



Open Space and Conservation

Chapter 7

Beyond the suburban and industrial fringe, the City of Williams is characterized by vast agricultural fields set against the foothills of the Coast Range to the west and the Colusa Basin to the east. As the City experiences urbanization, open space, environmental resources, and recreation areas warrant a level of protection from encroaching development. The benefits of conservation, defined as the “management of natural resources to prevent waste, destruction, or neglect,”¹ have no limits. These natural areas offer a historical and cultural richness that outlasts the built environment, given that conservation measures and investments are in place. All of these benefits contribute to the community’s character and quality of life.

This chapter addresses the nexus between the built and natural environments. Each system can complement, rather than compete against, one another for mutual gain. As the City increases its population base, the principles of environmental stewardship will help to preserve the land’s utility, water and air quality, plant and animal wildlife, and recreation areas. These benefits extend to regional and statewide networks of parks, open space, and geologic formations. From an anthropocentric perspective, economic development and tourism are fueled by investments in beautiful and unique natural places. Natural resource protection and recreational amenities boost community aesthetics and improve community living, lending tangible and intangible value to the City.

The City of Williams has access to a toolbox of conservation measures, including long-range planning; ordinance amendments; best management practices; County, State, and Federal regulations; local programming; and

¹ California General Plan Guidelines

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outreach and education opportunities. In particular, policies need to maximize natural resource protection while limiting restrictions on the built environment. Innovative technologies and practices should be adopted to keep pace with population growth and minimize the City's long-term impact on the natural environment.

Purpose

The purpose of this chapter is to address open space, conservation, and parks and recreation. California statute mandates specific topics to be addressed for each element:²

- The open space element guides the long-range preservation and conservation of open-space land, which is defined as any parcel or area of land or water that is essentially unimproved and devoted to open-space use. Topics include agriculture, natural resource protection, recreation, and enjoyment of scenic beauty.
- The conservation element provides direction regarding the conservation, development, and utilization of natural resources. Population growth and development continually require the use of both renewable and nonrenewable resources. One role of the conservation element is to establish policies that reconcile conflicting demands on those resources.
- The parks and recreation element is an optional component that addresses passive and active recreation opportunities. This section evaluates the current system based on future needs.

These three elements have been combined into one chapter to reflect the interrelationships among each topic. The policies of this chapter are intended to complement the City's comprehensive strategy of creating a sustainable, livable community – an outgrowth of Williams' natural history and environmental context.

Realization

The following subsections elaborate on the background and recommendations of essential components to open space, conservation, and parks and recreation planning. Each narrative is followed by policies and actions to implement the General Plan.

Agriculture

Agricultural fields dominate the visual landscape, serving as the City's primary open space resource. The City of Williams' agrarian roots are embedded in a long history - characterized by Spanish and Mexican origins.³ The mid-nineteenth century gold rush triggered the rapid expansion of wheat crops in conjunction with manufacturing and commerce of agricultural

² California General Plan Guidelines

³ Source: City of Williams General Plan Update, Background Report on Cultural Resources

The content of this chapter overlaps many crossover themes found in other elements, including **Chapter 2, Background Analysis; Chapter 3, Land Use; Chapter 4, Public Safety; and Chapter 5, Public Facilities.** Open space and conservation topics previously addressed include:

- Rivers, Lakes, Streams, Ground Water, Flood Protection, Wastewater, Storm Drainage (Pgs. 2.21 – 2.23; 4.3 – 4.5; 5.2 – 5.6)
- Seismic and Geologic Hazards (Pgs. 4.7 – 4.8)
- Fire Hazards and Protection (Pgs. 2.30 – 2.31; 4.8 – 4.13)
- Soils (Pgs. 2.19)
- Parks and Recreation (Pgs. 2.19 – 2.20; 3.32)
- Subdivision and Conservation Design (Pgs. 3.30 – 3.31)



outputs. Nearly a century later, rice crop was the largest in California's history. 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. Within Colusa County, the number of acres devoted to rice farming increased by almost 80 percent between 1990 and 2008 from 83,800 to 150,200 acres.⁴ The per acre unit production of rice also increased by over 150 percent during this same period making rice the most profitable crop in the County. The primary use of open space in and around Williams is active farming, as illustrated in **Map 7.1, Management Landscape**. Rangeland is scattered throughout the agricultural fields, with a significant patch of wildlife and natural land reserve to the east of the City.

The eastern half of Colusa County is surrounded by Prime Farmland and Farmland of Statewide Importance. These U.S. Department of Agriculture designations surround the City of Williams' urbanized core to the south and north, respectively, as illustrated in **Map 7.2, Important Farmlands**. 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.⁵ Farmland of Statewide Importance is similar in quality but has minor shortcomings, such as greater slopes or less ability to store soil moisture.⁶ As the country has transitioned to denser development patterns, high-quality farmland has been lost to industrial and urban uses, resulting in agricultural practices on marginal lands. Protecting high-yielding land is of local and national importance in meeting the necessary food supply.

