

**City of San Luis Obispo  
Environmental Stewardship Report  
A Summary of Resource Protection  
2009**



Johnson Ranch Open Space

## *Introduction*

Residents cherish the natural beauty within and surrounding our community. At the same time, San Luis Obispo is a city – a place where people work, raise families, go to school, recreate, and do the things that people do in a city environment.

Balancing the demands of city living with the desire to retain the community's natural beauty poses a constant challenge. Over the years, San Luis Obispo city councils have created policies and programs designed to help strike the right balance, ranging from the basics (properly disposing of waste) to progressive environmental and conservation services (night sky preservation). Providing these services requires the effort and teamwork of numerous city departments and employees.

## *How to Use this Report*

This online document summarizes the various ways the City of San Luis Obispo protects its natural resources. As greener technologies are introduced, and efforts for sustainable practices are put in place, the City will continue to be a leader in natural resource protection.

The report is organized into sections that highlight the many policies and programs implemented over the years. Within some sections, there are electronic links that connect the reader to more information on the topic.

If you need more information regarding a certain program, please contact one of the City employees located at the end of this report.

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## *Planning and Development Review*

The General Plan guides the City's future. It establishes parameters for the city's expansion and includes plans to maintain open space for farming and wildlife habitat. It contains policies for water, energy, and cultural resources, as well as for open space. The General Plan also aims to promote the job and housing balance from becoming more severe, thereby avoiding additional energy consumption and air pollution.

The City's Community Development Department is responsible for implementing many General Plan policies that support the protection of our natural environment. These include:

**Drafting** zoning and subdivision standards that protect natural resources such as requiring setbacks from creeks, providing bicycle parking, protecting solar exposure, and landscaping designed for water conservation.

**Conducting** reviews of remodels and new construction, including assessing proposals for consistency with the General Plan and City development standards. Demolition and construction projects are encouraged to make materials available for re-use or recycling.

**Assessing** potential environmental impacts of proposed projects and coordinating review by other agencies, the public, and decision-makers.

Three City advisory bodies focus specifically on planning and development: the Planning Commission, the Architectural Review Commission, and the cultural Heritage Committee.

The Planning Commission makes decisions and recommendations to Council on many different types of development applications, and advises the council on long-range planning.

The Architectural Review Commission establishes architectural guidelines for the design of new construction and major commercial remodeling projects.

The Cultural Heritage Committee oversees programs aimed at preserving historical and cultural resources.

## Conservation and Open Space

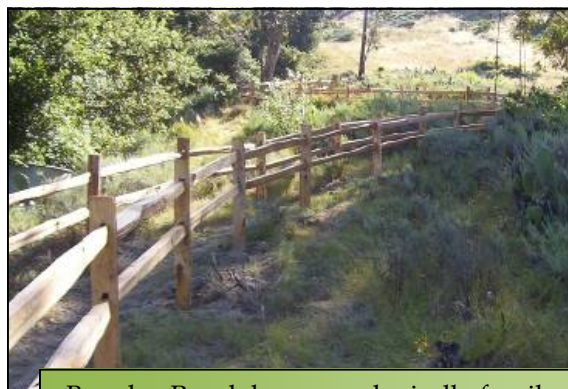
The Conservation and Open Space Element (COSE) guides the protection and preservation of the city and its surrounding natural resources. Updated in 2006, the COSE includes policies on the protection of wildlife habitat, open space, scenery, and water quality, energy sources, recycling, and archaeological sites.

Highlights of the Element include:

- ◆ “Natural community” definitions and natural resource maps based on detailed, accurate, and current information with corresponding preservation policies.
- ◆ A greenbelt boundary to expand open space buffers around the City that reflect viewsheds, watersheds, and geographic features like valleys, ridgelines, and peaks.
- ◆ Provisions requiring conservation plans for all open space areas under City ownership or easement.
- ◆ A monitoring program for air and water quality and for natural populations.
- ◆ The requirement for including wildlife corridors into the design of major roadways.
- ◆ Exterior lighting design standards to prevent light pollution and preserve nighttime sky views, while

enhancing public safety and lighting efficiency.

