## County of San Luis Obispo General Plan Conservation and Open Space Element









San Luis Obispo County Department of Planning and Building

| County of San Luis Obispo General Plan   |
|--|
| Conservation and Open Space<br>Element   |
| Adopted by the San Luis Obispo County Board of Supervisors<br>May 11, 2010 - Resolution 2010-151 |
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| San Luis Obispo County<br>Department of Planning and Building                                    |
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## **ACKNOWLEDGEMENTS**



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## Purpose

San Luis Obispo County seeks to conserve and protect important natural resources while balancing the needs of the natural and built environments. The County will:

- promote efforts that will prevent or eliminate damage to the environment;
- support environmental restoration;
- protect the health and welfare of the community;
- preserve ecological systems; and
- ensure long-term economic, social and environmental vitality.

## Introduction

Our county has an abundance of natural resources and open space features that are fundamental to our quality of life – they define our past, sustain our day-to-day activities, and influence the prosperity of our future. These features include majestic natural landmarks, outstanding scenic vistas, important wildlife habitats, diverse natural communities, unique historic and cultural resources, vibrant lakes and creek corridors, dynamic coastal and marine environments, clean air, and bountiful soils. However, the county's special character is vulnerable to development pressure that can incrementally degrade biodiversity and threaten ecologic, historic, scenic, and other natural resources.



#### The County's Vision

A place that is safe, healthy, livable, prosperous, and well governed.

#### A Safe Community

The County will strive to create a community where all people -- adults and children alike -- have a sense of security and well being, crime is controlled, fire and rescue response is timely, and roads are safe.

#### A Healthy Community

The County will strive to ensure all people in our community enjoy healthy, successful, and productive lives, and have access to the basic necessities.

#### A Livable Community

The County will strive to keep our community a good place to live by carefully managing growth, protecting our natural resources, promoting life-long learning, and creating an environment that encourages respect for all people.

#### A Prosperous Community

The County will strive to keep our economy strong and viable and assure that all share in this economic prosperity.

#### A Well Governed Community

The County will provide high quality "results oriented" services that are responsive to community desires. The Conservation and Open Space Element (COSE or Element) is a tool to protect and preserve these unique community is resources. Conservation the planned management, preservation, and wise utilization of natural resources and landscapes to ensure their availability in the future. Conservation means using less energy or water, using efficient technologies, and changing wasteful habits. Conserving, renewing, and restoring natural resources will assure their greatest ecologic, economic, or social benefit over time. This is necessary in order to enjoy scenic beauty and recreation, eliminate or minimize premature and unnecessary conversion of open space to urban uses, maintain public health and safety, and support a vital economy. This Conservation and Open Space Element contains goals, policies, and strategies to conserve, protect, and restore biodiversity and open space.

## **History**

California law requires every city and county in the state to prepare and adopt a comprehensive long-range General Plan for the physical development of the jurisdiction (§65300 CA Government Code). Each General Plan must include seven mandatory elements: land use, circulation, housing, conservation, open space, safety, and noise. General Plans may include other optional elements as desired.

The state requires conservation elements to address the following issues with regard to the conservation, development, and utilization of natural resources, to the extent that they are relevant locally:

- water and its hydraulic force,
- forests,
- soils,
- rivers and other waters,
- harbors,

- fisheries,
- wildlife,
- minerals, and
- other natural resources.

The discussion of water in the conservation element must be prepared in coordination with water suppliers and include any information on water supply and demand prepared pursuant to §65352.5.

To the extent that these issues are relevant locally, the open space element must address open space for:

- the preservation of natural resources,
- resource management, managed production of resources,
- outdoor recreation, and
- public health, and safety.

This Element consolidates and revises five existing elements and incorporates new material to address timely and relevant conservation issues. The consolidated elements include:<sup>1</sup>

- Environment Plan, Conservation Element (1974): This Element contained policies regarding water conservation, water pollution, flood control, air resources, and biological resources.
- 2) Environment Plan, Historic Element (1974): Contained historical and archaeological resource policies.
- 3) Environment Plan, Esthetic Element (1974): Contained noise, odor, and visual policies.
- 4) **Energy Element (1995):** Addressed energy conservation and efficiency, distribution and generation.
- 5) **Open Space Element (1998):** Addressed open space, scenic resources, cultural resources, biological resources,



Wildflowers in the county. Photo by Sue Luft.

## CHAPTER 1

<sup>&</sup>lt;sup>1</sup> In coordination with this Element, the County separated the Agriculture section of the 1998 Agriculture and Open Space Element and retitled it the Agriculture Element. All references to "AGP" in this Element refer to policies in the Agriculture Element.

recreation areas, natural area preserves, streams and riparian corridors, and marine resources.

This Element addresses all of the previously listed topics, as well as new issues, policies and strategies in following chapters:

Air Quality

- Open Space
- Biological Resources
- Cultural Resources
- Visual Resources

Soil Resources

Water Resources

- Energy
- Mineral Resources

The County is consolidating mandatory (conservation and open space) and optional (historic, esthetic, and energy) elements for several reasons: 1) to make them easier to use; 2) to eliminate redundancy and maintain consistency; 3) to group like policies for emphasis; and 4) to address related community issues more comprehensively in one element. The State Office of Planning and Research's (OPR) General Plan Guidelines encourages combining and integrating related General Plan policies in this manner. All General Plan elements carry equal weight, and policy repetition or redundancy conveys no added legitimacy or legal standing.

#### **Element Preparation**

The Board of Supervisors directed staff to prepare this Element on August 1, 2006. This Element is the result of a collaborative effort by a wide range of County staff, community members, and professional consultants. County staff hosted workshops throughout the county to educate and inform residents about the process, to engage stakeholders in discussions, and to solicit input on the topics and priorities for inclusion in this Element. In addition, a team of County staff and partner agencies (such as the Air Pollution Control District) identified issues, information gaps, and resource needs for consideration in the consolidation and update process. County staff and professional consultants collaborated to integrate public input with research and analysis of the existing elements, the issues identified, and the desired

outcomes. The Planning Commission reviewed this Element, listened to public testimony, and recommended changes throughout twelve public hearings held during June – December 2009.

The intent of this Element is to:

- Update and combine relevant conservation and open space policies from several County General Plan elements into one document so they are easier to find and use.
- 2) Apply the County's Strategic Growth Principles as the framework.
- 3) Add to, delete, or expand policies and programs in response to changing community needs and issues.
- Establish the County as a leader in natural resource conservation, open space preservation, and climate protection.

New conservation and open space policies and strategies have been included to address gaps in existing elements, emerging issues and challenges, new (or anticipated) state requirements, and comments from stakeholders.

These include, but are not limited to the following.

- Requirements to reduce greenhouse gas emissions from County operations and communitywide sources.
- Adaptation to climate change.
- Integration with the Resource Management System (RMS) to direct growth away from areas with constrained natural resources.
- Water and energy conservation programs.
- Integration of the Integrated Regional Water Management Plan's goals and policies to address water supply and quality issues for groundwater and surface water.
- Support of watershed management planning.

#### CHAPTER 1

## INTRODUCTION

 Requirements for low impact development techniques consistent with the County's Stormwater Management Program.



A newly planted vineyard. Photo by Sue Luft.

- Increased protection of oak woodlands and other native habitats.
- Integration of "green" building into all development.
- Increased protection of community separators and scenic corridors.
- Increased protection of archaeological sites, historically and architecturally significant buildings, and paleontological and other cultural features that contribute to "sense of place."

#### FRAMEWORK: STRATEGIC GROWTH PRINCIPLES

The County's overarching land use planning framework – Strategic Growth Principles – guided the development of this Element. In 2005, the County adopted Smart Growth Principles, now called Strategic Growth Principles, to serve as planning guidelines on how growth should occur in a more sustainable manner. The principles, listed below, seek to achieve the County's mission "to enhance the economic, environmental, and social quality of life in San Luis Obispo County."

#### **GUIDING PRINCIPLES FOR STRATEGIC GROWTH**<sup>2</sup>

- 1) Strengthen regional cooperation
- Preserve open space, scenic, natural beauty and natural resources. Conserve energy resources. Protect agricultural land and resources.
- 3) Strengthen and direct development toward existing and strategically planned communities.
- 4) Foster distinctive, attractive communities with a strong sense of place.

<sup>2</sup> Amended in 2009 by the Board of Supervisors.

- 5) Provide a variety of transportation choices.
- 6) Create a range of housing opportunities and choices.
- 7) Encourage mixed land uses.
- 8) Create walkable neighborhoods and towns
- 9) Take advantage of compact building design
- 10) Make development decisions predictable, fair and costeffective
- 11) Encourage community and stakeholder collaboration

The County has integrated the Strategic Growth Principles into the General Plan as goals, policies, and strategies that will:

- Sustain our most precious resources.
- Protect agriculture as an industry from rural sprawl. (See AGP 5)
- Encourage most future growth to be within existing and strategically planned cities, urban areas, and village areas in a more compact pattern.
- Give high priority to infrastructure improvements in a timely manner.
- Create conditions for more economic and civic vitality within communities.
- Locate new employment areas near customers, residential areas and transportation.

**Table COSE-1** presents the chapters of this Element and identifies those that directly implement Strategic Growth Principles. While all goals, policies, and implementation strategies may not individually implement the Strategic Growth Principles, they link together to provide a comprehensive and strategic approach to natural resource conservation and protection. This approach balances the needs of the natural and built environment to ensure long-term economic, social, and environmental vitality.



Creston Valley.



#### CHAPTER 1

# TABLE COSE-1 RELATIONSHIP OF CONSERVATION AND OPEN SPACEELEMENT TO STRATEGIC GROWTH PRINCIPLES

| Strategic Growth  | Conservation and Open Space Element Chapters |                 |               |        |          |               |       |        |       |
|---|--|-----------------|---------------|--------|----------|---------------|-------|--------|-------|
| Principles  | Air  | Bio-<br>logical | Cul-<br>tural | Energy | Minerals | Open<br>Space | Soils | Visual | Water |
| Strengthen Regional Cooperation.  | •  | •               | •             | •      | •        | •             | •     | •      | •     |
| Preserve Open Space,<br>Scenic, Natural Beauty<br>& Natural Resources.<br>Conserve Energy.<br>Protect Agricultural<br>land and Resources. | •  | •               | ٠             | •      | •        | •             | ٠     | •      | ٠     |
| Strengthen & Direct<br>Development Toward<br>Existing and<br>Strategically Planned<br>Communities.  | ٠  |                 |               | •      |          | •             |       | ٠      | ٠     |
| Foster Distinctive,<br>Attractive Communities<br>with a Strong Sense of<br>Place.   |  |                 | •             |        |          |               |       | •      |       |
| Provide a Variety of<br>Transportation<br>Choices.  | •  |                 |               | •      |          |               |       |        |       |
| Create a Range of<br>Housing Opportunities<br>& Choices.  | •  |                 |               | •      |          |               |       |        |       |
| Encourage Mixed Land<br>Uses.   | •  |                 |               | •      |          |               |       |        |       |
| Create Walkable<br>Neighborhoods &<br>Towns.  | •  |                 |               | •      |          |               |       |        |       |
| Take Advantage of<br>Compact Building<br>Design.  | •  | •               |               | •      |          | •             |       | •      | ٠     |
| Make Development<br>Decisions Predictable,<br>Fair & Cost-Effective.  | •  | •               | •             | •      | •        | •             | •     | •      | ٠     |
| Encourage community<br>and stakeholder<br>collaboration   | •  | •               | •             | •      | •        | •             | •     | •      | •     |

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CHAPTER 1

While all of the issues, goals, policies, and implementation strategies included in this Element are fundamental to the conservation of the county's natural resources and protection of its economic and social vitality, four essential priority actions require immediate attention:

- Conserve water countywide
- Reduce vehicle-miles-traveled
- Reduce greenhouse gas emissions, and
- Increase energy efficiency and use of renewable energy sources.

Accomplishing these actions to the extent identified in this Element will contribute to the sustainability of the county's natural resources and quality-of-life. In addition, acting on each of them, will likely result in the indirect or direct achievement of another. For example, increasing the use of renewable energy resources and reducing water consumption and distribution will reduce greenhouse gas emissions.

**Table COSE-2** presents the goals of this Element that will address the Strategic Growth Principles and their objectives identified in the preceding section. The goals also address the priority issues listed above and the resource-specific issues summarized in the following section. Realization of these goals will occur through ongoing and coordinated policy and strategy implementation.

## TABLE COSE-2 CONSERVATION AND OPEN SPACE ELEMENT GOALS

#### **Air Quality**

Goal AQ 1 Per capita vehicle- miles-traveled countywide will be reduced consistent with statewide targets.

Goal AQ 2 The County will be a leader in implementing air quality programs and innovations.

Goal AQ 3 State and federal ambient air quality standards will, at a minimum, be attained and maintained.

Goal AQ 4 Greenhouse gas emissions from County operations and community-wide sources will be reduced from baseline levels by a minimum of 15% by 2020.

Goal AQ 5 The County will adapt to adverse climate change.

## TABLE COSE-2 CONSERVATION AND OPEN SPACE ELEMENT GOALS

#### **Biological Resources**

Goal BR 1 Native habitat and biodiversity will be protected, restored, and enhanced.

Goal BR 2 Threatened, rare, endangered, and sensitive species will be protected.

Goal BR 3 Maintain the acreage of native woodlands, forests, and trees at 2008 levels.

Goal BR 4 The natural structure and function of streams and riparian habitat will be protected and restored.

Goal BR 5 Wetlands will be preserved, restored, and enhanced.

Goal BR 6 The county's fisheries and aquatic habitats will be preserved and improved.

Goal BR 7 Significant marine resources will be protected.

#### **Cultural Resources**

Goal CR 1 The County will have a strong, positive community image that honors our history and cultural diversity.

Goal CR 2 The County will promote public awareness and support for the preservation of cultural resources in order to maintain the county's uniqueness and promote economic vitality.

Goal CR 3 The county's historical resources will be preserved and protected.

Goal CR 4 The county's known and potential Native American, archaeological and paleontological resources will be preserved and protected.

#### Energy

Goal E 1 The County will have an environmentally sustainable supply of energy for all county residents.

Goal E 2 Energy consumption at County facilities shall be reduced by 20% from 2006 levels by 2020.

Goal E 3 Energy efficiency and conservation will be promoted in both new and existing development.

Goal E 4 Green building practices will be integrated into all development.

Goal E 5 Recycling, waste diversion, and reuse programs will achieve as close to zero waste as possible.

Goal E 6 The use of renewable energy resources will be increased.

Goal E 7 Design, siting, and operation of non-renewable energy facilities will be environmentally appropriate.



# TABLE COSE-2CONSERVATION AND OPEN SPACE ELEMENT GOALS

#### **Mineral Resources**

Goal MN 1 Conservation and development of significant mineral deposits will be a high priority, but will be balanced with other County General Plan goals and policies.

Goal MN 2 Significant mineral resources will be protected from land uses that threaten their availability for future mining.

Goal MN 3 Balance mining of mineral resources with sensitive natural resources and existing adjacent uses

#### **Open Space Resources**

Goal OS 1 Important open space areas will be identified, protected, sustained, and where necessary, restored and reclaimed.

Goal OS 2 Open space resources will be protected and sustained on public lands.

Goal OS 3 Ongoing public education programs about conservation, protection, and stewardship of open space resources will be encouraged. (OSG 4)

Goal OS 4 Urban sprawl and inappropriate development of rural areas will be prevented.

#### **Soil Resources**

Goal SL 1 Soils will be protected from wind and water erosion, particularly that caused by poor soil management practices.

Goal SL 2 Watershed and ecological function will be maintained through soil conservation.

Goal SL 3 Important agricultural soils will be conserved.

#### Visual Resources

Goal VR1 The natural and agricultural landscape will continue to be the dominant view in rural parts of the county.

Goal VR 2 The natural and historic character and identity of rural areas will be protected.

Goal VR 3 The visual identities of communities will be preserved by maintaining rural separation between them.

Goal VR 4 Protect visual resource within visual sensitive resource areas (SRAs) for scenic corridors.

Goal VR 5 Views from scenic vistas and vista points will be protected.

Goal VR 6 A cohesive visual character will be maintained in urban areas.

Goal VR 7 Views of the night sky and its constellations of stars will be maintained.

Goal VR 8 Visual intrusions of signs will be minimized within public view corridors.

Goal VR 9 The visual effects of utility lines will be minimized.

# TABLE COSE-2CONSERVATION AND OPEN SPACE ELEMENT GOALS

#### **Water Resources**

Goal WR 1 The County will have a reliable and secure regional water supply (IRWM).

Goal WR 2 The County will collaboratively manage groundwater resources to ensure sustainable supplies for all beneficial uses.

Goal WR 3 Excellent water quality will be maintained for the health of people and natural communities.

Goal WR 4 Per capita potable water use in the county will decline by 20 percent by 2020.

Goal WR 5 The best possible tools and methods available will be used to manage water resources.

Goal WR 6 Damage to life, structures, and natural resources from floods will be avoided.

## **Overview of Key Issues**

This section provides an overview of the issues by topic or chapter title.

#### **AIR QUALITY**

The County recognizes the importance of clean air for a healthy environment and vibrant communities for current and future generations. The intent of the air quality goals, policies, and implementation strategies is to improve local and regional air quality and help reduce local contributions to climate change (i.e., greenhouse gas emissions). This will improve public health, boost the local economy, and reduce pollution damage to trees, crops, plants, lakes, animals, and buildings.

The current and projected air quality challenges for San Luis Obispo County are grouped into three categories: local air quality, regional air pollution, and global climate change. Past land use decisions have contributed to poorer air quality. Future growth can worsen the county's ozone and particulate matter problems. Global climate change can diminish the county's air quality and quality of life. However, changing development standards to encourage commercial and residential infill and development in and adjacent to existing urban areas can improve air quality by reducing vehicle miles traveled (VMT) and greenhouse gases.

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County government has an opportunity to provide leadership on air quality issues and lead by example.

#### **BIOLOGICAL RESOURCES**

The intent of the biological resources goals, policies, and implementation strategies is to identify and protect biological resources that are a critical component of the county's environmental, social, and economic well being. Biological resources include major ecosystems; threatened, rare, and endangered species and their habitats; native trees and vegetation; creeks and riparian areas; wetlands; fisheries; and marine resources. Individual species, habitat areas, ecosystems and migration patterns must be considered together in order to sustain biological resources.

Sustaining healthy ecosystems, preserving biodiversity and protecting diverse landscapes ensures a future that is healthy and vibrant ecologically, socially, and economically. Converting agricultural and rural lands to residential and urban uses adversely impacts wildlife and native species. (Also addressed in the Agriculture Element, refer to AGP 24.) Such changes can fragment habitats, reduce biodiversity, increase pollutant loads, and increase flooding. Careful planning for urban expansion for workforce housing needs is necessary to avoid impacts to biological resources.

#### **CULTURAL RESOURCES**

The County recognizes that archaeological resources are "living resources," meaning that the culture represented by these resources still thrives here. Preserving local history and cultural diversity helps us retain our links to the past and remain a dynamic and desirable place.

Cultural resources throughout the state and county are increasingly vulnerable to development pressures, growing use of our open spaces, changes in technology, and lack of funding for their repair and maintenance. The intent of the cultural resource goals, policies, and implementation strategies is to identify and protect areas, sites, and buildings having Native American, architectural, historical, archaeological, paleontological, or cultural



A mortar and pestle at Mission San Miguel.



significance. These resources contribute to the vitality and diversity of the county and its sense of place.

#### ENERGY

The intent of the energy goals, policies, and implementation strategies is to identify energy needs, conserve and use energy efficiently, develop and use local, renewable energy, and achieve energy-efficient development. The County recognizes that efficient use of energy and greater reliance on clean, renewable energy benefits the health of our residents, visitors and environment, and contributes to the county's and the region's economic vitality.

The major issues described in the Energy Chapter include energy conservation and efficiency, sustainable energy supplies, renewable energy sources, and green building. Energy conservation and efficiency means using energy more wisely. A sustainable energy supply will include greater reliance on renewable energy sources such as solar and wind power. County operations are specifically targeted to pursue sustainable energy supplies.

#### **MINERAL RESOURCES**

The intent of the mineral resources goals, policies, and implementation strategies is to identify and protect mineral resources for present and future generations. Extraction of these resources makes a valuable contribution to the county's and region's economic vitality. The County recognizes the need to balance the economic benefit of mineral extraction with the protection of people and the environment from potential adverse effects of mining activities.

Mineral resources need to be protected so that they are available to the present and future generations that need them. However, mining of mineral resources can cause environmental harm; therefore, the exploitation of mineral resources needs to be balanced with the environmental effects of mining.

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#### **OPEN SPACE RESOURCES**

The local Open Space Plan of the County is comprised of this Conservation and Open Space Element, together with the Agriculture Element and the Parks and Recreation Element, consistent with Government Code section 65560 et seq.

It is the intent of the open space goals, policies, and implementation strategies to conserve, protect, manage, and restore irreplaceable open space resources for current and future generations. This will result in scenic, recreational, health, safety, economic, and other benefits. The open space chapter



Chorro Valley.

addresses issues of special importance to open space and other resources. The goals and policies strive to balance what, at times, may be competing interests.

#### **SOIL RESOURCES**

The loss of soil resources affects many other natural resources. For example, soil erosion can reduce agricultural productivity, threaten air and water quality, and harm water-dependent species.

The intent of the soil resources goals, policies, and implementation strategies is to protect and conserve soils and to recognize their critical role in the county's watersheds. The soils in San Luis Obispo County are essential for preserving economic and environmental vitality and nourishing ecological habitats. They are also essential for the production of food, fiber, and other agricultural products.

#### **VISUAL RESOURCES**

The intent of the visual resource goals, policies and implementation strategies is to protect the visual character and identity of the county while respecting private property rights, in order to: 1) maintain a sense of place recognized by residents, 2) preserve scenic landscapes that are highly valued by residents and visitors, and 3) maintain a high quality visual environment that enhances tourism, real estate values and economic growth. The visual resources chapter guides the appropriate placement of development so that 1) the natural landscape continues to be the



dominant view in rural parts of the county, and 2) in urban areas, visual character contributes to a robust sense of place.

#### WATER RESOURCES

The County recognizes water as a valuable and scarce resource; it is essential for the county's environmental, social, and economic well being, and for the public health. The intent of the water resources goals, policies, and implementation strategies is to



Salinas Dam Overflow. April 2006.

quality and natural communities, and control flooding.

resource issues include water Water supply, groundwater monitoring and management, water quality, conservation, water resource management, environmental needs, and flood control. The competing demands on our limited supply of water mean we have difficult policy choices to guide future water use. Changing land uses in the county mean changes in water use and availability. Securing adequate water supply for all beneficial uses, especially agricultural land uses, is a priority of the General Plan. Beneficial uses also include environmental resources.

## **User Guide**

This Element encompasses a broad range of complex issues and policies. The Element has two primary components: chapters and supporting appendices. Each chapter follows the same outline: a purpose statement; a brief introduction and overview of the topic; a listing of the major issues; a review of the relationship of the chapter to other elements, plans and programs; measures of success; goals, policies and implementation strategies; and an implementation approach.

Goals, policies, and implementation strategies are not listed in order of priority unless so stated. Measures of success are provided for the County and the public to determine when a goal or policy has been achieved. Text boxes with definitions of key terms, facts, photographs, and quotes are included in the margins

throughout the Element to highlight key terms, provide examples, and to make the Element more "reader-friendly."

Most chapters include maps and figures that illustrate policies and implementation strategies. Maps are provided for information purposes. Some maps include a sample detailed perspective to allow the reader to see the spatial data available at a larger scale. Full-scale maps are available for viewing at the County's <u>website</u>. Figures may include tables, charts, and diagrams.

Appendices provide detailed information regarding the setting, existing conditions, and regulatory context for each chapter's subject.

#### HOW TO READ THE ELEMENT

A General Plan is commonly referred to as a community's "constitution" or "blueprint" for development and conservation. All General Plans, including this one, must address a host of concerns within a consistent, well-integrated policy framework. In implementing the General Plan, the Board of Supervisors (or its delegates) makes policy determinations in a manner that promotes the overall goals of the General Plan and the public welfare in accordance with existing resources, staffing, and priorities. Policy and program implementation will require reasonable and thoughtful consideration of other General Plan policies. Such implementation decisions will come up on a case-by-case basis as the Board of Supervisors, Planning Commission, County staff, and others work to implement the entire General Plan.

While inevitably some overlap remains among the General Plan elements, the Conservation and Open Space Element emphasizes protection and management of natural resources and how that integrates into land use planning processes. Other General Plan elements may still contain policies which address open space or conservation topics as part of other County objectives. For example, the:

 Land Use and Circulation Element (LUE) focuses on the types and intensities of development, and identifies strategic growth strategies that balance growth with natural



resource protection. The Land Use Element includes all of the area plans which apply land use combining designations (overlay zones) to identify and protect sensitive resources.

- Safety Element (S) is concerned mainly with avoiding hazards from fire, flood, and unstable land, including areas where agriculture and natural landscapes are often the most appropriate uses.
- Parks and Recreation Element (PRE) contains goals and policies to acquire, develop, and maintain parkland areas for passive and active recreation, and natural areas for passive recreation while protecting sensitive resources.
- Agriculture Element (AG) addresses agricultural issues. It is intended to balance protection of natural resources and open space with the needs of production agriculture and to minimize impacts to ongoing production agriculture.
- Economic Element promotes a diverse and balanced economy that is dependent upon natural resource conservation and protection.
- Local Coastal Plan (LCP) addresses protection of natural resources within the designated coastal zone.
- Off-Shore Energy Element includes resource discussions covering biological, fisheries and air quality issues as they relate to off-shore energy development.

**Table COSE-3** depicts the interconnectedness of this Element with other elements of the General Plan. A symbol in the table denotes when chapters of this Element contain goals, policies, implementation strategies that directly relate to the implementation of another General Plan element.

In addition, references to complementary policies or implementation strategies may follow a policy or program to emphasize the interconnectedness. As an example, the following policy includes a reference to AGP 11 in parenthesis. AGP 11 refers to Agriculture Element Policy 11 located in the Agriculture Element.

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#### EXAMPLE

#### **Policy WR 1.7 Agricultural operations**

Groundwater management strategies will give priority to agricultural operations. Protect agricultural water supplies from competition by incompatible development through land use controls. (See also AGP 11 in the Agriculture Element.)