As urban development extends to agricultural land, the City should take an active role in promoting sensible development practices that respect the rural infrastructure and needs of neighboring farmers and ranchers. Growth management strategies can 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.

⁴ Source: Colusa County General Plan Update

⁵ Source: California NRCS.

<http://www.ca.nrcs.usda.gov/mlra02/napa/primfarmtbl.html>

⁶ Source: Colusa County General Plan Update



Several private orchards are located on the south side of town, within and just outside the City limits. Most of these trees are dedicated to walnut production.



Agricultural land surrounds the City of Williams.

As new industrial parks and residential subdivisions begin to develop on the City's fringe, zoning regulations such as bufferyards and setbacks help to reduce land use conflicts.

Zoning is another way to minimize conflicts with adjacent land uses. The City's zoning regulations designate an "Agricultural / Rural" (AR) district, which is intended to preserve the rural, agricultural character 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.

Conservation Innovation Grants

The Natural Resources Conservation Service (NRCS) awards Conservation Innovation Grants (CIG) to fund local projects designed to stimulate the development and adoption of innovative conservation approaches and technologies. These competitive grants seek to foster creative solutions to assist California's farmers and ranchers with emerging and traditional agricultural and natural resource issues. CIG projects are expected to lead to the transfer of conservation technologies, management systems and innovative approaches into NRCS technical manuals or guides or to the private sector. CIG, a component of NRCS' Environmental Quality Incentives Program (EQIP), funds one-to-three year projects that targets innovative on-the-ground conservation, including pilot projects and field demonstrations.

Applications must demonstrate the use of innovative technologies or approaches, or both, to address at least one sub-category as follows:

- Natural Resource Category: Water Quality-Livestock, Water Quality-Not Livestock, Water Quantity, Soils Resources, Atmospheric Resources, Grazing Land, Forest Health, Wildlife Habitat or On-Farm Energy Resources.
- Technology Category: Improved On-Farm Energy Efficiency, Water Management - Drainage Water and Irrigation Water, Improved Nutrient Management to Improve Water Quality, Air Quality or Conservation Technology Transfer to Targeted Groups of Farmers and Ranchers.

Source: NRCS,
http://www.ca.nrcs.usda.gov/news/releases/2010/cig_5-5-10.html

Conservation easements can supplement zoning in the effort to mitigate conflicting land uses. Land with significant conservation values, such as forests, wetlands, endangered species habitat, and scenic areas may be eligible for a conservation easement, a voluntary agreement with a nonprofit land trust or government agency.⁷ The easement restricts the type or amount of development while retaining private ownership of the land. Many landowners receive a federal income tax deduction for donating a conservation easement.

There are portions of two tracts within the existing Sphere of Influence (SOI) that are covered by a Williamson Act contract. Within the planning area, and within the area that is recommended for expansion of the Sphere of Influence, there is one tract and a portion of two other tracts that also have such a contract on them. These tracts are shown in *Figure 7.1, Williamson Act Tracts*. The Williamson Act, technically the California Land Conservation Act of 1965, authorizes local governments to enter into contracts with property owners to set aside prime and non-prime agricultural land, and a third classification known as a "farmland security zone", for agricultural and other open space uses. In exchange for the public benefit of the preservation (and resulting loss of potential revenue to the property owner), the property value is set much lower, resulting in lower property taxes.

To offset the loss in revenue, the state provides subsidies to those local governments that have entered into contracts. The Williamson Act tracts in the planning area are classified as prime agricultural lands, which mean they attained high rates in a quantitative analysis, and they support either livestock or crop-bearing plants.

Chapter 3, Land Use and Character begins to outline land use strategies that address the relationship between agricultural and urbanized lands. The

⁷ California Stewardship Program, <http://ceres.ca.gov/foreststeward/html/consease.html>



following policies and actions expand on these themes, extending the functional role of agriculture to cultural ties with the land.

Policies

- 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.
- 7.2 The history and tradition of local agricultural will be promoted through cultural events and programming.
- 7.3 Agriculture and ranching activities will be supported through financial incentives and access to municipal venues and facilities.
- 7.4 Prime farmland shall be prioritized for agricultural (rather than industrial or residential) uses to ensure the most efficient use of land.
- 7.4a Properties containing Williamson Act contracts shall have executed a Notice of Non-Renewal prior to annexation into the city limits of Williams.
- 7.4b Work with the Local Agency Formation Commission (LAFCo) on issues of mutual concern including the conversion of agricultural land.

Actions

- 7.a Restrict permitted activity and densities in the “Agricultural/Rural” zoning district to complement rural character, including low-density development and minimal infrastructure requirements. Examples include single-family detached homes, manufactured homes, and outdoor and entertainment facilities.
- 7.b Require additional permitting and approval to develop on prime agricultural land.
- 7.c Specify bufferyard requirements and lot setbacks that address conflicts between agricultural and residential land uses.
- 7.d Educate agricultural landowners and establish incentive programs to encourage the donation of conservation easements.
- 7.e Support and promote activity associated with the private farmer’s market located on Seventh Street.
- 7.f Consider funding a marketing campaign that promotes the purchase of “local” products from the City of Williams and Sacramento Valley region.