- ◆ Green Building standards to promote energy and materials conservation in new private and public buildings.
- ◆ Protection of archaeological sites, historically and architecturally significant buildings, and other cultural features that contribute to “sense of place.”
- ◆ Emphasis on planting native California trees and beautification of City streetscapes.
- ◆ Passive recreational uses of open space where compatible with other open space and ecological objectives.



Bowden Ranch has an ecologically fragile area that required fencing on both sides of the trail to preserve the area.

## *Conservation and Open Space*

In 2005, the Council dedicated the City to the Ahwahnee Principles. The City believes these principles are the foundation of a safe, environmentally healthy, and life-sustaining community. Highlights of the Principles include:

<b>Ahwahnee Principles</b>	All planning should be in the form of complete and integrated communities containing housing, shops, workplaces, schools, parks and civic facilities essential to the daily life of its citizens.
	Community size should be designed so that housing, jobs, daily needs, and other activities are within easy walking distance to each other.
	As many activities as possible should be located within easy walking distance of transit stops.
	A community should contain a diversity of housing types to enable citizens from a wide range of economic levels and age groups to live within its boundaries.
	The community should have a center focus that combines commercial, civic, cultural, and recreational uses.
	The community should contain an ample supply for specialized open spaces in the form of squares, greens, and parks whose frequent use is encouraged through placement and design.
	Each community should have a well-defined edge, such as agricultural greenbelts or wildlife corridors, permanently protected from development.
	Wherever possible, the natural terrain, drainage, and vegetation of the community should be preserved with superior examples contained within parks or green belts.
	The community design should conserve resources and minimize waste.
	Communities should provide for the efficient use of water through the use of natural drainage, drought tolerant landscaping, and recycling.
The street orientation, placement of buildings, and use of shading should contribute to the energy efficiency of the community.	

## *Natural Resources Protection*

Through its [Natural Resources Protection Program](#), the City brings a positive, innovative approach to issues involving natural resources. Administered by the Natural Resources Manager, the program includes community programs and organizational support.

### Community Programs

#### *Greenbelt Preservation*

Vital agricultural and resource lands are protected permanently using a variety of techniques, including fee or easement purchases, land dedications linked to granting development entitlements and donations. Since 1995, the City has protected more than more than 6,000 acres through this program. This includes land that has been purchased directly as well as open space easements.

#### *Land Stewardship*

The City, working with non-profit partners, enables interested residents to work on restoration, management, and trail projects in open space lands through its volunteer program SLO Stewards.

#### *Environmental Restoration*

Waterways are important to the City and this program integrates

environmental protection and restoration into development projects which affects creeks or other important natural resources.

#### *Natural History Education*

City staff and trained volunteers lead walks in open space areas and give presentations to schools, youth and civic groups, and the general public.

### Organizational Support

#### *Environmental Mitigation*

The City Council is committed to the full and fair mitigation of environmental impacts of projects undertaken by the City. This program ensures that commitment is met, and serves as many community needs as possible.

#### *Project Assistance*

Various departments within the City consult the Natural Resources staff for advice or action regarding natural resources issues. This consultation helps ensure proper and consistent handling of sensitive resources or activities.

#### *Training*

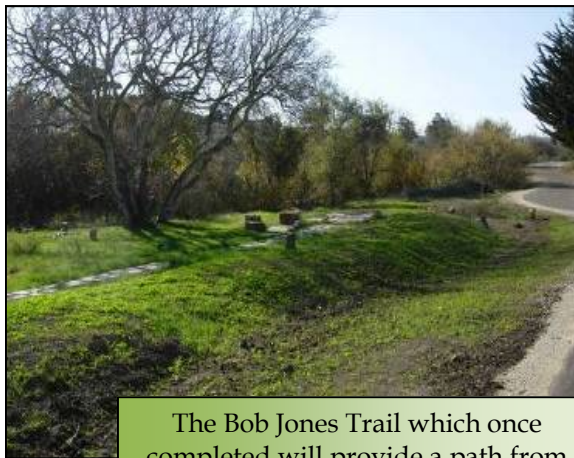
Educational walks, discussions of sensitive species or habitats, and the impact of new regulations on City activities are provided on an as-needed basis through this program.