# TABLE COSE-3 RELATIONSHIP OF CONSERVATION AND OPEN SPACEELEMENT GOALS AND POLICIES TO OTHER GENERAL PLAN ELEMENTS

| County                      | Conservation and Open Space Element Chapters |                 |               |        |         |               |       |        |       |
|-----------------------------|--|-----------------|---------------|--------|---------|---------------|-------|--------|-------|
| General Plan<br>Element     | Air  | Bio-<br>logical | Cul-<br>tural | Energy | Mineral | Open<br>Space | Soils | Visual | Water |
| Agriculture                 | •  | •               | •             | •      |         | •             | •     | •      | ٠     |
| Economic                    | •  | •               | •             | •      | •       | •             | •     | •      | •     |
| Housing                     | •  | •               |               | •      |         |               |       | •      | ٠     |
| Land Use and<br>Circulation | •  | •               | ٠             | •      | •       | •             | •     | •      | •     |
| Local Coastal Plan          | ٠  | •               | ٠             | •      | •       | •             | •     | •      | ٠     |
| Noise                       |  |                 |               | •      | •       | •             |       |        |       |
| Off-Shore Energy            | ٠  | •               |               | •      |         |               |       | •      | ٠     |
| Parks and Recreation        | •  | •               | •             |        |         | •             |       |        | •     |
| Safety                      | •  | •               |               | •      | •       |               | •     |        | •     |

#### **Basic Building Blocks of the Plan**

The goals, policies, and implementation strategies in this Element are used to evaluate proposed development projects and to minimize the impact of County operations upon natural resources. The following definitions apply.

- **Goal:** An expression of community values and desired outcomes, an ideal future result or condition, based on public health, safety, or general welfare.
- **Policy:** A statement derived from a goal that represents the County's adopted position and guides decision-making toward the goal.



 Implementation Strategy: A specific set of actions, mechanisms, partnerships, standards, or procedures to carry out goals and policies.

Policies and implementation strategies are typically accompanied by a heading or title. Headings and titles, like text boxes in the margins, are provided for convenience only. If headings, titles, or text boxes conflict with the goal, policy, or implementation strategy text they accompany, the text shall govern.

Every provision of this Element is guided by the following principle: "to the extent legally permitted." The County will not interpret any of the provisions in a manner that violates state or federal law.

Please refer to **Chapter 11** for a listing of the goals and accompanying policy titles for each chapter. **Chapter 12** provides a glossary of terms used in this Element.

#### Implementation

Following adoption by the Board of Supervisors, the goals, policies, and implementation strategies become effective and have full force and effect. They guide all County decisions and actions.

Each chapter in this Element concludes with a table that summarizes the County department or other agency that has primary responsibility for carrying out each implementation strategy. In addition, the table summarizes the priority, estimated year of initiation, and potential source of funding of each strategy. The actual timeframe for implementing the strategies is dependent upon the availability of adequate staff and funding. The following principles guide the implementation strategies.

 In some cases, implementation of the Element will occur through revisions to other land use plans and regulations. Revisions to existing regulations or development of new codes or ordinances will occur through a public hearing process.

- Implementation can take time, especially when needed resources are limited and required for more than one program.
- Because implementation can take time, the Board of Supervisors (or its delegates) may need to prioritize programs.

Implementation strategies may be adjusted over time based on new information, changing circumstances, and evaluation of their effectiveness, so long as they remain consistent with the intent of the Element.

The Element, due to its comprehensive nature, includes many implementation strategies that will often require more than one County department to ensure success. In addition, implementation of the Element will be an ongoing process through buildout of the General Plan. Because implementation can take time and resources, this Element relies on three overarching implementation strategies.

 Implementation Strategy COSE-1 Conservation and Open Space Committee

Within 90 days of adoption of this Element, County staff shall request that the Board of Supervisors appoint members of a Conservation and Open Space Committee. The purpose of the Committee is to:

- Facilitate implementation of the Element;
- Coordinate with staff to prioritize implementation strategies;
- Identify funding sources on an annual basis;
- Review policies and ordinances affecting the Element;
- Increase public awareness of issues affecting open space resources, including the relationship between open space and agricultural issues;
- Provide a wider range of advice to the Board of Supervisors.

The legal requirements for enactment of development impact fee program are set forth in Government Code §§ 66000-66025 (the "Mitigation Fee Act"), the bulk of which were adopted as 1987's AB 1600 and thus are commonly referred to as "AB 1600 requirements." The Committee shall convene on a quarterly basis and include representatives as determined by the Board. The Committee will be staffed by the Department of Planning and Building and include the Climate Action Team as a subcommittee. (Refer to Air Quality Implementation Strategy 4.2.1) The responsibilities of the Committee shall be established to coordinate with the responsibilities of other County advisory commissions, committees, or boards without conflicts or overlap.

 Implementation Strategy COSE-2 Conservation and Open Space Mitigation Program

Within one year of adoption of this Element, conduct a feasibility study of a Conservation and Open Space Mitigation Program that would establish an in-lieu fee, mitigation program, open space district, and/or land bank to offset or mitigate potential development project impacts to the environmental resources identified in this Element, including cumulative impacts. The feasibility study should consider use of a land bank concept for a variety of open space purposes. The feasibility study shall evaluate the use of in-lieu or mitigation fees for implementation of this Element, consistent with AB 1600. Develop and implement the Program based on the findings of the feasibility study.

- Implementation Strategy COSE-3 Conservation Manager Establish the position of Conservation Manager so that certain COSE-related functions are consolidated in a County position. The responsibilities of the Conservation Manager could include the following:
  - a. Work with advisory committees and County departments to identify natural resource and open space conservation needs and opportunities.
  - b. Apply for grants and secure funding to further natural resource conservation opportunities.
  - c. Assist in establishing land banking and resource mitigation programs.
  - d. Oversee and coordinate natural resource programs related to the protection and conservation of public open space.
  - e. Integrate natural resource management concepts throughout County operations.

## AIR QUALITY



## Purpose

The County recognizes the importance of clean air for a healthy environment and vibrant communities for current and future generations.

- Clean air protects the health of residents
- Clear skies and clean air are attractive for tourism, which contributes to economic vitality
- Clean air sustains our water resources, crops, and ecosystems
- Achieving clean air helps to reduce greenhouse gas emissions and the effect of global climate change
- Clean air is a highly valued resource by residents and visitors

This chapter focuses on goals and policies that the County will pursue to improve local and regional air quality and to reduce San Luis Obispo County's contribution to global climate change.

## Introduction

In the simplest of terms, we must have air to live. According to the Environmental Protection Agency, each of us breathes over 3,000 gallons of air each day (USEPA 2008). The quality of the air we breathe varies based on where we live, work, and play. Polluted air can make people sick and it can damage trees, crops, lakes, animals, and buildings. The young, elderly, sick, and active often experience worse reactions to air pollution than the general public. **Appendices 1 and 2** provide additional information about the county's air resources and air quality as well as a climate change background.

## **Local Conditions**

The primary factors affecting air quality in San Luis Obispo County are (1) the prevailing climatic conditions; (2) the topographic and geographic features of the region; and (3) the type, quantity, and location of pollutant emissions.

#### REGION

San Luis Obispo County is part of the South Central Coast Air Basin, which also includes Santa Barbara, and Ventura counties. For geography, climate, and meteorology, the county can be divided into three general regions: Coastal Plateau, Upper Salinas River Valley, and East County Plain.

The Coastal Plateau is immediately inland from the Pacific Ocean, is typically 5 to 10 miles wide, includes about 75 percent of the county's population and development, and yields higher levels of air pollutants as a result. It ranges in elevation from sea level to about 500 feet and is bounded to the northeast by the Santa Lucia Mountain Range.

The Upper Salinas River Valley lies inland from the Santa Lucia Range in the northern portion of the county and includes about 25 percent of the county's population, but it has some of the highest levels of ozone, perhaps due to the transport of ozone precursors from the other two county regions.

The East County Plain lays farther inland along the eastern flank of the county and includes about one third of the county's area, while housing less than 1 percent of its population. The county's local air quality conditions have been increasingly adversely affected by air pollution from the San Joaquin Valley. The Carrizo Plains in the far east end of the county also has high ozone levels. The Air Pollution Control District has concluded that this also due to pollutant transport from other areas.

The <u>San Luis Obispo</u> <u>County Air Pollution</u> <u>Control District</u> (APCD) is the local agency working to protect the health of over 260,000 county residents by preserving good air quality.

#### LOCAL AIR QUALITY

Pollution sources in the county vary widely from large power plants to small household painting projects. Motor vehicles are the largest contributor to air pollution in the county, which includes local, regional, and statewide circulation. Inefficient land use patterns, specifically the separation of housing from employment and commercial centers, greatly contribute to air pollution. Most pollution control strategies seek to reduce vehicle miles traveled and make greater use of alternative transportation and clean fuels.

County skies are typically clear and blue with little of the characteristic brown haze associated with areas considered to have poor air quality, yet we still have air pollution issues. The State standard for particulate matter (PM10) is violated several times throughout the year, resulting in the county's non-attainment status with the State's PM10 standard.

In 2005, the California Air Resources Board (CARB) approved the nation's most health protective ozone standard with special consideration for children's health. Based on local monitoring data, the county has been deemed non-attainment for the state 8-hour average ozone. With the federal government's recent adoption of new ozone standard 0.075 ppm, (compared to the State Ozone standard of .070 ppm), the county's attainment status is dependent on monitoring reports from 2006, 2007 and 2008. Designation is expected to occur in 2010, but preliminary analysis indicates the county's non-attainment status. Air quality in the county meets established standards for lead, carbon monoxide, and sulfur dioxide.

## **Climate Change**

The International Panel on Climate Change's (IPCC) Fourth Assessment Report on Climate Change states that the concentration of greenhouse gases (GHG) such as carbon dioxide in the atmosphere has increased significantly as a result of human activities since 1750 (IPCC 2007). These global increases in GHG concentrations are primarily due to fossil fuel use, land-use change, and agriculture. Health effects from global climate change may arise from temperature increases, climate-sensitive disease, and extreme events. Global warming may also contribute to air Air Pollutants are amounts of foreign and/or natural substances occurring in the atmosphere that may result in adverse effects to humans, animals, vegetation, and/or materials. - CARB

The Clean Air Act requires EPA to set National Ambient Air Quality Standards for six common air pollutants, known as "criteria pollutants," that are found all over the United States: particle pollution (particulate matter), ground-level ozone, carbon monoxide, sulfur oxides, nitrogen oxides, and lead.

EPA regulates them by developing human healthbased and/or environmentally based criteria (science-based guidelines) for setting permissible levels.

quality problems from increased frequency of smog and particulate air pollution.

California is one of the top GHG producers in the world. The California Energy Commission ranks the state as the second largest emitter of GHG in the country and twelfth to sixteenth largest in the world (CEC). In December 2007, the CARB released an aggregate, statewide inventory of California GHG emissions for 1990 (427 million metric tons of  $CO_2$  equivalent) and 2004 (484 million metric tons of  $CO_2$  equivalent). The main sources of GHG emissions in California in 2004 were on-road transportation (38 percent), electricity generation (25 percent), and industrial (20 percent) sectors. **Appendix 1** provides an expanded review of the scientific and regulatory context for climate change.

In 2005, the Governor announced GHG reduction targets for California by Executive Order ( $\underline{S-03-05}$ ):

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels;
- By 2050, reduce GHG emissions to 80% below 1990 levels.

In 2006, the California Legislature adopted Assembly Bill 32, the <u>California Global Warming Solutions Act of 2006</u> (AB 32). AB 32 requires CARB, the state agency charged with regulating statewide air quality, to adopt rules and regulations that would achieve greenhouse gas emissions equivalent to 1990 statewide levels by 2020, which is equivalent to an approximate 15% reduction below 2005 GHG levels.

In December 2008, CARB approved the <u>AB 32 Scoping Plan</u>, which outlines regulatory and market mechanisms necessary to achieve a 15% reduction by 2020. Among the many strategies included in the plan are a cap-and-trade system and a Renewable Portfolio Standard (RPS) for energy production. In addition, the Scoping Plan charges local governments with reducing statewide emissions by 5 million metric tons by 2020 through vehicle trip reduction and local initiatives.

The California Global Warming Solutions Act of 2006 (AB 32) sets targets for the reduction of greenhouse gas emissions in California to slow the onset of humaninduced climate change.

Communities address climate change through implementation of GHG emissions reduction programs and actions related to land use, transportation, energy, and waste. Local actions often take the shape of general plan policies or land use/zoning ordinance revisions that promote compact and mixed-use development, decrease vehicle trips, increase alternative transportation, promote "green" or sustainable building and design practices, improve energy efficiency, and reduce waste.

#### 2006 GREENHOUSE GAS EMISSIONS BASELINE INVENTORY REPORT

The County conducted a baseline inventory of greenhouse gas emissions from county operations and communitywide activities. The complete report is attached as **Appendix 2**.

The 2006 Greenhouse Gas Emissions Baseline Inventory found that, in the baseline year 2006, the community (unincorporated San Luis Obispo County) emitted approximately 1,506,163 metric tons of carbon dioxide equivalents (CO2e). The transportation sector was by far the largest emitter (64.8%), producing approximately 976,585 metric tons of CO2e in 2006. Emissions from the residential, commercial, and industrial sectors accounted for a combined 23.4% of the total while emissions from livestock and agricultural equipment comprised 9.7% of the total.

County operations and facilities produced approximately 34,335 metric tons of greenhouse gas emissions in 2006 - approximately 2.2% of total community-wide emissions in the county. County emissions are comprised of employee commute trips, waste, streetlight electricity, energy consumption from water and sewage facilities, building energy, vehicle fleet fuel consumption, and miscellaneous equipment. Employee commute was by far the largest contributor to the County's emissions (73.6%) with 25,257 metric tons of CO2e. The second largest contributor (14.5%) was from energy consumption in County-owned and – operated facilities.

#### "**Greenhouse gas**" or "**greenhouse gases**"

include all of the following gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

## Carbon Dioxide

**Equivalent (CO2e)** is a metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential (GWP). Carbon dioxide equivalents are commonly expressed as "million metric tons of carbon dioxide equivalents (MMTC02e)". (EPA)



## **Relationship to other Elements, Plans, and Programs**

General Plan policies related to air quality are designed to help ensure that regional and local air quality is as healthful as possible. This Element contains specific air quality policies; however, all Elements of the General Plan must work together to form a cohesive set of goals and policies that can help produce clean air for generations to come.

Ultimately, these goals and policies are intended to improve quality of life throughout the county and to support the General Plan's goals by improving public health, boosting the local economy, and reducing damage to trees, crops, plants, lakes, animals, buildings, and historical structures and monuments from air pollutants.

The County's Guiding Principles for Strategic Growth address the interconnection of land use, resource conservation, and quality of life. The Land Use Element's Framework for Planning (Inland and Coastal) reflects the County's Strategic Growth principles and goals. The following air quality goals, policies, and implementation strategies are compatible and consistent with the Strategic Growth principles and provide specific direction to achieve and maintain the County's desired air quality.

Other chapters of this Element, notably the Energy chapter, also include goals, policies, and implementation strategies that will directly and indirectly improve and protect air quality.

#### Major Issues

The current and projected air quality challenges for San Luis Obispo County can be categorized into six key issues. While the County cannot solve all of them, outlining the problems that need to be solved allows the County to contribute its share to improve regional air quality for current and future generations.

#### LOCAL AIR QUALITY

1) Historical land use decisions now contribute to poorer air quality. The land use patterns and transportation system

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developed over the last 50 years have led to everincreasing vehicle trips and vehicle miles traveled that affect the county's air quality. In recent years, the number of vehicle miles traveled has increased faster than the county's population. Today, most destinations are designed to provide convenient auto access to the exclusion of other modes of travel. New, efficient land use patterns that promote other transportation options are needed to maintain and improve future air quality in the midst of continuing growth.

- 2) County government has the opportunity to provide leadership on air quality issues and lead by example. As one of the region's largest employers, the County operates a large vehicle fleet. The County can take a leadership role by implementing employee trip reduction and alternative fleet operations programs. This will reduce its own emissions and provide a model and supporting infrastructure for the private sector.
- 3) Proper application of environmental law can minimize adverse air quality impacts of growth. The environmental assessment process required under the California Environmental Quality Act (CEQA) is an essential tool for the County to communicate with other agencies and the public about the air quality impacts of development. Strong and consistent application of CEQA can make a significant difference in minimizing project-level air quality impacts.

# REGIONAL AIR POLLUTION (OZONE AND ITS PRECURSORS)

- 4) Future growth can worsen the county's ozone and PM10 problems. Non-attainment of ozone and particulate air quality standards affects the economic, environmental, and social quality of life in San Luis Obispo County. Future growth in a sprawl pattern of development is likely to exacerbate existing air pollution violations of state health standards.
- 5) Regional coordination is needed. Coordination and cooperation among many jurisdictions are difficult to achieve. Working together for a common interest can

## We will recognize success when...

- At least 75% of new development in the unincorporated areas occurs within urban and village areas.
- Most new housing is located in close proximity to employment centers and services.
- Most new housing is located with convenient access to major highways and bus routes.
- All new neighborhoods are designed in accordance with strategic growth principles and policies.
- A higher percentage of people ride the bus, walk, and bicycle to daily destinations.
- A Climate Action Plan to reduce GHG from all sources is fully implemented.
- A broad cross-section of the public supports a variety of efforts to reduce GHG emissions.
- Most vehicles in the County fleet consist of clean-fuel vehicles.
- Communitywide GHG emissions are reduced by 15% percent from the baseline year of 2006 by 2020.



GENERAL PLAN

multiply the resources available to accomplish air quality goals that often impact neighboring cities and counties.

#### **GLOBAL CLIMATE CHANGE**

6) Global climate change threatens the county's air quality and quality of life. Atmospheric concentrations of carbon dioxide (CO<sup>2</sup>) are increasing, primarily from the burning of fossil fuels and land use change. This has led to an unprecedented rate of global climate change that could have profound implications for San Luis Obispo County. It could also complicate regional attempts to achieve ozone ambient air quality standards, since warmer temperatures lead to increased formation of ozone. Policies are needed that reduce greenhouse gas emissions while also preparing the county to adapt to a changing climate.

## Goals, Policies, and Implementation Strategies

The following section relates each of the six major issues mentioned above to specific air quality goals, policies, and implementation strategies.

The intent of the following goals, policies, and implementation strategies is to improve local and regional air quality and help reduce global climate change. This will improve public health; boost the local economy; and reduce pollution damage to trees, crops, plants, lakes, animals, and buildings.

## TABLE AQ-1 AIR QUALITY GOALS

| Goal AQ 1 | Per capita vehicle-miles-traveled countywide will be substantially reduced consistent with statewide targets.                               |
|-----------|---|
| Goal AQ 2 | The County will be a leader in implementing air quality programs and innovations.   |
| Goal AQ 3 | State and federal ambient air quality standards will, at a minimum, be attained and maintained.   |
| Goal AQ 4 | Greenhouse gas emissions from County operations and communitywide sources will be reduced from baseline levels by a minimum of 15% by 2020. |
| Goal AQ 5 | The County will adapt to adverse climate change.  |
|           |   |

#### GOAL

## PER CAPITA VEHICLE- MILES-TRAVELED COUNTYWIDE WILL BE SUBSTANTIALLY REDUCED CONSISTENT WITH STATEWIDE TARGETS.

#### Policy AQ 1.1 Compact development

Encourage compact land development by concentrating new growth within existing communities and ensuring complete services to meet local needs.

- Implementation Strategy AQ 1.1.1 Strategic Growth Principles
   Implement Strategic Growth principles and, as needed, amend applicable ordinances and policies to:
  - a. Locate new community commercial centers near major activity nodes and transportation corridors. Community commercial centers should provide goods and services that residents have historically had to travel outside of the community to obtain.
  - b. Promote new commercial development and needed services and facilities in rural communities that provides for the immediate needs of the local residents.
  - c. Direct most new residential development away from rural areas and concentrate it in higher density residential areas located near major transportation corridors and transit routes, where resources and services are available.
  - d. Design new commercial development to encourage and facilitate pedestrian circulation within and between commercial sites and nearby residential areas rather than being designed solely to serve vehicular circulation.
  - e. Promote use of first floor space in commercial centers for retail, food service, financial institutions, and other highvolume commercial uses. Allow and encourage residential uses in the upper floors of commercial buildings.

#### Vehicle Miles Traveled

(VMT) are the number of miles traveled by a given vehicle in a specified period. This number is sometimes estimated for the entire fleet of on road vehicles. (SLO APCD, CAP)



Bike racks on buses and transit centers facilitate use of alternative transportation modes.

- f. Encourage new office development near major transportation corridors and concentrations of residential uses.
- g. Encourage new residential development to be within walking distance (1/2 mile or less) to public activity centers such as schools, libraries, parks, and community centers.

#### Policy AQ 1.2 Reduce vehicle miles traveled

Require projects subject to discretionary review to minimize additional vehicle travel.

- Implementation Strategy AQ 1.2.1 VMT reduction strategies
   Strategies to reduce new demand for vehicle travel may include, but are not limited to, minimum densities along transit corridors, Transportation Demand Management, and alternative transportation infrastructure as follows:
  - a. All new development in the Residential Multifamily (RMF) land use category located within 1/2 mile of a transit node, existing bus route, or park and ride facility with regularly scheduled, daily service should have a minimum density of 15 dwelling units per acre.
  - b. New multi-family projects subject to discretionary review should include Transportation Demand Management (TDM) measures, such as reduced parking for affordable, workforce, or senior housing projects, subsidized public transportation passes, car sharing, vanpools, shuttles, or ride-matching programs, based on site-specific review.
  - c. New or expanded commercial, industrial, public, or mixeduse projects with 25 employees or more should provide TDM programs such as parking cash-out, subsidized transit passes, ridesharing incentives, vanpools, employee showers, and bicycle parking and storage facilities.
  - d. Install adequate and secure bicycle racks and storage facilities at a ratio of 1 per every 10 vehicle spaces in new commercial and public buildings with a corresponding reduction in required automobile parking spaces. Showers and changing facilities should also be encouraged.

- e. Incorporate design features and infrastructure into new projects that enable access by transit, bicycling, and walking.
- f. Establish minimum residential densities on appropriate sites in urban areas where resources are available.
- g. Rezone land to Residential Multi-Family (RMF) in existing urban areas where resources and services are available and expanded.
- h. Reduce parking requirements in areas such as central business districts where a variety of uses and services are planned in close proximity to each other and to transit. Work with communities and developers to fund additional parking where needed, for example, through in-lieu parking fee programs.
- Implementation Strategy AQ 1.2.2 Decoupling of parking from housing and commercial development Explore decoupling (or unbundling) of required parking from housing and commercial development in order to identify the true cost of parking and to more accurately assign the costs of parking to those who use the spaces.

#### Policy AQ 1.3 Convenient alternative transportation

Require new development to provide safe and convenient access to alternative transportation within the project area and safe access to public transportation as feasible.

 Implementation Strategy AQ 1.3.1 Connectivity in new development

Require new development to construct paths that connect land uses and other non-motorized routes, safe road crossings at major intersections and secure, weatherproof bicycle parking and storage facilities, and long-term maintenance of such facilities.

# Policy AQ 1.4 Alternative transportation improvements

Where new development is required to provide necessary alternative transportation improvements, such improvements

should be in place, or otherwise guaranteed, before or concurrent with construction of the new development.

#### Policy AQ 1.5 Transportation efficiency

Improve the operating efficiency of the transportation system by reducing vehicle travel demand and expanding opportunities for multi-modal travel.

- Implementation Strategy AQ 1.5.1 Countywide VMT Reduction Program Implement a countywide Vehicle Miles Traveled (VMT) Reduction Program in partnership with the San Luis Obispo Air Pollution Control District and San Luis Obispo Council of Governments. The program should identify specific Transportation Demand Management (TDM) strategies for reducing VMT.
- Implementation Strategy AQ 1.5.2 Use of LTF for transit The County, through its role in the San Luis Obispo Council of Governments, will give high priority to increasing the share of Local Transportation Funds (LTF) allocated to transit in support of the Long Range Transit Plan and to improve bus and shuttle services.
- Implementation Strategy AQ 1.5.3 Evaluate Countywide Transportation Tax
   Conduct a feasibility analysis of a Countywide Transportation Tax (local option sales tax measure) with a share set aside for transit projects and operations.

Implementation Strategy AQ 1.5.4 Include bus routes in Land Use and Circulation Element Work with the San Luis Obispo Regional Transit Authority and local cities to identify and map existing and future bus lines (routes) and transit corridors for inclusion in the Land Use and Circulation Element.

#### Policy AQ 1.6 Multi-modal transportation

Coordinate with other local governments and agencies to develop a multi-modal transportation system. This system should enable convenient and efficient use of transportation alternatives. It should also provide multi-modal transfer sites that incorporate

Improvements to transit service may include but not be limited to proximity to users, frequency and span of service, and connectivity.

auto, bike parking, transit, pedestrian and bicycle paths, as well as park and ride pickup points.

 Implementation Strategy AQ 1.6.1 Identify intermodal hubs

Encourage the San Luis Obispo Regional Transit Authority, San Luis Obispo Council of Governments, local cities and transit providers, and other agencies to (1) identify sites for intermodal hubs, and (2) support funding to upgrade and create intermodal hubs or transit stations and facilitate seamless connections between transit services and other multi-modal forms of transportation.

Implementation Strategy AQ 1.6.2 Amend Land Use Element: Transit Oriented Development Amend the Land Use Element to encourage compact, mixeduse, and infill development at identified transit nodes and Transit Oriented Development (TOD) sites. Incentives may include flexible standards and streamlined permit processing for mixed use and affordable housing. Prepare and release a public review draft Land Use Element amendment by the end of 2011.

 Implementation Strategy AQ 1.6.3 Adopt Complete Streets Ordinance

Adopt a "Complete Streets" Ordinance to ensure that the County's streets and roads are designed and operated as a balanced, multimodal transportation network that enables safe access for all users. "All users" includes pedestrians, bicyclists, persons with disabilities, movers of commercial goods, transit vehicles, and users, and motorists of all ages and abilities. Prepare public review draft ordinance and Land use and Circulation Element amendments by the end of 2014.