Parks System

Parks and recreation facilities are an essential part of a healthy, quality, and sustainable community environment. They provide necessary components in human existence for events outside of the home, after work, and beyond school activities. Whether for passive or active use, park areas and recreation facilities are an important part of everyday active living. Much like streets and sidewalks, water and wastewater lines, drainage facilities, police and fire



Each park offers different amenities, depending on the service area, location, and function. Shade trees and sheltered areas are highly valued in Williams’ hot and dry summer climate.

equipment, and other municipal facilities and services, parks are integral components of the municipal infrastructure. Parks reflect the quality of life enjoyed by citizens, incorporating scenic, historic, and cultural values. They deserve a significant level of attention and commitment of resources to be adequately acquired, constructed, operated, and maintained.

A publication of the National Recreation and Park Association (NRPA) entitled *Recreation, Park and Open Space Standards and Guidelines* includes criteria for the provision of parks and recreation facilities. The criteria are based on a national survey of municipalities of all sizes and geographic regions. These standards serve as a baseline to compare the current service levels against national standards. Many communities perceive these standards as a minimum, hoping to surpass them. Standards are typically calibrated to reflect local participation trends, user characteristics, demographics, climate, natural environment, and other factors specific to each community.

Current Parkland Needs (Acreage)

Chapter 2, Background Analysis, 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 is about 2.8% of the City’s inventory of developed property. Four of these parks 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. The City’s current parkland dedication requirements of one acre per 1,000 population will allow the City to remain within the standard overall. One park, Valley Vista, is classified as a community park. The City provides 2.08 acres of community 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.

Current Parkland Needs (Location)

In addition to the acreage of parks, their location relative to the existing and planned future neighborhoods is equally important. They should be well distributed and conveniently accessible to all areas of the community. An evaluation of park service areas helps to determine whether there is sufficient coverage and where new parks are needed to fill the deficient areas. The NRPA establishes a maximum service area of a quarter mile around a neighborhood park and of one mile around a community park.

Map 7.3, Neighborhood Park Service Area, shows the existing neighborhood parks in the City with the quarter- and one-mile radii. The neighborhood area east of the school and north of D Street appear to be underserved from an accessibility standpoint. Some of these gaps in parkland service can be

NRPA Recommendations

Pocket – 0.25-0.5 acres/1,000 persons

Neighborhood – 1-2 acres/1,000 persons

Community – 5-8 acres/1,000 persons



covered by a continuation of the City's current coordination efforts to share school and City resources. The school is located within a quarter mile of the homes in the underserved area. The City and Williams Unified School District have a cooperative relationship with a joint use agreement. In the future, the City may want to consider adding one neighborhood or pocket park within the northern neighborhood to augment the school's recreational offerings to the neighborhood.

At this time, the City of Williams does not provide any pocket park services. Pocket parks are recommended by the NRPA to serve relatively small groupings of the population, with an eighth mile service area and at a size between a quarter- to half-acre per 1,000 persons. To meet this standard, 1.32 acres distributed at five sites would need to be added. Valley Vista is Williams' sole community park and serves all of Valley Ranch and the older residential areas to the west to about Ninth Street. *Map 7.4, Community Park Service Area*, shows the current one-mile service area of the community park. The smaller quarter-mile service area around the park shown in red reflects the additional neighborhood park service that the park provides. The map indicates that the park would serve almost the entire eastern Sphere of Influence (SOI) and beyond, including the two potential future school sites to the east. However the western portion of the City remains underserved according to NRPA standards. A second community park located in the southwest corner of the City, or preferably within the area that is currently in the SOI south of Hankins Road (but should be annexed in before parkland is acquired) would cover the current residents and prepare the City for future growth to the south and to the southwest.

Future Parkland Needs

The City does not currently offer regional park services. Regional parks are large park facilities that serve several communities. They range in size from 100-499 acres. The regional park is a natural area or developed area for a variety of outdoor recreation such as ball fields, playgrounds, boating, fishing, swimming, camping, picnicking, and trail systems. NRPA guidelines for these parks are five to 10 acres per 1,000 persons, but they should not be smaller than 100 acres. Under those guidelines, Williams does not need to provide regional park services until it reaches a population that is nearly five times its current size, or at the point where there is a policy decision made to serve not only the City's but also the surrounding communities' citizens as well. As the City continues to grow in significance relative to the County and the region, it should begin to consider providing such a service to attract business, new residents, and visitors to the area using its service industry.

According to the information gathered from stakeholders during the kickoff meetings of the General Plan, there are certain recreational needs that are not



Valley Vista Community Park serves as a model for park development, offering athletic fields, basketball courts, restroom facilities, a trail system, and natural amenities. An on-site wetland serves as a recreational asset as well as a functional one, doubling as on-site detention for stormwater runoff.



met in the City. However, the extent and exact nature of these needs has not yet been studied in detail. For example, tennis is one sport where there was an interest, but there was also input that the existing tennis courts are underutilized. Due the lack of an analysis, the gaps in current parkland acreage, and the significant growth that is anticipated by 2030 (an almost doubling of the population), the City would benefit from a detailed study of the City's needs through a Parks and Recreation Master Plan.