## *Natural Resources Protection*

<i>Since 2004 the program has:</i>	Completed seven acquisition projects: Bowden Ranch, Kuden, Olson, Gearhart/McBride, Brughelli, King Ventures, and Union Pacific.	Completed two large creek barrier removal projects: Stagecoach Road Dam and Coon Creek. A combined 6 miles of pristine rearing habitat for native steelhead trout was opened.
	Surpassed \$12 million in total value of land acquisitions and related projects.	Monitored mitigation efforts associated with flood repair projects on San Luis Obispo Creek.
	Further developed the Natural Resources inventory for the City of San Luis Obispo.	Participated in developing the Airport Area and Margarita Area Specific Plans and Environmental Impact Report.
	Been recognized by the Canada West Land Stewardship Foundation as an international leader in urban land stewardship.	Coordinated the Stormwater Management Program which is the nexus between well managed stormwater systems and healthy creek environments.

### Natural Resources Manager

The Natural Resources Manager has overall responsibility for carrying out the requirements as they pertain to natural resource conservation, restoration, and management. This includes negotiating land and easement acquisitions for conservation purposes, developing management or restoration plans for such areas.



The Bob Jones Trail which once completed will provide a path from the City to Avila Beach

### City Biologist

The City Biologist provides expertise on a variety of environmental and biological issues in and around the City. The Biologist advises other staff and oversees a number of mitigation projects. The biologist plays an active role in the natural history education program.

## Ranger Services

Management of land dedicated to open space is handled by the Ranger Service. Since the establishment of the Natural Resources Protection Program in 1995, approximately 3,105 acres have been acquired by the City for a total of 5,494 acres of protected land. Rangers patrol the city's open space, enforcing regulations and managing the land.



Irish Hills Natural Reserve  
Trailhead

Additionally, rangers patrol more than six miles of creeks, removing both trash and non-native plant species. Volunteers and community service groups work with rangers to manage the creek system. The last few years have seen a rise in homeless encampments along the creek and the Rangers works with

local service providers and the San Luis Obispo Police Department to discourage this unlawful behavior.

Rangers promptly repair “bootleg trails” and shortcuts, deterring further abuse and alleviating ongoing environmental damage. Other year-round duties include planting and seeding native vegetation, repairing winter damage, annual trail construction projects, spraying star thistle, and winterizing trails.



Trail Workday,  
Johnson Ranch

Public education is the linchpin for the success of these programs, enabling the City to protect the open space that is a vital part of the community.

## Tree Program

For decades, the City has been committed to preserving and enhancing the natural environment and in 2008, celebrated its 25<sup>th</sup> year as a “Tree City, USA.” Maintaining the Urban Forest Management Program is a top priority and includes a city arborist, tree trimming, planting crews, and a Tree Ordinance to preserve and protect city trees.

### Urban Forest

The City has been preserving and maintaining its [Urban Forest](#) by planting new trees, requiring new developments to plant trees, replacing removed trees, and maintaining its existing inventory of 20,000 plus trees.



Tree planting in the Downtown

The Advisory Body to the Council on the Urban Forest and all matters relating to trees is the Tree Committee. The [Tree Committee](#) meets monthly to hear tree removal applications and requires replacement trees in most instances.

### Arbor Day

The Tree Committee also advises the City on its annual Arbor Day

celebration, updates the Master Street Tree list and the Major Streets Tree list, and makes revisions to the tree regulations. The annual Arbor Day celebration is notable for involving local school children in an Art and Prose contest and tree planting activities at the City’s Commemorative Tree Grove.



Arbor Day celebration in Laguna Lake Park

## *Solid Waste Management & Green Waste Recycling Program*

An array of measures implemented by the City during the past two decades has reduced the amount of waste disposed into the [Cold Canyon Landfill](#) as required by state law. In conjunction with San Luis Garbage Company, the City provides curbside recycling and green waste collection, and has established a “pay-as-you-throw” rate system. With these programs, residents have been able to reduce the waste trucked to the landfill by 60 percent.