 Implementation Strategy AQ 1.6.4 Support new transit nodes
 Work with the San Luis Obispo Regional Transit Authority, San

Luis Obispo Council of Governments, local cities and transit providers, and other agencies to identify transit nodes appropriate for mixed-use development and promote transitoriented development through the following or other means where appropriate:



Shifting the transportation mode share from single passenger cars to public transit, bicycling, and walking must be a significant part of short- and long-term planning goals if the state is to achieve the reductions in VMT and greenhouse gas emissions required by current law.

—<u>AB 1358</u>, California Complete Streets Act of 2008



- a. Rezoning of commercial properties to residential and/or mixed use,
- b. Flexible zoning and standards for multi-family housing and mixed-use development,
- c. Flexible minimum parking and building height limitations,
- d. Density bonus programs,
- e. Design guidelines for private and public spaces, and
- f. Incentives for redevelopment of underutilized areas.

#### Policy AQ 1.7 Bicycle and pedestrian travel

Encourage bicycle and pedestrian use by supporting the policies found in the Regional Transportation Plan, County Bikeways Plan, Land Use and Circulation Element, and County Parks and Recreation Element. In addition, support public and private efforts to facilitate bicycling and walking for transportation and recreation.

Implementation Strategy AQ 1.7.1 Bicycle racks at County facilities Provide, or work with other County agencies to provide, bicycle racks and storage facilities in public areas, such as County buildings and facilities, parks, and community centers.

- Implementation Strategy AQ 1.7.2 Rails-to-trails Coordinate to identify abandoned rail rights-of-way not planned for transit or freight use, analyze the feasibility of their use for non-motorized transportation, and incorporate them into the County's Parks and Recreation Element, the Bikeways Plan, and the Non-Motorized Transportation Program of the Regional Transportation Plan as appropriate.
- Implementation Strategy AQ 1.7. 3 Bike Share Program Work with cities, San Luis Obispo Council of Governments, Rideshare, and others to evaluate the feasibility of a Bike Share program.

#### Policy AQ 1.8 Support SLO Regional Rideshare

Support San Luis Obispo Regional Rideshare's Transportation Choices Programs that promote transportation alternatives by providing financial or other incentives to employers, employees,

Bike Share programs, also known as community bicycle, free bicycle or yellow bicycle programs, provide bicycles for shared use by individuals who do not own any of the bicycles. Use is often limited to certain areas. Bike share programs are often organized by community organization in partnership with government agencies and businesses.



and commuters who develop Trip Reduction Plans and implement commute options.

 Implementation Strategy AQ 1.8.1 Transportation Choices Program
 Require new office and commercial development to incorporate Transportation Choices Programs to reduce associated employee commute trips.

Also refer to refer to AQ Implementation Strategies AQ 2.1.1 – 2.1.3

#### Policy AQ 1.9 Use of rail

Encourage and facilitate, where appropriate, the use of railways as an alternative to trucking materials out of the county by preserving existing services and rights-of-way and investigating the feasibility of increasing general freight traffic by developing additional loading facilities. Railways should also be encouraged for use by passengers.

#### GOAL



## THE COUNTY WILL BE A LEADER IN IMPLEMENTING AIR QUALITY PROGRAMS AND INNOVATIONS.

#### Policy AQ 2.1 County employee trip reduction

Reduce employee commute-related vehicle trips. County departments will take the lead in implementing innovative employer-based trip reduction programs for their employees.

- Implementation Strategy AQ 2.1.1 Commute + Program Continue to promote, support, and expand the use of transit, vanpooling, carpooling, biking, teleworking, and walking to work through its Commute + Program.
- Implementation Strategy AQ 2.1.2 Alternative work arrangement Support alternative work arrangements such as flexible work schedules, compressed work weeks, telecommuting, and teleworking (satellite offices) as feasible without compromising public service.



#### CHAPTER 2



SLO Regional Rideshare's Lucky Bucks program is an example of an employer-supported trip reduction program.

## AIR QUALITY

 Implementation Strategy AQ 2.1.3 Employee Commuting Survey
 Collaborate with San Luis Obispo Rideshare to conduct an annual online Employee Commuting Survey regarding employee travel modes, behavior, and VMT. Use the results to develop programs and incentives that will reduce VMT.

#### **Policy AQ 2.2 County employee business travel** Reduce employee work-related vehicle trips.

- Implementation Strategy AQ 2.2.1 Video-conferencing Continue to support the use of video or tele-conferencing in lieu of employee travel to conferences and meetings when feasible.
- Implementation Strategy AQ 2.2.2 Inventory employee business travel
   Regularly compile employee miles traveled by all modes (automobile, plane, trains, etc.) for official County business.
   Identify opportunities to reduce greenhouse gas emissions resulting from employee business travel as feasible.

#### Policy AQ 2.3 Convert County fleet

Replace or convert conventional fuel vehicles in the County fleet with clean, alternative fuel vehicles.

- Implementation Strategy AQ 2.3.1 Alternative Fuel Strategy Adopt an Alternative Fuel Strategy to:
  - a. Set a fuel efficiency standard for the County fleet,
  - b. Ensure that new additions to the County fleet are alternatively fueled vehicles,
  - c. Create a timeline for replacement/conversion of County vehicle fleets to alternative fuel technologies, such as biodiesel, electricity, ethanol, hydrogen, natural gas, propane, or hybrid propulsion, and
  - d. Establish a network of alternative refueling facilities.

#### Policy AQ 2.4 Waste collection vehicles

Encourage waste haulers on contract to the County to use clean, alternative fuels for waste collection vehicles.

#### Policy AQ 2.5 Use of clean fuels

Encourage the use of clean fuels and the development of countywide fueling stations that distribute clean fuels through the County's participation in the Central Coast Clean Cities Coalition (C5).

#### Policy AQ 2.6 Alternative fuel incentives

Support and seek funding for incentives to residents, fleet operators, school districts, and employers to purchase and use alternative fuel vehicles as local, state, or federal funding sources become available.

- Implementation Strategy AQ 2.6.1 Preferential Parking Encourage new construction to provide preferential parking and/or no-cost parking for alternative fuel vehicles.
- Implementation Strategy AQ 2.6.2 Alternative Fuel Infrastructure Participate in countywide efforts to establish an alternative fuel infrastructure network to support alternative fuel vehicle technologies such as electric vehicle charging facilities and conveniently located alterative fueling stations.

Implementation Strategy AQ 2.6.3 Vehicle Charging in New Development Encourage new construction to include vehicle access to properly wired outdoor receptacles to accommodate zero emission vehicles (ZEV) and/or plug-in electric vehicles (PHEV).

#### Alternative fuel means a

nonpetroleum fuel. including electricity, ethanol, biodiesel, hydrogen, methanol, or natural gas that, when used in vehicles. has demonstrated. to the satisfaction of the CARB to have the ability to meet applicable vehicular emission standards. AB 1007 also includes petroleum fuel blended with nonpetroleum constituents, such as E85 or B20, as alternative fuels. The federal Energy Policy Act of 1992 also includes propane as an alternative fuel.

**Clean fuels** are fuels which have lower emissions than conventional gasoline and diesel, including alternative fuels and reformulated gasoline and diesel.



GOAL S

## STATE AND FEDERAL AMBIENT AIR QUALITY STANDARDS WILL, AT A MINIMUM, BE ATTAINED AND MAINTAINED.

#### Policy AQ 3.1 Coordinate with other jurisdictions

Coordinate with neighboring jurisdictions and affected agencies to address cross-jurisdictional and regional transportation and air quality issues.

- Implementation Strategy AQ 3.1.1 Air Quality Mitigation Measures Coordinate with the San Luis Obispo Air Pollution Control District and cities to identify feasible, cost-effective, consistent, and comprehensive air quality mitigation measures and programs to reduce short-term, operational, and cumulative impacts of new development on air quality.
- Implementation Strategy AQ 3.1.2 Consistency with APCD plans

Prepare amendments to the Framework for Planning that include criteria to avoid General Plan Amendments and land use designation changes that are not consistent with the San Luis Obispo Air Pollution Control District's approved plans, i.e., Toxic Risk Management Plan, PM Report, Clean Air Plan, and CEQA Handbook.

Implementation Strategy AQ 3.1.3 Support Prescribed Burning Program to Reduce Catastrophic Wildfires Support the San Luis Obispo Air Pollution Control District's (APCD) Prescribed Burning Program for rural lands through the implementation of its Smoke Management Program. The APCD, in coordination with the California Air Resources Board, CAL FIRE, land managers, and the public, should provide for the continuation of prescribed burning as a resource management tool, while minimizing smoke (particulate matter) imposts on the public. Critical components

(particulate matter) impacts on the public. Critical components of the Smoke Management Program include authorizing burning only under prescriptive weather and vegetative conditions, evaluation of alternatives to burning (e.g., grazing,

composting, or tilling) and careful monitoring of fire and smoke behavior.

#### Policy AQ 3.2 Attain air quality standards

Attain or exceed federal or state ambient air quality standards (the more stringent if not the same) for measured criteria pollutants.

◊ Implementation Strategy AQ 3.2.1 Use of APCD's CEQA Guidelines

The County's CEQA process will use the APCD's CEQA Guidelines to determine significance of impacts and to identify minimum project design and mitigation requirements.

#### Policy AQ 3.3 Avoid air pollution increases

Avoid a net increase in criteria air pollutant emissions in planning areas certified as Level of Severity II or III for Air Quality by the County's Resource Management System (RMS).

 Implementation Strategy AQ 3.3.1 Identify regional or local mitigation projects

The County will collaborate with the APCD and other agencies as appropriate to identify local or regional retrofit or mitigation projects with quantifiable reductions.

#### Policy AQ 3.4 Toxic exposure

Minimize public exposure to toxic air contaminants, ozone, particulate matter, sulfur dioxide, carbon monoxide, nitrogen oxides, and lead.

 Implementation Strategy AQ 3.4.1 Toxic Risk Management Plan

Work with APCD and other stakeholders to implement the region's Toxic Risk Management Pan (TRMP).

#### Policy AQ 3.5 Equitable decision making

Ensure that land use decisions are equitable and protect all residents from the adverse health effects of air pollution.

#### Policy AQ 3.6 Strategic growth principles

Ensure that implementation of the Strategic Growth principles and goals are balanced with protection of sensitive receptors near high-volume transportation routes and sources of toxic emissions



#### CHAPTER 2

## AIR QUALITY



Transportation represents 41 percent of total greenhouse gas emissions in California.

—The State Energy Resources Conservation and Development Commission (i.e. railyards, downtown centers, gasoline development facilities, chrome platers, dry cleaners, and refineries).

 Implementation Strategy AQ 3.6.1 Identify health risks to sensitive receptors

Provide an analysis of potential health risks and identify mitigation measures to reduce risk to acceptable levels for projects involving sensitive receptors proposed within 500 feet of freeways and high-speed highways, consistent with APCD criteria.

#### Policy AQ 3.7 Reduce vehicle idling

Encourage the reduction of heavy-vehicle idling throughout the county, particularly near schools, hospitals, senior care facilities, and areas prone to concentrations of people, including residential areas.

 Implementation Strategy AQ 3.7.1 Heavy Duty Vehicle Idling

Encourage the reduction of heavy-duty vehicle idling throughout the county using APCD and California Air Resources Board idling reduction policies for schools and other sensitive receptors.

#### Policy AQ 3.8 Reduce dust emissions

Reduce PM10 and PM2.5 emissions from unpaved and paved County roads to the maximum extent feasible.

- Implementation Strategy AQ 3.8.1 Reduce PM emissions from County roads
  - 1) Implement all APCD particulate matter (PM) emission controls.
  - 2) Continue efforts to clean paved roads, and
  - Pave or "chip seal" public County dirt roads to minimize fugitive dust.



#### GOAL

COUNTY OPERATIONS AND COMMUNITYWIDE SOURCES WILL BE REDUCED FROM BASELINE LEVELS BY A MINIMUM OF 15% BY 2020.

**GREENHOUSE GAS EMISSIONS FROM** 

#### Policy AQ 4.1 Reduce greenhouse gas emissions

Implement and enforce State legislative or regulatory standards, policies, and programs designed to reduce greenhouse gas emissions.

# *Policy AQ 4.2 Identify greenhouse gas emissions* Quantify, reduce, and mitigate greenhouse gas emissions.

Implementation Strategy AQ 4.2.1 Climate Action Team Identify a Climate Action Team within 90 days of adoption of this Element. The team shall consist of representatives from key County departments and agencies, including but not limited to the departments of Administration, General Services, Planning and Building, and Public Works.

Implementation Strategy AQ 4.2.2 2006 GHG Emissions Baseline Inventory Report Refer to the 2006 Greenhouse Gas Emissions Baseline Inventory Report as the baseline for greenhouse gas emissions levels from County municipal operations and community-related activities until updated. (Report included as Appendix 2).

 Implementation Strategy AQ 4.2.3 Update GHG emissions inventory report
 Inventory greenhouse gas emissions from County operations and community-wide sources on a regular basis, at a minimum of every 5 years, in accordance with State protocol.

 Implementation Strategy AQ 4.2.4 Communitywide GHG emissions reduction target
 Based on the results of the baseline greenhouse gas emissions inventory, stakeholder input, and state legislation and regulations, establish a communitywide greenhouse gas

emissions reduction target of at least 15% by 2020 (percentage reduction from baseline year by target year).

 Implementation Strategy AQ 4.2.5 Prepare and Implement Climate Action Plan

Prepare and implement a Climate Action Plan to achieve the greenhouse gas emissions reduction target. Government and community greenhouse gas reduction measures included in the plan will be proposed in collaboration with stakeholders. The measures will address key areas, including, but not limited to:

- a. Transportation
- b. Fuel (source and fleets)
- c. Solid waste and recycling
- d. Land use (Strategic Growth practices and principles to reduce VMT)
- e. Energy use
- f. Renewable energy
- g. Materials
- h. Commercial and industrial practices
- i. Public education
- j. Partnerships with local and regional organizations
- k. Green building procedures, and
- I. Agricultural activities
- Implementation Strategy AQ 4.2.6 Monitor and Update Climate Action Plan
   Regularly monitor, measure, and report on the implementation status of the Climate Action Plan and adapt strategies to reduce greenhouse gas emissions over time.

#### **Policy AQ 4.3 GHG emissions from County operations** Actively work to reduce greenhouse gas emissions from County operations specifically in the sectors of energy transportation

operations, specifically in the sectors of energy, transportation, and waste, as identified in the 2006 Greenhouse Gas Emissions Baseline Inventory Report.



Example of a hybrid technology vehicle

 Implementation Strategy AQ 4.3.1 Reduce GHG emissions from County operations
 Deduce groupbourge goo emissions from County exercises

Reduce greenhouse gas emissions from County operations and practices, including emissions from the following areas:

- County fleet managed by General Services, Public Works, Sheriff's Department, Library Services, Cal Fire, and other departments as applicable
- b. Procurement
- c. Energy use
- d. Materials
- e. Water
- f. Waste and Employee transportation (work-related travel and employee commuting).
- ◊ Implementation Strategy AQ 4.3.2 Reduce GHG emissions from County-related travel

Reduce greenhouse gas emissions from County transportation activities through fleet conversion to alternative fuels, preparation of a Transportation Demand Management program for employees, and other strategies identified in the Climate Action Plan. (Also refer to **Policy AQ 2.3** above.)

 Implementation Strategy AQ 4.3.3 Reduce GHG emissions from County energy use

Reduce greenhouse gas emissions resulting from energy use in the County buildings, facilities, and operations through adoption of energy efficiency and energy conservation measures, use of renewable energy sources, and other strategies identified in the Climate Action Plan. (Also refer to **Energy Policies 2.1 – 2.3.**)

# *Policy AQ 4.4 Development projects and land use activities*

Reduce greenhouse gas emissions from development projects and other land use activities.

Carbon sequestration is

the net removal of carbon dioxide  $(CO_2)$  from the atmosphere. This may occur through the enhancement of natural processes (i.e. terrestrial sequestration - the uptake of carbon by trees, vegetation, and soils) or through technological processes, such as the placement of CO<sub>2</sub> into a geologic repository (geologic sequestration) in such a way that it will remain permanently sequestered.

The term "carbon sinks" is also used to describe agricultural and forestry lands that absorb CO<sub>2</sub>.

- <u>U.S. EPA Carbon</u> <u>Sequestration FAQ</u> and the U.S. Dept. of Energy <u>National Energy</u> <u>Technology Laboratory</u> <u>Carbon Sequestration</u> <u>FAQ</u>.  Implementation Strategy AQ 4.4.1 Amend Initial Study Checklist: GHG emissions
 Amend Initial Study Checklist to address potential project impacts to greenhouse gas emissions, energy use, and materials.

- Implementation Strategy AQ 4.4.2 Reduce methane emissions Reduce methane emissions released from waste disposal through increased diversion rates, recycling, methane capture and recovery, and other strategies identified in the Climate Action Plan. (Also refer to Energy Policies E 5.1 – 5.6.)
- Implementation Strategy AQ 4.4.3Reduce GHG emissions from community-wide transportation activities Reduce greenhouse gas emissions resulting from communitywide transportation activities through expanded use of alternative fuel vehicles, increased use of alternative transportation modes, decreased VMT, development of compact, mixed-use, infill projects in established communities and urban areas, and other strategies identified in the Climate Action Plan. (Also refer to Policies AQ 1.1 – 1.8 above.)

#### Policy AQ 4.5 Carbon Sequestration

Reduce net carbon emissions through the preservation, protection, and enhancement, as appropriate, of the county's terrestrial and aquatic carbon sequestration resources, including the county's lakes, soils, and native forests, trees, and plants

 Implementation Strategy AQ 4.5.1 Identify carbon sequestration resources

Identify existing and potential opportunities for terrestrial and aquatic sequestration in the county, including but not limited to County lands, reclaimed mining lands, agricultural lands, and other areas or activities as appropriate.

#### Policy AQ 4.6 Regional organizations

Collaborate and coordinate with regional organizations and local jurisdictions to reduce greenhouse gas emissions.

- Implementation Strategy AQ 4.6.1 Partnerships with utilities
   Work with utilities to reduce greenhouse gas emissions and energy use.
- Implementation Strategy AQ 4.6.2 Regional collaboration to reduce GHG emissions

Participate in regional organizations that support greenhouse gas emissions reductions. Examples include the San Luis Obispo Air Pollution Control District's (APCD) Greenhouse Gas Emissions and Climate Change Stakeholder Group and other APCD-sponsored programs, ICLEI's Cities for Climate Protection program, PG&E Energy Watch, San Luis Obispo Regional Rideshare, San Luis Obispo Council of Governments programs, Central Coast Clean Cities Coalition (C5), and others as appropriate.

#### GOAL

5

# THE COUNTY WILL ADAPT TO ADVERSE CLIMATE CHANGE.

#### Policy AQ 5.1 Adapt to climate change

Identify needs and strategies to monitor, prepare for, and adapt to a changing climate.

- Implementation Strategy AQ 5.1.1 Risk of sea level rise Work with the Office of Emergency Services to identify the potential for sea level rise in the coastal planning areas. Amend the County's CEQA Initial Study Checklist, Area Plans, the Coastal Zone Land Use Ordinance, Safety Element, and Local Hazard Mitigation Plan as appropriate.
- Implementation Strategy AQ 5.1.2 Climate Change Adaptation Incorporate climate change impacts, projections, adaptation needs, and strategies into County planning documents in coordination with the California Coastal Commission, water districts, wildlife agencies, flood control and fire districts, and other relevant organizations. Plans should address human health and the health and adaptability of natural systems, including the following:



- a. Water resources including expanded rainwater harvesting, water storage and conservation techniques, water re-use, desalination, and water-use and/or irrigation efficiency.
- b. Biological resources including land acquisition, creation of marshlands/wetlands as a buffer against sea level rise and flooding, and protection of existing natural barriers.
- c. Public health including heat-related health plans, vector control, safe water, and improved sanitation.
- d. Environmental hazards including seawalls, storm surge barriers, and fire protection.

#### Policy AQ 5.2 Public awareness

Increase public awareness about climate change and lifestyle changes that will reduce greenhouse gas emissions.

Implementation Strategy AQ 5.2.1 Increase public awareness about climate change Work with local government agencies, schools and universities, the business community, and nonprofit organizations to increase public awareness about climate change and lifestyle changes that reduce greenhouse gas emissions.

- Implementation Strategy AQ 5.2.2 Climate change research
   Work with climate science experts on local climate change impacts, mitigations, and adaptation to inform public policy decisions.
- Implementation Strategy AQ 5.2.3 Carbon footprint calculator
   Provide and publicize an online "carbon footprint calculator" and other resources for individuals, households, and businesses to assist in the reduction of carbon footprints.

 Implementation Strategy AQ 5.2.4 Provide climate change information on County website
 Provide and distribute climate change information through the County's website, publications, and offices. Implementation Strategy AQ 5.2.5 Support green business Support local efforts to develop "green" or sustainable business practices that reduce greenhouse gas emissions and improve overall quality of life in the county.

## **Summary of Implementation Strategies**

For each implementation strategy described in this chapter, the following table (**Table AQ-2**) summarizes the County department or other agency that has primary responsibility for carrying out that strategy. In addition, the table summarizes the priority, estimated year of initiation, and potential source of funding of each strategy-The actual timeframe for implementing the strategies is dependent upon the availability of adequate staff and funding.

## TABLE AQ-2 AIR QUALITY IMPLEMENTATION

| Implementation<br>Strategy  | Responsible<br>Department<br>or Agency <sup>1</sup> | Priority  | Timeframe<br>to Start | Possible<br>Funding<br>Sources <sup>2</sup> |
|---|---|-----------|-----------------------|---|
| IS AQ 1.1.1 Strategic Growth Principles                             | РВ  | Essential | Immediately           | DB  |
| IS AQ 1.2.1 VMT reduction strategies                                | РВ  | Essential | 2010                  | DB  |
| IS AQ 1.2.1 Decoupling of parking                                   | РВ  | Medium    | 2012                  | DB  |
| IS AQ 1.3.1 Connectivity in new<br>development                      | PB, PW, GS  | High      | Immediately           | N/A   |
| IS AQ 1.5.1 Countywide VMT<br>Reduction Program                     | PB, APCD,<br>COG                                    | High      | 2012                  | Grant, GF                                   |
| IS AQ 1.5.2 Use of LTF for transit                                  | COG   | Essential | Immediately           | COG   |
| IS AQ 1.5.3 Evaluate Countywide<br>Transportation Tax               | COG, PW, cities                                     | Medium    | 2011                  | GF  |
| IS AQ 1.5.4 Include bus routes in Land Use and Circulation Element  | PW, PB, RTA,<br>cities                              | Medium    | 2011                  | DB  |
| IS AQ 1.6.1 Identify intermodal hubs                                | PB, RTA, COG,<br>PW                                 | High      | Immediately           | DB  |
| IS AQ 1.6.2 Amend Land Use Element:<br>Transit Oriented Development | PB, PW, RTA   | High      | Immediately           | DB  |
| IS AQ 1.6.3 Adopt Complete Streets<br>Ordinance                     | PB, PW, COG,<br>RTA                                 | Essential | 2013                  | DB  |

2.2

## TABLE AQ-2 AIR QUALITY IMPLEMENTATION

| Implementation<br>Strategy  | Responsible<br>Department<br>or Agency <sup>1</sup> | Priority | Timeframe<br>to Start    | Possible<br>Funding<br>Sources <sup>2</sup> |
|---|---|----------|--------------------------|---|
| IS AQ 1.6.4 Support new transit nodes   | PW, PB  | Medium   | 2011                     | DB  |
| IS AQ 1.7.1 Bicycle racks at County facilities  | GS, cities, CSDs                                    | Low      | 2010                     | GF, grant                                   |
| IS AQ 1.7.2 Rails-to-trails   | PW, COG, GS   | Low      | 2012                     | GF, grant                                   |
| IS AQ 1.7.2 Bike Share Program  | PB, cities, COG                                     | Medium   | 2012                     | DB  |
| IS AQ 1.8.1 Transportation Choices<br>Program   | PB  | High     | Immediately              | N/A   |
| IS AQ 2.1.1 Commute + Program   | All departments                                     | High     | Immediately <sup>3</sup> | N/A   |
| IS AQ 2.1.2 Alternative work arrangement  | All departments                                     | High     | Immediately              | N/A   |
| IS AQ 2.1.3 Employee Commuting<br>Survey  | Admin, IT, PB                                       | Low      | Immediately <sup>3</sup> | DB  |
| IS AQ 2.2.1 Video-conferencing  | All departments                                     | High     | Immediately              | N/A   |
| IS AQ 2.2.2 Inventory employee business travel  | PB  | High     | Immediately              | DB  |
| IS AQ 2.3.1 Alternative Fuel Strategy   | GS  | Medium   | 2010                     | DB, GF,<br>grants                           |
| IS AQ 2.6.1 Preferential Parking  | PB, APCD  | High     | Immediately <sup>3</sup> | DB  |
| IS AQ 2.6.2 Alternative Fleet<br>Infrastructure                                       | PB, GS, APCD,<br>C5                                 | Ongoing  | Immediately <sup>3</sup> | DB, GH,<br>grants                           |
| IS AQ 2.6.3 Vehicle Charging in New<br>Development                                    | PB, APCD  | Ongoing  | Immediately <sup>3</sup> | N/A   |
| IS AQ 3.1.1 Air Quality Mitigation<br>Measures  | APCD, PB, cities                                    | Medium   | 2011                     | DB, grant                                   |
| IS AQ 3.1.2 Consistency with APCD plans   | PB, APCD  | Low      | 2012                     | DB  |
| IS AQ 3.1.3 Support Prescribed<br>Burning Program to Reduce<br>Catastrophic Wildfires | PB, APCD, Cal<br>Fire, CARB,<br>landowners          | Medium   | Immediately <sup>3</sup> | N/A   |
| IS AQ 3.2.1 Use of APCD's CEQA<br>Guidelines  | PB, APCD  | High     | Immediately <sup>3</sup> | N/A   |