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.⁸ The annual budget under the City of Williams Parks Improvement Project shall 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.
- 7.7 Parks and recreation facilities and services will be integrated with the City's storm drainage improvement planning and other public facilities, allowing for dual benefit among municipal functions.
- 7.8 Parks and open space shall 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 shall be used to increase quantity and quality, sustaining a high level of service across the entire system.

Actions

- Hire a part-time parks and recreation staff member to support event programming and pursue additional grants and outreach opportunities.⁹
- 7.g Support community groups such as the Citizens for a Better Williams, a local nonprofit, that hosts social and community events, such as Pioneer Day, Festival of Lights, and wine tasting.

⁸ The Parks Improvement Project, FY 2010-2011 is currently being developed and reviewed.

⁹ The City is actively recruiting for this position.

Pioneer Day is one event among several that the community organization, Citizens for a Better Williams, sponsors. Additional City staff will expand the City's capability in supporting and organizing these types of events, which boost the City image and attract visitors.



- 7.h Continue pursuing funding for a community center in the old Veteran’s Building, which will primarily target senior recreational activity and house the Parks and Recreation department.¹⁰
- 7.i Continue to support the joint maintenance and facility agreement of parks and recreational facilities between the City’s Parks and Recreation Department and the Williams Unified School District.
- 7.j Increase the number of events and programs for year-round indoor and outdoor activities, with the help of additional staff and continued support of community groups.
- 7.k Regularly prepare nominations and applications to qualify for grant assistance or other funding arrangements to finance annual capital improvements, parkland acquisition and development, trail development and maintenance, and open space preservation.
- 7.l Adopt a parks-to-standards program to set a standard by which all parks, recreation areas, and public spaces are measured. Improvements would bring each to an equivalent standard, which may then be adhered to through ongoing maintenance. In this way, the entire park system is elevated to the same standard of quality.
- 7.m Establish and implement a regular and formalized park and facility maintenance program. The program must, first, identify and log all necessary maintenance items, including repair of broken equipment, identification of unsafe conditions and remedies for correction, and items needing more significant capital expenditures. Cost estimates shall be compiled and integrated into a multi-year improvement program.
- 7.n Establish a “Friends-of-the-Park” program to solicit neighborhood, business, and civic group involvement in maintaining and policing parks and open space areas.
- 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.

Trails and Greenways System

Interconnected, trail and greenways corridors that connect neighborhoods, schools, parks, and other public use areas enhance the parks and recreation system, allowing for inter-city travel and enjoyment across multiple destinations. This type of investment requires a comprehensive strategy, based on an inventory of

¹⁰ In the Parks Improvement Project of the Fiscal Year 2011 Capital Improvement Program, the City set aside \$62,000 of Proposition 40 funds for renovating the Veterans Building. The State is currently reviewing a Proposition 84 grant application submitted by the City, which would be used to supplement the cost.

Funding for Trails

The Recreational Trails Program (RTP) provides funds to the States to develop and maintain Recreational Trails and trail-related facilities for both non-motorized and motorized Recreational Trail uses. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) defines the program at the federal level. Seventy percent (70%) of the funds received by California will be available for non-motorized Projects on a Competitive basis.

Safe Routes to School Program makes grants available for the construction of facilities that improve and enhance the safety of pedestrians and bicycle facilities and related infrastructure.

Habitat Conservation Fund (HCF) Program
This competitive grant program funds the development, improvement, rehabilitation, restoration, and enhancement of non-motorized trails and associated interpretive facilities for the purpose of increasing public access to, and enjoyment of, public areas for increased recreational opportunities.

Source: California State Parks & Concepts – Practical Tools for Parks and Recreation, California Department of Parks and Recreation



existing infrastructure and system gaps; future growth patterns; and capital improvement budgets. To do so will require a coordinated effort to seek out trail opportunities within rights-of-way, utility and drainage easements, public access ways, and as dedicated bike lanes along major streets and rural roads. Such an interconnected system of bicycle and pedestrian facilities accommodates recreation needs while also providing alternative modes of travel.

The California Department of Parks and Recreation has a Statewide Trails Office, which establishes a vision applicable to all recreation trails, including ones designed and maintained by the City of Williams. The mission is to:

Promote the establishment and maintenance of a system of trails and greenways that serves California's diverse population while respecting and protecting the integrity of its equally diverse natural and cultural resources. The system should be accessible to all Californians for improving their physical and mental well-being by presenting opportunities for recreation, transportation, and education, each of which provides enhanced environmental and societal benefits.¹¹

The City should seek to fulfill this vision, resulting in health, recreation, transportation, clean air, social, economic, educational, energy conservation, environmental, and resource protection benefits. The following policies augment the land use approach, as outlined in *Chapter 3, Land Use and Character*. Trail and greenway development ties into community design principles that promote multi-modal, livable centers catering to pedestrians and bicyclists. These types of corridors enhance the system's overall connectivity, a central theme in transportation and land planning.

