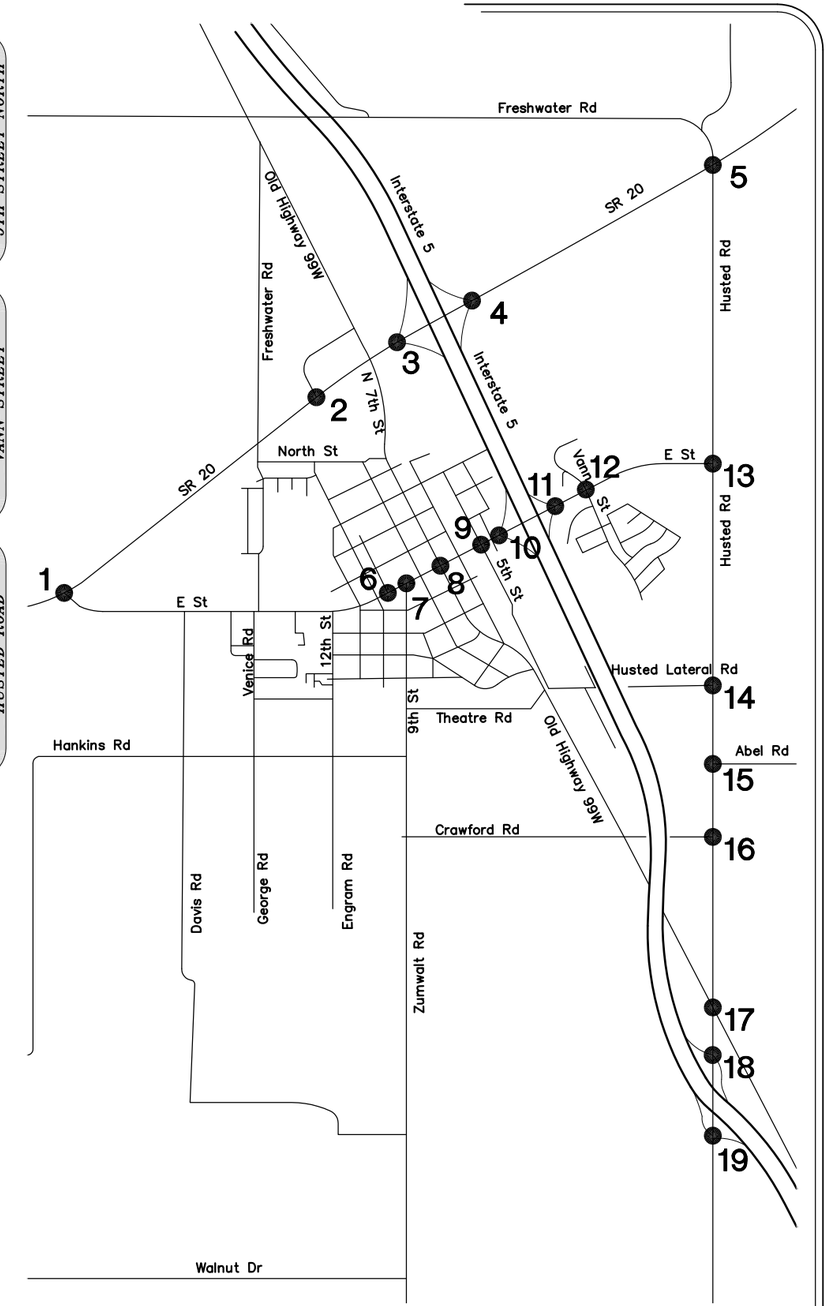


LEGEND:

xx – AM PEAK HOUR TRAFFIC VOLUMES
(xx) – PM PEAK HOUR TRAFFIC VOLUMES



City of Williams On-Call Services

Figure 2

Existing Peak Hour Intersection Volumes

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As shown in Table 2, all study intersections are projected to operate at or below acceptable level of service conditions.

Existing roadway operations were quantified using the HCM LOS thresholds (Table 1B). Roadway operations are presented in Table 2B.

TABLE 2B
2010 EXISTING CONDITIONS: ROADWAY LEVEL OF SERVICE

#	Roadway Segment	Capacity Configuration	Acceptable LOS	Average Daily Traffic (ADT)	Estimated LOS
1	Freshwater Road from Freshwater Lateral to Husted Road	Two-Lane Collector	D	700	A
2	Husted Road from Freshwater Road to E Street	Two-Lane Collector	D	3,450	C
3	Husted Road from E Street to Abel Road	Two-Lane Collector	D	1,850	C
4	Husted Road from Abel Road to I-5 SB Ramps	Two-Lane Collector	D	1,400	C
5	E Street from Husted Road to I-5 SB Ramps	Two-Lane Divided Arterial	D	4,700	C
6	E Street from I-5 SB Ramps to 5th Street	Four-Lane Divided Arterial	D	8,450	B
7	E Street from 5th Street to 9th Street South (Downtown)	Four-Lane Divided Arterial	D	7,050	A
8	E Street from 9th Street South to SR 20	Two-Lane Collector	D	3,200	A
9	SR 20 from E Street to I-5 NB Ramps	Two-Lane Undivided Arterial	D	5,300	A
10	SR 20 from I-5 NB Ramps to Husted Street	Two-Lane Undivided Arterial	D	4,000	A
11	Old Highway 99W from SR 20 to E Street	Two-Lane Collector	D	2,750	A
12	Old Highway 99W from E Street to Thearter Road	Two-Lane Collector	D	2,850	A
13	Old Highway 99W from Theatre Road to Husted Road	Two-Lane Collector	D	2,800	A
14	9th Street from Theatre Road to E Street	Two-Lane Collector	D	1,400	A
15	12th Street from Hankins to E Street	Two-Lane Collector	D	680	A

Notes:

1. Bolded entries denote roadways operating at unacceptable LOS

2. Average Daily Traffic Volumes have been estimated from peak hour counts using a 10% peak hour volume factor

As presented in Table 2B, all roadway segments were found to be operating at acceptable LOS during the PM peak hour.

GENERAL PLAN UPDATE - BUILDOUT LAND USES

Buildout uses that correspond to the City of Williams proposed General Plan Update Land Use Plan were as provided by Development Impact INC (June 1, 2011). Using these development forecasts, Omni-Means has updated AM, PM, and daily trip generation estimates based upon this new data. The land use units and trip generation results are discussed in detail within the following sections of this memorandum.

EXISTING 2010 LAND USES AND TRIP GENERATION VALUES

The existing 2010 land use quantities were as provided by Development Impact INC. Table 3A presents the trip generation associated with the 2010 land use quantities.

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TABLE 3A
EXISTING LAND USE: QUANTITIES AND TRIP GENERATION

Land Use Type	Units	Quantity	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
				Total	In	Out	Total	In	Out
Industrial	Acres	246	9,535	1,810	1,312	498	2,020	808	1,212
Office / Service	Acres	14	1,400	245	216	29	230	37	193
Residential	Dwelling Units	1,385	11,667	979	245	734	1,119	705	414
Retail	Acres	42	15,755	665	399	266	1,410	705	705
Total		*1,686*	*38,357*	*3,699*	*2,172*	*1,527*	*4,779*	*2,255*	*2,524*

Notes:
1. Daily, AM, and PM Trips determined from ITE Trip Generation (Eighth Edition)

As presented in Table 3A, the existing land uses within the City of Williams are estimated to generate 38,357 net daily trips, of which 3,699 would occur during the AM peak hour, and 4,779 would occur during the PM peak hour. These trips were calculated using the trip rate information contained within the *ITE Trip Generation Manual (8th Edition)*.

YEAR 2030 TRIP GENERATION: METHODOLOGIES AND ASSUMPTIONS

The land use growth quantities from the proposed General Plan Land Use Plan were provided in gross acres. These gross acreages have been processed into trip generation forecasts based on methodologies and trip rates found in the *ITE Trip Generation Manual (8th Edition)*. Assumptions and conversion factors used to forecast City land use growth by TAZ are summarized below.

- For the purposes of trip generation calculations, a floor-to-area ratio of 20% was assumed for retail and office/service type uses and 40% for industrial uses.
- Trip generation for industrial land uses were based on ITE 110 General Light Industrial, 140 Manufacturing, 151 Mini-Warehouse, and 152 High-Cube Warehouse acre rates.
- Trip generation for retail land uses were converted from acres to square feet with a 43,560 conversion ratio and calculated using the appropriate ITE Category.
- Trip generation for office and service land uses were converted from acres to square feet with a 43,560 conversion ratio and calculated using the appropriate ITE Category.
- Trip generation for residential land uses were converted from acres to dwelling units based on Table 3.2 LU Acreages & Population provided by the City. The final trip generation per dwelling unit type was calculated using the appropriate ITE Category.

Table 3B presents the trip generation associated with this additional development.

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TABLE 3B
GP BUILDOUT GROWTH: LAND USE QUANTITIES AND TRIP GENERATION

Land Use Type	Units	Quantity	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
				Total	In	Out	Total	In	Out
Industrial	Acres	378	12,130	805	584	221	685	274	411
Office / Service	Acres	319	30,685	4,410	3,881	529	4,250	680	3,570
Residential	Dwelling Units	1,255	12,025	944	236	708	1,268	799	469
Retail	Acres	94	35,080	1,340	804	536	3,030	1,515	1,515
Total		*2,045*	*89,920*	*7,499*	*5,504*	*1,995*	*9,233*	*3,268*	*5,965*

Notes:
1. Daily, AM, and PM Trips determined from ITE Trip Generation (Eighth Edition)

As presented in Table 3B, the additional development per the June 1, 2011 Land Use Map is expected to generate 89,920 net daily trips, of which 7,499 would occur during the AM peak hour, and 9,233 would occur during the PM peak hour.

Table 3C presents the trip generation for the buildout (Year 2030) scenario (Existing + growth quantities from the proposed General Plan Land Use Plan).

TABLE 3C
CITY OF WILLIAMS YEAR 2030 LAND USE SUMMARY

Land Use Type	Units	Quantity	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
				Total	In	Out	Total	In	Out
Industrial	Acres	623	21,665	2,615	1,896	719	2,705	1,082	1,623
Office / Service	Acres	333	32,085	4,655	4,096	559	4,480	717	3,763
Residential	Dwelling Units	2,640	23,692	1,923	481	1,442	2,387	1,504	883
Retail	Acres	136	50,835	2,005	1,203	802	4,440	2,220	2,220
Total		*3,731*	*128,277*	*11,198*	*7,676*	*3,522*	*14,012*	*5,522*	*8,489*

Notes:
1. Daily, AM, and PM Trips determined from ITE Trip Generation (Eighth Edition)

From Table 3C, the Year 2030 buildout scenario is expected to generate 128,277 net daily trip ends, of which 11,198 trips would occur during the AM peak hour, and 14,012 trips would occur during the PM peak hour. Trip ends within and external to the City are matched based upon trip production and attraction characteristics. It is understood that the City wants to take advantage of its regionally significant location at the crossroads of Interstate 5 and Highway 20 and have planned large areas for both commercial and industrial/warehousing uses. Thus, within the City west of I-5, internal travel is well matched between residential and non-residential uses. The planned areas of the City east of I-5 with its large parcels planned for commercial and industrial/warehousing uses has a greater orientation for regional travel to support regional needs The majority of vehicular trips within the City Planning Area would be satisfied internally. Full development of the commercial, industrial and office land uses would result in a matching of trips outside the Planning Area.

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GENERAL PLAN BUILDOUT LEVEL OF SERVICE CONDITIONS WITHOUT IMPROVEMENTS

Omni-Means has updated the City travel demand model based upon the proposed General Plan Land Use Plan. Peak hour intersection turning movement volume projections were obtained from the updated model. Figure 3 illustrates General Plan buildout peak hour traffic volumes while Table 4A summarizes intersection LOS associated with Year 2030 volumes with existing lane geometrics and control. Table 4B presents the roadway intersection LOS results.

TABLE 4A
GENERAL PLAN BUILDOUT CONDITIONS: INTERSECTION LEVEL OF SERVICE

#	Intersection	Control Type[1]	Acceptable LOS	AM Peak Hour			PM Peak Hour		
				V/C[2]	LOS	Warrant Met?[3]	V/C[2]	LOS	Warrant Met?[3]
1	SR 20/E. Street	TWSC	D	0.21	A	No	0.68	B	No
2	**SR 20/Old Highway 99W**	**TWSC**	**D**	**1.52**	**F**	**Yes**	**OVR**	**F**	**Yes**
3	**SR 20/I-5 SB Ramps**	**TWSC**	**D**	**OVR**	**F**	**Yes**	**OVR**	**F**	**Yes**
4	**SR 20/I-5 NB Ramps**	**TWSC**	**D**	**OVR**	**F**	**Yes**	**OVR**	**F**	**Yes**
5	**SR 20/Husted Rd./Freshwater Rd.**	**TWSC**	**D**	**OVR**	**F**	**Yes**	**OVR**	**F**	**Yes**
6	E Street/9th Street North	TWSC	D	0.23	A	No	0.38	A	No
7	E Street/9th Street South	TWSC	D	0.35	A	No	0.36	A	No
8	**E Street/7th Street**	**AWSC**	**D**	**1.43**	**F**	**Yes**	**1.87**	**F**	**Yes**
9	**E Street/5th Street**	**AWSC**	**D**	**1.39**	**F**	**Yes**	**1.71**	**F**	**Yes**
10	**E Street/I-5 SB Ramps**	**TWSC**	**D**	**OVR**	**F**	**Yes**	**OVR**	**F**	**Yes**
11	**E Street/I-5 NB Ramps**	**TWSC**	**D**	**OVR**	**F**	**Yes**	**OVR**	**F**	**Yes**
12	**E Street/Vann Street**	**TWSC**	**D**	**OVR**	**F**	**Yes**	**OVR**	**F**	**Yes**
13	**E Street/Husted Road**	**TWSC**	**D**	**OVR**	**F**	**Yes**	**OVR**	**F**	**Yes**
14	**Husted Road/Husted Rd Lateral**	**TWSC**	**D**	**1.95**	**F**	**Yes**	**OVR**	**F**	**Yes**
15	**Husted Road/Abel Road**	**TWSC**	**D**	0.90	D	No	**OVR**	**F**	**Yes**
16	**Husted Road/Crawford Road**	**TWSC**	**D**	0.60	A	No	**OVR**	**F**	**Yes**
17	**Husted Road/Old Highway 99W**	**TWSC**	**D**	**OVR**	**F**	**Yes**	**OVR**	**F**	**Yes**
18	Husted Road/I-5 NB Ramps	TWSC	D	0.77	C	No	0.73	C	No
19	**Husted Road/I-5 SB Ramps**	**TWSC**	**D**	0.34	A	No	**OVR**	**F**	**Yes**
20	**E Street/Marguerite Drive**	**TWSC**	**D**	**1.94**	**F**	**Yes**	**1.14**	**F**	**Yes**
21	**SR 20/Marguerite Drive**	**TWSC**	**D**	0.43	A	No	**1.74**	**F**	**Yes**

Notes:
1. TWSC = Two Way Stop Control; AWSC = All Way Stop Control
2. V/C = Volume to Capacity Ratio; V/C for TWSC = Ratio of "Worst Case Movement" at Intersection; OVR = V/C exceeds 2.0
3. Warrant = Based on California MUTCD Warrant 3, performed only when operating at unacceptable LOS

As presented in Table 4A, seventeen (17) of the twenty one (21) analyzed intersections were identified as deficient under *Buildout Conditions*. Mitigation measures that address these LOS deficiencies are discussed in a subsequent section of this report.