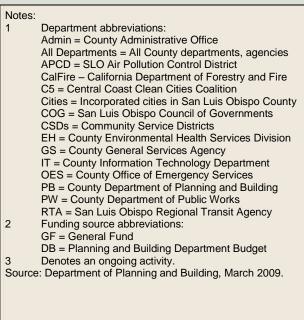
## TABLE AQ-2 AIR QUALITY IMPLEMENTATION

| Implementation<br>Strategy                                     | Responsible<br>Department<br>or Agency <sup>1</sup> | Priority  | Timeframe<br>to Start    | Possible<br>Funding<br>Sources <sup>2</sup> |
|--|---|-----------|--------------------------|---|
| IS AQ 3.3.1 Identify regional or local mitigation projects     | PB, APCD, cities                                    | High      | 2010                     | N/A   |
| IS AQ 3.4.1 Toxic Risk Management<br>Plan                      | PB, APCD  | Medium    | Immediately <sup>3</sup> | DB  |
| IS AQ 3.6.1 Identify health risks to<br>sensitive receptors    | PB, APCD  | High      | Immediately              | N/A   |
| IS AQ 3.7.1Heavy Duty Vehicle Idling                           | PB, APCD  | Medium    | Immediately <sup>3</sup> | DB  |
| IS AQ 3.8.1 Reduce PM emissions from<br>County roads           | PW, PB, APCD  | High      | Immediately              | DB  |
| IS AQ 4.2.1 Climate Action Team                                | РВ  | Essential | Immediately              | DB  |
| IS AQ 4.2.2 2006 GHG Emissions<br>Baseline Inventory Report    | PB, APCD, PW,<br>GS                                 | High      | Immediately <sup>3</sup> | DB  |
| IS AQ 4.2.3 Update GHG emissions inventory report              | PB, APCD, PW,<br>GS                                 | High      | Immediately              | N/A   |
| IS AQ 4.2.4 Communitywide GHG<br>emissions reduction target    | PB, APCD  | Medium    | 2009                     | DB  |
| IS AQ 4.2.5 Prepare and Update<br>Climate Action Plan          | PB, APCD  | High      | 2009                     | DB  |
| IS AQ 4.2.6 Monitor and Update<br>Climate Action Plan          | APCD, PB, PW  | Essential | 2010                     | DB  |
| IS AQ 4.3.1 Reduce GHG emissions<br>from County operations     | All departments                                     | High      | Immediately              | DB, GF                                      |
| IS AQ 4.3.2 Reduce GHG emissions<br>from County-related travel | GS, PW  | High      | 2011                     | GF, grants                                  |
| IS AQ 4.3.3 Reduce GHG emissions from County energy use        | All Departments                                     | High      | Immediately              | GF, DB, grants                              |
| IS AQ 4.4.1 Amend Initial Study<br>Checklist: GHG emissions    | PB, PW  | High      | Immediately              | DB  |
| IS AQ 4.4.2 Reduce methane emissions                           | APCD, PW  | Medium    | 2011                     | DB  |



## TABLE AQ-2 AIR QUALITY IMPLEMENTATION

| Implementation<br>Strategy   | Responsible<br>Department<br>or Agency <sup>1</sup> | Priority  | Timeframe<br>to Start    | Possible<br>Funding<br>Sources <sup>2</sup> |
|--|---|-----------|--------------------------|---|
| IS AQ 4.4.3 Reduce GHG emissions from community-wide transportation activities | PB, cities, COG                                     | High      | Immediately              | DB, grants                                  |
| IS AQ 4.5.1 Identify carbon sequestration resources                            | PB, PW, AG  | Medium    | 2011                     | GF  |
| IS AQ 4.6.1 Partnerships with utilities  | GS, PB, APCD  | High      | 2010                     | GF, grant                                   |
| IS AQ 4.6.2 Regional collaboration to reduce GHG emissions                     | PB, GS, APCD,<br>Cities, CG                         | High      | Immediately <sup>3</sup> | GF, APCD,<br>Cities, COG                    |
| IS AQ 5.1.1 Risk of sea level rise   | PB, OES   | Low       | 2013                     | DB  |
| IS AQ 5.1.2 Climate Change<br>Adaptation                                       | PB, PW, EH  | Low       | 2013                     | DB  |
| IS AQ 5.2.1 Increase public awareness about climate change                     | APCD, PB  | Essential | Immediately              | DB  |
| IS AQ 5.2.2 Climate change research  | APCD, PB  | Medium    | 2010                     | DB  |
| IS AQ 5.2.3 Carbon footprint calculator  | APCD  | Low       | Immediately              | DB  |
| IS AQ 5.2.4 Provide climate change information on County website               | PB, APCD  | Medium    | Immediately              | DB  |
| IS AQ 5.2.5 Support green business   | PB, PW, GS  | High      | Immediately              | DB  |



## References

- California Energy Commission. 2006. Inventory of California Greenhouse Gas Emissions and Sinks 1990-2004 (CEC-600-2006-013-SF).
- California Environmental Protection Agency Air Resources Board. 2007. Staff Report California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit.
- California Environmental Protection Agency. 2004. ARB Technical Support document for Staff Proposal Regarding Reduction of Greenhouse Gas Emissions from Motor Vehicles.
- California Environmental Protection Agency Air Resources Board. Climate Change Portal. http://www.arb.ca.gov/cc/cc.htm
- Intergovernmental Panel on Climate Change. Fourth Assessment Report, Working Group I. 2007. Climate Change 2007: The Physical Science Basis, Summary for Policy Makers.
- San Luis Obispo County Air Pollution Control District. 2001. Clean Air Plan San Luis Obispo County. http://www.slocleanair.org/business/pdf/CAP.pdf.
- San Luis Obispo Air Pollution Control District. 2005. Particulate Matter Report Implementation of SB 656 Requirements.
- San Luis Obispo Air Pollution Control District. 2007. Annual Air Quality Report. http://www.slocleanair.org/air/pdf/2007aqrptfullversion.pdf
- San Luis Obispo Air Pollution Control District. 2007a. *Emission* Inventory <u>http://www.slocleanair.org/air/emissions.php</u>
- United States Environmental Protection Agency. *Glossary of Climate Change Terms*. <u>http://yosemite.epa.gov/oar/globalwarming.nsf/content/glos</u> <u>sary.html</u>



# **BIOLOGICAL RESOURCES**



## **Purpose**

Sustaining healthy ecosystems, preserving biodiversity, restoring degraded habitats, and protecting diverse landscapes honors San Luis Obispo County's history and ensures a future that is healthy and vibrant ecologically, socially and economically. This chapter identifies biological resources of importance to the County and outlines a framework to achieve this future.

## Introduction

San Luis Obispo County is home to a number of diverse and important natural communities, from coastal marine environments to riparian habitats, and a mosaic of forests, woodlands, grasslands, and chaparral (refer to **Figures BR-1**, **BR-2**, **BR-3**, and **BR-4**). Occurrences of special-status species are known throughout San Luis Obispo (refer to **Figure BR-5**). More than 103 special-status plants and 53 special-status animal species in San Luis Obispo are monitored regularly. The wide variety of vegetation types add immeasurable beauty to the county's landscape, whether it be the oak studded hillsides, pines along a mountain ridge, or lush willows along the streams. In addition to their beauty, plants are a vital part of the ecosystem: shelter for wildlife, cleansing the air, preventing soil erosion and water pollution, and as food for humans and animals. (An overview of the biological resources setting is provided in **Appendix 3**.)

## **Ecosystems**

Ecosystems hold the key for preserving vegetation and wildlife. In fact, we cannot truly protect endangered species unless we preserve the ecosystem within which they thrive and interact. **Biodiversity** refers to the variety of life and its processes, including the variety of living organisms, the genetic differences among them, and the communities and ecosystems in which they occur.

Island effect is the isolation of one habitat fragment from other areas of habitat. Habitat fragmentation is often caused by land conversion.

#### Wildlife movement corridors are features

whose primary wildlife function is to connect at least two significant habitat areas.

Accordingly, the best and most efficient strategy for preserving rare or endangered species - and in the end the least costly - is to prevent them from becoming rare and endangered in the first place.

An ecosystem can be defined as all the components of a biological community and the physical environment, and the interactions among and between them. Ecosystems are more than just the sum of their various components, involving a complex system of linkages between plants, animals, their environment, and humans. (Refer to **Figure A3-1** in **Appendix 3**.)

The key to protecting biological resources and sustaining the great variety of lifeforms on earth is to protect and sustain healthy, functioning ecosystems and the biological diversity within them. "Biodiversity" refers to all living organisms and the ecological setting on which they depend for life - the natural variety, abundance, and variability of different plant and animal species. One of the generally accepted key principles of ecology is that biological diversity leads to stability of an ecosystem.

If one of the key links in the system is broken - a certain keystone species is lost, for example, - the functioning of the entire ecosystem upon which many plants and animals depend can be weakened, and the natural communities lost. Extinction of a key plant or animal - predator or prey - can be the beginning of the end for an ecosystem. The key to avoiding this is to maintain the complex system of linkages in the ecosystem wherever possible. This can be done by maintaining large, unfragmented areas of natural habitat and by maintaining physical connections between those areas to enable wildlife migration - preserving biological diversity.

Wildlife corridors between habitat areas are a way to minimize the "island effect." Good examples of wildlife corridors are streams and riparian corridors. Wildlife corridors can also be recreated and protected by humans. The protection of corridors shall be required in certain circumstances in order to minimize the effects of public and private construction projects on wildlife migration and special status species.

## **BIOLOGICAL RESOURCES**

Conserving valuable but rapidly diminishing wetland habitats also provides the benefits of filtering pollution, protecting water quality, controlling flooding, and maintaining a reliable water table. The importance of wetlands has been long recognized in the County General Plan. The significant reduction in wetlands in the county due to development, grading, agricultural activities, and conversion of land uses increases our need to preserve and restore the county's remaining wetlands.

Streams and their associated riparian vegetation corridors are important open space resources. Maintaining streams and riparian corridors in a natural state offers many benefits, including conserving fish spawning areas and key corridors for wildlife migration and survival. Other benefits include maintaining the productivity of estuaries downstream, providing ground water recharge, maintaining high aesthetic quality, and providing potential recreational opportunities. It is recognized that agricultural activities can affect biological resources such as riparian zones and that protection of such resources can affect agricultural activities.

This Conservation and Open Space Element is an important step towards conservation planning in San Luis Obispo County. If planning programs can be more effective on an ecosystem basis, the programs will be more effective at protecting those species already listed as rare and endangered. Programs that are more effective can also reduce the number of new species added to the rare and endangered lists.

Human activity has had major adverse effects on the health and sustainability of these natural communities. Since the mid-19th century, grazing, logging, agriculture, road building, mineral extraction, and development have markedly altered the natural landscape. Specific programs seek preservation of special-status species, sensitive natural communities, important wildlife habitat and movement corridors, wetlands, riparian habitats, coastal dunes, and baylands.

Preservation, protection, and restoration of biological resources in San Luis Obispo County is the responsibility of both the private and public sectors. On one hand, residents, businesses, and Like the resource it seeks to protect, wildlife conservation must be dynamic, changing as conditions change, seeking always to become more effective. Rachel Carson



GENERAL PLAN

We will recognize success when...

 Restoration of important habitats such as streams, wetlands, woodlands, and corridors is underway.

 The acreage and integrity of sensitive habitat such as oak woodlands, wetlands and streams and riparian vegetation is maintained or increased.

 A network of major ecosystems has been established and is being managed.

 A diversity of wildlife flourishes in the county's woodlands, streams, wetlands, and other habitats. organizations, have responsibilities to do their part to preserve and protect the county's biological resources. On the other, federal, state, regional, the County, and the incorporated cities have roles to regulate and encourage conservation and resource protection.

# Relationship to Other Elements, Plans, and Programs

This Element contains biological resource-specific policies. However, it and all the elements of the General Plan work together to form a cohesive set of goals, objectives, and policies that cumulatively preserve, enhance, and protect biological resources for generations to come.

The goals, policies, and implementation strategies in this chapter are designed to be consistent with the Agriculture Element, which is intended to balance protection of open space and biological resources with the needs of production agriculture and to minimize the impacts to ongoing production agriculture.

Many of the sensitive and scenic areas identified in this plan are already identified in the Land Use Element (LUE) by existing Sensitive Resource Area (SRA) combining designations. (Refer to <u>Title 22, County Land Use Ordinance.</u>) In those areas, standards in the LUE and Land Use Ordinance (LUO) protect sensitive resources and mitigate the effects of development. However, there are also other important sensitive and scenic areas and features that are currently not designated in the LUE, such as major ecosystems, key wildlife corridors, sensitive natural communities identified by the California Department of Fish and Game, oak woodlands identified by the California Department of Forestry, watersheds supporting native steelhead fisheries, and County Natural Area Preserves. The policies in this Element are intended to protect these important biological and ecological resources in vulnerable areas.

## **Major Issues**

- 1) Integrated management approach. Increasing risk of degradation and/or elimination of natural resources requires coordinated and integrated management of the county's biological resources by public, private, nonprofit, and agricultural organizations at ecosystem and sitespecific levels.
- 2) Land use conversion. Changing land uses, particularly conversion of agricultural and rural lands to residential and urban uses, adversely impact species and their habitats.
- 3) Wildlife protection. Changing land uses impact wildlife movement corridors and displaces wildlife.
- 4) Oak woodlands. Areas of oak woodlands and native trees are diminishing due to tree cutting, urban land conversion and displacement by exotic/non native species.
- 5) Wetland habitats. Changing land uses impact wetlands, steams, and riparian habitats.
- 6) Fisheries. Marine resources and fisheries are increasingly vulnerable to degraded habitat, polluted runoff, and sedimentation from urban development.

## **Goals, Policies, and Implementation Strategies**

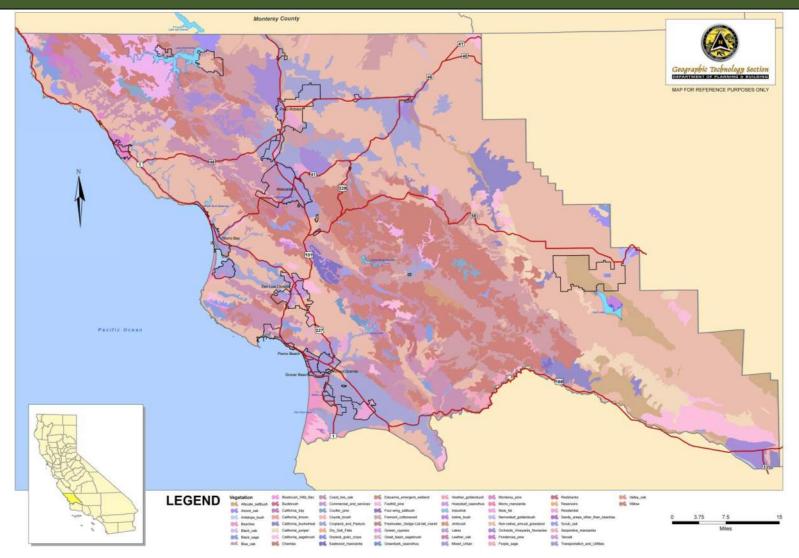
The intent of the following goals, policies, and implementation strategies is to identify and protect biological resources that are a critical component of the county's environmental, social, and economic well-being. Biological resources include major ecosystems; threatened, rare, and endangered species and their habitats; native trees and vegetation; creeks and riparian areas; wetlands; fisheries; and marine resources. Individual species, habitat areas, ecosystems and migration patterns must be considered together in order to sustain biological resources.



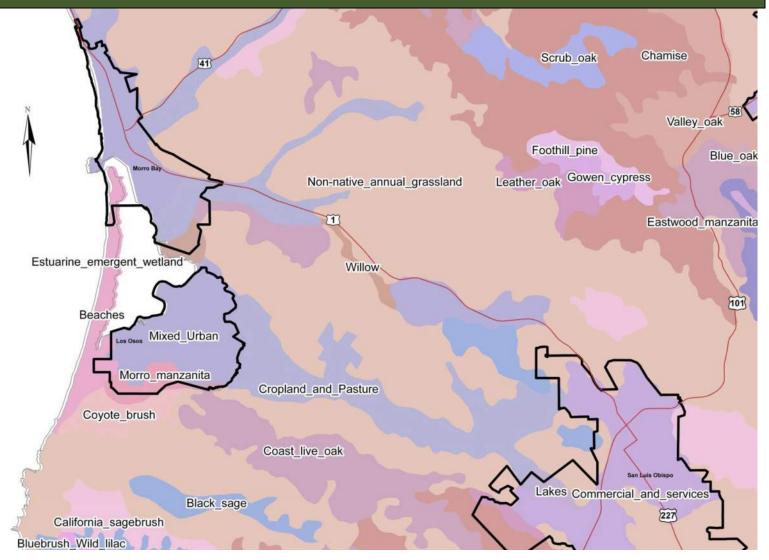
| TABLE BR-1<br>GOALS FOR BIOLOGICAL RESOURCES |  |  |  |  |
|--|--|--|--|--|
| Goal BR 1                                    | Native habitat and biodiversity will be protected, restored, and enhanced.                         |  |  |  |
| Goal BR 2                                    | Threatened, rare, endangered, and sensitive species will be protected.                             |  |  |  |
| Goal BR 3                                    | Maintain the acreage of native woodlands, forests, and trees at 2008 levels.                       |  |  |  |
| Goal BR 4                                    | The natural structure and function of streams and riparian habitat will be protected and restored. |  |  |  |
| Goal BR 5                                    | Wetlands will be preserved, enhanced, and restored.  |  |  |  |
| Goal BR 6                                    | The County's fisheries and aquatic habitats will be preserved and improved.                        |  |  |  |
| Goal BR 7                                    | Significant marine resources will be protected.  |  |  |  |



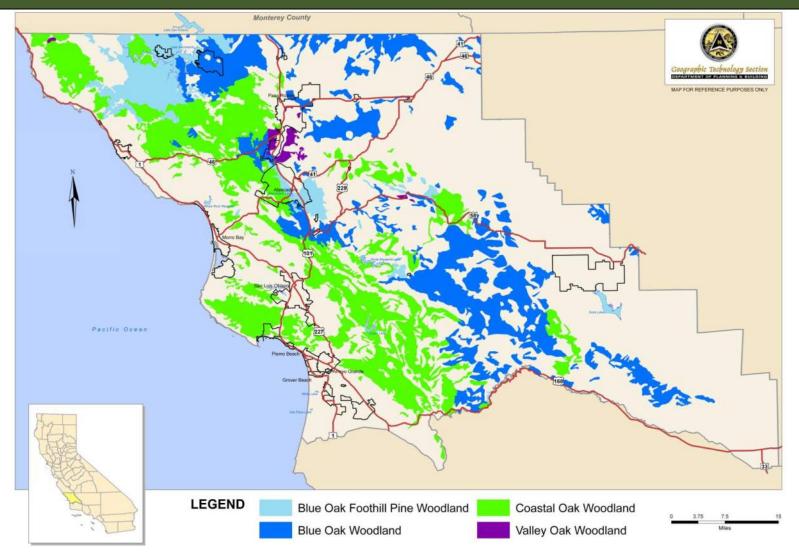
## FIGURE BR-1 VEGETATION RESOURCES



## FIGURE BR-2 VEGETATION RESOURCES – DETAILED PERSPECTIVE

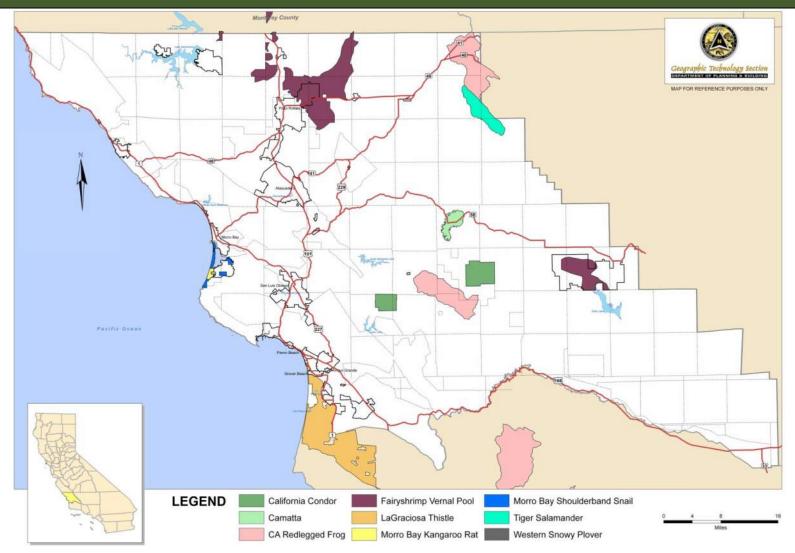


## FIGURE BR-3 HARDWOOD RESOURCES



# **FIGURE BR-4** HARDWOOD RESOURCES - DETAILED PERSPECTIVE Paso Robles Blue Oak Woodland Valley Oak Woodland 46 Coastal Oak Woodland Atascadero 229 Blue Oak Foothill Pine Woodland 101 N

## FIGURE BR-5 CRITICAL HABITATS



Sensitive biological resources include those species listed by the federal or state government as endangered or threatened as well as non-listed species of concern. Sensitive biological resources also include habitats of limited occurrence or distribution such as riparian and riverine areas subject to Army Corps of Engineers or California Department of Fish and Game jurisdiction.

The Pacific Flyway is a major north-south route of travel for migratory birds in the Americas, extending from Alaska to Patagonia. Migratory birds travel some or all of this distance in spring and in fall, following food sources, heading to breeding grounds, or travelling to overwintering sites.

## GOAL

## NATIVE HABITAT AND BIODIVERSITY WILL BE PROTECTED, RESTORED, AND ENHANCED.

**Policy BR 1.1 Protect Sensitive Biological Resources** Protect sensitive biological resources such as, wetlands, migratory species of the Pacific flyway, and wildlife movement corridors through:

- 1) environmental review of proposed development applications, including consideration of cumulative impacts,
- 2) participation in comprehensive habitat management programs with other local and resource agencies, and
- acquisition and management of open space lands that provide for permanent protection of important natural habitats.

## **Policy BR 1.2 Limit Development Impacts**

Regulate and minimize proposed development in areas that contain essential habitat for special-status species, sensitive natural communities, wetlands, coastal and riparian habitats, and wildlife habitat and movement corridors as necessary to ensure the continued health and survival of these species and protection of sensitive areas.

### **Policy BR 1.3 Environmental Review**

Require environmental review of development applications pursuant to CEQA and County procedures to assess the impact of proposed development on native species and habitat diversity, particularly special-status species, sensitive natural communities, wetlands, and important wildlife nursery areas and movement corridors.

## Policy BR 1.4 No Net Loss

Require that development projects are approved with conditions and mitigation measures to ensure the protection of sensitive resources and to achieve "no net loss" of sensitive habitat acreage, values, and function. Give highest priority to avoidance of sensitive habitat. When avoidance is not feasible, require provision of replacement habitat onsite through restoration and/or habitat creation. When onsite mitigation is not feasible, provide for offsite mitigation that reflects no net loss.

## *Policy BR 1.5 Establish and Maintain a Network of Major Ecosystems*

The County will work collaboratively with affected agencies, groups and individuals to establish, protect, and manage a network of major ecosystems.

 Implementation Strategy BR 1.5.1 Identify regional system of ecosystems

Identify and conserve an integrated, regional system of the important native ecosystems and landscapes most representative of the region's most important natural ecosystems, as follows: 1) use the County's creeks, rivers, lakes, and other inland and coastal aquatic features in public or nonprofit ownership or management as strategic building blocks, 2) link regional landscapes that include publicly owned lands harboring native ecosystems and privately owned, highly managed properties, 3) conserve critical elements of native ecosystems and landscapes, 4) facilitate the ability of ecosystems and landscapes to function as dynamic systems, and 5) reconcile conservation of native ecosystems with human uses.

 Implementation Strategy BR 1.5.2 Ecosystem research and monitoring
 Support research and require proper monitoring protocols to effectively plan and manage native ecosystems and landscapes.

Implementation Strategy BR 1.5.3 Non-governmental outreach and education The County will engage the tourism and agricultural industries, private landowners, conservationists, recreationists, and public agencies in developing the Major Ecosystems Network Program. No Net Loss is assuring that there is no reduction in the value and function of resources as a result of development. For example, measures to achieve no net loss of biological resources include avoiding impacts, replacing or restoring habitat, or compensating for habitat loss off site or through a mitigation program.

An **ecosystem** is a dynamic and interrelating complex of plant and animal communities and their associated environment.

#### An ecosystem approach

is a philosophy of resource management that focuses on protecting or restoring the function, structure, and species composition of an ecosystem, recognizing that all components are interrelated.





### Special-Status Species, Listed Species, or Sensitive Species are threatened, endangered, fully protected, and plant and animal species of special concern. The CA Department of Fish and Game maintains and updates lists for Special Plants, Special Animals Threatened and Endangered Animals, and Threatened, Endangered and Rare Plants. DFG also provides general information and links to photo databases of plants and animals.

## "Special <u>Animals</u> and

Plants" is a general term that refers to all of the taxa the CNDDB is interested in tracking, regardless of their legal or protection status. These lists are also referred to as the list of "species at risk" or "special status species."

(State of CA DFG)

## Implementation Strategy BR 1.5.4 Governmental outreach and education

Provide interested public, jurisdictions, and landowners with up-to-date information on sensitive ecological resources and the regulations enacted to protect them. This will help assess the potential impacts of proposed development on species and habitat diversity, determine when additional detailed site environmental assessment is necessary, provide information on invasive exotic species control, and monitor development trends and habitat management activities. The natural resource information program should contain up-to-date information on the following:

- a. Verified sightings of special-status species and sensitive natural communities.
- b. Recovery programs for special-status species and sensitive natural communities.
- c. Information from resource agencies, including lists of special-status species.
- d. Mapping of critical habitat areas.
- e. Biological reports completed as part of environmental review of proposed development projects.
- f. Lists of appropriate and inappropriate plant species for use in developing landscape plans, including invasive exotic plants.
- g. Summarized information for use by landowners addressing habitat protection and management of sensitive resources.

### Policy BR 1.6 Ecosystem Management

Where County public lands are to be leased for agricultural or other purposes, the public entity leasing the land will establish management strategies as terms in the lease to ensure continued compatibility between sensitive resources, agricultural uses, or other uses.

### **Policy BR 1.7 Ecosystem Education**

Continue to support education of the public about the importance and benefits of protecting entire ecosystems and wildlife corridors and restoration of damaged areas through everyday public contact and by supporting the efforts of conservation and environmental organizations.