Policy

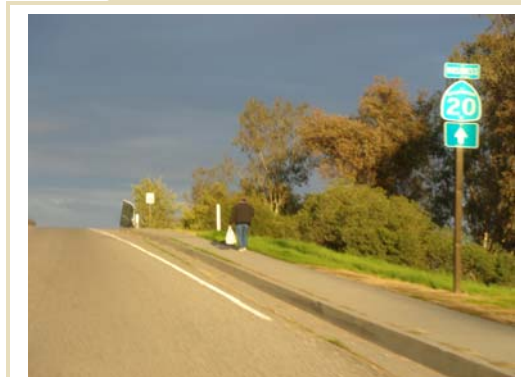
- 7.12 A comprehensive, interconnected trail system will offer pedestrian walkways, bike paths, and equestrian trails throughout the community
- 7.13 The creation of inter-city trails will enhance recreational opportunities and promote walking as a viable travel mode.
- 7.14 The creation of linear greenways will serve as a vehicle to protect natural resources and provide for natural scenic corridors.
- 7.15 The local trail system will connect local residents to regional, state, and federal trail systems.
- 7.16 Pedestrian paths will adhere to ADA accessibility guidelines, including possible redesign of existing sidewalks, sidewalk curb cuts, ramps, and trails.

¹¹ California Recreational Trails Plan, 2002

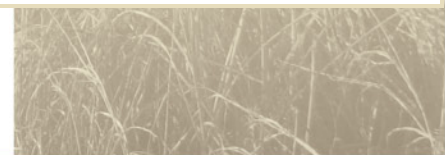


Actions

- 7.p Invest in a multi-use trail over the E Street bridge, allowing for safe and accessible, multi-modal travel across the Interstate divide.
- 7.q Include provisions in the subdivision regulations to allow for or require the construction of off-street trails, including design specifications for appropriate surface materials and construction practices.
- 7.r Prepare a comprehensive trail and greenways master plan that identifies the locations of bike lanes, trails, greenways, and pedestrian linkages throughout the City. Attention shall be given to identify sidewalk improvements in and around Downtown and the well established areas of town where roadways may require “retrofitting” to accommodate such improvements. Generally, the plan shall:
- 7.s Inventory and map all existing trail segments and sidewalks throughout the City.
- 7.t Identify missing and incomplete segments needed to improve continuity, particularly those adjacent to schools, parks, public buildings, and other pedestrian generators and attractors, such as Downtown.
- 7.u Inventory possible accessibility barriers for disabled persons.
- 7.v Identify natural areas and other infrastructure corridors within the community that could serve as linear linkages and/or greenbelts. These areas shall be acquired and developed for recreational use and as trails and connections.
- 7.w Propose trail extensions that would connect the City’s trail network with County, State, and Federal trail systems.
- 7.x Recommend appropriate cross sections for different facilities including sidewalks, multi-purpose paths, and bike lanes.
- 7.y Prepare a near-term capital improvement plan and program for those trail or sidewalk segments that would have an immediate impact, meaning those by which connections may be made to and between significant destinations with relatively little planning and investment.
- 7.z Identify long-term costs associated with trail maintenance, and include these into the capital improvement plan.
- 7.aa Based on the results of the above inventory prepare an application for the Safe Routes to School Program. Under this program Caltrans makes grants available for the construction of facilities that improve and enhance the safety of pedestrians and bicycle facilities and infrastructure.
- 7.bb Acquire any necessary additional rights-of-way or easements to allow for a multi-purpose (walking, jogging, bicycle, and equestrian use) trails along linear features, such as the railroad, waterways, and roadways. Provide for lateral extensions to serve neighborhood areas and points of public access, consistent with the comprehensive trail and greenways master plan.



E Street could serve as an east-west greenway corridor to the community, accommodating cross-town traffic and offering enhanced, pedestrian-friendly access over Interstate 5.



Animal Wildlife

The development of residential and commercial property typically occurs on a large scale, wiping out natural habitats and forcing animals to relocate. This disruption in the ecosystem puts some animals at high risk, threatening their very existence. The State and Federal Endangered Species Acts classify animals into several categories to determine the level of animal protection. These categories are distinguished as Threatened, Endangered, California Species of Special Concern, and Fully Protected Species. The City of Williams is home to a number of birds, reptiles, amphibians, and invertebrates that fall within these categories, as documented in *Appendix A, Special-Status Wildlife Species Potentially Occurring Within the City of Williams Sphere of Influence*.

Wildlife movement corridors, also called dispersal corridors or landscape linkages, function as a linear trail system for animals by connecting two significant habitat areas.¹² Studies have proven that wildlife corridors are effective at increasing animal movement between destinations, helping to prevent loss of populations and improving overall biodiversity.¹³ See the sidebar, *Principles of Wildlife Corridor Design*, on the previous page to explore concepts and guidelines for promoting safe animal travel.