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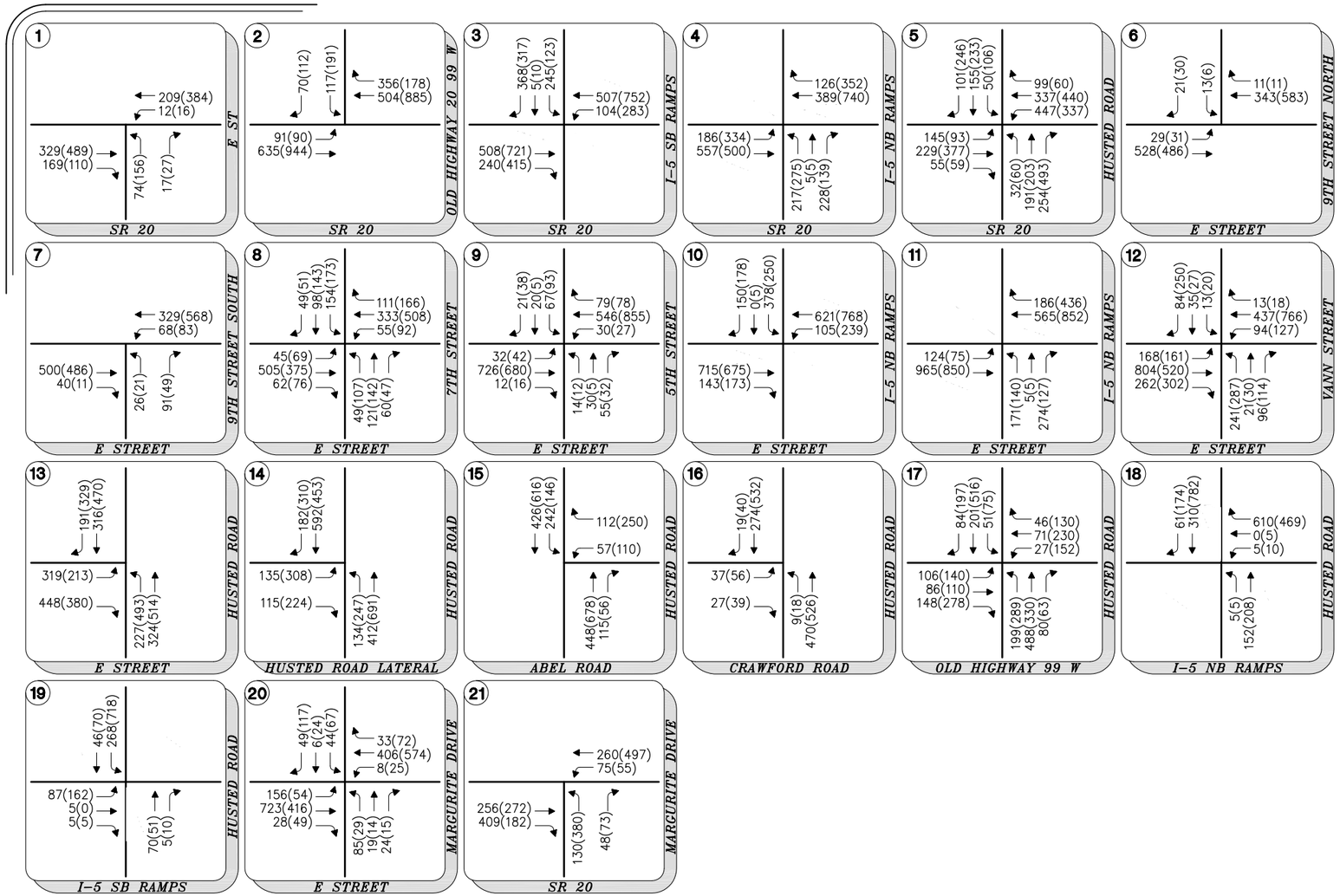

LEGEND:

XX – AM PEAK HOUR TRAFFIC VOLUMES

(XX) – PM PEAK HOUR TRAFFIC VOLUMES

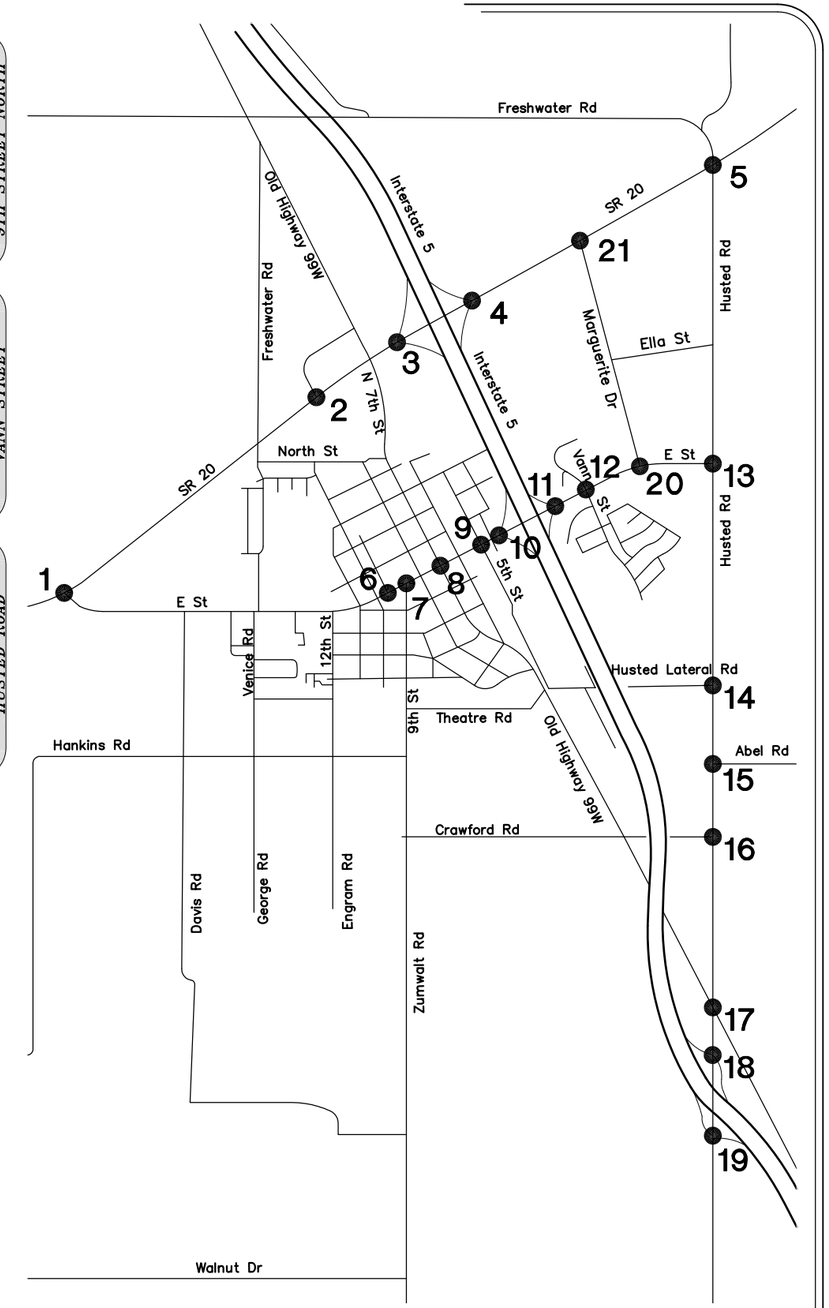

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Figure 3

General Plan Buildout Peak Hour Intersection Volumes

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TABLE 4B
GENERAL PLAN BUILDOUT CONDITIONS: ROADWAY LEVEL OF SERVICE

#	Roadway Segment	Capacity Configuration	Target LOS	Average Daily Traffic (ADT)	LOS
1	Freshwater Road from Freshwater Lateral to Husted Road	Two-Lane Collector	D	940	A
2	**Husted Road from Freshwater Road to E Street**	**Two-Lane Collector**	**D**	**15,550**	**F**
3	**Husted Road from E Street to Abel Road**	**Two-Lane Collector**	**D**	**17,780**	**F**
4	**Husted Road from Abel Road to I-5 SB Ramps**	**Two-Lane Collector**	**D**	**15,220**	**F**
5	**E Street from Husted Road to I-5 SB Ramps**	**Two-Lane Divided Arterial**	**D**	**17,470**	**E**
6	E Street from I-5 SB Ramps to 5th Street	Four-Lane Divided Arterial	D	18,080	A
7	E Street from 5th Street to 9th Street South	Four-Lane Divided Arterial	D	14,400	A
8	E Street from 9th Street South to SR 20	Two-Lane Collector	D	7,820	C
9	**SR 20 from E Street to I-5 NB Ramps**	**Two-Lane Undivided Arterial**	**D**	**15,310**	**F**
10	**SR 20 from I-5 NB Ramps to Husted Street**	**Two-Lane Undivided Arterial**	**D**	**13,850**	**E**
11	Old Highway 99W from SR 20 to E Street	Two-Lane Collector	D	7,440	B
12	Old Highway 99W from E Street to Thearter Road	Two-Lane Collector	D	6,070	B
13	**Old Highway 99W from Theatre Road to Husted Road**	**Two-Lane Collector**	**D**	**12,440**	**F**
14	9th Street from Theatre Road to E Street	Two-Lane Collector	D	1,640	A
15	12th Street from Hankins to E Street	Two-Lane Collector	D	710	A

Notes:

1. Bolded entries denote roadways operating at unacceptable LOS

2. Average Daily Traffic Volumes have been estimated from peak hour counts using a 10% peak hour volume factor

As presented in Table 4B, seven (7) of the fifteen (15) analyzed roadway segments were identified as deficient under *Buildout Conditions*.

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GENERAL PLAN BUILDOUT TRANSPORTATION IMPROVEMENT NEEDS

INTERSECTION BUILDOUT DEFICIENCY MITIGATIONS

Intersection deficiencies identified in Table 4A can be mitigated by installing the improvements identified in red in Figure 4. Roadway circulation system outside of the City of Williams were not studied within this memorandum. The proposed roadway circulation system identified within Figure 4 would accommodate the proposed General Plan buildout uses identified within Table 3B. Where new traffic signals are proposed, alternative roundabout improvements that would provide acceptable operations should be considered. Ensuing level of service operations following these improvements are provided in Table 5A.

TABLE 5A
MITIGATED GENERAL PLAN BUILDOUT CONDITIONS: INTERSECTION LEVEL OF SERVICE

#	Intersection	Control Type[1]	Acceptable LOS	AM Peak Hour			PM Peak Hour		
				V/C[2]	LOS	Warrant Met?[3]	V/C[2]	LOS	Warrant Met?[3]
1	SR 20/E. Street	TWSC	D	0.21	A	-	0.68	B	-
2	SR 20/Old Highway 99W	Signal	D	0.60	A	-	0.74	C	-
3	SR 20/I-5 SB Ramps	RDBT	D	22.2	C	-	16.4	C	-
4	SR 20/I-5 NB Ramps	RDBT	D	12.4	B	-	16.1	C	-
5	SR 20/Husted Rd./Freshwater Rd.	Signal	D	0.71	C	-	0.79	C	-
6	E Street/9th Street North	TWSC	D	0.23	A	-	0.38	A	-
7	E Street/9th Street South	TWSC	D	0.35	A	-	0.36	A	-
8	E Street/7th Street	Signal	D	0.78	C	-	0.68	B	-
9	E Street/5th Street	Signal	D	0.53	A	-	0.51	A	-
10	E Street/I-5 SB Ramps	Signal	D	0.77	C	-	0.80	C	-
11	E Street/I-5 NB Ramps	Signal	D	0.69	B	-	0.70	B	-
12	E Street/Vann Street	Signal	D	0.68	B	-	0.76	C	-
13	E Street/Husted Road	Signal	D	0.56	A	-	0.69	B	-
14	Husted Road/Husted Rd Lateral	Signal	D	0.57	A	-	0.67	B	-
15	Husted Road/Abel Road	Signal	D	0.50	A	-	0.58	A	-
16	Husted Road/Crawford Road	Signal	D	0.52	A	-	0.50	A	-
17	Husted Road/Old Highway 99W	Signal	D	0.49	A	-	0.80	C	-
18	Husted Road/I-5 NB Ramps	TWSC	D	0.77	C	-	0.74	C	-
19	Husted Road/I-5 SB Ramps	Signal	D	0.40	A	-	0.76	C	-
20	E Street/Marguerite Drive	Signal	D	0.46	A	-	0.48	A	-
21	SR 20/Marguerite Drive	Signal	D	0.39	A	-	0.53	A	-

Notes:
1. TWSC = Two Way Stop Control; AWSC = All Way Stop Control
2. V/C = Volume to Capacity Ratio; V/C for TWSC = Ratio of "Worst Case Movement" at Intersection; OVR = V/C exceeds 2.0
3. Warrant = Based on California MUTCD Warrant 3, performed only when operating at unacceptable LOS

SR 20 / Old Highway 99W

This intersection is expected to operate at unacceptable LOS F during peak hour buildout conditions. The following improvements are recommended:

- Signalize the intersection
- Eastbound Approach: Two through lanes and one left turn lane
- Westbound Approach: One through lane and one shared through-right lane

SR 20 / I-5 SB Ramps

This intersection is expected to operate at unacceptable LOS F during peak hour buildout conditions. The following improvements are recommended:

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- Construct a multilane roundabout or
- Traffic Signal

SR 20 / I-5 NB Ramps
This intersection is expected to operate at unacceptable LOS F during peak hour buildout conditions. The following improvements are recommended:

- Construct a multilane roundabout or
- Traffic Signal

SR 20 / Husted Road
This intersection is expected to operate at unacceptable LOS F during peak hour buildout conditions. The following improvements are recommended:

- Signalize the intersection
- Northbound Approach: One left, one through, and one right turn lane
- Southbound Approach: One left, one through, and one right turn lane
- Eastbound Approach: One left, one through, and one right turn lane
- Westbound Approach: One left, one through, and one right turn lane

E Street / 7th Street
This intersection is expected to operate at unacceptable LOS F during peak hour buildout conditions. The following improvements are recommended:

- Signalize the intersection
- Northbound Approach: One left turn lane and one shared through-right lane
- Southbound Approach: One left turn lane and one shared through-right lane

E Street / 5th Street
This intersection is expected to operate at unacceptable LOS F during peak hour buildout conditions. The following improvements are recommended:

- Signalize the intersection

E Street / I-5 SB Ramps
This intersection is expected to operate at unacceptable LOS F during peak hour buildout conditions. The following improvements are recommended:

- Signalize the intersection
- Eastbound Approach: One through lane and one shared through-right lane
- Westbound Approach: Two through lanes and one left turn lane

E Street / I-5 NB Ramps
This intersection is expected to operate at unacceptable LOS F during peak hour buildout conditions. The following improvements are recommended:

- Signalize the intersection
- Eastbound Approach: Two through lanes and one left turn lane

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- Westbound Approach: One through lane and one shared through-right lane

E Street / Vann Street
This intersection is expected to operate at unacceptable LOS F during peak hour buildout conditions. The following improvements are recommended:

- Signalize the intersection
- Southbound Approach: One right turn lane and one shared through-left lane
- Eastbound Approach: One left turn lane, two through lanes, and one right turn lane
- Westbound Approach: One left turn lane, one through lane, and one shared through-right lane

E Street Husted Road
This intersection is expected to operate at unacceptable LOS F during peak hour buildout conditions. The following improvements are recommended:

- Signalize the intersection
- Northbound Approach: One left turn lane, two through lanes, and one right turn lane
- Southbound Approach: One left turn lane, one through lane, and one shared through-right lane
- Eastbound Approach: One left turn lane and one shared through-right lane

Husted Road / Husted Road Lateral
This intersection is expected to operate at unacceptable LOS F during peak hour buildout conditions. The following improvements are recommended:

- Signalize the intersection
- Northbound Approach: One left, one through, and one shared through-right lane
- Southbound Approach: One left, one through, and one shared through-right lane
- Eastbound Approach: One left turn lane and one shared through-right lane
- Westbound Approach: One left turn lane and one shared through-right lane

Husted Road / Abel Road
This intersection is expected to operate at unacceptable LOS F during peak hour buildout conditions. The following improvements are recommended:

- Signalize the intersection
- Northbound Approach: Two through lanes and one left turn lane
- Southbound Approach: One through lane and one shared through-right lane

Husted Road / Crawford Road
This intersection is expected to operate at unacceptable LOS F during peak hour buildout conditions. The following improvements are recommended:

- Signalize the intersection
- Northbound Approach: One left, one through, and one shared through-right lane
- Southbound Approach: One left, one through, and one shared through-right lane
- Eastbound Approach: One left turn lane and one shared through-right lane
- Westbound Approach: One left turn lane and one shared through-right lane

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Husted Road / Old Highway 99W
This intersection is expected to operate at unacceptable LOS F during peak hour buildout conditions. The following improvements are recommended:

- Signalize the intersection
- Northbound Approach: One left, one through, and one shared through-right lane
- Southbound Approach: One left, one through, and one shared through-right lane
- Eastbound Approach: One left turn lane and one shared through-right lane
- Westbound Approach: One left turn lane and one shared through-right lane

Husted road / I-5 SB Ramps
This intersection is expected to operate at unacceptable LOS F during peak hour buildout conditions. The following improvements are recommended:

- Signalize the intersection

E Street / Marguerite Drive
This intersection is expected to operate at unacceptable LOS F during peak hour buildout conditions. The following improvements are recommended:

- Signalize the intersection
- Northbound Approach: One left and one shared through-right lane
- Southbound Approach: One left and one shared through-right lane
- Eastbound Approach: One left turn lane, one through lane, and one shared through-right lane
- Westbound Approach: One left turn lane, one through lane, and one shared through-right lane

SR 20 / Marguerite Drive
This intersection is expected to operate at unacceptable LOS F during peak hour buildout conditions. The following improvements are recommended:

- Signalize the intersection
- Northbound Approach: One left and one right turn lane
- Eastbound Approach: One through lane and one right turn lane
- Westbound Approach: One through lane and one left turn lane

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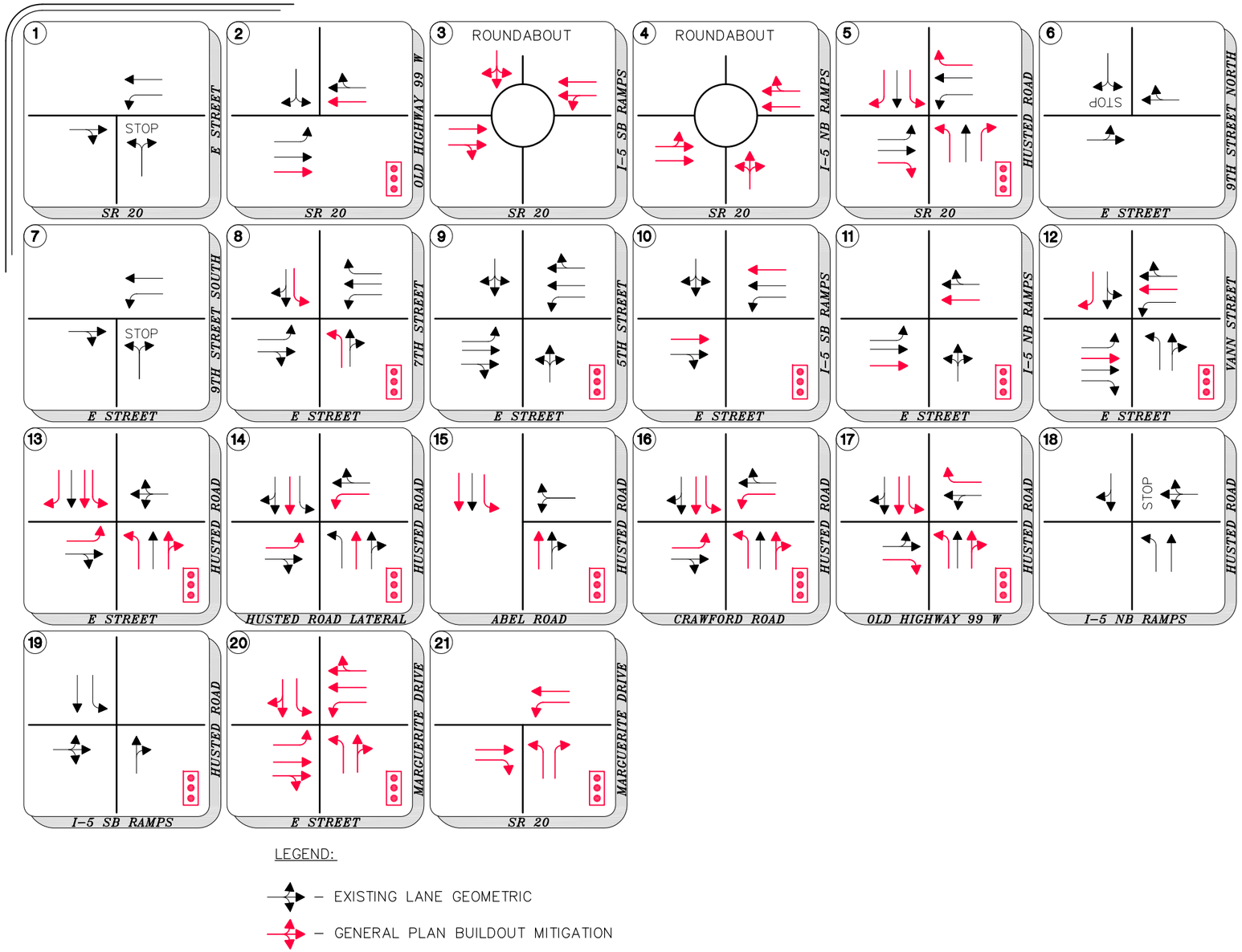

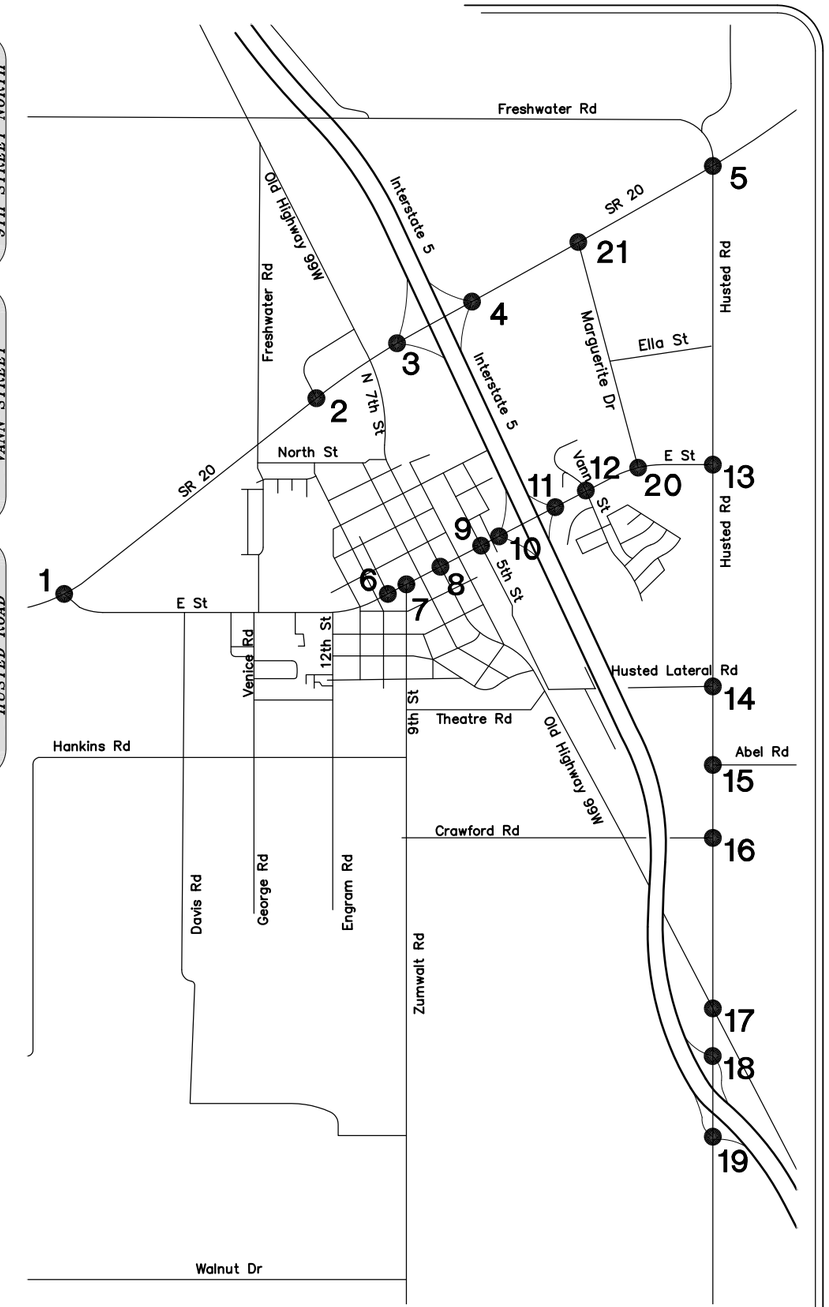

City of Williams On-Call Services

Figure 4

Mitigated General Plan Buildout Lane Geometrics and Control

K:\PRJ\1163\T1163\T1163TG002.dwg 8/11/2011 2:11:22 PM PDT

Job No: 25-1731-02

ROADWAY BUILDOUT DEFICIENCY MITIGATIONS

Roadway deficiencies identified in Table 4B can be mitigated with the following improvements.

E Street between Husted Road and I-5 NB Ramps

From a peak hour segment capacity standpoint, between Husted Road to I-5 NB Ramps, the roadway requires widening from a two lane to a four lane arterial.

SR 20 from E Street to Husted Road

From a peak hour segment capacity standpoint, between Husted Road to E Street, the roadway requires widening from a two lane major highway to a four lane expressway.

Husted Road from Freshwater Road to I-5 SB Ramps

From a peak hour segment capacity standpoint, between Freshwater Road to I-5 SB Ramps, the roadway requires widening from a two lane collector to a four lane arterial.

Old Highway 99W from Theater Road to Husted Road

From a peak hour segment capacity standpoint, between Theater Road and Husted Road, the roadway requires widening from a two lane collector to a two lane arterial.

The ensuing level of service operations following these roadway improvements are provided in Table 5B.

TABLE 5B
MITIGATED GENERAL PLAN BUILDOUT CONDITIONS: ROADWAY LEVEL OF SERVICE

#	Roadway Segment	Capacity Configuration	Target LOS	Average Daily Traffic (ADT)	LOS
1	Freshwater Road from Freshwater Lateral to Husted Road	Two-Lane Collector	D	940	A
2	Husted Road from Freshwater Road to E Street	Four-Lane Undivided Arterial	D	15,550	A
3	Husted Road from E Street to Abel Road	Four-Lane Undivided Arterial	D	17,780	A
4	Husted Road from Abel Road to I-5 SB Ramps	Four-Lane Undivided Arterial	D	15,220	A
5	E Street from Husted Road to I-5 SB Ramps	Four-Lane Divided Arterial	D	17,470	A
6	E Street from I-5 SB Ramps to 5th Street	Four-Lane Divided Arterial	D	18,080	A
7	E Street from 5th Street to 9th Street South	Four-Lane Divided Arterial	D	14,400	A
8	E Street from 9th Street South to SR 20	Two-Lane Collector	D	7,820	C
9	SR 20 from E Street to I-5 NB Ramps	Four-Lane Expressway	D	15,310	A
10	SR 20 from I-5 NB Ramps to Husted Street	Four-Lane Expressway	D	13,850	A
11	Old Highway 99W from SR 20 to E Street	Two-Lane Collector	D	7,440	B
12	Old Highway 99W from E Street to Thearter Road	Two-Lane Collector	D	6,070	B
13	Old Highway 99W from Theatre Road to Husted Road	Two-Lane Undivided Arterial	D	12,440	D
14	9th Street from Theatre Road to E Street	Two-Lane Collector	D	1,640	A
15	12th Street from Hankins to E Street	Two-Lane Collector	D	710	A

Notes:

1. Bolded entries denote roadways operating at unacceptable LOS

2. Average Daily Traffic Volumes have been estimated from peak hour counts using a 10% peak hour volume factor

CICRULATION MAP AND ROADWAY CLASSIFICATION SYSTEM

The proposed circulation map, as presented in Figure 5, reflects the circulation improvements required to achieve a mitigated circulation plan.