## **Policy BR 1.8 Effects of Major Ecosystems**

Designation and management of a Major Ecosystem Network will be coordinated with agricultural uses on private lands that are either within or adjacent to the network, as stated in the Policy AGP 28 in the Agriculture Element.

## **Policy BR 1.9 Preserve Ecotones**

Require that proposed discretionary development protects and enhances ecotones, or natural transitions between habitat types because of their importance to vegetation and wildlife. Ecotones of particular concern include those along the margins of riparian corridors, baylands and marshlands, vernal pools, and woodlands and forests where they transition to grasslands and other habitat types.

## *Policy BR 1.10 Identify and Protect Ecologically Sensitive Areas*

Protect and enable management of ecologically sensitive areas to the maximum extent feasible.

- Implementation Strategy BR 1.10.1 Natural areas database Maintain and regularly update a database of the location and condition of natural areas and features, geological forms, soil types, watershed boundaries, wetlands, water bodies, floodplains, wildlife movement corridors, and special-status plant communities and special-status species habitat. Create a framework for the database by the end of 2010.
- Implementation Strategy BR 1.10.2 Vegetation classification and mapping project

Conduct a countywide Vegetation Classification and Mapping Project to develop a detailed vegetation classification based on the National Vegetation Classification System and California Native Plant Society's Manual of California Vegetation (second edition). Upon completion of the Vegetation Classification and Mapping Project, identify additional locations where the SRA combining designation for biological resources can be applied and initiate countywide **Ecotones** are transitional zones between two adjacent communities, containing species characteristic of both as well as other species occurring only within the zone.

The Vegetation Classification and Mapping Project will include countywide vegetation mapping with detailed mapping of oak woodlands.

## A <u>geographic</u> <u>information system</u>

(GIS) integrates hardware, software, and data for capturing, managing, analyzing, and displaying all forms of geographically referenced information. GIS allows us to view, understand, question, interpret, and visualize data in many ways. <u>Environmental</u> <u>Systems Research</u> <u>Institute, Inc</u>.



#### Endangered species

means a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.

#### Threatened species

means a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts.

-CA Native Plant Protection Act of 1977, CA Endangered Species Act of 1984, and he Federal Endangered Species Act of 1973 amendments to the Land Use Element accordingly. Complete the classification and mapping project by the end of 2011, and release a public review draft Land Use Element amendments by the end of 2012.

Implementation Strategy BR 1.10.3 GIS-based natural communities monitoring Use countywide GIS mapping of natural communities and other information sources to work with other agencies to 1) develop a program to monitor trends in habitat loss, protection, and restoration and to prioritize areas most threatened by development, 2) establish cumulative thresholds for habitat loss for particularly vulnerable natural communities, 3) use the program as a basis for modifying standards for mitigation, and 4) develop a program to map areas of invasive vegetation.

## *Policy BR 1.11 Protect Wildlife Nursery Areas and Movement Corridors*

Identify, protect, and enable the management of connected habitat areas for wildlife movement. Features of particular importance to wildlife for movement may include, but are not limited to, riparian corridors, shorelines of the coast and bay, and ridgelines. Identification and designation of wildlife corridors will not interfere with agricultural uses on private lands. (Refer to AGP 29 in the Agriculture Element).

- Implementation Strategy BR 1.11.1 Maintain a wildlife corridor database
   Identify and maintain a database of key wildlife corridors that link habitat areas, including major ecosystems and natural area preserves.
- Implementation Strategy BR 1.11.2 Assistance for landowners
   Encourage landowners and public agencies to seek technical assistance from resource conservation districts (RCDs) and the Natural Resources Conservation Service (NRCS) to protect wildlife corridors.

### Policy BR 1.12 Development Impacts to Corridors

Ensure that important corridors for wildlife movement and dispersal are protected as a condition of discretionary permits. Provide linkages and corridors as needed to connect sensitive habitat areas such as woodlands, forests, and wetlands.

 Implementation Strategy BR 1.12.1 Identify and protect wildlife corridors
 Require all discretionary development applications in rural areas, including land divisions, to identify and protect wildlife corridors, and avoid disturbance of identified key wildlife corridors as the primary method of protection.

 Implementation Strategy BR 1.12.2 Mitigate impacts to wildlife corridors
 If avoidance is not feasible, re-establish and/or restore

important wildlife corridors that may have been damaged or disrupted.

#### Policy BR 1.13 Maintain Safe Wildlife Movement

Maintain and enhance existing stream channels and riparian corridors to provide for wildlife movement at roadway crossings.

#### Policy BR 1.14 Wildlife and Roadways

Include the need for wildlife movement in designing and expanding major roadways and stream crossings.

Implementation Strategy BR 1.14.1 New development and safe passage for wildlife Require new development to provide safe passage over or under transportation routes in areas of significant wildlife movement.

## Policy BR 1.15 Restrict Disturbance in Sensitive Habitat during Nesting Season

Avoid impacts to sensitive riparian corridors, wetlands, and coastal areas to protect bird-nesting activities.

 Implementation Strategy BR 1.15.1 Identify setbacks from bird nesting areas
 Design land divisions and development with adequate

setbacks from sensitive habitat areas that are occupied during



the nesting season to protect bird nesting, rearing, and fledging activities.

 Implementation Strategy BR 1.15.2 Preconstruction surveys for bird nesting areas
 Require preconstruction surveys, using established protocols, where development is proposed in sensitive habitat areas during the nesting season in order to protect nests in active use.

## Policy BR 1.16 Land Acquisition

Collaborate with public agencies and conservation organizations to acquire important natural habitat areas for open space purposes, such as wetlands, coastal shorelines, wildlife corridors, and other lands linking permanently protected open space lands. Support public and private partnerships to acquire and manage such areas. Encourage the use of voluntary conservation easements. (Also refer to Parks and Recreation Element.)

#### **Policy BR 1.17 Resource Conservation Districts**

Support efforts of the Natural Resource Conservation Service and the Resource Conservation Districts to conserve and improve habitat and biological resources using programs and strategies such as the Environmental Quality Incentives Program (EQIP), the Conservation Security Program, the San Luis Obispo County Partners in Restoration (PIR), and funding for habitat conservation planning activities.



GOAL

2

THREATENED, RARE, ENDANGERED, AND SENSITIVE SPECIES WILL BE PROTECTED.

## Policy BR 2.1 Coordinate with Trustee Agencies

The County will consult with trustee and other relevant state and federal agencies during environmental review when special-status species, sensitive natural communities, marine resources, or wetlands may be affected. (Refer to **Figure BR 5** Critical Habitats)

 Implementation Strategy BR 2.1.1 Coordination with trustees during discretionary review

During review of discretionary development applications, coordinate with relevant trustee agencies and require evidence of compliance with any necessary permits from federal and state agencies prior to issuance of grading or building permits.

## *Policy BR 2.2 Promote Early Consultation with Other Agencies*

Require applicants to consult with all agencies with review and/or permit authority for projects in areas supporting wetlands and special-status species at the earliest opportunity.

 Implementation Strategy BR 2.2.1 Promote pre-application activities

Inform applicants during pre-application review or other presubmittal activities about other agencies that may have jurisdiction, and the policies and standards of those agencies that may regulate proposed development activities.

## **Policy BR 2.3 Habitat Conservation Plans**

The County will continue to collaborate with local agencies, landowners, and nonprofit organizations to fund and prepare habitat conservation plans (HCPs) for federally listed species. The County should collaborate with RCDs, the NRCS, and other organizations to fund collaborative conservation planning to conserve habitats. Although threatened, rare, and endangered species have special protections under state and federal law, the County's comprehensive approach to natural resource management takes into consideration all species and their habitats.

**Trustee Agency** means a state agency having

jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California. There are 4 trustee agencies – the Department of Fish and Game, the State Lands Commission, the Department of Parks and Recreation, and the University of California. – CEQA

## A Habitat Conservation

**Plan (HCP)** is a plan that outlines ways of maintaining, enhancing, and protecting a given habitat type needed to protect species; usually includes measures to minimize impacts, and may include provisions for permanently protecting land, restoring habitat, and relocating plants or animals to another area.



A **recovery plan** serves a guide for activities to be undertaken by Federal, State, or private entities in helping to recover and conserve endangered or threatened species.

## Policy BR 2.4 Species Recovery Programs

Support recovery programs for endangered and threatened species.

 Implementation Strategy BR 2.4.1 Require consistency with recovery plans

Require that applications for discretionary land use projects and land divisions located in the habitat for endangered or threatened species be consistent with applicable recovery plans.

## *Policy BR 2.5 Species Recovery Plans and General Plan Amendments*

The County will coordinate with the U.S. Fish and Wildlife Service to ensure that General Plan amendments do not conflict with the final recovery plans for federally listed species.

## Policy BR 2.6 Development Impacts to Listed Species

Ensure that potential adverse impacts to threatened, rare, and endangered species from development are avoided or minimized through project siting and design. Ensure that proposed development avoids significant disturbance of sensitive natural plant communities that contain special-status plant species or provide critical habitat to special-status animal species. When avoidance is not feasible, require no net loss of sensitive natural plant communities and critical habitat areas.

Implementation Strategy BR 2.6.1 Use of biological resource surveys Require applications for discretionary projects and land divisions to provide a biological resource survey performed by a qualified biologist when needed to address special-status animal and plant species and their associated habitats.

Implementation Strategy BR 2.6.2 Use of habitat preservation ratio Where avoidance, restoration, or replacement of habitat of special status species is not feasible, require preservation and/or enhancement of similar habitat at a minimum 2:1 ratio to avoid significant cumulative loss of valuable habitats and to achieve no net loss of habitat value.

 Implementation Strategy BR 2.6.3 Use of easements to protect habitat

Obtain easements or dedications to protect habitat, especially where it is connected to other large areas of unique or sensitive habitat. Natural open space areas in development projects should be contiguous to natural areas adjacent to the site wherever possible.

 Implementation Strategy BR 2.6.4 Use of habitat banking or TDC program

As an alternative to onsite mitigation and habitat protection, consider participation in an established habitat banking or Transfer of Development Credit (TDC) program if the project meets the criteria of the program. (Also refer to **Policy OS 1.15**.)

Implementation Strategy BR 2.6.5 Habitat banking program
 Evaluate the development of a habitat-banking program to mitigate the effects of development on unique or sensitive habitat. (Also refer to Policy OS 1.9.)

## *Policy BR 2.7 Fire Suppression and Sensitive Plants and Habitats*

Balance the need for fire suppression and/or vegetation (fuel) management with the need to protect sensitive biological resources. Where possible, design land divisions and development so that fuel-breaks, vegetation, or fuel modification areas that are needed to reduce fire hazards do not disrupt special-status plant communities or critical habitat for special-status animal species. Fuel-breaks and vegetation or fuel modification areas shall be located on the development side of required setbacks from sensitive features, and shall be in addition to the required setbacks. (Also refer to **AGP 25**.)

### Policy BR 2.8 Invasive Plant Species

Promote and support efforts to reduce the effects of noxious weeds on natural habitats. The County will work with local resource and land management agencies to develop a comprehensive approach to controlling the spread of non-native invasive species and reducing their extent on both public and private land.

A **native species** is a species within its natural range or natural zone of dispersal, i.e., within the range it would or could occupy without direct or indirect introduction and/or care by humans.

**Exotic species** are any species or other variable biological material that enters an ecosystem beyond its historic range, including such organisms transferred from one country to another. Also known as nonindigenous or non-native.

Invasive species are species that establish and reproduce rapidly outside of their native range and may threaten the diversity or abundance of native species through competition for resources, predation, parasitism, hybridization with native populations, introduction of pathogens, or physical or chemical alteration of the invaded habitat. (State of CA 2008)





Native Flowers and plants in the County.

- Implementation Strategy BR 2.8.1 Monitoring of natural plant communities Encourage scientific study, monitoring, and active management where biotic communities and habitats of limited distribution or sensitive natural plant communities are threatened by the spread of invasive non-native species.
- Implementation Strategy BR 2.8.2 Prohibit invasive species in landscaping Prohibit use of invasive plant species in landscaping of proposed development. Revise the County's invasive plant list by the end of 2010 in cooperation with County Parks and the County Department of Agriculture consistent with Implementation Strategies B.R. 2.8.4 and 2.8.5. Consider including in that list invasive plants listed in the state's Noxious Weed List, the California Invasive Plant Council's Invasive Plant Inventory, and other priority species identified by the San Luis Obispo County Agricultural Commissioner and California Department of Agriculture.
- Implementation Strategy BR 2.8.3 Require removal of invasive exotic plants Require the removal of invasive exotic plant species, to the extent feasible, when reviewing discretionary development projects, and include monitoring to prevent re-establishment in managed areas. Support educational programs that inform property owners about appropriate vegetation management techniques.

Implementation Strategy BR 2.8.4 Use of plant lists Prepare and update lists of appropriate native, non-native, and non-invasive landscape species that have habitat value, low water requirements, and low flammability. Consult with the California Native Plant Society and the Natural Resources Conservation Service to prepare and update the plant lists.

 Implementation Strategy BR 2.8.5 Invasive exotic plant education
 Collaborate with non profit and regulatory approach and the

Collaborate with non-profit and regulatory agencies and the public to control and manage invasive species, including provision of up-to-date lists of invasive exotic species of

concern, to project applicants, the public and other interested parties.

## Policy BR 2.9 Promote Use of Native Plant Species

Landscaping for proposed development will use a variety of native or compatible non-native, non-invasive plant species as part of project landscaping to improve wildlife habitat values.

### **Policy BR 2.10 Integrated Pest Management**

Encourage the use of integrated pest management practices. (Refer to **AGP 12** in the Agriculture Element.)

## *Policy BR 2.11 Control Spread of Non-native Invasive Animal Species*

The County will work with landowners, the California Department of Fish and Game, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the National Invasive Species Council, and other agencies and organizations to control and prevent the spread of non-native, invasive animal species.

## GOAL

MAINTAIN THE ACREAGE OF NATIVE WOODLANDS, FORESTS, AND TREES AT 2008 LEVELS.

## Policy BR 3.1 Native Tree Protection

Protect native and biologically valuable trees, oak woodlands, trees with historical significance, and forest habitats to the maximum extent feasible. (Refer to **Figure BR-3** for a distribution of hardwood resources in the county.)

 Implementation Strategy BR 3.1.1 Prepare countywide native tree protection ordinance using information obtained from San Luis Obispo County Vegetation Mapping Project.
 Using information obtained from the San Luis Obispo County Vegetation Mapping Project, develop a countywide native tree

protection ordinance and/or standards to avoid disturbance of protected trees, forests, woodlands, and other significant arboreal resources and to identify required replacement ratios



Blue Oak Quercus douglasii



Coast Live Oak Quercus agrifolia Used with permission of <u>www.laspilitas.com</u>

Oak means any species in the genus Quercus. Oak woodlands means an oak stand with a greater than 10 percent canopy cover or that may have historically supported greater than 10 percent canopy cover. - CA Oak Woodlands Conservation Act



that can infect and quickly kill several species of native California oaks. It is caused by a fungus-like brown alga called Phytophthora ramorum (phy-TOFF-thoruh ruh-

Sudden Oak Death is a

highly contagious disease

MOR-um). Beetles then attack the weakened trees. and in the later stages of decline, decaying fungi are seen on the trunks of oaks and tanoaks. A tree may be infected for several years before it dies. In addition to coast redwood and Douglas fir. the current host list includes: California black oak, coast live oak, Shreve oak, tanoak, rhododendron, California bay laurel, big leaf maple, madrone, manzanita, huckleberry, California honeysuckle, toyon, California buckeye, and California coffeeberry, among many others.-University of California Agriculture and Natural Resources



and replanting standards. Prepare and release a public review draft ordinance by the end of 2012.

## *Policy BR 3.2 Protection of Native Trees in New Development*

Require proposed discretionary development and land divisions to avoid damage to native trees (e.g., Monterey Pines, oaks) through setbacks, clustering, or other appropriate measures. When avoidance is not feasible, require mitigation measures.

 Implementation Strategy BR 3.2.1 Tree replacement in new development

If avoidance of damage to native specimen trees is not feasible in discretionary land use permits and land divisions, require mitigation measures such as tree replacement using native stock at specified ratios, replanting plans, reseeding disturbed open areas with native, drought, and fire resistant species. A long-term monitoring plan will also be required.

## Policy BR 3.3 Oak Woodland Preservation

Maintain and improve oak woodland habitat to provide for slope stabilization, soil protection, species diversity, and wildlife habitat.

- Implementation Strategy BR 3.3.1 Implement Oak Woodlands Preservation Act Comply with the Oak Woodlands Preservation Act (PRC Section 21083.4) through the review of proposed discretionary development by maintaining the integrity and diversity of oak woodlands, chaparral communities, and other significant vegetation.
- Implementation Strategy BR 3.3.2 Oak woodlands mapping
   Develop a base map of oak woodlands in the county by the end of 2012.

Implementation Strategy BR 3.3.3 Oak Woodlands Management Plan Prepare an Oak Woodlands Management Plan that includes significance standards and mitigation requirements for discretionary projects that affect oak woodlands. The plan should also identify a conceptual reserve system that, if preserved, would ensure that oak woodlands achieve long-

term sustainability in the county. Mitigation for impacts to oak woodlands could be directed to the reserve system. If an inlieu fee is required for small projects, the fees should be used to purchase easements within the reserve system from willing landowners. Prepare and release the public review draft management plan by the end of 2013.

## *Policy BR 3.4 Vegetation and Wildlife Disease Management Programs*

Continue to support agency programs to limit the impacts of Sudden Oak Death syndrome and any other potential or existing diseases harmful to native vegetation and wildlife in the county, while addressing any potential adverse effects on sensitive resources.

## Policy BR 3.5 Non-native Trees

Protect healthy and non-hazardous, non-native trees (e.g., eucalyptus groves) and forests that provide raptor nesting or roosting sites or support colonies of monarch butterflies.



## THE NATURAL STRUCTURE AND FUNCTION OF STREAMS AND RIPARIAN HABITAT WILL BE PROTECTED AND RESTORED.

#### **Policy BR 4.1 Protect Stream Resources**

Protect streams and riparian vegetation to preserve water quality and flood control functions and associated fish and wildlife habitat.

- Implementation Strategy BR 4.1.1 Approach to stream protection
  - Require preservation of natural streams and associated riparian vegetation in an undisturbed state to the greatest extent feasible in order to protect banks from erosion, enhance wildlife passageways, and provide natural greenbelts.
  - b. Include stream and riparian corridors as part of a network of wildlife corridors.

## Riparian Habitat is

characterized by vegetated areas along bodies of freshwater including streams, lakes and rivers.

#### Riparian corridors are

highly favorable for wildlife. They are the areas with the most water and the densest plant cover, providing predator protection, shade, breeding and nesting areas, and food sources.



- c. Protect steam corridors and setback areas through easements or dedications.
- d. Protect the needs of wildlife when watercourse alteration is undertaken, explore alternatives to alteration, and assure that stream diversion structures protect habitats.

♦ Implementation Strategy BR 4.1.2 Salinas River Watershed Plan Prepare, with stakeholders (e.g. RCD, property owners, and other agencies), a Salinas River Watershed Plan that focuses on protection and restoration of riparian corridors, endangered species protection, appropriate areas for siting and types of new development. Coordinate plan development with development County's Aggregate of the Materials Management Plan (refer to Implementation Strategy MN 2.1.2).

#### Policy BR 4.2 Minimize Impacts from Development

Minimize the impacts of public and private development on streams and associated riparian vegetation due to construction, grading, resource extraction, and development near streams. [This policy and the following implementation strategy do not apply 1) within the coastal zone, because the Local Coastal Program already includes detailed policies and standards to protect streams and riparian vegetation, and 2) on private lands designated Agriculture in the Land Use Element and on other lands used for production agriculture; for those lands, refer to Policy AGP 26 in the Agriculture Element.]

 Implementation Strategy BR 4.2.1 Setbacks from streams and riparian vegetation

Set back development on public lands and all private development subject to discretionary review a minimum of 50 feet from the top of the bank of any stream or outside the dripline of riparian vegetation, whichever distance is greater, as shown in **Figures BR-6 and BR-7**. (Top of creek bank is the uppermost ground elevation paralleling a creek or watercourse where the gradient changes from a more defined vertical component to more horizontal.) Locate buildings and structures outside the setback; public trails may be located within this required setback only if trail design and construction

avoid or mitigate environmental impacts. Provide for adjustments where alternatives are infeasible or more environmentally damaging, but require a minimum 30-foot building setback consistent with the requirements of the Regional Water Quality Control Board's Basin Plan. The following apply to applications subject to this strategy:

- Do not grade inside the established setback, unless the applicant provides justification that alternatives are infeasible or more environmentally damaging. When grading is permitted within the setback, require erosion control during construction and habitat restoration following grading.
- 2) Limit the alteration of riparian vegetation.
- Allow stream alterations for water supply and flood control projects, road maintenance, maintenance of existing channels, improvement of fish and wildlife habitat, or where no practical alternative is available.
- 4) Assure that stream diversion structures protect habitats.
- 5) When there is no practical alternative to a significant impact to stream or riparian resources, implement a County-approved mitigation and monitoring plan that will lessen the impact. The plan shall be prepared and implemented by a qualified professional funded by the applicant.
- 6) Where a nexus exists with the proposed project, restore damaged riparian habitats as a condition of approval.
- 7) Where possible, protect stream corridors and setback areas through easements or dedications.
- Locate parcel lines in land divisions that include stream or riparian corridors to optimize resource protection as shown in Figure BR 7.
- Direct polluting drainage away from the creek or include appropriate filters consistent with Low Impact Development (LID) and Stormwater Pollution Prevention Program (SWPP) requirements.



A stream corridor.



- 10) Minimize all ground disturbance and native vegetation removal.
- 11) To offset possible losses of riparian woodland, provide and maintain similar quality and quantity of replacement habitat or in-kind funds to an approved wildlife habitat improvement and acquisition fund in San Luis Obispo County.
- Implementation Strategy BR 4.2.2 Develop stream protection standards Prepare proposed amendments to the Land Use Ordinance and Subdivision Ordinance to establish criteria and development standards to implement the measures contained in this policy (BR 4.2) and Implementation Strategy 4.2.1. Prepare and release public review draft amendments by the end of 2013.

### **Policy BR 4.3 Alluvial Well Extractions**

Require discretionary projects that depend on alluvial well extractions and stream diversion to monitor the long-term effects on surface streamflow and riparian vegetation. Identify and implement contingencies for maintaining streamflow (e.g., minimum bypass flows, alternate water sources, decreased pumping rates, groundwater discharge).

## Policy BR 4.4 Vegetated Treatment Systems (Low Impact Development Techniques)

Promote use and maintenance of engineered, vegetated treatment systems such as constructed wetlands, vegetated swales, or vegetated filter strips where they will reduce nonpoint source pollution from private and public development.

## *Policy BR 4.5 Encourage Stream Preservation on Private Lands*

Encourage private landowners to protect and preserve stream corridors in their natural state and to restore stream corridors that have been degraded.

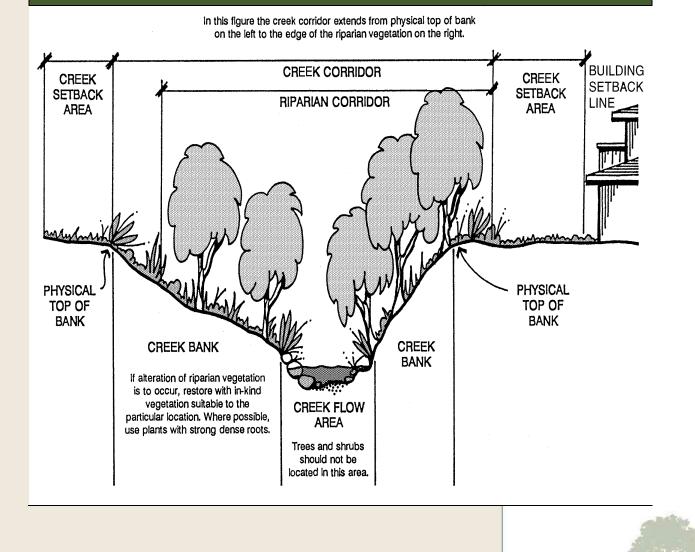


Blue line stream is a perennial (continuous flow) or intermittent (seasonal flow) creek, stream or watercourse indicated by a solid or broken blue line on a U.S. Geologic Survey 7.5 minute series quadrangle map.



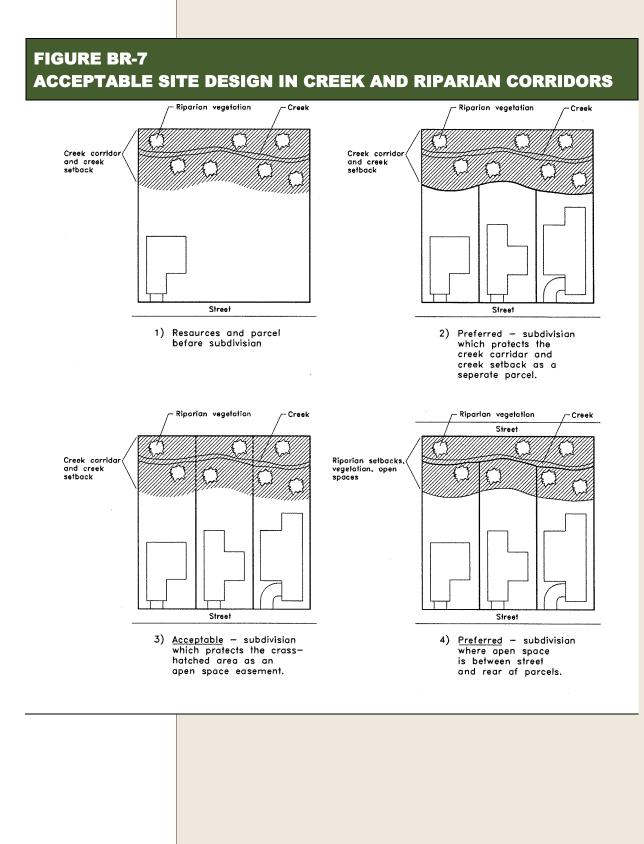
Implementation Strategy BR 4.5.1 Support ongoing riparian vegetation management Support expansion of ongoing efforts led by the County Agricultural Commissioner, the Flood Control and Water Conservation District, resource conservation districts, and local conservation groups to implement riparian vegetation management techniques. Specifically, the approaches established for the management and/or elimination of invasive plant species as part of the Zone 9 and 1/1A Waterway Management Program (San Luis Obispo Creek and Arroyo Grande Creek watersheds) can be used as a model throughout the region.