As the community evaluates new growth scenarios, seeks to improve open space land for recreation opportunities, and expands the transportation network, animal habitats and connectors between them should be a consideration in assessing environmental impacts.

Principles of Wildlife Corridor Design

- The corridor should be as wide as possible. The corridor width may vary with habitat type or target species, but a rule of thumb is about a minimum of 1,000 feet wide (but larger if possible).
- Maintain as much natural open space as possible next to any culverts to encourage the use of the culverts.
- Maximize land uses adjacent to the corridor that reduce human impacts to the corridor (Beier and Loe 1992). Isolation effects along corridors can be offset by having surrounding habitat similar to that found within corridors (Perault and Lomolino 2000).
- Do not allow housing or other impacts to project into the corridor to form impediments to movement and increase harmful edge effects.
- If housing is to be permitted next to the corridor, put conservation easements on adjacent lots to prohibit structures nearest the corridor.
- Develop strict lighting restrictions for the houses adjacent to the corridor to prevent light pollution into the corridor. Lights must be directed downward and inward toward the home.

Checklist for Evaluating Corridors

- Step 1: Identify the habitat areas the corridor is designed to connect.
- Step 2: Select several target species for the design of the corridor
- Step 3: Evaluate the relevant needs of each target species
- Step 4: For each potential corridor, evaluate how the area will accommodate movement by each target species.
- Step 5: Draw the corridor on a map.
- Step 6: Design a monitoring program.

Source: Center for Biological Diversity,
<http://www.biologicaldiversity.org/publications/papers/wild-corridors.pdf>

¹² Monica Bond, Center for Biological Diversity,
<http://www.biologicaldiversity.org/publications/papers/wild-corridors.pdf>

¹³ Study by Dr. Nick Haddad, North Carolina State University,
<http://www.sdearthtimes.com/et0103/et0103s4.html>



Policies

- 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 when developing new land.
- 7.18 Animal corridors along waterways, tree groves, and grasslands shall be developed to ensure safe animal travel.

Actions

- 7.cc Designate animal reserves or habitat areas in public parks and open space, effectively limiting recreation activities to provide undisturbed refuges for animal wildlife.
- 7.dd Coordinate with regional authorities to create interconnected wildlife corridors both within and outside the City limits.
- 7.ee Promote and support Habitat Conservation Plans between landowners and the U.S. 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. ¹⁴

Land Development and Subdivision Design

Land use and community design policies directly impact total open space, site selection criteria, and landscape requirements. *Chapter 3, Land Use and Character*, begins to address conservation principles in land planning, a decision-making process that influences flora and fauna for a service area extending far beyond the site boundaries.

Open space can be regulated through each land use district, requiring a specific percentage of open space per square foot of development. Buildings, parking areas, sidewalks, driveways, or roadways are excluded from this total. For instance, suburban residential districts would require more open space than suburban commercial districts, but less than estate residential districts. The zoning ordinance can incorporate restrictions that offer sufficient flexibility for profitable development while preserving the natural environment.

Policies

- 7.19 Subdivision regulations and design guidelines shall be used as a tool to promote sustainable land planning and development practices.
- 7.20 Open space and natural areas are a community amenity - of equal importance in the planning stages as transportation accommodations and public utilities.

¹⁴ California Department of Fish and Game,
http://www.dfg.ca.gov/habcon/conplan/fed_hcp/



The successful restoration and management of wildlife areas must provide access to food, shelter and migration corridors as well as hibernation, aestivation, breeding, and nesting sites. This wildlife corridor is surrounded by agricultural land uses.

Source: Natural Resource Conservation Service,
<http://www.ia.nrcs.usda.gov/news/brochures/reptilesamphibians.html>



Valley Vista Community Park is integrated into the adjoining subdivision, providing open space amenities (athletic fields and recreation facilities), trail system, and on-site detention (designed as a wetland) for the housing development.

Open Space Preservation Techniques

Parkland/Trail Dedication – As authorized by the Quimby Act and AB1600, the City may require the dedication of parkland and/or open space or to pay a fee for the acquisition and development of facilities.

Zoning Incentives – The City may offer a density bonus in exchange for preserving sensitive resources and increased open space.

Zoning for Conservation – Use of overlay zones to protect floodplains, wetlands, watersheds, steep slopes, and other sensitive areas, or designating special zoning categories with environmental restrictions such as larger setback or limits on impervious cover.

Public Access Easements – Allows development of a trail on the landowner's property within the easement.

Conservation Easements – Voluntary restriction placed on a property by the owner. The right to enforce this restriction is granted to a public agency (land trust).

Transfer of Development Rights – Development rights attached to a piece of property are part of a bundle of rights the landowner has regarding the property. The landowner can sell the right to develop the property while maintaining ownership of the land itself.

Conservation Subdivisions – Conservation subdivisions cluster dwelling units together on small lots while leaving a large percentage of the site undeveloped.