The City composts or recycles all of its green waste, utilizing the mulch for various City projects. Trees that are removed around the City are ground and cut to make woodchips and firewood. The wood rounds and rough woodchips are used in City parks, tree wells, and medians to protect the soil from sun and wind.



Mulch piles from green waste collected around the City

About every quarter, the Tree Division of the Public Works Department sponsors a free mulch and firewood give-away for

residents. The City also delivers these woodchips to local nonprofit organizations on request. The Tree Division makes an effort to recycle and reuse all tree stakes and return planting containers to nurseries for reuse, small but important measures.

## *Hazardous Materials*

Hazardous materials potentially pose serious health and environmental risks if not disposed of properly. These materials include oil, gasoline and other automotive products; paints; pool chemicals; pesticides; herbicides; garden products; and some household cleaning products.



The City promotes and supports the Household Hazardous Waste facility at Cold Canyon Landfill. Residents can dispose of hazardous waste free of charge through this program.

The [Fire Department](#) oversees a number of business sector hazardous materials programs and enforces health and safety regulations.

## *Light Pollution*

In 2009, the City Council adopted a Night Sky Ordinance to mitigate the negative effects of outdoor lighting and prevent light pollution. Light pollution is excessive night sky glow from outdoor illumination that diminishes the visibility of stars. It significantly alters the nighttime environment and therefore affects the public welfare of community members.



Associated impacts from excessive lighting include light trespass and energy waste. Light trespass can impede the ability to drive or walk and create unwanted nuisances for neighboring residents. Nighttime lighting can also alter the setting of rural and natural areas by accenting the built environment and creating visual clutter.

## *Climate Action Plan to Reduce Greenhouse Gases*

As a 2009-11 Major City Goal, Council identified the development of a Climate Action Plan. By September, 2009, the City had completed the first of five steps in the process toward emissions reduction, with the completion of a Greenhouse Gas Emissions Inventory.

The next steps include setting a target for reduction and developing a Climate Action Plan to guide municipal government and the community in reducing emissions.



## Clean Creeks

The City is committed to maintaining the health of its creeks and has implemented several programs to address the major contributors to pollution. Individual citizens can play a significant roll in keeping the waterways clean by picking up after their pets, eliminating the use of pesticides that can wash into creeks and poison fish, reducing yard runoff which can carry fertilizers into the creeks, and by being thoughtful of where their car washing water drain.

### *Enforcement*

Construction is one contributor to creek pollution and inspectors with the City are trained to assist contractors to keep their sites maintained to prevent dirt and debris from washing away. The City enforces improper use of its drainage system to eliminate illegal dumping and sewage entry. Citizens can help in that effort by reporting dumping to the City's [Public Works Department](#). A public awareness campaign marked all the drain inlets that lead to creeks.

### *Management*

The City is enrolled in the Stormwater Management Program which identifies specific measures to improve water quality through new development practices, regular maintenance of the storm drain system, and coordination of staff and services.

The City is continually looking into new ways to manage water runoff. Debris is removed annually that might restrict San Luis Creek's flow during major storms. The City Biologist monitors the creek system to ensure the health of its natural inhabitants. Several major creek barrier removal projects have been completed; both grant funded and mitigation programs resulting in the restoration of critical spawning and rearing areas for native steelhead trout. A fish monitoring program has been implemented to monitor the progress of the fish population from creek restoration projects over time.



The City is also evaluating its own activities in regard to keeping the creeks clean. A massive effort took place to remove silt and trash from pipelines. These will now be cleaned on a regularly scheduled rotation. Again, citizens can have an impact by cleaning trash and debris from areas of the creek on their property and keeping private drainage systems clear.

## Water Recycling and Reclamation

The City's [Water Reclamation Facility](#) (WRF) treats approximately 4.5 million gallons of sewage per day. The facility is a state-of-the-art tertiary



WRF digester

wastewater treatment plant that produces water clean enough to support a healthy population of steelhead trout and other species in San Luis Obispo Creek. The treatment plant cools the effluent before it is discharged into the creek so it doesn't negatively impact the water body's cold water habitat.