Additionally, the City of Williams Transportation and Circulation Element does not have cross-sections or construction standards for the roadway facilities. It is recommended that the following roadway classification and cross-sections be adopted by City of Williams. Figure 6 provides a schematic of the roadway functional classifications.

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Freeway – Characterized by high speeds and limited controlled access, freeways primarily serve regional and long distance travel. I-5 is the only freeway through the City of Williams.

Expressway – A highway with restricted driveway access, but with a mix of grade-separated interchanges and at-grade intersections. SR 20 is the only expressway in Williams.

Major Arterial – These streets are generally higher speed, higher capacity transportation corridors that link the community with highways and freeways.

Minor Arterial – Medium speed and medium capacity, these roads are principally for travel between larger land uses within the community.

Major Collector **–** Facilities that may be upgraded to an arterial in the future and usually limit on-street parking to maintain smooth flow.

Collector Street – Relatively low speed and low capacity, collector streets are generally two lanes connecting neighborhoods with other neighborhoods as well as with the arterial system.

Local Street – Local Streets are low speed, low capacity street that provide direct access to adjacent land uses and are typically meant only for local, as opposed to through traffic.

This classification system is consistent with national standards, and provides a good framework for the planning of a citywide, or area wide transportation systems. The Freeways and Expressways fall under the jurisdiction of Caltrans and hence their construction standards are dictated by the policies and standards of Caltrans.

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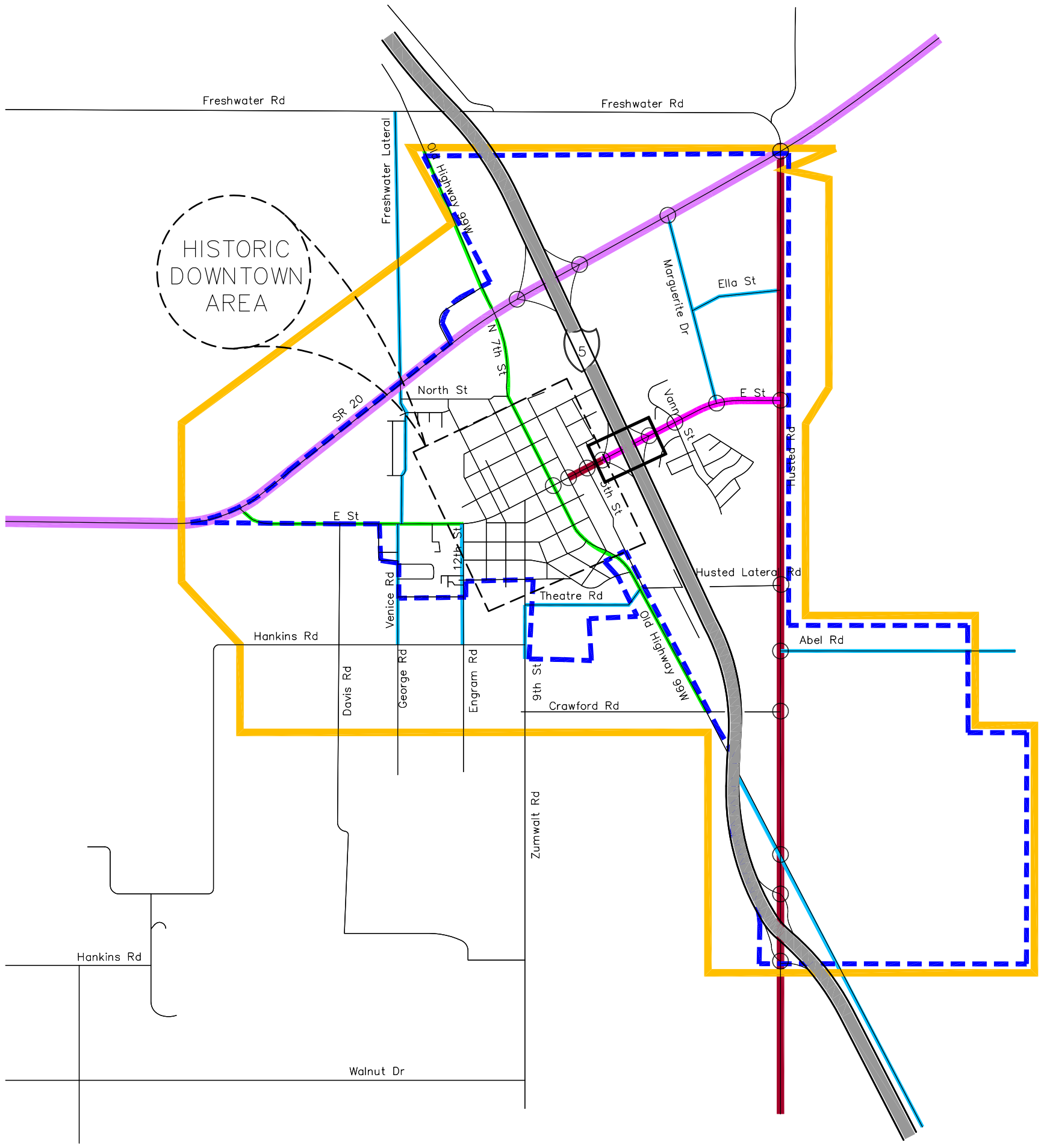


LEGEND

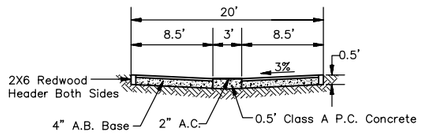
- FREEWAY
- EXPRESSWAY
- MAJOR ARTERIAL
- MINOR ARTERIAL
- PROPOSED FUTURE
- MAJOR COLLECTOR
- COLLECTOR
- LOCAL (RESIDENTIAL)
- CITY LIMIT
- SPHERE OF INFLUENCE
- MAJOR INTERCHANGE MODIFICATION
- INTERSECTION IMPROVEMENT

Williams General Plan Update

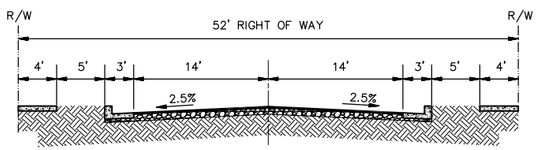
Figure 5

Circulation Map

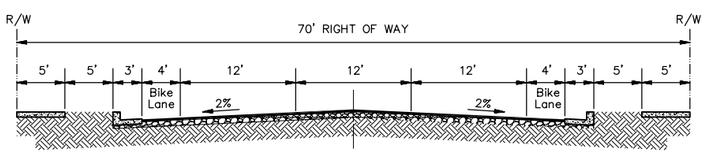
File: T1163TG004.DWG(11AUG11) 25-1731-02



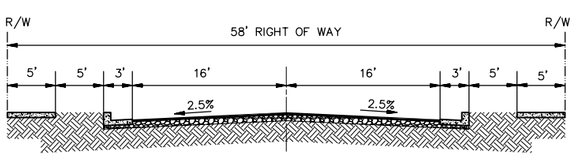
Alley Detail



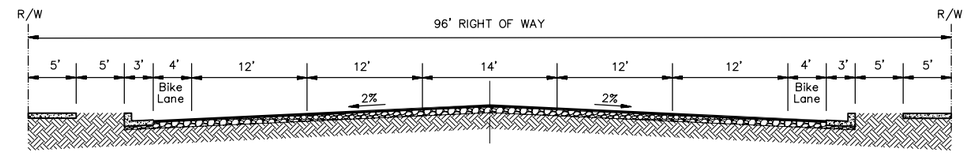
Local Street (Residential)



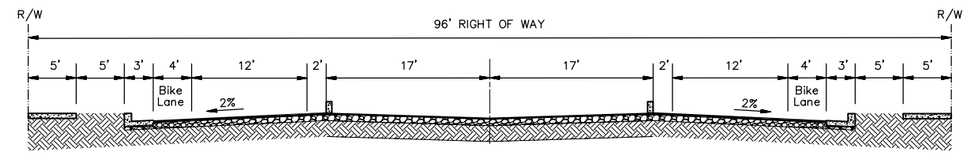
Major Collector (Industrial Street)



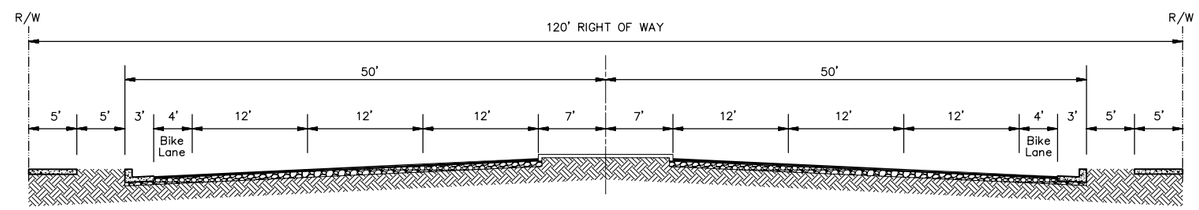
Minor Collector



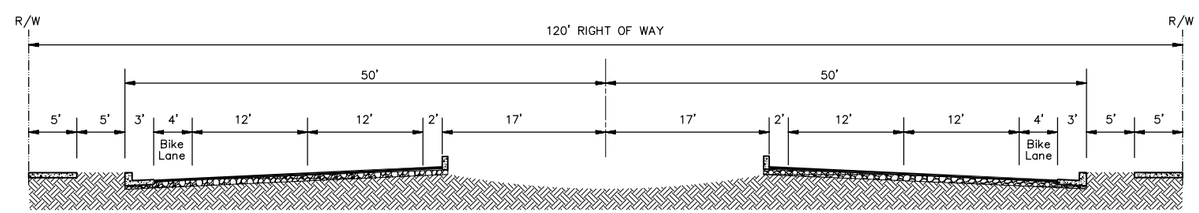
Minor Arterial (Full Width)



Minor Arterial (Partial Width)



Major Arterial (Full Width)



Major Arterial (Partial Width)

City of Williams General Plan Update

Figure 6

Roadway Functional Classifications

File: T1125TG30.dwg (24sep07) 25-1731-01

Appendix B Air Quality Analysis Data

Air Permitting Specialists

TECHNICAL MEMORANDUM

To: Paula Danulek
Development Impact, Inc.

Date: September 6, 2011

From: Ray Kapahi
Air Permitting Specialists

Project: City of Williams
Air Quality Analysis

Subject: Air Quality Impact Analysis Associated with General Plan Update
City of Williams

INTRODUCTION

This Technical Memorandum supplements a recent General Plan update for the City of Williams completed by Development Impact, Inc. The scope of this Technical Memorandum is to present an air quality impact analysis associated with the General Plan Update. Specifically, the analysis focused on air quality impacts associated with increased vehicular traffic. The analysis also compared projected increase in emissions with prevailing thresholds of significance.

Air Permitting Specialists was provided with existing and future (2030) traffic volumes[1] associated with the General Plan Update. These data along with an estimate of average trip length were used to estimate the daily and annual emission rates of the following air pollutants:

- Fine particulate Matter (PM-10)
- Oxides of Nitrogen (NOx)
- Reactive Organic Gases (ROG)
- Carbon Monoxide (CO)
- Carbon Dioxide (CO_2) (Greenhouse Gas)

[1] Omni Means (2011) Technical Memorandum 2010 Circulation Study, June 24, 2011.

We analyzed current (baseline) and future (General Plan Buildout) daily trips. Daily and annual emissions associated with these to scenarios were quantified. The increase in emissions equals future minus current emissions. These emissions are discussed below.

ESTIMATE OF BASELINE (CURRENT) EMISSIONS

Emissions of various air pollutants associated with current traffic volumes were estimated using the EMFAC model. Current traffic volumes were estimated to be 37,022 vehicles per day (Table 3A, Omni Means 2010 Circulation Update). The EMFAC model was run for Colusa County and provides current vehicular exhaust emissions. Average emissions for the period 2005 to 2010 were used in the analysis. Emissions were estimated assuming an average annual temperature of 70 F and a relative humidity of 50%. Since tailpipe exhaust emissions vary by speed, EMFAC was run for speeds between 25 to 55 mph. A copy of the EMFAC model output is attached.

Current daily and annual emissions are summarized in Tables 1 and 2. Daily emissions vary between 8.4 to 351.1 pounds per day depending on the air pollutant and vehicle speed. Annual emissions vary between 1.5 to 64.1 tons/year depending on the air pollutant and vehicle speed. Annual GHG emissions vary between 24,469 to 30,214 tons/year depending on vehicle speed.

ESTIMATE OF FUTURE EMISSIONS

Future daily and annual emissions are based on 86,025 vehicles per day (Table 3B, Omni Means 2010 Circulation Study). Future emissions are summarized in Tables 3 and 4. Daily emissions vary between 9.9 to 386.1 pounds per day depending on the air pollutant and vehicle speed. Annual emissions vary between 1.8 to 70.5 tons/year depending on the air pollutant and vehicle speed. Annual GHG emissions vary between 61,121 to 75,386 tons/year depending on vehicle speed.

NET INCREASE IN EMISSIONS

The net increase in daily and annual emissions is summarized below.

	Increase in Emissions at 30 mph		*Significace Threshold*
Pollutant	*(lbs/day)*	*(tons/yr)*	*(tons/yr)*
ROG	15.9	2.9	250
CO	160.2	29.2	No Threshold
NOx	-58.6	-10.7	250
PM-10	1.6	0.3	250
CO2/GHG	227,992	41,609	No Threshold

Note that there will be a net reduction in NOx emissions. This is because while future traffic volumes will increase by 232% (from 37,022 to 86,025 vehicles/day), future NOx emissions will decline by 351% (1.568 to 0.551 grams/mile). The decline in NOx emissions is due to more stringent tailpipe emission standards in the future (2010 to 2020) from autos and trucks.