## FIGURE BR-6 CREEK AND RIPARIAN CORRIDOR SETBACKS



GENERAL PLAN

3.29





## *Policy BR 4.6 Encourage Stream Preservation on Public Lands*

Protect stream and riparian corridors in their natural state on public lands.

Implementation Strategy BR 4.6.1 Creek restoration Where streambank erosion is a concern, restore creeks to stabilize streambanks, enhance riparian habitat, and improve water quality. The County should coordinate with and seek technical assistance from agencies such as the Natural Resources Conservation Service, Resource Conservation Districts, the California Department of Fish and Game, U.C. Cooperative Extension, and the Regional Water Quality Control Board.

### **Policy BR 4.7 Contamination from Pesticides**

Contamination from the use of commercial, residential, and public application of pesticides and herbicides into all inland and coastal waters, including but not limited to rivers, streams, wetlands, and intertidal areas shall be eliminated.

 Implementation Strategy BR 4.7.1 Limit Contamination from Pesticides

Support the existing regulatory programs as administered by the California Department of Pesticide Regulation and the local Agricultural Commissioner to limit contamination from the use of pesticides. Increase the use of Central Coast native plants in landscaping. Encourage organic agricultural and horticultural practices where feasible.

## Policy BR 4.8 Runoff from County Lands

Reduce and control fertilizer and pollutant runoff from Countyowned and managed lands.

Implementation Strategy BR 4.8.1 Non-point source best management practices Implement RWQCB Best Management Practices, including integrated pest management, to minimize pesticide application and minimize fertilizer runoff from County-owned and managed properties.

## Best Management

**Practice (BMP):** A technique, process, activity, or structure used or developed to reduce the pollutant content of a storm-water discharge.

Wetlands are those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. -Clean Water Act

Implementation Strategy BR 4.8.2 Pet waste in County facilities

Provide receptacles for disposal and pickup of pet waste in County recreation areas.

## **Policy BR 4.9 Pesticide Reduction**

Encourage all landowners and pesticide applicators to consult with agencies such as the Natural Resource Conservation Service, U.C. Cooperative Extension, and Resource Conservation Districts to 1) reduce pesticide use, explore use of integrated pest management, 2) consider environmental impacts in choosing pesticides, and 3) otherwise reduce contamination of surface water and groundwater from pesticides.

### **Policy BR 4.10 Vector Control**

Control vectors to prevent disease problems in keeping with good conservation principles. Vector control practices should minimize disturbance of the environment.

GOAL



## WETLANDS WILL BE PRESERVED, ENHANCED, AND RESTORED.

The following policies and implementation strategies do not apply within the coastal zone, because the Local Coastal Program already includes detailed policies and standards to protect wetlands.

## **Policy BR 5.1 Protect Wetlands**

Require development to avoid wetlands and provide upland buffers.

Implementation Strategy BR 5.1.1 Wetland delineations for new development Require development applications to include wetland delineation for sites with jurisdictional wetlands and wetlands that support rare, threatened, or endangered species and to demonstrate compliance with these wetlands policies,

standards, and criteria, and with state and federal regulations.

- Implementation Strategy BR 5.1.2 Avoidance of wetlands Amend the Land Use Ordinance to require development to avoid wetlands and transition zones. If avoidance of wetlands is not feasible, require the provision of replacement habitat onsite through restoration and/or habitat creation, provided that no net loss of wetland area, wetland function, and habitat values occurs. When on site wetland mitigation is not feasible, provide for offsite mitigation.
- Implementation Strategy BR 5.1.3 Wetland impact mitigation measures
   Amond the Lond Line Ordinance to incorrecte wetland impact

Amend the Land Use Ordinance to incorporate wetland impact mitigation measures that accomplish the following objectives:

- a. Prevent net losses in wetland acreage, functions, or values.
- b. Minimize any short-term loss and modification to wetlands.
- c. Establish setbacks to protect adjacent upland habitat to provide an adequate buffer.
- d. Permanently protect and manage mitigation sites for open space and wildlife habitat purposes.
- e. Give priority to restoration of wetlands over creation of new replacement wetlands.
- f. Minimize the need for ongoing maintenance.
- g. Monitor the success of the restoration project and modify mitigation measures as needed.
- h. Require mitigation that is commensurate with adverse impacts of the wetland alteration and provide similar values to and greater wetland acreage than those of the wetland area adversely affected.
- i. Require performance bonds for habitat creation and enhancement projects.

## Policy BR 5.2 No Net Loss of Wetlands

Ensure that all public and private projects avoid impacts to wetlands if feasible. If avoidance is not feasible, ensure no net loss of wetlands, consistent with state and federal regulations and this Element.

- Carlos and a state of the

Wetlands in the County.

## Jurisdictional wetlands

are wetlands under the protection of the United States Army Corps of Engineers (USACE) as designated in the Rivers and Harbors Act Section 10 and Section 404 of the Clean Water Act. -<u>http://www.usace.army.mil</u> /cw/cecwo/reg/



 Implementation Strategy BR 5.2.1 Identify wetlands and minimize impacts
 For projects subject to discretionary review: 1) require a report from a qualified biologist to determine the extent of wetlands,

potential impacts of the project and recommended mitigation measures, and 2) minimize impacts to wetlands through measures such a clustering development, low impact development (LID) and use of vegetated swales.

### **Policy BR 5.3 Wetland Conversion**

Avoid the conversion of wetlands, including vernal pools, except where grazing may improve the health and function of those wetlands. Where grazing occurs in and around wetlands and vernal pools, encourage grazing management that improves the health and function of those wetlands.

## **Policy BR 5.4 Wetlands on Agricultural Lands**

Support use of best management practices and proper range uses to minimize impacts to wetlands on agricultural lands.

 Implementation Strategy BR 5.4.1 RCD wetland programs for landowners

Encourage landowners to use programs offered by Resource Conservation Districts and the Natural Resource Conservation Service to preserve wetlands and riparian vegetation.

#### GOAL

6

## THE COUNTY'S FISHERIES AND AQUATIC HABITATS WILL BE PRESERVED AND IMPROVED.

### Policy BR 6.1 Avoid Impacts to Fisheries

Require all proposed discretionary land use projects and land divisions to avoid impacts to freshwater and saltwater fisheries and wildlife habitat to the maximum extent feasible. When avoidance is not feasible, offset potential losses of fisheries and wildlife.

 Implementation Strategy BR 6.1.1 Prohibitions in specialstatus fish spawning areas

Prohibit construction activities within the channel of any waterway identified to contain existing or potential spawning



Interpretive Display for Listed Species

### CHAPTER 3

## **BIOLOGICAL RESOURCES**

habitat for special-status fish species during periods of spawning activities.

Implementation Strategy BR. 6.1.2 Fish-friendly stream and river management Manage stream flows to fish-bearing streams, support a region-wide program to remove or reduce barriers to fish movement, and implement fish-friendly stream and river corridor restoration projects.

## GOAL

SIGNIFICANT MARINE RESOURCES WILL BE PROTECTED.

This goal is fully implemented by policies and programs in the County's certified Local Coastal Program (LCP). The following general policies protect marine resources consistent with the LCP.

## **Policy BR 7.1 Coastal Protection**

The County should continue to advocate sound energy and coastal protection policies and oppose proposals along the San Luis Obispo County coastline that are inconsistent with the County's Local Coastal Program and other County plans and policies.

#### **Policy BR 7.2 Protection of Marine Resources**

Make every effort to secure permanent protection and management of the County's ecologically and economically significant marine resources using the National Marine Sanctuary, National Estuary, or other programs and legislation as vehicles for protection and management.

 Implementation Strategy BR 7.2.1 Monterey Bay National Marine Sanctuary
 Work with federal officials and agencies to study the possibility

of expansion of the Monterey Bay National Marine Sanctuary.

### **Policy BR 7.3 Best Management Practices**

Support landowners that participate in education and assistance programs and other voluntary and cooperative programs, such as conservation programs offered by the Natural Resources



Examples of Marine Resources





Conservation Service and Resource Conservation Districts, that encourage sustainable land management practices (Best Management Practices) that reduce erosion, sedimentation, and nutrient levels in coastal watersheds.

## Policy BR 7.4 Sedimentation

Support efforts on public and private lands to keep Chorro Creek, Los Osos Creek, and other watercourses free of excessive sediment and other pollutants to maintain freshwater flow into the Morro Bay National Estuary and the Monterey Bay National Marine Sanctuary, nurture steelhead trout, and support other plant and animal species. On County-owned lands, implement Best Management Practices in order to reduce sediment transport to coastal waters.

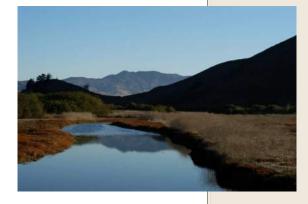
Implementation Strategy BR 7.4.1 TMDLs Implement provisions of Total Maximum Daily Loads (TMDLs) as they are developed for Chorro Creek, Los Osos Creek, and the Morro Bay estuary, and other watersheds consistent with the requirements of the Regional Water Quality Control Board.

#### Policy BR 7.5 Morro Bay Watershed

Support implementation of the Comprehensive Conservation and Management Plan for the Morro Bay Estuary.

#### Policy BR 7.6 Morro Bay Estuary Water Quality

Support efforts to ensure a level of water quality in the Morro Bay Estuary that supports recreation, viable commercial fishing and shellfish mariculture industries, healthy eelgrass beds, and thriving fish and shellfish populations.



#### **Policy BR 7.7 Watershed Protection**

As a complement to regulatory and enforcement programs, promote a voluntary, cooperative, educational, and incentive-based approach to protect Morro Bay and its watershed. Where appropriate, continue to obtain open space easements for sensitive wetlands and bayfront areas, and encourage other agencies and conservation organizations to obtain open space and conservation easements and fee title to these areas.

## **Summary of Implementation Strategies**

For each implementation strategy described in this chapter, the following table (**Table BR–2**) summarizes the County department or other agency that has primary responsibility for carrying out that strategy. In addition, the table summarizes the priority, estimated year of initiation, and potential source of funding of each strategy. The actual timeframe for implementing the strategies is dependent upon the availability of adequate staff and funding.

# TABLE BR 2 <u>BIOLOGICAL RESOURCES IMPLEMENTATION</u>

| Implementation<br>Strategy                                    | Responsible<br>Department<br>or Agency <sup>1</sup> | Priority | Timeframe<br>to Start    | Possible<br>Funding<br>Sources <sup>2</sup> |
|---|---|----------|--------------------------|---|
| IS BR 1.5.1 Identify regional system of<br>ecosystems         | РВ  | High     | 2012                     | DB, Grant                                   |
| IS BR 1.5.2 Ecosystem research and monitoring                 | РВ  | High     | Immediately <sup>3</sup> | DB, Grant                                   |
| IS BR 1.5.3 Non-governmental outreach and education           | PB  | High     | 2011                     | DB, Grant                                   |
| IS BR 1.5.4 Governmental outreach and education               | РВ  | Low      | 2011                     | DB  |
| IS BR 1.10.1 Natural areas database                           | PB  | High     | Immediately              | DB  |
| IS BR 1.10.2 Vegetation classification<br>and mapping project | РВ  | High     | Immediately              | DB  |
| IS BR 1.10.3 GIS-based natural<br>communities monitoring      | РВ  | Medium   | 2010                     | DB  |
| IS BR 1.11.1 Maintain a wildlife corridor database            | РВ  | Medium   | 2010                     | DB  |
| IS BR 1.11.2 Assistance for landowners                        | PB  | Medium   | Immediately <sup>3</sup> | DB  |
| IS BR 1.12.1 Identify and protect wildlife corridors          | РВ  | High     | Immediately <sup>3</sup> | N/A   |
| IS BR 1.12.2 Mitigate impacts to wildlife corridors           | PB, PW  | Medium   | Immediately <sup>3</sup> | N/A   |
| IS BR 1.14.4 New development and safe passage for wildlife    | PB, PW  | Medium   | Immediately <sup>3</sup> | DB  |



# TABLE BR 2 BIOLOGICAL RESOURCES IMPLEMENTATION

| Implementation<br>Strategy  | Responsible<br>Department<br>or Agency <sup>1</sup> | Priority | Timeframe<br>to Start    | Possible<br>Funding<br>Sources <sup>2</sup> |
|---|---|----------|--------------------------|---|
| IS BR 1.15.1 Identify setbacks from bird nesting areas                | PB  | Medium   | Immediately <sup>3</sup> | N/A   |
| IS BR 1.15.2 Preconstruction surveys for bird nesting areas           | РВ  | Medium   | Immediately <sup>3</sup> | N/A   |
| IS BR 2.1.1 Coordination with trustees<br>during discretionary review | РВ  | High     | Immediately <sup>3</sup> | N/A   |
| IS BR 2.2.1 Promote pre-application activities                        | РВ  | High     | Immediately <sup>3</sup> | N/A   |
| IS BR 2.4.1 Require consistency with recovery plans                   | РВ  | High     | Immediately <sup>3</sup> | N/A   |
| IS BR 2.6.1 Use of biological resource surveys                        | РВ  | High     | Immediately <sup>3</sup> | N/A   |
| IS BR 2.6.2 Use of habitat preservation ratio                         | PB  | Medium   | Immediately <sup>3</sup> | N/A   |
| IS BR 2.6.3 Use of easements to protect habitat                       | РВ  | Medium   | Immediately <sup>3</sup> | N/A   |
| IS BR 2.6.4 Use of habitat banking or TDC program                     | РВ  | Medium   | 2012                     | DB  |
| IS BR 2.6.5 Habitat banking program                                   | PB  | High     | 2010                     | DB  |
| IS BR 2.8.1 Monitoring of natural plant communities                   | PB, RCD, UCext                                      | Medium   | 2012                     | DB, Grant                                   |
| IS BR 2.8.2 Prohibit invasive species in landscaping                  | PB, AG  | High     | 2010                     | DB,<br>Grants                               |
| IS BR 2.8.3 Require removal of invasive exotic plants                 | РВ  | Medium   | Immediately <sup>3</sup> | N/A   |
| IS BR 2.8.4 Use of plant lists  | PB  | Low      | 2013                     | DB  |
| IS BR 2.8.5 Invasive exotic plant education                           | РВ  | Medium   | 2012                     | DB  |
| IS BR 3.1.1 Prepare countywide native tree protection ordinance       | РВ  | High     | 2010                     | DB  |
| IS BR 3.2.1 Tree replacement in new development                       | PB  | High     | Immediately <sup>3</sup> | N/A   |



## TABLE BR 2

## **BIOLOGICAL RESOURCES IMPLEMENTATION**

| Implementation<br>Strategy                                     | Responsible<br>Department<br>or Agency <sup>1</sup> | Priority | Timeframe<br>to Start    | Possible<br>Funding<br>Sources <sup>2</sup> |
|--|---|----------|--------------------------|---|
| IS BR 3.3.1 Implement Oak Woodlands<br>Preservation Act        | РВ  | High     | Immediately <sup>3</sup> | N/A   |
| IS BR 3.3.2 Oak woodlands mapping                              | PB  | High     | 2010                     | DB  |
| IS BR 3.3.3 Oak Woodlands<br>Management Plan                   | PB, UCext, AG                                       | High     | 2011                     | DB, grants                                  |
| IS BR 4.1.1 Approach to stream protection                      | РВ  | High     | Immediately              | DB  |
| IS BR 4.1.2 Salinas River Watershed Plan                       | PB, RCD, DFG  | High     | Immediately <sup>3</sup> | DB,<br>Grants,<br>fees                      |
| IS BR 4.2.1 Setbacks from streams and riparian vegetation      | РВ  | High     | Immediately <sup>3</sup> | N/A   |
| IS BR 4.2.2 Develop stream protection standards                | РВ  | High     | 2011                     | DB  |
| IS BR 4.5.1 Support ongoing riparian vegetation management     | AG, PW, cities,<br>RCD                              | Medium   | 2011                     | DB, grant                                   |
| IS BR 4.6.1 Creek restoration                                  | GS, PW, RCD   | High     | 2011                     | DB, GF                                      |
| IS BR 4.7.1 Limit Contamination from Pesticides                | PB, AG, GS  | Medium   | Immediately <sup>3</sup> | DB  |
| IS BR 4.8.1 Non-point source best<br>management practices      | GS, PW  | High     | Immediately <sup>3</sup> | DB  |
| IS BR 4.8.2 Pet waste in County facilities                     | GS  | Medium   | Immediately              | DB, user<br>fees                            |
| IS BR 5.1.1 Wetland delineations for new development           | РВ  | High     | Immediately <sup>3</sup> | N/A   |
| IS BR 5.1.2 Avoidance of wetlands                              | PB  | Medium   | 2011                     | DB  |
| IS BR 5.1.3 Wetland impact mitigation measures                 | РВ  | Medium   | 2011                     | DB  |
| IS BR 5.2.1 Identify wetlands and minimize impacts             | РВ  | High     | Immediately <sup>3</sup> | N/A   |
| IS BR 5.4.1RCD wetland programs for landowners                 | РВ  | Medium   | Immediately <sup>3</sup> | N/A   |
| IS BR 6.1.1 Prohibitions in special-status fish spawning areas | PB, PW, GS  | High     | Immediately <sup>3</sup> | DB  |



# TABLE BR 2BIOLOGICAL RESOURCES IMPLEMENTATION

| IS BR. 6.1.2 Fish-friendly<br>river management<br>IS BR 7.2.1 Monterey<br>Marine Sanctuary<br>IS BR 7.4.1 TMDLs | <ul> <li>Motes:</li> <li>Department abb<br/>Cities= Incorport<br/>CSDs= Commut<br/>GS = County Ge<br/>F &amp; G = Department<br/>PB = County De</li> </ul>   | ated cities<br>nity Service Districts   | Medium<br>Low<br>High  | Immediately <sup>3</sup><br>2012<br>2011  | DB<br>N/A<br>DB, grant  |
|---|--|---|--|---|---|
| Marine Sanctuary  | Notes:<br>1 Department abb<br>Cities= Incorpor<br>CSDs= Commu<br>GS = County Ge<br>F & G = Departr<br>PB = County De   | PB, PW<br>reviations:<br>ated cities<br>nity Service Districts  | -  |   |   |
| IS BR 7.4.1 TMDLs   | 1 Department abb<br>Cities= Incorpor<br>CSDs= Commu<br>GS = County Ge<br>F & G = Departr<br>PB = County De   | reviations:<br>ated cities<br>nity Service Districts  | High   | 2011  | DB. grant   |
|   | 1 Department abb<br>Cities= Incorpor<br>CSDs= Commu<br>GS = County Ge<br>F & G = Departr<br>PB = County De   | ated cities<br>nity Service Districts   |  |   | <b>2 2</b> , g.∞  |
|   | RCD = Resourc<br>UCext = Univers<br>Funding source<br>GF = General Fi<br>DB = Planning a<br>Denotes an ong<br>Source: Department of<br><b>Referen</b><br>In addition t<br>review the<br>list of refere<br>Beier, P. ar<br>wildl<br>20:4<br>State of Ca<br>Garr<br>Man<br>State of Ca<br>Garr<br>Natu | nent of Fish and Game<br>partment of Planning a<br>epartment of Public Wo<br>e Conservation District<br>sity of California Coope<br>abbreviations:<br>und<br>and Building Departmen<br>oing activity.<br>of Planning and Buildir<br><b>ICES</b><br>to the following re<br>Biological Resource<br>ances.<br>and S. Loe. 1992<br>ife movement<br>34-440.<br>alifornia Resource<br>ne. 2008. Ca<br>agement Plan. S<br>alifornia Resource<br>ne Biogeograph | and Building<br>orks<br>irative Extension<br>Int Budget<br>Ing, March 2009,<br>eferences, t<br>urces Apper<br>A checklis<br>corridors.<br>ces Agency<br>lifornia Ac<br>Sacramento,<br>ces Agency<br>nic Data I<br>Databa | November2009<br>he reader is en<br>ndix and its ac<br>t for evaluating<br>Wildlife Socio<br>v Department<br>quatic Invasiv<br>, CA.<br>v Department<br>Branch. 2008<br>se Special | companying<br>g impacts to<br>ety Bulletin<br>of Fish and<br>ve Species<br>of Fish and<br>. California<br>Animals |

### CHAPTER 3

## **BIOLOGICAL RESOURCES**

State of California Resources Agency California Department of Fish and Game, Natural Diversity Database. 2008. Special Vascular Plants, Bryophytes, and Lichens List. Quarterly publication. 70 pp. http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/SPPlants.pdf



# CULTURAL RESOURCES

### **Purpose**

This chapter seeks to identify and protect areas, sites, and buildings having architectural, historical, Native American, or cultural significance. It reaffirms that these important places contribute to the vitality and diversity of the county and help to maintain a sense of place.

# Introduction

San Luis Obispo County is fortunate to posses a rich and diverse cultural heritage. Throughout the county, there are Native American resources, archaeological and sacred sites. paleontological sites, historic structures, streetscapes and landscapes, which together tell the unique and ever-evolving story of this diverse county. These cultural resources are a valuable, yet fragile asset that contributes to the uniqueness of San Luis Obispo County.

The County sees the value in preserving its cultural resources as it grows. Maintaining the diversity of people, places, and events that are part of the history of the county contributes to today's vibrant community, enhances the county's quality of life, and attracts new residents and businesses. Embracing the past also enables the county to retain its sense of place.

We can preserve historic sites and buildings by promoting curation, conservation, interpretation, preservation, and consistent standards and guidelines. This will also encourage people to help preserve these resources.

### **Cultural Resources**

encompass archaeological, traditional, and built environment resources, including but not necessarily limited to buildings, structures, objects, districts, and sites. Cultural resources include sites of important events, traditional cultural places and sacred sites. and places associated with an important person. (Caltrans Standard Environmental Reference. Environmental Handbook, Volume I, Chapter 28: Cultural Resources)

Sites of important events, traditional cultural places, and sacred sites, or places associated with an important person may lack obvious physical characteristics.



# Setting

San Luis Obispo County has a wealth of historic and prehistoric resources, including sites and buildings associated with Native Americans, Spanish missionaries, immigrant settlers, and military branches of the United States. Numerous cultural resources with archaeological or historical significance are currently listed in the National Register of Historic Places and the California Register of Historical Resources. These sites are presented in **Appendix 4**, **Table A4-1**. There are also 13 California State Landmarks within the county. These landmarks are listed in **Appendix 4**, **Table A4-2**. A systematic, comprehensive survey of buildings or sites in the county has not been performed.

The cultural resources of this county are an important part of the county's history and heritage. Native American peoples are known to have occupied our county dating back at least 9,000 years. The Chumash, Salinan, and Yokut lived in this area.

An overview of the county's history and its management of cultural resources is provided in **Appendix 4**.

# Relationship to Other Elements, Plans, and Programs

This chapter describes goals and policies that are intended to preserve cultural and historic resources, and identifies specific actions to do so.

Cultural resources in the county are preserved or protected by goals and policies in the Land Use Element, the Local Coastal Program, and the inland and Coastal Zone Land Use Ordinances. Certain historic resources are also addressed in the <u>Parks and Recreation Element</u>.

The County Land Use Element and area plans guide and regulate the identification, registration, protection, and preservation of significant historic resources. The Land Use Element protects cultural resources through use of combining designations (i.e. zoning overlays), specifically the Historic Site (H) designation for areas of unique historical significance. These combining

# **CULTURAL RESOURCES**

designations are subject to special standards in the inland and Coastal Land Use Ordinances. The Local Coastal Program includes policies and standards to protect archaeological and paleontological resources. Table CR-1 lists all existing sites with the H combining designation. Figure CR-1 illustrates the distribution of cultural and historic sites in the county.

# **TABLE CR-1**

# SITES WITH "H" COMBINING DESIGNATIONS

| Adelaida School (1917)                        | Hansen Barn (Bishop Peak)                            | Pozo Saloon                                  |
|---|--|--|
| Adobe Barn - Los Berros                       | Hearst Castle (San Simeon)                           | Price Adobe (Pismo Beach)                    |
| Arthur Beale House Nitwit Ridge (Cambria)     | Hearst Ranch Headquarters<br>(San Simeon)            | Rancho Huasna (Isaac Sparks<br>Adobe) (1850) |
| Avila Valley Historic Site                    | Huasna School (1907)                                 | Rinconada School                             |
| Banning School (El Chorro<br>Park)            | Independence School (SLO)                            | Rios Caledonia Adobe - San<br>Miguel         |
| Bethel Lutheran Church<br>(Templeton)         | J. F. MacGillivray Residence (c.<br>1879) (Adelaida) | Rotta Winery (Adelaida)                      |
| Bianchini House (Cambria)                     | Linne School   | Runels Home - Dana Street<br>(Nipomo)        |
| C. H. Philips House (Templeton)               | Los Berros Schoolhouse                               | San Marcos Cemetery (c. 1889)<br>(Adelaida)  |
| Canet Adobe (Estero)                          | Los Osos Schoolhouse                                 | Southern Pacific Railroad Depot<br>(Oceano)  |
| Captain James Cass House<br>Complex (Cayucos) | Lyman House (Cuesta Grade)                           | Spooner Residence (Montana<br>de Oro)        |
| Cayucos Pier                                  | Marre House (c. 1932) (Avila<br>Beach)               | Tar Springs Ranch (Huasna)                   |
| Chandler House-Webster<br>(Creston)           | Geneseo School                                       | Temple of the People (Halcyon)               |
| Coffee T. Rice House (Oceano)                 | Mission San Miguel Archangel                         | The Paul Squib House<br>(Cambria)            |
| Creston Cemetery                              | Mission Santa Margarita de<br>Cortona Asistencia     | The Sebastian Store (San<br>Simeon)          |
| Creston Community Church                      | Octagon Barn (SLO)                                   | Tognazzini General Store<br>(Edna)           |
| Dana Adobe (Nipomo)                           | Old St. Joseph's Church<br>(Nipomo)                  | Van Gordon Archaeological Site<br>(Cambria)  |
| Dana Home (Nipomo)                            | Pacific Coast Railroad Depot<br>Site (Nipomo)        | Vasquez-Hollister Adobe<br>(Cuesta College)  |



# TABLE CR-1 SITES WITH "H" COMBINING DESIGNATIONS

| Eight-Mile House & Stagecoach<br>Road (Cuesta Grade) | Port San Luis Lighthouse (1890)        | Willow Creek Cemetery<br>(Adelaida) (c. 1911) |
|--|--|---|
| Estrella Adobe Church                                | Porter Ranchhouse (1890)               | York Mountain Winery<br>(1882–1890)           |
| The Lull House (Cambria)                             | Carroll's Blacksmith Shop<br>(Cambria) | The Bucket of Blood Saloon<br>(Cambria)       |
| The 1 <sup>st</sup> Presbyterian Church<br>(Cambria) | Adelaida Cemetery                      | The Red House (Cambria)                       |
| The Olallieberry Inn (Cambria)                       | The Leffingwell House<br>(Cambria)     | Heart's Ease (Taylor House)<br>Cambria        |
| The Old Santa Rosa Chapel<br>(Cambria)               | The Thorndyke House<br>(Cambria)       | Ian's Restaurant (Cambria)                    |
| The Bank of Cambria                                  | Soto's Market (Cambria)                | The Brambles Restaruant<br>(Cambria)          |
| Camozzi's (Cambria)                                  | Robin's Restaurant (Cambria)           | Rigdon Hall Restaurant<br>(Cambria)           |
| Louis Maggetti House (Cambria)                       | The Bluebird Motel (Cambria)           |   |



# FIGURE CR-1 HISTORIC AND CULTURAL RESOURCES



### **Major Issues**

Cultural resources throughout the state and county are increasingly under threat due to development pressures, growing use of our open spaces, changes in technology and style, benign neglect, unauthorized collection, and lack of funding for repair and maintenance. The County recognizes that Native American and archaeological resources are "living resources," meaning that the culture represented by these resources still thrives here. Preserving local history and cultural diversity helps the community retain its links to the past and remain a dynamic and desirable place.