The WRF also produces [recycled water](#) used for irrigation at City owned buildings and city parks, like the Damon Garcia Sports Complex. When in full operation, approximately 1,000 acre feet of recycled water will be available for irrigation purposes each year. That means 900,000 gallons of drinking water will be saved each day.



Recycled water is designated by purple pipes and signs

## Water Conservation

Water Conservation is an integral part of the City's water management policies. By managing the demand for water, the City significantly reduced the amount of water a new or supplemental source must deliver.

Since the mid 1980's, the City has implemented water efficiency programs and policies that have enabled the City to decrease overall demand while the population continues to grow. In 1991, the City was one of the original signatories to Best Management Practices (BMPs) as defined in the Memorandum of Understanding Regarding Urban Water Conservation in California. This agreement is a voluntary collaborative effort by California water agencies and environmental organizations to achieve water efficiency through the implementation of cost effective measures.

The success of the conservation is shown by the City's significant and sustained reduction in water use per capita. A key factor in our water conservation program is a rate structure that is based solely on use (no minimum charges) and tiered rates. Three primary components make up the City's Water Conservation program: water hardware replacement, public education, and technical assistance.



## Energy Conservation

Energy conservation efforts reflect the City's goal of being a steward of the environment. Energy efficiency is significant for municipal government from a cost standpoint as well. Here are some highlights of the City's program:

- ◆ Installation of one 60 kW microturbine at the Swim Center generates almost enough electricity to power the complex while adding 50,000 btus of heat to the pool.
- ◆ Motion-detection lighting controls are installed in most offices and common areas. Only fluorescent lamps and High Density Discharge lamps, are used. They use much less power, have no PCBs and contain little, if any mercury.
- ◆ High-technology energy management systems are installed at seven major City office buildings (City Hall, Palm Street Parking Garage, Police Department, Parks & Recreation, the Swim Center, Fire Station One, and the Corporation Yard).
- ◆ Solar panels were installed at the Utilities Administration building and the Ludwick Community Center which each generate about 8 kW.
- ◆ Installation of eight 30 kW micro-turbines & other energy saving measures at the Water Rec. Facility save about 50,000 kWh of electricity & about \$200,000 per year.



Solar panels on the Utilities Administration building

## Purchasing Policies

Thoughtful stewards choose products that have a limited impact on environmental quality whenever possible. In 1990, the City added a statement of principles encouraging the use of recycled products to its purchasing policy. Bid documents were restructured to encourage products incorporating recycled materials and an incentive was added of up to 10% (not to exceed \$1,000 per contract) for using recycled products.

In daily operations, the City uses recycled paper for stationary, documents, and almost all printing needs; all major documents, including Council Agendas, are printed in duplex; and most major City documents (including the General Plan and City Budget) are available electronically on the City's website.

## Trip Reduction

Since 1997, the City has had a voluntary incentive program encouraging employees to reduce the number of their automobile trips. Incentives include either cash or paid vacation days. Approximately 25% of City employees use alternative forms of transportation to and from work.

### *The Morro Street Bicycle Boulevard*

A Bicycle Boulevard is a shared roadway (bikes and cars share the space without marked bike lanes) where the through movement of bicycles is given priority over motor vehicles on a local street.

A Bicycle Boulevard is meant to provide some of the same advantages as a bike lane in built-up residential areas where space is not available and on-street parking needs don't allow room for a bike lane.



The creation of the Morro Street Bicycle Boulevard began by closing the south end of Morro Street to motor vehicle traffic. A signal was added that includes a Bicycle phase allowing bicyclists to cross diagonally. Large stencils placed on the street alert drivers of the route status. Bicyclists riding the route, positioned over the arrow points, will be outside the "door zone" (area of street where car doors open).

## City Fleet

The City uses re-refined bulk oil products for the entire City fleet, including engine oil, transmission fluid, hydraulic oil, and gear oil. Not only is this good for the environment, it's good for the City's pocketbook.

The City is committed to purchasing hybrid or other alternative fuel vehicles, and has a



policy in place for acquiring these vehicles when their life-cycle cost is within 20% of a conventional fuel vehicle. When alternative fuel vehicles are not available that meet the City's operational needs, conventional fuel vehicles are expected to be energy-efficient.



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