SIGNIFICANCE OF IMPACTS

Currently, neither Colusa County nor Colusa County Air Pollution Control District have established daily or annual thresholds of significance. These thresholds are in terms of daily or annual emission rates. However, other Districts, such as Sacramento and San Francisco and the Central Valley have established annual thresholds for air pollutants and greenhouse gases.

Typically, a project is deemed to have a significant air quality impact if the net increase (future-baseline emissions) annual NOx, ROG or PM-10 emissions exceed between 5 to 10 tons/year. GHG emissions thresholds are normally only for stationary sources however, the Bay Area Air Quality Management District adopted a threshold for land-use projects. They adopted a threshold of 4.6 metric tons per year per resident or employee.

On this basis, the proposed General Plan update would not lead to significant air quality impact since annual emissions of ROG, NOx and PM-10 are below the thresholds of significance. GHG emissions are likely to exceed the threshold of significance.

Table 1
Estimate of Current Daily Emissions
City of Williams General Plan Update

Speed	ROG		CO		NOx		PM-10		CO2/GHG	
(mph)	*g/mile*	*lbs/day*	*g/mile*	*lbs/day*	*g/mile*	*lbs/day*	*g/mile*	*lbs/day*	*g/mile*	*lbs/day*
25	0.125	25.5	1.041	212.2	1.722	351.1	0.042	8.6	812.093	165,558
30	0.11	22.4	0.98	199.8	1.568	319.7	0.041	8.4	740.549	150,972
40	0.09	18.3	0.932	190.0	1.357	276.6	0.044	9.0	659.291	134,407
55	0.088	17.9	1.094	223.0	1.286	262.2	0.062	12.6	657.674	134,077

Average Daily Trips	37,022	trips/day	*Ref: 2010 Circulation Update Study June 24, 2011*
			Omni Means Traffic Engineers, Roseville, CA 95678
Average Trip Length	2.5	miles	
Increase in VMT	92,555	miles/day	
	33,782,575	miles/year	

Table 2
Estimate of Current Annual Emissions
City of Williams General Plan Update

Speed	ROG		CO		NOx		PM-10		CO2/GHG	
(mph)	*g/mile*	*tons/yr*	*g/mile*	*tons/yr*	*g/mile*	*tons/yr*	*g/mile*	*tons/yr*	*g/mile*	*tons/yr*
25	0.125	4.7	1.041	38.7	1.722	64.1	0.042	1.6	812.093	30,214
30	0.11	4.1	0.98	36.5	1.568	58.3	0.041	1.5	740.549	27,552
40	0.09	3.3	0.932	34.7	1.357	50.5	0.044	1.6	659.291	24,529
55	0.088	3.3	1.094	40.7	1.286	47.8	0.062	2.3	657.674	24,469

Average Daily Trips	37,022	trips/day	*Ref: 2010 Circulation Update Study June 24, 2011*
			Omni Means Traffic Engineers, Roseville, CA 95678
Average Trip Length	2.5	miles	
Increase in VMT	92,555	miles/day	
	33,782,575	miles/year	

Table 3
Estimate of Future Daily Emissions
City of Williams General Plan Update

Speed	ROG		CO		NOx		PM-10		CO2/GHG	
(mph)	*g/mile*	*lbs/day*	*g/mile*	*lbs/day*	*g/mile*	*lbs/day*	*g/mile*	*lbs/day*	*g/mile*	*lbs/day*
25	0.092	43.6	0.815	386.1	0.604	286.1	0.022	10.4	872	413,072
30	0.081	38.4	0.76	360.0	0.551	261.0	0.021	9.9	800	378,965
40	0.066	31.3	0.704	333.5	0.477	226.0	0.021	9.9	716	339,173
55	0.061	28.9	0.766	362.9	0.447	211.7	0.025	11.8	707	334,910

Average Daily Trips	86,025	trips/day	*Ref: 2010 Circulation Update Study June 24, 2011*
			Omni Means Traffic Engineers, Roseville, CA 95678
Average Trip Length	2.5	miles	
Increase in VMT	215,063	miles/day	
	78,497,813	miles/year	

Table 4
Estimate of Future Annual Emissions
City of Williams General Plan Update

Speed	ROG		CO		NOx		PM-10		CO2/GHG	
(mph)	*g/mile*	*tons/yr*	*g/mile*	*tons/yr*	*g/mile*	*tons/yr*	*g/mile*	*tons/yr*	*g/mile*	*tons/yr*
25	0.092	8.0	0.815	70.5	0.604	52.2	0.022	1.9	872	75,386
30	0.081	7.0	0.76	65.7	0.551	47.6	0.021	1.8	800	69,161
40	0.066	5.7	0.704	60.9	0.477	41.2	0.021	1.8	716	61,899
55	0.061	5.3	0.766	66.2	0.447	38.6	0.025	2.2	707	61,121

Average Daily Trips	86,025	trips/day	*Ref: 2010 Circulation Update Study June 24, 2011*
			Omni Means Traffic Engineers, Roseville, CA 95678
Average Trip Length	2.5	miles	
Increase in VMT	215,063	miles/day	
	78,497,813	miles/year	

Table 5
Net Increase in Daily and Annual Emissions
City of Williams General Plan Update

Increase in Daily Emissions at 30 MPH

Speed	ROG		CO		NOx		PM-10		CO2/GHG	
(mph)	*g/mile*	*lbs/day*	*g/mile*	*lbs/day*	*g/mile*	*lbs/day*	*g/mile*	*lbs/day*	*g/mile*	*lbs/day*
Future	0.11	38.4	0.98	360.0	1.568	261.0	0.041	9.9	740.549	378,965
Current	0.11	22.4	0.98	199.8	1.568	319.7	0.041	8.36	740.549	150,972
Net Change		15.9		160.2		-58.6		1.6		227,992

Increase in Annual Emissions at 30 MPH

Speed	ROG		CO		NOx		PM-10		CO2/GHG	
(mph)	*g/mile*	*tons/yr*	*g/mile*	*tons/yr*	*g/mile*	*tons/yr*	*g/mile*	*tons/yr*	*g/mile*	*tons/yr*
Future	0.081	7.0	0.76	65.7	0.55	47.6	0.021	1.8	800	69,161
Current	30	4.09	0.98	36.46	1.568	58.3	0.041	1.53	740.5	27,552
Net Change		2.9		29.2		-10.7		0.3		41,609

File: City of Williams
Sheet: 5 Net Emissions

ATTACHMENT

Copy of EMFAC Emissions Model Runs
for Colusa County

Current Emissions (2005 to 2010)

Future Emissions (2011 to 2020)

Title : City of Williams General Plan Update Current Emissions
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2011/09/06 03:46:21
Scen Year: 2010 -- All model years in the range 2005 to 2010 selected
Season : Annual
Area : Colusa County APCD
****
****

Year: 2010 -- Model Years 2005 to 2010 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

District Average District Average Colusa County APCD

Table 1: Running Exhaust Emissions (grams/mile)

Pollutant Name: Reactive Org Gases Temperature: 70F Relative Humidity: 50%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
25	0.008	0.010	0.031	0.396	0.020	2.215	0.125
30	0.007	0.008	0.025	0.345	0.016	2.065	0.110
40	0.005	0.006	0.020	0.264	0.012	2.084	0.090
55	0.005	0.006	0.017	0.196	0.010	3.061	0.088

Pollutant Name: Carbon Monoxide Temperature: 70F Relative Humidity: 50%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
25	0.538	0.646	0.686	1.581	0.478	17.608	1.041
30	0.496	0.595	0.618	1.488	0.387	17.493	0.980
40	0.425	0.510	0.522	1.426	0.303	19.801	0.932
55	0.344	0.413	0.443	1.596	0.325	34.921	1.094

Pollutant Name: Oxides of Nitrogen Temperature: 70F Relative Humidity: 50%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
25	0.036	0.046	0.486	7.402	0.354	1.060	1.722
30	0.033	0.043	0.467	6.712	0.346	1.080	1.568
40	0.031	0.039	0.473	5.737	0.360	1.137	1.357
55	0.030	0.039	0.609	5.290	0.477	1.263	1.286

Pollutant Name: Carbon Dioxide Temperature: 70F Relative Humidity: 50%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
25	388.669	492.172	654.693	1986.343	1193.879	146.964	812.093
30	340.979	431.777	572.727	1872.841	1115.051	136.523	740.549
40	293.590	371.752	494.040	1710.688	1042.649	127.446	659.291
55	309.749	392.197	524.143	1626.875	1074.380	143.057	657.674

Pollutant Name: Sulfur Dioxide Temperature: 70F Relative Humidity: 50%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
25	0.004	0.005	0.006	0.019	0.011	0.002	0.008
30	0.003	0.004	0.006	0.018	0.011	0.002	0.007
40	0.003	0.004	0.005	0.016	0.010	0.002	0.006
55	0.003	0.004	0.005	0.016	0.010	0.002	0.006

Pollutant Name: PM10 Temperature: 70F Relative Humidity: 50%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
25	0.006	0.009	0.014	0.160	0.019	0.023	0.042
30	0.005	0.008	0.012	0.161	0.015	0.022	0.041
40	0.004	0.006	0.009	0.183	0.011	0.022	0.044
55	0.003	0.006	0.008	0.264	0.010	0.032	0.062

Pollutant Name: PM10 - Tire Wear Temperature: 70F Relative Humidity: 50%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
25	0.008	0.008	0.010	0.034	0.011	0.004	0.014
30	0.008	0.008	0.010	0.034	0.011	0.004	0.014
40	0.008	0.008	0.010	0.034	0.011	0.004	0.014
55	0.008	0.008	0.010	0.034	0.011	0.004	0.014

Title : City of WilliamsTraffic Emissions 2021 2047
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Season : Annual
Area : Colusa
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Year: 2020 -- Model Years 2011 to 2020 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Colusa County Average

Table 1: Running Exhaust Emissions (grams/mile)

Pollutant Name: Reactive Org Gases Temperature: 60F Relative Humidity: 60%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
25	0.006	0.009	0.016	0.252	0.020	2.083	0.092
30	0.005	0.007	0.013	0.219	0.016	1.923	0.081
40	0.004	0.005	0.010	0.167	0.012	1.914	0.066
50	0.004	0.005	0.009	0.134	0.010	2.341	0.060
55	0.004	0.005	0.009	0.125	0.010	2.792	0.061
65	0.005	0.007	0.011	0.118	0.011	4.603	0.076

Pollutant Name: Carbon Monoxide Temperature: 60F Relative Humidity: 60%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
25	0.422	0.555	0.714	1.133	0.519	15.371	0.815
30	0.389	0.512	0.652	1.051	0.420	15.071	0.760
40	0.334	0.438	0.555	0.991	0.329	16.318	0.704
50	0.289	0.380	0.486	1.041	0.325	21.335	0.721
55	0.270	0.355	0.460	1.106	0.352	26.494	0.766
65	0.238	0.312	0.427	1.333	0.493	48.917	0.991

Pollutant Name: Oxides of Nitrogen Temperature: 60F Relative Humidity: 60%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
25	0.032	0.044	0.104	2.066	0.379	1.097	0.604
30	0.030	0.041	0.100	1.877	0.374	1.099	0.551
40	0.028	0.037	0.099	1.610	0.393	1.132	0.477
50	0.027	0.036	0.107	1.492	0.452	1.203	0.446
55	0.027	0.037	0.115	1.489	0.505	1.254	0.447
65	0.029	0.040	0.145	1.601	0.703	1.394	0.483

Pollutant Name: Carbon Dioxide Temperature: 60F Relative Humidity: 60%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
25	376.952	479.839	654.412	1979.298	1231.466	153.837	872.373
30	330.546	420.767	570.869	1866.529	1158.004	144.519	800.326
40	284.179	361.744	489.836	1705.601	1090.531	140.033	715.547
50	283.514	360.898	490.267	1629.245	1093.433	154.842	694.542
55	299.433	381.162	519.529	1622.729	1120.102	171.678	707.178
65	373.437	475.365	657.591	1674.136	1249.001	236.284	788.170

Pollutant Name: Sulfur Dioxide Temperature: 60F Relative Humidity: 60%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
25	0.004	0.005	0.006	0.019	0.012	0.002	0.008
30	0.003	0.004	0.005	0.018	0.011	0.002	0.008
40	0.003	0.003	0.005	0.016	0.010	0.002	0.007
50	0.003	0.003	0.005	0.016	0.010	0.002	0.007
55	0.003	0.004	0.005	0.015	0.011	0.002	0.007
65	0.004	0.005	0.006	0.016	0.012	0.003	0.008

Pollutant Name: PM10 Temperature: 60F Relative Humidity: 60%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
25	0.008	0.012	0.015	0.053	0.024	0.015	0.022
30	0.006	0.010	0.012	0.053	0.020	0.014	0.021
40	0.005	0.007	0.009	0.059	0.014	0.014	0.021
50	0.005	0.007	0.008	0.074	0.012	0.018	0.025
55	0.005	0.007	0.008	0.085	0.012	0.021	0.028
65	0.006	0.009	0.010	0.112	0.013	0.034	0.036

Pollutant Name: PM10 - Tire Wear Temperature: 60F Relative Humidity: 60%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
25	0.008	0.008	0.009	0.034	0.011	0.004	0.015
30	0.008	0.008	0.009	0.034	0.011	0.004	0.015
40	0.008	0.008	0.009	0.034	0.011	0.004	0.015
50	0.008	0.008	0.009	0.034	0.011	0.004	0.015
55	0.008	0.008	0.009	0.034	0.011	0.004	0.015
65	0.008	0.008	0.009	0.034	0.011	0.004	0.015

Pollutant Name: PM10 - Brake Wear Temperature: 60F Relative Humidity: 60%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
25	0.013	0.013	0.013	0.027	0.013	0.006	0.016
30	0.013	0.013	0.013	0.027	0.013	0.006	0.016
40	0.013	0.013	0.013	0.027	0.013	0.006	0.016
50	0.013	0.013	0.013	0.027	0.013	0.006	0.016
55	0.013	0.013	0.013	0.027	0.013	0.006	0.016
65	0.013	0.013	0.013	0.027	0.013	0.006	0.016