7.21 Construction practices will minimize soil erosion with respect to wind, water, and site selection. This will impact site preparation, grading, sediment control, and structural foundations.

Actions

- 7.ff Promote cluster subdivisions that will preserve site specific resources as part of planned developments or in a newly adopted agricultural zoning district.
- 7.gg Amend the zoning and subdivision regulations to allow and encourage conservation, low-impact development types. Corresponding density bonuses may be integrated into the ordinance to make these attractive to conventional large-lot subdivisions. In this way development may reinforce the City's desired rural character while invoking sustainable development practices.
- 7.hh Amend the subdivision regulations as follows:
- 7.ii Establish the allowable and limited uses of open space regarding buildings, structures, and impervious surfaces.
- 7.jj Specify the means of ownership and maintenance of open spaces such as the use of homeowners' associations, conservation easements in favor of the City, or dedication to a public agency or a City-approved private, non-profit organization.
- 7.kk Allow parks and greenways to fulfill open space requirements.
- 7.ll Maintain strict soil erosion guidelines to ensure development is sensitive to site and climate conditions.
- 7.mm Promote landowner education regarding the benefits and potential applicability of conservation easements within subdivisions and for individual properties.
- 7.nn Develop a "land bank" program whereby owners of flood-prone property may deed land to the "bank" for long-term conservation. Non-profit organizations that specialize in land acquisition and establishment of conservation easements can assist with such initiatives.
- 7.oo Avoid developing subdivisions on soils that are designated as prime agricultural land, in order to maximize the best use of the land.
- 7.pp Coordinate with agencies such as the Trust for Public Land¹⁵ and the California State Parks' Land and Water Conservation Fund program to identify and acquire valued open space areas in and around the community.

Vegetation

In the form of plants, shrubs, and trees, vegetation offers both functional and aesthetic benefits to the City of Williams, warranting protection of existing species and promotion of new ones. Community and subdivision entryways

¹⁵ The Trust for Public Land is active in California including a program for the Central Valley that protects working landscapes, watershed lands, and other resources areas.



are enriched with lush, colorful perennials. Street trees along major roadways can reduce traffic speeds and increase pedestrian safety, while bioswales in parking lots can serve as on-site detention basins and increase stormwater runoff filtration. Many of these functional benefits are coupled with visual enhancements, improving the City's quality of life and overall attractiveness to prospective investors and tourists.

Context

Colusa County's habitat is characterized by diverse forests to the west and agricultural lands to the east, as illustrated in **Map 7.5, Colusa County Land Cover**. Although the City of Williams is surrounded by farmland with patches of rangeland, the City has a mixture of mature and newly planted vegetation dispersed across the community. The older residential neighborhoods are characterized by canopy trees and elaborate groundcover, while the newer developments are distinguished by young trees evenly dispersed. This contrast is underscored when comparing neighborhoods on the east and west sides of Interstate 5.

Although the City doesn't have any natural forests, residents are within close proximity to the Mendocino National Forest, which falls within Colusa, Lake, Glenn, Mendocino, Tehama, and Trinity counties. 60,000 of the 913,306 acres are estimated to be old-growth forest, including Douglas-fir, Ponderosa Pine, White Fir, Tanoak, and Pacific madrone species.¹⁶ Other nearby, natural areas with remarkable plant and animal wildlife include:

- Colusa National Wildlife Refuge
- Delevan National Wildlife Refuge
- Sacramento National Wildlife Refuge
- Willow Creek-Lurline Wildlife Management Area
- North Central Valley Wildlife Management Area
- Colusa-Sacramento River State Recreation Area
- Colusa Bypass Wildlife Area
- Sacramento River Wildlife Area

Wetlands are located throughout Colusa County, but there are relatively few within the City of Williams. *Figure 7.2, Wetlands in the City of Williams*, identifies these locations. Wetlands are characterized by aquatic-type vegetation and hydrology present.¹⁷ Due to their unique and significant habitats, they are protected by the Federal government 404 permit program, which requires U.S. Army Corp of Engineers approval before placing fill for development purposes. Although agricultural uses and grazing are allowed,



The Mendocino National Forest, located in the western half of Colusa County, illustrates the diverse landscapes of the region.

Photo Source: Visit Mendocino
<http://www.visitmendocino.com/business/mendocino-national-forest>

¹⁶ 2010 Colusa County General Plan

¹⁷ 1988 City of Williams General Plan

wetlands merit preservation and when appropriate, recreational enhancement. Their diversity of plant and animal species, hydrologic functions, and recreational potential should be optimized for community enjoyment.



Figure 7.2, Wetlands in the City of Williams
Source: U.S. Fish and Wildlife Service, National Wetlands Inventory

Selection

When introducing plant life into the landscape, the preferred practice is to select native species, which are best suited to Williams’ climate, soil type, and water requirements. Benefits of using native plants include: saving water; lowering maintenance costs; reducing pesticides; improving wildlife habit; and supporting local ecology. Please see the sidebar on the following page, *Advantages to Planting Native Species*, for additional detail. Native species are superior to invasive species, which threaten the diversity or abundance of native species through: competition for resources, predation, parasitism, interbreeding with native populations, transmitting diseases, or causing physical or chemical changes to the invaded habitat.¹⁸ This can result in clogging of navigable waterways and water delivery systems; weakening flood control structures; damaging crops; and introducing diseases to animals that are raised or harvested commercially.