# Goals, Policies, and Implementation Strategies

The intent of the following goals, policies, and implementation strategies is to identify and protect cultural and historical resources. These resources contribute to the vitality and diversity of the county and its sense of place.

# TABLE CR-2 CULTURAL RESOURCES GOALS

**Goal CR 1** The County will have a strong, positive community image that honors our history and cultural diversity.

- **Goal CR 2** The County will promote public awareness and support for the preservation of cultural resources in order to maintain the county's uniqueness and promote economic vitality.
- **Goal CR 3** The county's historical resources will be preserved and protected.
- **Goal CR 4** The county's known and potential Native American, archaeological, and paleontological resources will be preserved and protected.



# GOAL

THE COUNTY WILL HAVE A STRONG, POSITIVE COMMUNITY IMAGE THAT HONORS OUR HISTORY AND CULTURAL DIVERSITY.

# Policy CR 1.1 Cultural Identity

Establish and support programs that enhance the county's sense of community and identity, such as the collection of oral histories, cultural and genealogical research, and the acquisition of collections of historic artifacts, documents, and memorabilia relevant to the history of the county.

- Implementation Strategy CR 1.1.1 Curation Support existing museums or cultural centers and establishment of new ones to educate the public about the importance of local history, Native American resources, and archaeology, and to display artifacts, documents, and art relevant to the county's history and cultural diversity.
- Implementation Strategy CR 1.1.2 Curation Facility Work with stakeholders to locate, construct and maintain a storage, curation and research facility in a central location for cultural resource artifacts and documents from the County.
- Implementation Strategy CR 1.1.3 Diversified Funding Identify and pursue funding for existing and new curation facilities to ensure the continued curation of collections in perpetuity.

# We will recognize success when...

- There is widespread public acceptance of the value of preserving cultural and archaeological sites, because they represent living resources that are part of a continuing culture.
- A more effective process is in effect to identify, preserve and prevent demolition or degradation of historic buildings.
- Sensitive cultural and archaeological resources are identified early in the development review process in consultation with Native Americans, and are avoided whenever feasible.



# CULTURAL RESOURCES



Dana Adobe Photo by the San Luis Obispo Land Conservancy

2

THE COUNTY WILL PROMOTE PUBLIC AWARENESS AND SUPPORT FOR THE PRESERVATION OF CULTURAL RESOURCES IN ORDER TO MAINTAIN THE COUNTY'S UNIQUENESS AND PROMOTE ECONOMIC VITALITY.

### **Policy CR 2.1 Community Participation**

The County will actively promote and support community participation in the preservation and enhancement of the county's culture and history.

- Implementation Strategy CR 2.1.1 Public Outreach Establish a program to publicize the County's efforts to protect historical and cultural resources at risk from development and its commitment to preserve its cultural heritage. The program may include public outreach and education through posters, signs, handouts, brochures, exhibits, videos, the County website, and workshops.
- Implementation Strategy CR 2.1.2 Outreach to Schools Support education programs through local historical societies, schools, and other groups that provide information to the community regarding the rich history of the county and the importance of preserving it for future generations to appreciate.
- Implementation Strategy CR 2.1.3 Unauthorized Collection Protect sensitive sites from vandalism and unauthorized collection of artifacts by educating staff, public officials, the public, and landowners about the importance of such sites.
- Implementation Strategy CR 2.1.4 Interpretive Signage Require the incorporation of monuments, plaques, signs, or artwork into public and private development projects in areas associated with history or cultural resources in order to identify and interpret the county's diverse history and cultural resources. Promote such interpretive signage in existing public and private sites.

# CULTURAL RESOURCES

 Implementation Strategy CR 2.1.5 Cultural Resources Advisory Committee
 Establish a Cultural Resources Advisory Committee to make recommendations to the Board of Supervisors and other

decision-making bodies on ways to protect Native American, archaeological, historic, and other cultural resources. The Committee shall also:

- Assist in developing historic contexts of County history;
- Assist in surveying and identifying cultural resources;
- Recommend standards and procedures to designate cultural resources.
- Recommend historic sites to be included in the General Plan H designations or ordinances.
- Review of applications for projects that involve alteration or demolition of recognized cultural resources.

### **Policy CR 2.2 Acquisition**

The County encourages and supports acquisition by public agencies or historical or conservation organizations of the most important archaeological and cultural sites from willing sellers.

#### Policy CR 2.3 "Living Resources"

Preserve historic sites and buildings and recognize cultural and archaeological resources as "living resources" that are part of a continuing culture.

- Implementation Strategy CR 2.3.1 Stakeholder Outreach Support and facilitate ongoing discussions or forums about protecting and preserving cultural resources with Native American groups, historical and archaeological interest groups, cultural resource professionals, decision makers, and landowners.
- Implementation Strategy CR 2.3.2 Government-to-Government Consultation Establish a government-to-government consultation process with the Native American community and a consultation process with other stakeholders to identify potentially significant cultural resources in the county and to discuss issues relevant to the protection and preservation of cultural resources.

Consultation refers to the meaningful and timely process of seeking, discussing, and considering carefully the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement. Consultation between government agencies and Native American tribes shall be conducted in a way that is mutually respectful of each party's sovereignty. (California Government Code Section 65353.4)

#### Government-to-

**government** means "local agency consultation with a local Native American tribal government."





San Miguel Lighthouse Church, built 1892. Photo by Robert Vessely P.E

#### HISTORICAL RESOURCES



THE COUNTY'S HISTORICAL RESOURCES WILL BE PRESERVED AND PROTECTED.

#### **Policy CR 3.1 Historic Preservation**

The County will provide for the identification, protection, enhancement, perpetuation, and use of features that reflect the County's historical, architectural, Native American, archaeological, cultural, and aesthetic heritage.

 Implementation Strategy CR 3.1.1 Historic Preservation Ordinance

The County will develop a cultural resources preservation ordinance to: 1) more effectively preserve Native American cultural sites, archaeological resources, and protect and enhance historic buildings, 2) prevent demolition or substantial changes in outward appearance of historically designated buildings, unless it is necessary for public health and safety, 3) integrate historically accurate designs and features in historic residential and commercial structures, 4) promote restoration of historic buildings or sites using the greatest degree of authenticity practicable, consistent with the Secretary of the Interior's Standards as appropriate, and 5) create the Cultural Resources Advisory Committee.

◊ Implementation Strategy CR 3.1.2 Historic Resources Inventory

Develop a description of the broad patterns of human occupation or historic contexts of the area in order to provide a basis on which to judge the place and importance of potential cultural resources. Based on these contexts, develop and regularly update a comprehensive and systematic historic resources inventory, coordinating with other agencies and organizations as necessary. The inventory will include sites, historic buildings, and structures, such as the Avila Schoolhouse, and historic documents within the county, and a map depicting their locations. It shall use the State of California, Department of Parks and Recreation "Building, Structure, and Object Record" or similar format. The inventory

# CULTURAL RESOURCES

will include a map depicting the locations of the features (unless the locations are confidential).

- Implementation Strategy CR 3.1.3 National Register Work with recognized preservation organizations and interested individuals and landowners to determine whether additional churches, schools, and other private and public structures deserve State or federal designation and protection as historic resources. Pursue formal listing of all eligible sites and properties in the National Register of Historic Places and California Register of Historical Resources, or as California Historic Landmarks.
- Implementation Strategy CR 3.1.4 Historic Listing Process Develop a process to protect newly identified historic sites, buildings, and structures in a timely manner as an alternative to including them in the Historic (H) combining designation. Examples are 1) adopt a Historic Preservation Ordinance that includes or references a list, to be updated periodically, of historic sites, buildings and structures, and 2) amend planning area/Land Use Ordinance standards to include such lists for each Planning Area.

#### **Policy CR 3.2 Historic Preservation Programs**

The County supports and encourages historic preservation activities. County agencies should cooperate and coordinate their activities with preservation activities.

- Implementation Strategy CR 3.2.1 Grants Support applications for grants and other sources of funding for historic preservation projects that are consistent with the County's General Plan.
- Implementation Strategy CR 3.2.2 Restoration Incentives Identify and provide incentives, as feasible, to private landowners, nonprofit organizations, and interested preservation groups to rehabilitate and restore historic buildings and structures and to encourage their continued use.



Lighthouse, Built 1890. Photo by Point San Luis Lighthouse Keepers





Paulding House, Arroyo Grande, built 1889. Photo by South County Historical Society

- Implementation Strategy CR 3.2.3 Tax Incentives Share information on federal and state tax incentive programs and nonprofit conservation programs for historic preservation with landowners and preservation groups.
- ♦ Implementation Strategy CR 3.2.4 Mills Act

Consider participating in the Mills Act Tax Abatement Program starting with research or studies of costs and benefits. The Mills Act is an economic incentive program for the restoration and preservation of qualified historic buildings by private owners. Private owners who pledge to rehabilitate and maintain the historical and architectural character of their properties for at least a 10-year period receive substantial property tax savings under the act.

#### **Policy CR 3.3 Remodeling and Reconstruction**

Maintain and enhance the historic character of the county by establishing review procedures for the remodeling and reconstruction of buildings and other structures consistent with the Secretary of the Interior's Standards.

- Implementation Strategy CR 3.3.1 Restoration Assistance Provide property owners and developers with design assistance, including information on the restoration and adaptive reuse of historic buildings and structures. Use private and public resources to provide information on proper methods and techniques of restoration and rehabilitation, including sources of funding assistance.
- Implementation Strategy CR 3.3.2 Salvaged Materials Encourage the reuse of salvaged architecturally significant materials.



#### **ARCHAEOLOGICAL RESOURCES**



THE COUNTY'S KNOWN AND POTENTIAL NATIVE AMERICAN, ARCHAEOLOGICAL, AND PALEONTOLOGICAL RESOURCES WILL BE PRESERVED AND PROTECTED.

### **Policy CR 4.1 Non-development Activities**

Discourage or avoid non-development activities that could damage or destroy Native American and archaeological sites, including off-road vehicle use on or adjacent to known sites. Prohibit unauthorized collection of artifacts. (Also refer to **Implementation Strategy CR 2.1.3.**)

# *Policy CR 4.2 Protection of Native American Cultural Sites*

Ensure protection of archaeological sites that are culturally significant to Native Americans, even if they have lost their scientific or archaeological integrity through previous disturbance. Protect sites that have religious or spiritual value, even if no artifacts are present. Protect sites that contain artifacts, which may have intrinsic value, even though their archaeological context has been disturbed.

Implementation Strategy CR 4.2.1 Archaeological Sensitivity Mapping Identify significant archaeological and cultural sites and conduct sensitivity mapping in consultation with Native Americans and archaeological and conservation organizations to improve the County's ability to protect the resources. Map resources consistently in urban and rural areas of the county.

 Implementation Strategy CR 4.2.2 Archaeological Site Records
 Establish and maintain, but do not publicize archaeological site records. Site records may be released to limited individuals and groups with appropriate professional or tribal credentials.

#### Policy CR 4.3 Cultural Resources and Open Space

The County supports the concept of cultural landscapes and the protection and preservation of archaeological or historical resources as open space or parkland on public or private lands.

#### Archeology is the

scientific study of historic or prehistoric peoples and their cultures by analysis of their artifacts, inscriptions, monuments, and other such remains



A Native American rock painting. Photo by Jeff Oliveira



Interpretation of cultural resources can include monuments, signs, plaques, artwork, publications, etc.

- Implementation Strategy CR 4.3.1 Cultural Landscapes The identification and interpretation of cultural resources should consider the larger landscape in order to address the relationships between archaeological sites, landscape features and the environment.
- Implementation Strategy CR 4.3.2 Cultural Landscapes: Open Space Easements
   In proposed land divisions and discretionary land use permits:
   1) locate parcels and easements to optimize protection of cultural resources, 2) as necessary, clearly define allowable uses, prohibited activities, and open space maintenance responsibilities as a condition of approval, and 3) use open space easements to protect designated archaeological sites.
- Implementation Strategy CR 4.3.3 Cultural Landscapes: Management
   Manage public open space and parkland so that public use does not disturb or degrade archaeological or historical resources.

### Policy CR 4.4 Development Activities and Archaeological Sites

Protect archaeological and culturally sensitive sites from the effects of development by avoiding disturbance where feasible. Avoid archaeological resources as the primary method of protection.

Implementation Strategy CR 4.4.1 Native American participation in development review process In areas likely to contain Native American and cultural resources, include Native Americans in tasks such as Phase I II, and III surveys, resource assessment, and impact mitigation. Consult with Native American representatives early in the development review process and in the design of appropriate mitigations. Enable their presence during archaeological excavation and construction in areas likely to contain cultural resources.

 Implementation Strategy CR 4.4.2 Cultural Resource Studies
 Require cultural resources studies (i.e. archaeological and

Require cultural resources studies (i.e., archaeological and historical investigations) by a professional who meets the

# CULTURAL RESOURCES

Secretary of the Interior's Professional Qualifications Standards when development is proposed within an archaeologically or historically sensitive area. These studies will conform to the County's approved guidelines.

#### **Policy CR 4.5 Paleontological Resources**

Protect paleontological resources from the effects of development by avoiding disturbance where feasible.

- Implementation Strategy CR 4.5.1 Paleontological Studies Require a paleontological resource assessment and mitigation plan to 1) identify the extent and potential significance of the resources that may exist within the proposed development and 2) provide mitigation measures to reduce potential impacts when existing information indicates that a site proposed for development may contain biological, paleontological, or other scientific resources.
- Implementation Strategy CR 4.5.2 Paleontological Monitoring
   Deguine a paleontological control gradient to monitor.

Require a paleontologist and/or registered geologist to monitor site-grading activities when paleontological resources are known or likely to occur. The monitor will have the authority to halt grading to determine the appropriate protection or mitigation measures. Measures may include collection of paleontological resources, curation of any resources collected with an appropriate repository, and documentation with the County.

#### **Policy CR 4.6 Resources-Based Sensitivity**

Protect archaeological resources near streams, springs and water sources, rock outcrops, and significant ridgetops, as these are often indicators of the presence of cultural resources.

- Implementation Strategy CR 4.6.1 Resource-Based Surveys
  - a. Require a preliminary site survey to determine the likelihood of resources with all development subject to a discretionary permit that is proposed within 1) 100 feet of the bank of a creek or spring or 2) 300 feet of a creek where the slope of that area is less than 10 percent. Require that a professional archaeologist who meets the Secretary of the Interior's Professional Qualifications for

**Paleontology** is the science of the forms of life existing in former geologic periods, as represented by their fossils.



Ancient grinding holes in a rock outcropping often resulted from repeated nut grinding by Native American women. Photo by Jeff Oliveira





# **CULTURAL RESOURCES**

Archaeology conduct the preliminary survey. Recommendations made by the archaeologist may be applied as mitigation measures.

b. As significant rock outcrops and ridge tops are identified, determine the distances within which or the circumstances under which proposed discretionary development would be subject to a preliminary site survey, based on site-specific conditions.



San Simeon School House Photo by Jeff Legato



# **Summary of Implementation Strategies**

For each implementation strategy described in this chapter, the following table (**Table CR-3**) summarizes the County department or other agency that has primary responsibility for carrying out that strategy. In addition, the table summarizes the priority, estimated year of initiation, and potential source of funding of each strategy. The actual timeframe for implementing the strategies is dependent upon the availability of adequate staff and funding.

# TABLE CR-3 CULTURAL RESOURCES IMPLEMENTATION

| Implementation Strategy                              | Responsible<br>Department or<br>Agency <sup>1</sup> | Priority | Timeframe<br>to Start    | Potential<br>Funding<br>Sources <sup>2</sup> |
|--|---|----------|--------------------------|--|
| IS CR 1.1.1 Curation                                 | Private/Public                                      | Medium   | 2012                     | Private/Grants                               |
| IS CR 1.1.2 Interim Facility                         | Private/Public                                      | Medium   | 2011                     | Private                                      |
| IS CR 1.1.3 Diversified Funding                      | Private/Public                                      | Medium   | 2011                     | Private                                      |
| IS CR 2.1.1 Public                                   | PB, Hist. Soc.                                      | Medium   | 2011                     | DB, Grants                                   |
| IS CR 2.1.2 Outreach to Schools                      | PB, Hist. Soc., Cal Poly                            | Medium   | 2011                     | DB   |
| IS CR 2.1.3 Unauthorized<br>Collection               | GS, PB  | Medium   | 2011                     | DB/Grants                                    |
| IS CR 2.1.4 Interpretive Signage                     | GS, PB, PW  | Medium   | 2011                     | Private/DB                                   |
| IS CR 2.1.5 Cultural Resources<br>Advisory Committee | РВ  | High     | 2011                     | DB   |
| IS CR 2.3.1 Stakeholder<br>Outreach                  | РВ  | High     | Immediately <sup>3</sup> | N/A  |
| IS CR 2.3.2 Govt-to-Govt<br>Consultation             | PB, Other agencies                                  | Medium   | Immediately              | DB   |
| IS CR 3.1.1 Historic Preservation<br>Ordinance       | РВ  | High     | 2010                     | N/A  |
| IS CR 3.1.2 Historic Resources<br>Inventory          | РВ  | Medium   | 2011                     | DB   |
| IS CR 3.1.3 National Register                        | PB  | Medium   | 2011                     | DB   |
| IS CR 3.1.4 Historic Listing<br>Process              | РВ  | High     | 2011                     | DB   |
| IS CR 3.2.1 Grants                                   | PB, GS  | Medium   | Immediately <sup>3</sup> | N/A  |
| IS CR 3.2.2 Restoration<br>Incentives                | PB  | Medium   | 2011                     | N/A  |
| IS CR 3.2.3 Tax incentives                           | PB  | Medium   | Immediately              | N/A  |
| IS CR 3.2.4 Mills Act                                | PB  | Medium   | 2011                     | N/A  |
|  |   |          |                          |  |



# **TABLE CR-3 CULTURAL RESOURCES IMPLEMENTATION**

| Implementation Strategy                                  | Responsible<br>Department or<br>Agency <sup>1</sup> | Priority | Timeframe<br>to Start    | Potential<br>Funding<br>Sources <sup>2</sup> |
|--|---|----------|--------------------------|--|
| IS CR 3.3.2 Assistance                                   | PB  | Medium   | Immediately <sup>3</sup> | N/A  |
| IS CR 3.3.3 Salvaged Materials                           | PB  | Medium   | Immediately <sup>3</sup> | N/A  |
| IS CR 4.2.1 Arch Sens. Mapping                           | PB  | Medium   | 2011                     | N/A  |
| IS CR 4.2.2 Arch Site Records                            | PB  | Medium   | Immediately <sup>3</sup> | N/A  |
| IS CR 4.3.1 Cultural Landscapes                          | PB  | High     | Immediately <sup>3</sup> | N/A  |
| IS CR 4.3.2 Cultural Landscapes:<br>Open Space Easements | РВ  | High     | Immediately <sup>3</sup> | N/A  |
| IS CR 4.3.3 Cultural Landscapes:<br>Management           | GS, other agencies                                  | Medium   | Immediately <sup>3</sup> | DB   |
| IS CR 4.4.1 Native American<br>Participation             | РВ  | High     | Immediately <sup>3</sup> | N/A  |
| IS CR 4.4.2 Arch Sensitive Areas                         | PB  | High     | Immediately <sup>3</sup> | N/A  |
| IS CR 4.5.1 Paleontological<br>Studies                   | РВ  | High     | Immediately <sup>3</sup> | N/A  |
| IS CR 4.5.2 Paleontological<br>Monitoring                | РВ  | High     | Immediately <sup>3</sup> | N/A  |
| IS CR 4.6.1 Creeks and other<br>Archaeological Resources | РВ  | High     | Immediately <sup>3</sup> | N/A  |

Notes:

2

Department abbreviations:

CalPoly = California Polytechnic State University Cities = Incorporated cities

GS = County General Services Agency Hist. Soc = San Luis Obispo Historical Society PB = County Department of Planning and Building PW = County Department of Public Works Funding source abbreviations:

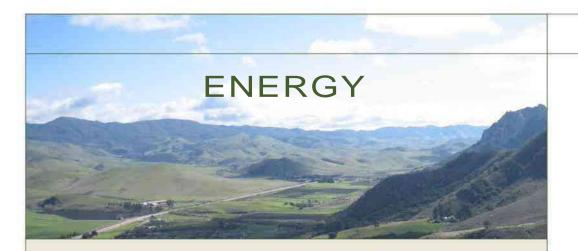
GF = General Fund

DB = Planning and Building Department Budget

3 Denotes an ongoing activity.

Source: Department of Planning and Building, March 2009, revised October 2009.





# Purpose

The County seeks to provide a framework for moving toward an energy future that transitions from traditional, non-renewable fossil fuel energy sources, to the production of environmentally sustainable, renewable energy supplies that do not degrade ecosystems.

# Introduction

The production, transportation, cost, and use of energy affects us all. Energy issues have a profound effect on ecosystems, global climate, commerce, the provision of public services, land use planning, and development, transportation, and quality of life. Using energy more efficiently will benefit residents and businesses economically and reduce environmental impacts. Changes in land use patterns, transportation systems, building designs, agricultural practices, human behavior, and recycling efforts can all lead to greater energy production, efficiency, and conservation.

San Luis Obispo County has abundant resources that can be and are used to generate energy. These include a mix of renewable and non-renewable sources: crude oil and gas, biomass fuels, geothermal, wind, tidal, wave, solar energy, and microhydroelectric potential. Crude oil and gas are exported out of the county for refining and distribution. Only a small portion of the wind, solar, and biomass potential in the county is currently used. The development of local resources may offer the best alternatives to importing large amounts of energy from other areas of the state.

### Sustainable development is

development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

-Report of the World Commission on Environment and Development: <u>Our</u> <u>Common Future</u> (also known as the <u>Brundtland</u> <u>Commission</u> or Brundtland Report)

#### The 2030 Challenge

In January of 2006. Architecture 2030 officially issued the '2030 Challenge', calling for 1) all new buildings and developments to be designed to use half the fossil fuel energy they would typically consume, i.e., half the regional or country average for that building type, 2) at a minimum, an equal amount of existing building area be renovated annually to use half the amount of fossil fuel energy they are currently consuming, and 3) the fossil fuel reduction standard for all new buildings be increased to 60% in 2010, 70% in 2015, 80% in 2020, 90% in 2025 and carbon neutral by 2030 (using no fossil fuel GHG-emitting energy). Fossil fuel reduction targets should be achieved through design, the application of renewable energy technologies, and/or the purchase of renewable energy (20% maximum).

Because most local public institutions, residences, industries, businesses, farms, and ranches are not currently maximizing direct use of local energy resources, the county relies heavily on imported resources. Imported resources include diesel, gasoline, propane, natural gas, and electricity. The production and distribution of energy can cause significant negative impacts to the natural environment. Energy generated from fossil fuels (i.e., natural gas, coal, and oil) is a significant contributor to greenhouse gas (GHG) emissions. Reducing energy use and increasing use of renewable energy sources can therefore directly benefit the environment.

Reducing energy use can also benefit the economy. For example, by saving energy through more efficient construction and operation of commercial and industrial facilities, businesses will have lower operating costs and a greater potential to increase capital and profits. The potential for savings is considerable because such facilities may use large amounts of energy for manufacturing processes, space heating or cooling, refrigeration, and lighting.

Both the public and private sectors need to reduce energy use and increase use of local renewable energy sources. Local governments can improve energy conservation and efficiency through land use planning policies local regulations, and more efficient management of the transportation system and public buildings and facilities. Local governments can also encourage energy-efficient agricultural practices, building regulation, energy education, and recycling and reuse programs.

#### **RENEWABLE ENERGY USE**

Renewable energy sources capture energy from on-going natural processes such as sunshine, wind, tidal, wave, flowing water, biological processes, and geothermal heat. In contrast, nuclear power and fossil fuels, such as coal, oil, and natural gas are non renewable. Renewable forms of energy, other than geothermal and tidal power, ultimately come from the sun. Biomass, for example, is accumulated over a period of months, as with straw, or through many years, as with wood.

Renewable energy resources may be used directly or used to create other more convenient forms of energy. Examples of direct use are passive buildings, solar ovens, geothermal heating, and water-wheels, micro-hydro, and windmills. Examples of indirect use that require energy harvesting are electricity generation through wind turbines or photovoltaic cells, or production of fuels such as ethanol from biomass.