Pollutant Name: Gasoline - mi/gal Temperature: 60F Relative Humidity: 60%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
25	23.464	18.434	13.262	12.649	12.926	47.956	20.051
30	26.756	21.020	15.363	15.259	15.592	50.772	22.859
40	31.123	24.450	18.180	18.827	19.235	51.521	26.553
50	31.203	24.514	18.160	18.642	19.044	45.238	26.536

Appendix C FHWA Model Input Data

Appendix A-1

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Data Input Sheet

Project #: 2009-076 City of Williams General Plan Update
Description: Existing
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
1	SR 20	West of E St.	3675	83		17	2	5	55	100	
2	SR 20	E St. to Old Hwy 99W	4200	83		17	2	5	45	100	
3	SR 20	Old Hwy 99W to I-5	4610	83		17	2	5	45	100	
4	SR 20	I-5 to Husted Rd./Freshwater Rd.	2965	83		17	2	5	45	100	
5	SR 20	East of Husted Rd./Freshwater Rd.	4890	83		17	2	5	55	100	
6	E St.	SR 20 to 9th St. (N)	4930	83		17	1	1	35	100	
7	E St.	9th St. (N) to 9th St. (S)	4875	83		17	1	1	35	100	
8	E St.	9th St. (S) to 7th St.	5640	83		17	1	1	35	100	
9	E St.	7th St. to 5th St.	6030	83		17	1	1	35	100	
10	E St.	5th St. to I-5	7620	83		17	1	1	35	100	
11	E St.	I-5 to Vann St.	5340	83		17	1	1	35	100	
12	E St.	Vann St. to Husted Rd.	2870	83		17	1	1	35	100	
13	Freshwater Rd.	North of SR 20	450	83		17	2	5	45	100	
14	Husted Rd.	SR 20 to E St.	2760	83		17	2	5	45	100	
15	Husted Rd.	E St. to Husted Lateral Rd.	1225	83		17	2	5	45	100	
16	Husted Rd.	Husted Lateral Rd. to Abel Rd.	1365	83		17	2	5	45	100	
17	Husted Rd.	Abel Rd. to Crawford Rd.	1250	83		17	2	5	45	100	
18	Husted Rd.	Crawford Rd. to Old Hwy 99W	1325	83		17	2	5	45	100	
19	Husted Rd.	Old Hwy 99W to I-5	1170	83		17	2	5	45	100	
20	Husted Rd.	South of I-5	460	83		17	2	5	45	100	
21	Old Hwy 99W	North of Husted Rd.	1325	83		17	2	5	45	100	
22	Old Hwy 99W	South of Husted Rd.	1170	83		17	2	5	45	100	
23	Abel Rd.	East of Husted Rd.	565	83		17	2	5	45	100	
24	9th St.	North of E St.	245	83		17	0.1	0.1	35	100	
25	9th St.	South of E St.	1585	83		17	1	1	35	100	

BOLLARD
Acoustical Consultants

Appendix A-2

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2009-076 City of Williams General Plan Update
Description: Existing
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
26	7th St.	North of E St.	2200	83		17	1	1	35	100	
27	7th St.	South of E St.	2225	83		17	1	1	35	100	
28	5th St.	North of E St.	1215	83		17	1	1	35	100	
29	5th St.	South of E St.	920	83		17	1	1	35	100	
30	Vann St.	South of E St.	3190	83		17	0.1	0.1	35	100	
31	I-5	Husted Rd. to SR 20	27500	83		17	6	21	65	100	

BOLLARD
Acoustical Consultants

Appendix D Notice of Preparation and Response Letters

ARNOLD SCHWARZENEGGER
GOVERNOR

Cal EMA
CALIFORNIA EMERGENCY MANAGEMENT AGENCY

MATTHEW R. BETTENHAUSEN
SECRETARY

August 3, 2010

Monica Aguayo
City of Williams
P.O. Box 310
Williams, CA 95987

RE: Notice of Preparation for a Draft Environmental Impact Report for the City of Williams' General Plan Update, SCH# 2010072071

Dear Ms. Aguayo:

Thank you for the opportunity to comment on your Notice of Preparation for a Draft Environmental Impact Report (DEIR) for the city's general plan update. In preparing the general plan and accompanying DEIR, the city should examine the sections of state planning law that involve potential hazards the city may face. For your information, I have underlined specific sections of state planning law where identification and analysis of hazards are discussed (see Attachment A).

Prior to the release of the draft general plan or within the DEIR, city staff or your consultants should examine each of the requirements in state planning law and determine if there are hazard issues within the community which the general plan should address. A table in the DEIR (or general plan) which identifies these specific issues and where they are addressed in the general plan would be helpful in demonstrating the city has complied with these requirements. If the DEIR determines that state planning law requirements have not been met, it should recommend that these issues be addressed in the general plan as a mitigation measure.

We note that state planning law includes a requirement for consultations with state agencies in regard to information related to hazards. Cal EMA would be happy to share all available information at our disposal to facilitate the city's ability to comply with state planning and environmental laws.

If you have any questions about these comments, please contact Andrew Rush at (916) 845-8269 or andrew.rush@calema.ca.gov.

Sincerely,

Dennis Castrillo

Dennis Castrillo
Environmental Officer

cc: State Clearinghouse

3650 SCHRIEVER AVENUE • MATHER, CA 95655
RECOVERY BRANCH
(916) 845-8200 [OFFICE] • (916) 845-8385 [FAX]

Attachment A
Hazards and State Planning Law Requirements

General Plan Consistency

65300.5. In construing the provisions of this article, the Legislature intends that the general plan and elements and parts thereof comprise an integrated, internally consistent and compatible statement of policies for the adopting agency.

Seven Mandated Elements

65302. The general plan shall consist of a statement of development policies and shall include a diagram or diagrams and text setting forth objectives, principles, standards, and plan proposals. The plan shall include the following elements:

(a) A land use element that designates the proposed general distribution and general location and extent of the uses of the land for housing, business, industry, open space, including agriculture, natural resources, recreation, and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid waste disposal facilities, and other categories of public and private uses of land. The location and designation of the extent of the uses of the land for public and private uses shall consider the identification of land and natural resources pursuant to paragraph (3) of subdivision (d). The land use element shall include a statement of the standards of population density and building intensity recommended for the various districts and other territory covered by the plan. The land use element shall identify and annually review those areas covered by the plan that are subject to flooding identified by flood plain mapping prepared by the Federal Emergency Management Agency (FEMA) or the Department of Water Resources. The land use element shall also do both of the following:

(1) Designate in a land use category that provides for timber production those parcels of real property zoned for timberland production pursuant to the California Timberland Productivity Act of 1982, Chapter 6.7 (commencing with Section 51100) of Part 1 of Division 1 of Title 5.

(2) Consider the impact of new growth on military readiness activities carried out on military bases, installations, and operating and training areas, when proposing zoning ordinances or designating land uses covered by the general plan for land, or other territory adjacent to military facilities, or underlying designated military aviation routes and airspace.

(A) In determining the impact of new growth on military readiness activities, information provided by military facilities shall be considered. Cities and counties shall address military impacts based on information from the military and other sources.

(B) The following definitions govern this paragraph:

(i) "Military readiness activities" mean all of the following:

(I) Training, support, and operations that prepare the men and women of the military for combat.

(II) Operation, maintenance, and security of any military installation.

(III) Testing of military equipment, vehicles, weapons, and sensors for proper operation or suitability for combat use.

(ii) "Military installation" means a base, camp, post, station, yard, center, homeport facility for any ship, or other activity under the jurisdiction of the United States Department of Defense as defined in paragraph (1) of subsection (e) of Section 2687 of Title 10 of the United States Code.

(b) A circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, any military airports and ports, and other local public utilities and facilities, all correlated with the land use element of the plan.

(c) A housing element as provided in Article 10.6 (commencing with Section 65580).

(d) (1) A conservation element for the conservation, development, and utilization of natural resources including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources. The conservation element shall consider the effect of development within the jurisdiction, as described in the land use element, on natural resources located on public lands, including military installations. That portion of the conservation element including waters shall be developed in coordination with any countywide water agency and with all district and city agencies, including flood management, water conservation, or groundwater agencies that have developed, served, controlled, managed, or conserved water of any type for any purpose in the county or city for which the plan is prepared. Coordination shall include the discussion and evaluation of any water supply and demand information described in Section 65352.5, if that information has been submitted by the water agency to the city or county.

(2) The conservation element may also cover all of the following:

(A) The reclamation of land and waters.

(B) Prevention and control of the pollution of streams and other waters.

(C) Regulation of the use of land in stream channels and other areas required for the accomplishment of the conservation plan.

(D) Prevention, control, and correction of the erosion of soils, beaches, and shores.

(E) Protection of watersheds.

(F) The location, quantity and quality of the rock, sand and gravel resources.

(3) Upon the next revision of the housing element on or after January 1, 2009, the conservation element shall identify rivers, creeks, streams, flood corridors, riparian habitats, and land that may accommodate floodwater for purposes of groundwater recharge and stormwater management.

(e) An open-space element as provided in Article 10.5 (commencing with Section 65560).

(f) (1) A noise element which shall identify and appraise noise problems in the community. The noise element shall recognize the guidelines established by the Office of Noise Control in the State Department of Health Care Services and shall analyze and quantify, to the extent practicable, as determined by the legislative body, current and projected noise levels for all of the following sources:

(A) Highways and freeways.

(B) Primary arterials and major local streets.

(C) Passenger and freight on-line railroad operations and ground rapid transit systems.

(D) Commercial, general aviation, heliport, helistop, and military airport operations, aircraft overflights, jet engine test stands, and all other ground facilities and maintenance functions related to airport operation.

(E) Local industrial plants, including, but not limited to, railroad classification yards.

(F) Other ground stationary noise sources, including, but not limited to, military installations, identified by local agencies as contributing to the community noise environment.

(2) Noise contours shall be shown for all of these sources and stated in terms of community noise equivalent level (CNEL) or day-night average level (Ldn). The noise contours shall be prepared on the basis of noise monitoring or following generally accepted noise modeling techniques for the various sources identified in paragraphs (1) to (6), inclusive.

(3) The noise contours shall be used as a guide for establishing a pattern of land uses in the land use element that minimizes the exposure of community residents to excessive noise.

(4) The noise element shall include implementation measures and possible solutions that address existing and foreseeable noise problems, if any. The adopted noise element shall serve as a guideline for compliance with the state's noise insulation standards.

(g) (1) A safety element for the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence, liquefaction, and other seismic hazards identified pursuant to Chapter 7.8 (commencing with Section 2690) of Division 2 of the Public Resources Code, and other geologic hazards known to the legislative body; flooding; and wild land and urban fires. The safety element shall include mapping of known seismic and other geologic hazards. It shall also address evacuation routes, military installations, peakload water supply requirements, and minimum road widths and clearances around structures, as those items relate to identified fire and geologic hazards.

(2) The safety element, upon the next revision of the housing element on or after January 1, 2009, shall also do the following:

(A) Identify information regarding flood hazards, including, but not limited to, the following:

(i) Flood hazard zones. As used in this subdivision, "flood hazard zone" means an area subject to flooding that is delineated as either a special hazard area or an area of moderate or minimal hazard on an official flood insurance rate map issued by the Federal Emergency Management Agency. The identification of a flood hazard zone does not imply that areas outside the flood hazard zones or uses permitted within flood hazard zones will be free from flooding or flood damage.

(ii) National Flood Insurance Program maps published by FEMA.

(iii) Information about flood hazards that is available from the United States Army Corps of Engineers.

(iv) Designated floodway maps that are available from the Central Valley Flood Protection Board.

(v) Dam failure inundation maps prepared pursuant to Section 8589.5 that are available from the Office of Emergency Services.

(vi) Awareness Floodplain Mapping Program maps and 200-year flood plain maps that are or may be available from, or accepted by, the Department of Water Resources.

(vii) Maps of levee protection zones.

(viii) Areas subject to inundation in the event of the failure of project or nonproject levees or floodwalls.

(ix) Historical data on flooding, including locally prepared maps of areas that are subject to flooding, areas that are vulnerable to flooding after wildfires, and sites that have been repeatedly damaged by flooding.

(x) Existing and planned development in flood hazard zones, including structures, roads, utilities, and essential public facilities.

(xi) Local, state, and federal agencies with responsibility for flood protection, including special districts and local offices of emergency services.

(B) Establish a set of comprehensive goals, policies, and objectives based on the information identified pursuant to subparagraph (A), for the protection of the community from the unreasonable risks of flooding, including, but not limited to:

(i) Avoiding or minimizing the risks of flooding to new development.

(ii) Evaluating whether new development should be located in flood hazard zones, and identifying construction methods or other methods to minimize damage if new development is located in flood hazard zones.

(iii) Maintaining the structural and operational integrity of essential public facilities during flooding.

(iv) Locating, when feasible, new essential public facilities outside of flood hazard zones, including hospitals and health care facilities, emergency shelters, fire stations, emergency command centers, and emergency communications facilities or identifying construction methods or other methods to minimize damage if these facilities are located in flood hazard zones.

(v) Establishing cooperative working relationships among public agencies with responsibility for flood protection.

(C) Establish a set of feasible implementation measures designed to carry out the goals, policies, and objectives established pursuant to subparagraph (B).

(3) After the initial revision of the safety element pursuant to paragraph (2), upon each revision of the housing element, the planning agency shall review and, if necessary, revise the safety element to identify new information that was not available during the previous revision of the safety element.

(4) Cities and counties that have flood plain management ordinances that have been approved by FEMA that substantially comply with this section, or have substantially equivalent provisions to this subdivision in their general plans, may use that information in the safety element to comply with this subdivision, and shall summarize and incorporate by reference into the safety element the other general plan provisions or the flood plain ordinance, specifically showing how each requirement of this subdivision has been met.

(5) Prior to the periodic review of its general plan and prior to preparing or revising its safety element, each city and county shall consult the California Geological Survey of the Department of Conservation, the Central Valley Flood Protection Board, if the city or county is located within the boundaries of the Sacramento and San Joaquin Drainage District, as set forth in Section 8501 of the Water Code, and the Office of Emergency Services for the purpose of including information known by and available to the department, the office, and the board required by this subdivision.

(6) To the extent that a county's safety element is sufficiently detailed and contains appropriate policies and programs for adoption by a city, a city may adopt that portion of the county's safety element that pertains to the city's planning area in satisfaction of the requirement imposed by this subdivision.

Consistency with Airport Land Use Plans

65302.3. (a) The general plan, and any applicable specific plan prepared pursuant to Article 8 (commencing with Section 65450), shall be consistent with the plan adopted or amended pursuant to Section 21675 of the Public Utilities Code.