According to the California Natural Diversity Database (CNDD) and California Native Plant Society (CNPS), the City of Williams does not have

any occurrences of special-status plants (i.e. endangered, threatened, or species of special importance) within the City limits. However, five plants have been identified to have historical occurrences within a five-mile radius of the City limits, as documented in *Appendix B, Special-Status Plant Species Potentially Occurring within the City of Williams Sphere of Influence*. If located in the community, these species require special conservation measures since they are rare and valuable environmental resources.

In the following policies and actions, vegetation is addressed from the perspectives of preserving existing species in the natural environment and introducing new species to the built environment.

Policies

7.22 Preservation and replacement measures will be encouraged for existing vegetation, with special emphasis on mature shade trees.

¹⁸ California Department of Fish and Game, <http://www.dfg.ca.gov/invasives/>



- 7.23 Open spaces and recreational areas are enhanced by the appearance, shade, and design elements of plants, shrubs, and trees.
- 7.24 Preference will be given to native and drought-tolerant plant species to reduce water consumption, minimize invasive species, and preserve the appearance of the natural landscape.
- 7.25 While the zoning regulations mandate landscape requirements for private property, the overall appearance of the City requires upgrades to the private and public domain.
- 7.26 Landscaping in the right-of-way enhances the community appearance, helps to calm traffic, and increases the community's ability to attract tourists and developers.
- 7.27 In the removal and relocation of plants and trees, special consideration will be given to endangered species.
- 7.28 Use of shade trees reduces radiation heating and encourages outdoor recreation.

Actions

- 7.qq Establish a public advisory committee to develop landscape guidelines, standards, and measures for protecting plant and wildlife communities on public and private properties.
- 7.rr Adopt design practices that are compatible with the environment, including an emphasis on native and drought-tolerant species.
- 7.ss Promote site design practices that reduce the extent of impervious cover (building footprints and paved areas) in favor of natural and/or landscaped areas.
- 7.tt Assess public opinion and consider adopting a tree protection ordinance which requires protection and relocation of mature trees (e.g. 6" diameter or greater).
- 7.uu Prohibit the re-location or removal of endangered species unless replacement provisions are in place.
- 7.vv Discourage the introduction of invasive species and prevent the spread of non-native invasive species that have become established.
- 7.ww Prepare a near-term capital improvement plan and program for right-of-way and publicly owned property that would immediately benefit from landscape improvements, with emphasis on community gateways and arterial roads.
- 7.xx Require new commercial, industrial, and multi-family developments to submit landscaping plans that coincide with zoning requirements, as part of the development review process.
- 7.yy Plant 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.

Advantages to Planting Native Species

Save Water

Take advantage of water conserving plants in your landscape. Once established, many California native plants need minimal irrigation beyond normal rainfall.

Lower Maintenance

In a garden environment, native plants do best with some attention and care, but require less water, fertilizer, pruning, less or no pesticide, and less of your time to maintain than do many common garden plants.

Reduce Pesticides

Native plants have developed their own defenses against many pests and diseases. Since most pesticides kill indiscriminately, beneficial insects become secondary targets in the fight against pests. Reducing or eliminating pesticide use lets natural pest control take over and keeps garden toxins out of our creeks and watersheds.

Invite Wildlife

Native plants, hummingbirds, butterflies, and other beneficial insects are "made for each other." Research shows that native wildlife clearly prefers native plants. California's wealth of insect pollinators can improve fruit set in your garden, while a variety of native insects and birds will help keep your landscape free of mosquitoes and plant-eating bugs.

Support Local Ecology

While creating native landscapes can never replace natural habitats lost to development, planting gardens, parks, and roadsides with California native plants can help provide an important bridge to nearby remaining wild areas.

Source: California Native Plant Society,
http://www.cnps.org/cnps/grownative/why_native.php



7.zz Consider provisions in the subdivision regulations may require riparian buffers around all naturally occurring water bodies and wetlands. The standards shall restrict septic systems within the buffer area and include requirements for planting indigenous plants and trees to enhance the buffer’s absorption and filtering potential.

7.aaa Include the use of bio-swales and permanent water features for drainage management to reduce the volume and rate of stormwater runoff from new developments.

7.bbb 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, the use of green roofs shall result in a reduction in the extent of stormwater facilities that need to be constructed to meet standards.

7.ccc The City will identify areas that may accommodate floodwater for the purposes of groundwater recharge and stormwater management.



The height and canopy of mature trees enriches older neighborhoods, offering shade, vertical scale, and a rich color palette.



Tree preservation should be prioritized over tree replacement since new trees take a long time to establish themselves.