Review of Safety Element

65302.5. (a) At least 45 days prior to adoption or amendment of the safety element, each county and city shall submit to the Division of Mines and Geology of the Department of Conservation

one copy of a draft of the safety element or amendment and any technical studies used for developing the safety element. The division may review drafts submitted to it to determine whether they incorporate known seismic and other geologic hazard information, and report its findings to the planning agency within 30 days of receipt of the draft of the safety element or amendment pursuant to this subdivision. The legislative body shall consider the division's findings prior to final adoption of the safety element or amendment unless the division's findings are not available within the above prescribed time limits or unless the division has indicated to the city or county that the division will not review the safety element. If the division's findings are not available within those prescribed time limits, the legislative body may take the division's findings into consideration at the time it considers future amendments to the safety element. Each county and city shall provide the division with a copy of its adopted safety element or amendments. The division may review adopted safety elements or amendments and report its findings. All findings made by the division shall be advisory to the planning agency and legislative body.

(1) The draft element of or draft amendment to the safety element of a county or a city's general plan shall be submitted to the State Board of Forestry and Fire Protection and to every local agency that provides fire protection to territory in the city or county at least 90 days prior to either of the following:

(A) The adoption or amendment to the safety element of its general plan for each county that contains state responsibility areas.

(B) The adoption or amendment to the safety element of its general plan for each city or county that contains a very high fire hazard severity zone as defined pursuant to subdivision (b) of Section 51177.

(2) A county that contains state responsibility areas and a city or county that contains a very high fire hazard severity zone as defined pursuant to subdivision (b) of Section 51177, shall submit for review the safety element of its general plan to the State Board of Forestry and Fire Protection and to every local agency that provides fire protection to territory in the city or county in accordance with the following dates as specified, unless the local government submitted the element within five years prior to that date:

(A) Local governments within the regional jurisdiction of the San Diego Association of Governments: December 31, 2010.

(B) Local governments within the regional jurisdiction of the Southern California Association of Governments: December 31, 2011.

(C) Local governments within the regional jurisdiction of the Association of Bay Area Governments: December 31, 2012.

(D) Local governments within the regional jurisdiction of the Council of Fresno County Governments, the Kern County Council of Governments, and the Sacramento Area Council of Governments: June 30, 2013.

(E) Local governments within the regional jurisdiction of the Association of Monterey Bay Area Governments: December 31, 2014.

(F) All other local governments: December 31, 2015.

(3) The State Board of Forestry and Fire Protection shall, and a local agency may, review the draft or an existing safety element and report its written recommendations to the planning agency within 60 days of its receipt of the draft or existing safety element. The State Board of Forestry and Fire Protection and local agency shall review the draft or existing safety element and may

offer written recommendations for changes to the draft or existing safety element regarding both of the following:
(A) Uses of land and policies in state responsibility areas and very high fire hazard severity zones that will protect life, property, and natural resources from unreasonable risks associated with wildland fires.
(B) Methods and strategies for wildland fire risk reduction and prevention within state responsibility areas and very high hazard severity zones.
(b) Prior to the adoption of its draft element or draft amendment, the board of supervisors of the county or the city council of a city shall consider the recommendations made by the State Board of Forestry and Fire Protection and any local agency that provides fire protection to territory in the city or county. If the board of supervisors or city council determines not to accept all or some of the recommendations, if any, made by the State Board of Forestry and Fire Protection or local agency, the board of supervisors or city council shall communicate in writing to the State Board of Forestry and Fire Protection or to the local agency, its reasons for not accepting the recommendations.

Open Space Plans

65560. (a) "Local open-space plan" is the open-space element of a county or city general plan adopted by the board or council, either as the local open-space plan or as the interim local open-space plan adopted pursuant to Section 65563.
(b) "Open-space land" is any parcel or area of land or water that is essentially unimproved and devoted to an open-space use as defined in this section, and that is designated on a local, regional or state open-space plan as any of the following:
(1) Open space for the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, bays and estuaries; and coastal beaches, lakeshores, banks of rivers and streams, and watershed lands.
(2) Open space used for the managed production of resources, including but not limited to, forest lands, rangeland, agricultural lands and areas of economic importance for the production of food or fiber; areas required for recharge of groundwater basins; bays, estuaries, marshes, rivers and streams which are important for the management of commercial fisheries; and areas containing major mineral deposits, including those in short supply.
(3) Open space for outdoor recreation, including but not limited to, areas of outstanding scenic, historic and cultural value; areas particularly suited for park and recreation purposes, including access to lakeshores, beaches, and rivers and streams; and areas which serve as links between major recreation and open-space reservations, including utility easements, banks of rivers and streams, trails, and scenic highway corridors.
(4) Open space for public health and safety, including, but not limited to, areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, flood plains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs and areas required for the protection and enhancement of air quality.

Colusa Local Agency Formation Commission
John Benoit, Executive Officer
P.O Box 2694 Granite Bay, Calif 95746
(530) 458-0593 LAFCO@countyofcolusa.org

August 6, 2010

City of Williams
P.O. Box 310
Williams, CA 95987

Attn: Monica Aguayo, Assistant City Planner

SUBJECT: NOP Response for the City of Williams General Plan EIR

Dear Monica,

Thank you for sending LAFCO a copy of the Notice of Preparation for the EIR the City is undertaking. It is the policy of Colusa LAFCO to actively participate in the development of Environmental Documents where LAFCO is a Responsible Agency as required in Section 15096 of the CEQA guidelines or in this case, when the City is preparing a General Plan. LAFCO is concerned with the orderly provision of urban services in the City and surrounding area and that the services required for any subsequent development be provided by an established service provider where feasible and that the service provider has and maintains adequate funding for the services provided.

As you are aware, LAFCO is in the process of preparing a Municipal Service Review for services in the City of Williams Area and ultimately, a Sphere of Influence for the City. Prior to finalization of our MSR, LAFCO may need to include new available information contained in the Final Environmental Impact Report. If feasible, LAFCO intends to use this EIR for its environmental document for the upcoming Sphere of Influence rather than preparing a new environmental document for this purpose. Please provide language in the "Purposes and Intent" section of the EIR that LAFCO will be using this EIR for the upcoming City of Williams Sphere of Influence update.

Depending upon the ability of the City to provide services (as well as other factors) a Sphere of Influence update to include the territory in the map attached to the NOP may not be feasible in the near term. The environmental documentation needs to disclose any potential environmental impacts associated with a larger or updated Sphere of Influence. Of particular importance to LAFCO has been the City's ability to provide water and wastewater services. These areas should be thoroughly discussed to the extent feasible in the EIR.

In addition to the land use diagram, LAFCO requests a copy of the General Plan Policy Document. Comments on this NOP do not include any specific comments relating to policies the City may adopt. We believe the environmental impact of proposed new policy needs to assessed in the environmental document to the extent feasible.

A thorough analysis of the impacts upon agricultural lands needs to be placed in the EIR as well as acceptable mitigation for the loss and conversion of agricultural lands.

LAFCO's Policies and Procedures with respect to the contents of a Sphere of Influence and Municipal Service Review are attached to this letter.

Please be aware the LAFCO Act requires a meeting between the City and County regarding the boundaries, development standards and zoning requirements within the proposed City Sphere of Influence. If the City and County agree, then LAFCO shall give great weight to any such agreement.

LAFCO becomes concerned about the cumulative service impacts subsequent development may have on various local service providers including the City, the County and the Williams Rural Fire Protection District. I assume subsequent development will undergo additional environmental review on a project-by-project basis, which may later be used by LAFCO in considering individual future annexations.

Thank you for providing LAFCO with the opportunity to comment on the NOP for the City's General Plan. LAFCO would requests a hard copy of the DEIR when released as well as the City's General Plan Policy Document as soon as these documents are available.

Sincerely,

John Benoit

John Benoit
Executive Officer, Local Agency Formation Commission

3.1. General Policies

a. LAFCO must adopt a sphere of influence for each city and each district in its jurisdiction, and must review and, if necessary, update each sphere of influence at least every five years. All LAFCO actions must be consistent with a sphere plan. A Sphere of Influence is defined in Section 56425 of the Government Code as "a plan for the probable physical boundary and service area of a local agency or municipality as determined by the commission."

The establishment of Sphere of Influence Plans is perhaps the most important planning function given to LAFCOs by the state legislature. Spheres of Influence are described by the Cortese Knox Hertzberg Act as an important tool for "planning and shaping the logical and orderly development and coordination of local governmental agencies so as to advantageously provide for the present and future needs of the county and its communities." Spheres serve a similar function in LAFCO determinations as general plans do for cities and counties. Consistency with the adopted sphere plan is mandatory, and changes to the plan require careful review.

While LAFCO encourages the participation and cooperation of the subject agency, the sphere of influence plan is a LAFCO responsibility, and the Commission is the sole authority as to the sufficiency of the documentation and the plan's consistency with law and LAFCO policy. Staff of LAFCO will work closely with agencies in developing sphere of influence plans. In determining the sphere of influence of each agency, LAFCO must consider and prepare a written statement of its determinations with respect to the following four factors as stated in Government Code Section 56425 (e):

1. *The present and planned land use in the area, including agricultural and open-space lands.*
2. *The present and probable need for public facilities and services in the area.*
3. *The present capacity of public facilities and adequacy of public services provided by the agency.*
4. *Any social or economic communities of interest in the area that the Commission determines is relevant to the agency.*

b) *In order to prepare and update spheres of influence, LAFCO is required to conduct a review of the municipal services provided in the county, region, subregion, or other appropriate designated area. The policies, standards and procedures of Colusa LAFCO applying to Municipal Service Reviews are set forth in Section 3.3 below.*

i) Consistency Requirement. Every sphere of influence plan must be consistent with LAFCO's Policies and Procedures, the state legislature's policy direction to LAFCO, the sphere plans of all other agencies in the area, the Commission's statement of written determinations with respect to its review of municipal services in the applicable area, and with the long range planning goals for the area.

ii) Sphere Boundaries. In establishing the boundaries of a sphere of influence plan for an agency, LAFCO will consider the factors listed in Section 56425 (e) of the Government Code as noted above.

c) *With respect to Factor 3.1(b) above, LAFCO will not include lands that are unlikely to require the services provided by the agency, for example, lands not designated for development by the applicable General Plan, territory where development is constrained by topographical factors, or areas where the projected and historical growth rates do not indicate a need for service within the timeframe of the sphere plan.*

d) *With respect to Factor 3.1(c) above, LAFCO will not include areas in an agency's sphere of influence, which cannot feasibly be served by the agency within a time frame consistent with the sphere plan.*

e) *Time Factor. Sphere of Influence amendments will ordinarily take longer to process than applications for a change of organization or reorganization and will generally require more detailed information.*

f) *Updated Plans Encouraged. Agencies are encouraged to keep the supporting documentation for their Sphere of Influence plans up to date so that individual applications for changes of organization or reorganization are not burdened with time delays.*

g) *Areas of Concern. LAFCO may, at its discretion, designate a geographic area beyond the Sphere of Influence as an area of Concern to any local agency.*

i) An Area of Concern is a geographic area beyond the Sphere of Influence in which land use decisions or other governmental actions of one local agency (the "Acting Agency") impact directly or indirectly upon another local agency ("the Concerned Agency"). For example, approval of a housing project developed to urban densities on septic tanks outside the city limits of a city and its sphere of influence may result in the city being forced subsequently to extend sewer services to the area to deal with septic failures and improve city roads that provide access to the development. The city in such situation would be the Concerned Agency with appropriate reason to request special consideration from the Acting Agency in considering projects adjacent to the City.

ii) LAFCO will notify any Concerned Agency when LAFCO receives notice of a proposal of another agency in the Area of Concern to the Concerned Agency, and will give great weight to its comments.

iii) If requested, LAFCO will seek to obtain a Joint Powers Agreement or other commitment between the agencies so that the Acting Agency provides advance notice to the Concerned Agency of any actions, or projects being considered within the area of concern, and commits to considering any comments made by the Concerned Agency.

h) Zero and Minus Spheres. The Commission may adopt a "zero" sphere of influence (encompassing no territory) for an agency when the Commission has determined that the public service functions of the agency are either non-existent, no longer needed, or should be reallocated to some other agency of government. Adoption of a "zero" sphere indicates the agency should ultimately be dissolved. The Commission may initiate dissolution of an agency when it deems such action appropriate. The Commission may adopt a "minus" sphere (excluding territory currently within that agency's boundaries) when it has determined that territory within the agency's boundaries is not in need of the agency's services, or when the agency has no feasible plans to provide efficient and adequate service to the territory in question.

3.2. CONTENTS OF THE SPHERE OF INFLUENCE PLAN

a) General Requirements. The Sphere of Influence Plans for all governmental agencies within LAFCO's jurisdiction shall contain the following:

i) A sphere map and phased plan for annexation of the depicted territory defining the probable boundary of the agency's service area 20 years hence (the long-term horizon) and identifying a near-term development horizon defining the agency's logical boundary for lands likely to be annexed prior to the next sphere review or update (typically within five years). The phased annexation plan may include specific conditions for particular areas that must be satisfied before annexations may occur.

ii) Documentation to support the Commission's determinations regarding the factors stated in §56425(e). Generally this information will be provided in the applicable Municipal Service Review(s), supplemented and updated as necessary to assure the information and analysis satisfy LAFCO policy requirements and are complete, current, and accurate.

b) Specific Requirements for City Sphere Plans

i) City/County Agreement. When required by Government Code §56425(b), a city and the county shall meet and confer regarding the boundaries of the city's sphere prior to the Commission's final determination. If a city and the county have reached agreement

regarding the boundaries, development standards, and zoning requirements within a proposed city sphere, the Commission shall give great weight to the agreement in the Commission's final determination of the city's sphere.

ii) Parcel Inventory and Absorption Study. The Commission must be able to make a positive determination that the city's sphere is consistent with its historical and expected growth rates, and that the territory within the sphere is likely to be annexed within the 20-year timeframe. The Commission's determination will be based on information provided by the city, including 1) a vacant land inventory, 2) an analysis of the vacant lands to determine their suitability for development, and 3) a market study to determine the absorption rate of the usable vacant lands. If the city is unable to supply such information, LAFCO will make a sphere determination after considering the city's historical growth rates for each land use designation, pertinent city land use and zoning regulations, and the physical characteristics of the property intended to be included in the sphere.

iii) Spheres for New Cities. The Commission will adopt a Sphere of Influence Plan for a newly incorporated city within a year of the date of incorporation.

3.3 Municipal Service Reviews

In order to establish an appropriate sphere for an agency, LAFCO must have adequate information on present and future service needs in the area and the capabilities of the agency to meet those needs. To this purpose, the Cortese-Knox-Hertzberg Act requires LAFCO to conduct service reviews prior to establishing or updating spheres of influence. A service review is a comprehensive review of provision of specified services within a designated geographic area. Its purpose is to evaluate the provision of services on a regional basis and to recommend actions, when necessary, to promote the efficient provision of those services. The service reviews are intended to help LAFCO, the public and other agencies better understand the public service structure and evaluate options for the provision of efficient and effective public services. LAFCO uses the information and analysis provided by the Municipal Service Review (MSR) to ascertain whether an agency can provide adequate and efficient services to the areas in the agency's sphere within the applicable time frame.

LAFCO will prepare or update the appropriate Municipal Service Reviews prior to or in conjunction with the adoption or update of an agency's sphere of influence plan. In general, LAFCO will conduct such reviews on a service-by-service basis for designated geographic areas. The Commission will periodically develop and implement a multi-year coordinated schedule for preparing MSRs and updating spheres of influence, in accordance with the legislature's direction to review each agency's sphere of influence every five years and update as necessary and provided for in LAFCO's budget.

a) General Standards. LAFCO shall prepare Municipal Service Reviews in conformance with the provisions of Government Code §56430. A Municipal

Service Review must provide information specific to each agency to support the Commission's written determinations with respect to the following:

Growth and population projections for the affected area.

Present and planned capacity of public facilities and adequacy of public services, including infrastructure needs or deficiencies.

Financial ability of agencies to provide service.

Status of, and opportunities for, shared facilities.

Accountability for community service needs, including governmental structure and operational efficiencies.

Any other matter related to effective or efficient service delivery.

b) *Municipal Service Reviews Must Support Spheres of Influence. In addition to the requirements discussed above, Municipal Service Reviews shall contain information on which the Commission can base its determination of the appropriate sphere of influence for an agency, including:*

i) *Identification of existing land uses and a reasonable projection of land uses, which would occur if services were provided consistent with each agency's sphere of influence plan. This analysis should include maps and explanatory text detailing the following:*

ii) *Present designated and actual land uses in the area, improved and unimproved properties, and agricultural and open space lands, as defined by Government Code Sections 56064 and 56059.*

iii) *Proposed future land uses in the area.*

iv) *Discussion of present and probable future needs for public facilities and services in the sphere area. The discussion should include consideration of the need for all types of major facilities, not just those provided by the agency.*

v) *A determination of the present and future capacity of facilities and adequacy of services the agency provides or has plans to provide. The review must include specific information and analysis of how the agency will meet anticipated growth in demand within its current boundaries and within the area included in its sphere. This information will guide the Commission's designation of appropriate sphere horizons in the Sphere of Influence Plan. The required information should include the following:*

1) *Maps and explanatory text that indicate the location and capacity of existing and proposed facilities, including a plan for timing and location of new or expanded facilities.*

2) *An estimate of projected revenue and expense over the sphere horizons, specifically identifying the cost of planned new facilities or services and projected source(s) of revenue to fund those new facilities or services.*

3) *Actual and projected costs of services to consumers in current dollars. A statement of actual and projected allocations of the*

cost of services between existing and new residents shall be included.

4) *Identification of any relevant social or economic communities of interest in the area. For example, an area, which is completely within one subdivision governed by a single homeowner's association should be noted, in order to avoid unnecessary division of the territory between service agencies.*

c) *Uses of the Municipal Service Review.* *Upon approval of the Municipal Service Review, it will be utilized by LAFCO both in establishing the agency's sphere of influence and in the consideration of all proposals affecting that agency.*

DEPARTMENT OF TRANSPORTATION
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Flex your power!
Be energy efficient!

August 19, 2010

032010COL0014
City of Williams General Plan Update
Notice of Preparation
SCH# 2010072071

Ms. Monica Aguayo
City of Williams
P. O. Box 310
Williams, CA 95987

Dear Ms. Aguayo,

Thank you for the opportunity to review and comment on the Notice of Preparation (NOP) for the City of Williams 2030 General Plan Update Environmental Impact Report (EIR). The General Plan is a priority for Caltrans, as it will provide direction for the future of the City of Williams and the State Highway System (SHS) serving your community. Caltrans has the following comments:

Our focus for this document as it moves forward will be directed towards the Circulation and Land Use elements. The SHS provides major transportation corridors for the City of Williams. It is important that the upcoming EIR adequately address all potentially significant impacts that the General Plan will have on the SHS.

General

- The SHS is a major part of the circulation network in City of Williams and should be identified as such throughout both the General Plan itself, and the associated Environmental Documents.

- The Transportation Corridor Concept Report (TCCR) for State Route (SR) 20 provides information for long range planning for the SHS within the City and is available for review at: www.dot.ca.gov/dist3/departments/planning/systemplanning.html. The TCCR for Interstate 5 (I-5) is currently being updated. These reports provide information on current and future projects, such as operational and safety improvements on SR 20 and I-5, as well as the future vision for these facilities as they affect the City of Williams. Where possible, the General Plan should be consistent with the TCCRs.

- The City should protect adequate right-of-way for new and expanded SHS transportation facilities and the General Plan should include an access management policy to control access to the SHS to ensure operational integrity.

- As part of the circulation network operation and improvements to the SHS are a shared responsibility between City of Williams and Caltrans. This should be reflected in a policy statement.

Traffic/Circulation

- The SHS within City of Williams operates with a high volume of commuter and truck traffic. In order to maintain an acceptable level of service, parallel routes need to be developed to provide an alternative to the SHS for local trips, as the SHS is intended to facilitate inter-regional travel.

- A Traffic Impact Study (TIS), should be completed as part of the Circulation Element and include an analysis of impacts to the SHS. The TIS should include I-5 and SR 20. The TIS should consider all traffic impacts to SHS intersections, ramps, ramp intersections, and mainline segments, including new and proposed developments that will have significant impact on the SHS. The "Guide for the Preparation of Traffic Impact Studies" updated December 2002, can be downloaded at: http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/reports/tisguide.pdf.

Caltrans would like to meet with the City to review the scope of the TIS before the Study begins.

Traffic Impact Fees

Freeways and Highways serve local, intra-regional, and inter-regional travel through City of Williams. It is imperative that new developments within the City that use State Highway facilities for intra-regional and local travel; contribute fair share cost towards funding improvements that will be necessary to maintain acceptable levels of service, as new development will increase travel demand.

We suggest that a Nexus study be prepared for those portions of the City where development is planned, so that a Traffic Impact Mitigation Fees (TIMFs) program can be developed and implemented in the City. This action would set up a fair and equitable mechanism to assess and collect TIMFs from all local projects that require mitigation. Caltrans is available to assist the City through this process.

Land Use

It is advantageous to develop general plans that include policies, strategies, and land development patterns that work together to reduce vehicle trips and increase transit, walking, and bicycling trips associated with future land development.

We suggest that the City consider including "Smart Growth" goals and "Complete Streets" policies into the General Plan, which may include the following:

- Establishing land use strategies to increase population and housing densities and make public transportation more viable. These strategies help to reduce sprawl and to conserve valuable farmland and open space.
- Placing housing closer to employment centers to promote a jobs/housing balance. This placement will decrease overall vehicle miles traveled, resulting in less traffic congestion and fewer associated negative consequences.
- Supporting mixed-use development so that transit, bicycle, and pedestrian facilities are viable options to driving.

Please provide our office with a copy of the Draft Environmental Impact Report and proposed TIS Scope of Work once these documents are available for this project. If you have any questions regarding these comments, please contact Nora Hogan, Local Development/Inter-Governmental Review Coordinator, at (530) 634-7799 or nora_hogan@dot.ca.gov.

Sincerely,

LILIBETH GREEN, Chief
Office of Transportation Planning – North

STATE OF CALIFORNIA Arnold Schwarzenegger, *Governor*

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
(916) 657-5390 - Fax

August 9, 2010

Monica Aguayo
City of Williams
P.O. Box 310
Williams. CA 95987

RE: SCH#2010072071 City of Williams General Plan Update; Colusa County.

Dear Ms. Aguayo:

The Native American Heritage Commission (NAHC) has reviewed the Notice of Preparation (NOP) referenced above. The California Environmental Quality Act (CEQA) states that any project that causes a substantial adverse change in the significance of an historical resource, which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA Guidelines 15064(b)). To comply with this provision the lead agency is required to assess whether the project will have an adverse impact on historical resources within the area of project effect (APE), and if so to mitigate that effect. To adequately assess and mitigate project-related impacts to archaeological resources, the NAHC recommends the following actions:

- ✓ Contact the appropriate regional archaeological Information Center for a record search. The record search will determine:
  - If a part or all of the area of project effect (APE) has been previously surveyed for cultural resources.
  - If any known cultural resources have already been recorded on or adjacent to the APE.
  - If the probability is low, moderate, or high that cultural resources are located in the APE.
  - If a survey is required to determine whether previously unrecorded cultural resources are present.
- ✓ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure.
  - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.
- ✓ Contact the Native American Heritage Commission for:
  - A Sacred Lands File Check. **USGS 7.5 minute quadrangle name, township, range and section required.**
  - A list of appropriate Native American contacts for consultation concerning the project site and to assist in the mitigation measures. **Native American Contacts List attached.**
- ✓ Lack of surface evidence of archeological resources does not preclude their subsurface existence.
  - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
  - Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
  - Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

Sincerely,

Katy Sanchez

Katy Sanchez
Program Analyst
(916) 653-4040

CC: State Clearinghouse

Native American Contact List
Colusa County
August 5, 2010

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Cortina Band of Indians
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This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH# 2010072071 City of Williams General Plan Update; Colusa County.

Native American Contact List
Colusa County
August 5, 2010

Grindstone Rancheria of Wintun-Wailaki
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Nomlaki
Wintun (Patwin)
Wailaki
Muimok

This list is current only as of the date of this document.

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This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH# 2010072071 City of Williams General Plan Update; Colusa County.

STATE OF CALIFORNIA

Arnold Schwarzenegger, *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

August 24, 2010

Monica Aguayo
City of Williams
P.O. Box 310
Williams, CA 95987

Re: Notice of Preparation, Draft Environmental Impact Report (DEIR)
City of Williams County General Plan
SCH# 2010072071

Dear Ms. Aguayo:

As the state agency responsible for rail safety within California, the California Public Utilities Commission (CPUC or Commission) recommends that development projects proposed near rail corridors be planned with the safety of these corridors in mind. New developments and improvements to existing facilities may increase vehicular traffic volumes, not only on streets and at intersections, but also at at-grade highway-rail crossings. In addition, projects may increase pedestrian traffic at crossings, and elsewhere along rail corridor rights-of-way. Working with CPUC staff early in project planning will help project proponents, agency staff, and other reviewers to identify potential project impacts and appropriate mitigation measures, and thereby improve the safety of motorists, pedestrians, railroad personnel, and railroad passengers.

The traffic impact study within the transportation/circulation section of the DEIR needs to specifically consider traffic safety issues to the at-grade railroad crossings. In general, the major types of impacts to consider are collisions between trains and vehicles, and between trains and pedestrians.

Measures to reduce adverse impacts to rail safety need to be considered in the DEIR. General categories of such measures include:

- Installation of grade separations at crossings, i.e., physically separating roads and railroad track by constructing overpasses or underpasses
- Improvements to warning devices at existing highway-rail crossings
- Installation of additional warning signage
- Improvements to traffic signaling at intersections adjacent to crossings, e.g., traffic preemption
- Installation of median separation to prevent vehicles from driving around railroad crossing gates
- Prohibition of parking within 100 feet of crossings to improve the visibility of warning devices and approaching trains

- Installation of pedestrian-specific warning devices, channelization and sidewalks
- Construction of pull out lanes for buses and vehicles transporting hazardous materials
- Installation of vandal-resistant fencing or walls to limit the access of pedestrians onto the railroad right-of-way
- Elimination of driveways near crossings
- Increased enforcement of traffic laws at crossings
- Rail safety awareness programs to educate the public about the hazards of highway-rail grade crossings

Commission approval is required to modify an existing highway-rail crossing or to construct a new crossing.

Thank you for your consideration of these comments. We look forward to working with the City on this project. If you have any questions in this matter, please contact me at (415) 713-0092 or email at ms2@cpuc.ca.gov.

Sincerely,

Moses Stites
Rail Corridor Safety Specialist
Consumer Protection and Safety Division
Rail Transit and Crossings Branch
180 Promenade Circle, Suite 115
Sacramento, CA 95834-2936

From: Dan Radulescu [DRadulescu@waterboards.ca.gov]
Sent: Wednesday, July 28, 2010 5:05 PM
To: maguayo@cityofwilliams.org
Subject: City of Williams General Plan Update Draft Programmatic EIR
Hello, Ms. Aguayo:

In regard to the NOP for the DEIR, we would like to recommend that the County incorporate in its long term planning, and amend the municipal codes accordingly, the concepts of Low Impact Development (LID), Smart Growth in order to mitigate some of the impacts related to urbanization and provide sustainable approaches for the development of the community while preserving the natural resources.

LID is a sustainable practice that benefits water supply and contributes to water quality protection. The goal of LID is to mimic a sites predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to the source of rainfall.

Hydromodification strategies should include controls to manage the increases in the magnitude, volume and duration of runoff from development projects in order to protect receiving waters from increased potential for erosion and other adverse impacts, ideally to the pre-development levels.

On 20 January, 2005, Resolution 2005-0006 was adopted by the State Water Resources Control Board. The resolution adopted the concept of sustainability as a core value for all California Water Boards activities and programs, and directed California Water Boards staff to consider sustainability in all future policies, guidelines, and regulatory actions, including the review of applicable CEQA documents.

For further details please check
http://www.opr.ca.gov/ceqa/pdfs/Technical_Advisory_LID.pdf
http://www.epa.gov/smartgrowth/about_sg.htm

Thank you for the opportunity to present comments,

Dan R

Dan Radulescu, EJD, P.E., CPSWQ
Lead, MS4 Permitting & Water Quality Certification Unit
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dradulescu@waterboards.ca.gov
Find us on the web at http://www.waterboards.ca.gov/centralvalley/
To comply with the Governor's order calling for furloughs, the Central Valley Regional Water Control Board Office and offices of the California Environmental Protection Agency are closed the second, third and fourth Friday of every month. I apologize for any inconvenience this may cause