# SUSTAINABLE BUILDING PRACTICES – GREEN BUILDINGS

Buildings account for nearly half of the total energy used in the United States. They represent a significant portion of the nation's consumption of energy and raw materials and waste output. Sustainable building practices include designing, constructing, and operating buildings and landscapes to incorporate on-site energy production, energy efficiency, water conservation, waste minimization, pollution prevention, resource-efficient materials, and high standards of indoor environmental quality. "Green" building design involves investments in energy and resourceefficient materials and technology. Benefits include:

- Efficient use of water, energy, lumber, and other resources, which also minimizes maintenance and operation costs to homeowners and businesses.
- Designs that are appropriately suited for the site and climate.
- Pollution prevention and reduced waste.
- Potential health benefits from reduced exposure to noxious materials.

Understanding the consequences associated with energy waste, and changing our behavior to use less energy and rely on local and/or renewable energy sources, will result in many benefits, such as:

- ensuring a sustainable energy supply,
- reducing greenhouse gas emissions,

#### Energy conservation

means reducing energy waste, such as turning lights, heating, and motors off when not needed.

#### Energy efficiency is

doing the same or more work with less energy, such as replacing incandescent light bulbs with compact fluorescent light bulbs or buying an Energy Star appliance to use less energy for the same or greater output.

# We will recognize success when...

 Energy consumption in County buildings and facilities is reduced by 20% by 2020.

 Green building practices are used in all new development and remodels.

 A program is in place to retrofit existing buildings using green building practices.

 Waste reduction, reuse and recycling program is in effect to divert 70% of waste in unincorporated areas by 2015.

 A variety of environmentally sound renewable energy systems are in operation, including solar power and wind energy systems and cogeneration facilities, with a combination of commercial systems and distributed energy resources.

 Energy consumption is reduced through conservation and efficiency measures, development of environmentally sound renewable energy sources, and location of most new housing in compact urban neighborhoods near jobs, services and transportation.

- reducing significant impacts to sensitive biological and natural resources from nonrenewable and resourceconsumptive energy sources; and
- securing a vibrant economic future that relies on sustainable energy resources.

# **Relationship to Other Elements, Plans, and Programs**

This chapter contains specific energy policies; however, all chapters of the Conservation and Open Space Element and all elements of the General Plan must work together to form a cohesive set of goals and policies that manage and sustain the county's resources for generations to come. The County's Guiding Principles for Strategic Growth address the interconnection of land use, resource conservation, and quality of life. The Land Use Element's Framework for Planning (Inland and Coastal) reflects the County's desired Strategic Growth principles and goals. The following energy goals, policies, and implementation strategies are compatible and consistent with the Strategic Growth principles and provide specific direction to achieve and maintain the county's desired energy resources. Other chapters of this Element also include goals, policies, and implementation strategies that will directly and indirectly affect energy, notably those included in the Air Quality and Water Resources chapters.

# **Major Issues**

The following major issues are derived from the 1995 Energy Element and the changes in state law since that time. The major issues described in that Element are still applicable, and include energy conservation and efficiency, sustainable energy supplies, renewable energy sources, and green building.

 Energy conservation and efficiency means using energy more wisely. There are many opportunities to do so, including developing compact land use patterns, also known as "Strategic Growth," discouraging reliance on auto travel, and encouraging more walkable places and better public transit. Other ways to use energy more

efficiently include constructing more energy-efficient and passive solar-powered homes and businesses, ensuring that County operations are as energy-efficient as possible, and expanding recycling and reuse programs.

- A sustainable energy supply will include greater reliance on renewable energy sources such as solar and wind power. County operations are specifically targeted to pursue environmentally sustainable local energy supplies.
- 3) An increase in the use of renewable energy resources will require some revisions to County ordinances and policies. The revisions will seek to facilitate the use of renewable energy such as wind, solar, geothermal and cogeneration.
- 4) In 2006, electricity and natural gas consumption by residential, commercial, and industrial uses in the unincorporated areas of the county contributed 24% of total community-wide greenhouse gas emissions. Green building seeks to improve building practices to make them more sustainable by conserving water; providing most of their own heating, cooling, ventilation, and daytime lighting; minimizing waste; preventing pollution; and improving indoor air quality.

# Goals, Policies, and Implementation Strategies

The intent of the following goals, policies, and implementation strategies is to identify energy needs, conserve and use energy efficiently, use renewable energy, and achieve energy-efficient development. The County recognizes that efficient use of energy and greater reliance on clean, renewable energy benefits the health of our residents, visitors and environment, and contributes to the county's and the region's economic vitality.

| TABLE E-1<br>Energy ( |   |
|-----------------------|---|
| Goal E 1              | The County will have an environmentally sustainable supply of energy for all county residents.        |
| Goal E 2              | Energy consumption at County facilities will be reduced by 20% from 2006 levels by 2020.              |
| Goal E 3              | Energy efficiency and conservation will be promoted in both new and existing development.             |
| Goal E 4              | Green building practices will be integrated into all development.                                     |
| Goal E 5              | Waste reduction, reuse, and recycling will achieve as close to zero waste as possible.                |
| Goal E 6              | The use of renewable energy resources will be increased.  |
| Goal E 7              | Design, siting, and operation of non-renewable energy facilities will be environmentally appropriate. |
|                       |   |
|                       | GOAL THE COUNTY WILL HAVE AN  |

# THE COUNTY WILL HAVE AN ENVIRONMENTALLY SUSTAINABLE SUPPLY OF ENERGY FOR ALL COUNTY RESIDENTS.

#### Policy E 1.1 Meeting energy needs

1

Meet our electricity needs through the following prioritized measures:

- a. Increased conservation and efficiency in all sectors of energy use.
- b. Development and use of locally appropriate sources of renewable resources from both distributed and large-scale projects. Examples include wind, tidal, wave, solar, microhydroelectric, biomass, and geothermal.
- c. Development of non-renewable sources of energy.

#### Policy E 1.2 Local control

Assert more local control of energy decisions and sources.

- Implementation Strategy E 1.2.1 Evaluate Community Choice Aggregation
   Determine if Community Choice Aggregation (CCA) or a similar program is a cost-effective and low-risk strategy to increase use of renewable energy, and realize a low-carbon, local energy portfolio. Evaluate CCA for the ability to
  - develop local energy resources that can feasibly supply heat and electricity to the county;
  - determine the financial framework that provides the lowest cost funding for this portfolio;
  - take actions necessary to provide access to the funding; and
  - create public-private partnerships to construct, operate and maintain the new energy resources as public works projects

Implementation Strategy E 1.2.2 Update the Countywide Emergency Energy Contingency Plan Update the existing Countywide Emergency Energy Contingency Plan to meet peak electricity and natural gas needs of essential facilities within the county at all times. The plan should evaluate and determine essential energy priorities and establish a strategy for meeting these priorities during periods of energy shortage.

 Implementation Strategy E 1.2.3 Use of tax assessments to retrofit residential and commercial properties

Consider implementation of an "<u>AB 811</u>" or municipal financing program that would enable the County to use tax assessment districts and provide low-interest loans to property owners for the installation of energy efficiency improvements and renewable energy sources that are permanently fixed to existing real property within the county. Develop the program as directed by AB 811.

# Community Choice Aggregation: Assembly

Bill 117 permits municipalities to aggregate and provide electricity to residents, businesses, and public facilities. Investor-owned utilities (IOUs) continue to own and operate the transmission and distribution system, and provide metering, billing, and other customer service functions.

AB 811 authorizes all cities and counties in California to designate areas within which willing property owners could enter into contractual assessments to finance the installation of distributed renewable generation or energy efficiency improvements, that are permanently fixed to the property owner's existing residential, commercial, industrial, or other real property. These financing arrangements allow property owners to finance renewable generation and energy efficiency improvements through low-interest loans that would be repaid as an item on the property owner's property tax bill.



### Renewable energy is

energy from sources that regenerate and are generally less damaging to the environment, such as solar, wind, biomass, and small-scale hydroelectric power.  Implementation Strategy 1.2.4 Renewables Portfolio Standard
 Assess local renewable energy resources and establish a countywide goal for renewable energy sources in conjunction with other counties. The goal will take maximum advantage of available renewable energy resources.

**Policy E 1.3 Renewable energy and County facilities** Seek to use renewable energy to power County facilities.

- Implementation Strategy E 1.3.1 Use of renewable energy at County facilities
   Retrofit existing County facilities with appropriate renewable energy and clean technologies such as L.E.D. lighting, solar, wind, biofuel, cogeneration, and fuel cells.,.
- Implementation Strategy E 1.3.2 Fund renewable energy at County facilities
   Seek tax-free, low-interest loans, and other available financial options or grants to fund renewable energy projects.
- Implementation Strategy E 1.3.3 Assess County's use of renewable energy sources and set a target Within 12 months of adoption of this Element, identify the County's use of renewable sources for energy use using 2006 as the baseline year and set a target for use of renewable and clean distributed generation sources by 2020.
- Implementation Strategy E 1.3.4 Renewable Energy and Clean Distributed Generation Plan Upon identification of a baseline and target for the County's use of renewable sources for energy use in County facilities, develop a plan to achieve the 2020 target.

### Policy E 1.4 Methane

Increase the use of methane as an energy source from wastewater treatment plants and active and inactive, closed landfills.

 Implementation Strategy E 1.4.1 Capture methane from landfills and wastewater treatment facilities
 Encourage landfill and wastewater treatment operators to capture and use methane for energy production where

feasible. Land use permit applications for landfill expansions, new wastewater treatment facilities, and amendments to previous permits shall propose the capture and use of methane for energy production where feasible.

### Policy E 1.5 Waste burning

Encourage waste-burning biomass facilities and conversion technologies as methods of producing electrical energy without endangering resource recovery programs where environmental and air quality are protected and the facility is compatible with adjoining uses.

#### GOAL

7

# ENERGY CONSUMPTION AT COUNTY FACILITIES SHALL BE REDUCED BY 20% FROM 2006 LEVELS BY 2020.

#### Policy E 2.1 Energy efficiency

Become a model of energy efficiency and conservation in the provision of services and the maintenance of County facilities and equipment to:

- a. demonstrate to County residents and businesses the benefits of energy efficiency and conservation,
- b. reduce costs of government,
- c. reduce dependence on imported fossil fuel energy, and
- d. improve air quality.
- Implementation Strategy E 2.1.1 Apply Energy Use Policy to all County facilities

Amend the Energy Use Policy for County buildings and facilities operated, managed, or leased by General Services to apply to all buildings and facilities operated by the County. The amended Energy Use Policy should identify energy conservation, energy efficiency, demand reduction, distributed generation, and renewable energy strategies consistent with this Element.

#### Life cycle costing (LCC)

is the process of evaluating the total overall costs and benefits of buildings or equipment over time, including initial costs of design and construction; operating costs; long-term costs of maintenance, repair and replacement; and other environmental or social costs over its full life, rather than simply based on purchase cost alone.



- Implementation Strategy E 2.1.2 Use of Life Cycle Costing Budget for capital improvements using life cycle costing (LCC) to identify long-term energy costs, environmental benefits, and cost savings for the life of projects.
- Implementation Strategy E 2.1.3 Energy efficiency in project management
   Revise project management (PM) processes to incorporate energy efficiency and emissions reductions on all viable projects.

#### Policy E 2.2 Energy consumption

Decrease energy consumption at all County facilities by 20% using 2006 as a baseline year.

- Implementation Strategy E 2.2.1 Monitor and report energy use The Departments of General Services, Public Works, Social Services, Library Services, Fire, and Sheriff shall continue, or immediately implement, annual monitoring and reporting of energy use in County buildings and facilities to the Department of Planning and Building.
- Implementation Strategy E 2.2.2 Implement energy efficiency activities and improvements The Department of General Services will:
  - a. Continue to audit existing County facilities to identify potential energy efficiency improvements.
  - Implement cost-effective energy-efficient design and technology enhancements in existing buildings based on the energy audits.
  - c. Allocate funding and staff time annually for energy efficiency upgrades for existing County facilities.
  - d. Budget for energy-efficient technology in all new County facilities.
  - e. Seek funding to incorporate renewable energy and energyefficient technology in County facilities.
  - f. Turn off the lights in County buildings at night.

#### Policy E 2.3 Energy and water

Promote water conservation for all water users in the county to reduce the amount of energy used to pump and treat water and wastewater at public water and wastewater treatment and distribution facilities.

Implementation Strategy E 2.3.1 Amend Annual Resource Summary Report: Water Conservation Include water conservation as a measure in the Annual Resource Summary report of the Resource Management System. Convene collaborative groups of water purveyors in major groundwater basins (e.g., the Nipomo Mesa Water Conservation Area and the Paso Robles Groundwater Basin) to discuss and resolve issues of concern, such as uniform water conservation measures in all local jurisdictions and small water systems.

# **GOAL** ENERGY EFFICIENCY AND CONSERVATION WILL BE PROMOTED IN BOTH NEW AND EXISTING

**DEVELOPMENT.** 

#### Policy E 3.1 Use of renewable energy

Ensure that new and existing development incorporates renewable energy sources such as solar, passive building, wind, and thermal energy. Reduce reliance on non-sustainable energy sources to the extent possible using available technology and sustainable design techniques, materials, and resources.

Implementation Strategy E 3.1.1 Incorporate renewable energy systems in new and existing development Where feasible, incorporate on-site renewable energy systems (i.e., solar or wind powered) in new and existing development. Collaborate with stakeholder groups, including business and property owners, wineries, and other agricultural operations to increase awareness of renewable systems, to streamline the permitting process, and to identify incentives. **ENERGY STAR** is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy. The agencies work closely with more than 1,000 manufacturers to determine the energy performance levels that *must be met for a product* to earn the ENERGY STAR label. The Agencies only award the label in product categories where the efficient products offer the features and performance consumers want and provide a reasonable payback if the initial purchase price is higher. In addition, ENERGY STAR labels are also available for homes and businesses

#### Policy E 3.2 Energy efficient equipment

Require the use of energy-efficient equipment in all new development, including but not limited to Energy Star appliances, high-energy efficiency equipment, heat recovery equipment, and building energy management systems.

- Implementation Strategy E 3.2.1 Develop energy efficiency program for new development
   As part of a Green Building Program, develop an energy efficiency program for new development, retrofits, and renovations.
- Implementation Strategy E 3.2.2 Energy Efficiency Retrofit Program

Develop and adopt an Energy Efficiency Retrofit Program to increase energy efficiency in existing commercial, residential, governmental, and industrial facilities. As part of the program, collaborate with the incorporated cities in the county to develop and implement a countywide Energy Audit Upon Sale requirement that would require sellers to provide interested buyers with evidence of a certified energy audit at the time of sale.

# *Policy E 3.3 Use of renewable energy for water and wastewater*

Promote the use of renewable energy systems to pump and treat water and wastewater.

Implementation Strategy E 3.3.1 Evaluate installation of renewable energy systems at water facilities The San Luis Obispo County Flood Control and Water Conservation District and the Water Resources Advisory Committee shall investigate the feasibility of installing renewable energy systems at water facilities that pump and treat water and wastewater.

**Policy E 3.4 Incentives for energy conservation** Offer incentives to conserve energy.



Example of sustainable landscaping

- Implementation Strategy E 3.4.1 Voluntary energy efficiency and conservation Encourage and assist voluntary actions by owners of existing commercial and residential buildings for energy efficiency retrofits, such as the installation of solar panels, wind turbines, green roofs, cool roofs, natural lighting, and other long-term,
- Implementation Strategy E 3.4.2 Amend ordinances: energy conservation Amend ordinances, plans, and procedures as feasible to create incentives and standards that reduce energy consumption.

permanent energy conservation installations.

- Implementation Strategy E 3.4.3 Encourage energy and water efficiency improvements Encourage homeowners, landlords, and tenants to install energy- and water-efficient fixtures and equipment and drought-tolerant landscaping.
- Implementation Strategy E 3.4.4 Energy efficiency and conservation education: public Seek grants and partnerships to sponsor energy education programs to increase public awareness about the benefits of energy conservation, energy efficiency, and recycling.
- Implementation Strategy E 3.4.5 Energy efficiency and conservation training and education: County staff Provide training and support to County staff regarding renewable energy, energy conservation, and efficient technology.

#### **Policy E 3.5 Demonstration projects**

Provide community demonstration or pilot projects to educate the community about the effectiveness of renewable energy.

Implementation Strategy E 3.5.1 Collaborate to provide demonstration projects Work with PG&E, CalPoly, and other organizations or businesses as appropriate to sponsor demonstration projects for community solar photovoltaic power, wind energy, and LED lights for roads and parking lots.



Residential solar panels

What is a "green" building?

A Sustainable or "green" building is a holistic approach to design, construction, and demolition that minimizes the building's impact on the environment, the occupants, and the community. - CCR, Title 24, and Part 11, Ch. 2

Average Savings for a Green Building 30% energy savings 35% carbon savings 30-50% water savings 50-90% waste cost savings. - U.S. Green Building Council/Capital E



#### Policy E 3.6 Energy conservation in agriculture

Promote state-of-the-art energy conservation and efficiency in agriculture.

 Implementation Strategy E 3.6.1 Sponsor energy education to agriculture community

Seek grants and partnerships to sponsor energy education programs to increase awareness in the agricultural community about the benefits of energy conservation, energy efficiency, and waste reduction.

GOAL

Δ



Natural lighting

GREEN BUILDING PRACTICES WILL BE INTEGRATED INTO ALL DEVELOPMENT.

#### Policy E 4.1 Integrate green building practices

Integrate green building practices into the design, construction, management, renovation, operations, and demolition of buildings, including publicly funded affordable housing projects, through the development review and building permitting process.

 Implementation Strategy E 4.1.1 Continue partnerships for green building education

Continue to educate staff and the public about green building through partnerships with local nonprofit organizations (SLO Green Build), professional planning, and building organizations (USGBC C4), and local agencies.

◊ Implementation Strategy E 4.1.2 Develop Green Building Program

Develop a mandatory Green Building Program in collaboration with stakeholders that includes performance standards, guidelines, review criteria, incentives, and implementation schedules based on building type, size, and location. Amend existing ordinances as necessary to implement the Green Building Program using the California Green Building Code as a minimum standard. Perform an annual review of the Green Building Program for consistency with state requirements and amend as necessary. ◊ Implementation Strategy E 4.1.3 Use of Green Building Checklists

Prior to adoption and implementation of a Green Building Program, require applications for the following projects to include a green building checklist (LEED, Build It Green, or Green Builder, among others) in their development applications: 1) nonresidential projects with 5,000 or more square feet of gross floor area; 2) residential projects with 3,000 or more square feet of gross floor area or more than four dwelling units (applies to multi-family, mixed-use, planned development, or subdivision projects); and 3) land divisions or other residential projects of 5 or more dwelling units. Use checklists to determine consistency with this Element and to inform environmental impact analyses where applicable.

 Implementation Strategy E 4.1.4 Collaborate to develop uniform Green Building Codes
 Work with local governments, nonprofit organizations, special districts, and other public organizations to develop uniform green building policies and programs.

 Implementation Strategy E 4.1.5 Encourage green affordable housing
 Encourage the implementation of green affordable housing

practices by developing partnerships between developers, nonprofit organizations, and local jurisdictions. If possible, seek additional funding programs in support of green development practices (such as the Enterprise Green Communities program).

#### Policy E 4.2 Green building incentives

Offer incentives to encourage green building practices in all development projects, including retrofits of existing buildings.

 Implementation Strategy E 4.2.1 Remove disincentives to green building

Collaborate with stakeholders to remove regulatory or procedural disincentives to implement green building practices, and identify incentives to encourage green building practices.

The California Building Standards Commission adopted the California **Green Building** Standards Code on July 17, 2008, as amended for publication in the 2007 California Green Building Standards Code, CCR, Title 24, and Part 11. Its purpose is to improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: 1. Planning and design; 2. Energy efficiency; 3. Water efficiency and conservation: 4. Material conservation and resource efficiency; and 5. Environmental air quality. The Code sets minimum Green Building Standards that may, at the discretion of any local government entity, be applied.



#### Urban Heat Island

The term "heat island" describes built up areas that are hotter than nearby rural areas. On a hot, sunny summer day. roof and pavement surface temperatures can be 50–90°F (27–50°C) hotter than the air, while shaded or moist surfaces remain close to air temperatures. These surface urban heat islands, particularly during the summer, have multiple impacts and contribute to atmospheric urban heat islands. Heat islands can affect communities by increasing summertime peak energy demand, air conditioning costs, air pollution and greenhouse gas emissions, heatrelated illness and mortality, and water quality. -USEPA 2008

 Implementation Strategy E 4.2.2 Provide expedited permitting for green building projects
 Implement an expedited or "fast track" permitting process for green projects in all County departments that review development applications.

#### Policy E 4.3 Green County facilities

Incorporate green building practices into the planning, design, construction, management, renovation, operations, and demolition of all County buildings.

- Implementation Strategy E 4.3.1 Prepare a Green Building Checklist for County facilities Prepare a green building checklist of an established green building certification program such as LEED, Build It Green, Green Builder, or as otherwise directed by the County's Green Building Program. Achieve a score that would allow at least the baseline certification level of a rating system, for example, LEED Silverfor the LEED rating system.
- Implementation Strategy E 4.3.2 Apply Green Building Operations and Maintenance to all County operations Develop green building operations and maintenance guidelines for all County operations and maintenance practices undertaken by the County or its contractors. The guidelines shall, include, at a minimum, use of:
  - Recycled-content, formaldehyde-free fiberglass insulation
  - Cellulose insulation, or other natural insulation products
  - No- or low-Volatile Organic Compounds (VOC), formaldehyde-free paints, stains, and adhesives
  - No- or low -VOC, furniture, particleboard, and cabinetry
  - Exposed concrete as a finished floor.
- Implementation Strategy E 4.3.3 Support Green Building Accreditation for County staff Offer green building training and support green building professional accreditation for County capital project managers, architects, building plans examiners, building inspectors, building officials, planners, and other staff as applicable in the

Departments of Planning and Building, General Services, and Public Works.

#### Policy E 4.4 Solar exposure

Orient new buildings to maximize solar resources, shading, ventilation, and lighting.

- Implementation Strategy E 4.4.1 Amend ordinances and plans to maximize solar resources
   Amend design plans, guidelines, and other documents to promote the following design techniques to maximize solar resources:
  - a. Passive solar design, thermal mass, and insulation to reduce space heating and cooling needs;
  - b. Shading on east, west, and south windows with overhangs, awnings, or deciduous trees; and
  - c. Sustainable site design and landscaping to create comfortable microclimates.
- Implementation Strategy E 4.4.2 Amend ordinances and plans to mitigate urban heat island effect
   Amend design plans and guidelines to encourage projects in urban areas to avoid or mitigate the urban heat island effect.
   Design techniques include:
  - a. Minimizing use of dark materials on roofs, parking lots, and roads.
  - Maximizing vegetation, particularly shade trees, to cool air temperatures.
  - c. Reducing the area of large surface parking lots.
  - d. Using light-colored aggregate in new road construction and repaving projects adjacent to existing cities and in some of the communities north of the Cuesta Grade. (E 27.1)

#### Policy E 4.5 Healthy indoor environments

Encourage healthy indoor environmental quality in new and renovated buildings, including publicly funded affordable housing projects and County buildings, using healthy building materials, finishes, paints, and products. "California is blessed with vast resources...we rededicate ourselves to making California cleaner, greener and more prosperous. The green building approach builds in conservation from the ground up....It's good for business and it's great for the environment."

-Gov. Arnold Schwarzenegger

GENERAL PLAN



San Luis Obispo County's diversion rate in 2006 was 63%. A **diversion rate** is the percentage of its total waste that a jurisdiction diverts from disposal at a landfill through reduction, reuse, recycling and composting programs. The State of California requires jurisdictions to achieve a minimum 50% diversion rate. - <u>CA</u> <u>Integrated Waste</u> <u>Management Board</u>

# ENERGY

- Implementation Strategy E 4.5.1 Amend ordinances to encourage healthy building materials
   Amend design plans and building ordinances to encourage the use of the following materials, products, and techniques:
  - Recycled-content, formaldehyde-free fiberglass insulation, cellulose insulation, or other natural insulation products
  - No- or low-Volatile Organic Compounds (VOC), formaldehyde-free paints, stains, and adhesives
  - No- or low -VOC, furniture, particleboard, and cabinetry
  - Use of exposed concrete as a finished floor
  - Appropriate low-E windows, when possible
  - Natural, recycled-content, and low-VOC carpet
  - Natural light.

GOAL

# RECYCLING, WASTE DIVERSION, AND REUSE PROGRAMS WILL ACHIEVE AS CLOSE TO ZERO WASTE AS POSSIBLE.

### Policy E 5.1 Source reduction and waste diversion

Encourage source reduction and diversion of solid waste generated to as near zero waste as possible, in order to reduce energy consumption.

- Implementation Strategy E 5.1.1 Achieve Waste Diversion Rate
   Create a waste reduction, reuse, and recycling program aimed at achieving a diversion rate of at least 70% by 2015 for the unincorporated county.
- Implementation Strategy E 5.1.2 Promote business that promote source reduction Support and promote ongoing efforts of the business community, schools and universities, and nonprofit organizations to promote green business practices and products that are locally sourced and/or to reduce, reuse, or recycle materials.

 Implementation Strategy E 5.1.3 Accommodate recycling containers in trash enclosures
 Develop new standards to accommodate recycling containers in trash enclosures. At a minimum, enclosures should accommodate two four-yard containers.

#### Policy E 5.2 County operations and waste

Continue efforts to reduce waste from County operations through reduction, reuse, and recycling in all County programs, operations, facilities, and buildings.

 Implementation Strategy E 5.2.1 Adopt an Environmentally Preferable Purchasing Policy

Develop and implement an Environmentally Preferable Purchasing (EPP) policy to purchase recycled content and toxic-free products for County supplies, equipment and services, and to promote recycling markets.

 Implementation Strategy E 5.2.2 Ensure recycling at all County facilities
 Ensure that recyclable materials are collected at all County

facilities, and develop a policy for the salvage and reuse/recycling of County equipment at the end of its useful life in order to ensure that it is responsibly disposed of or recycled.

#### Policy E 5.3 Biomass and composting

Encourage biomass, green waste, and food waste composting facilities (agricultural, residential, food service, commercial, industrial sources) for the proper disposal of locally generated waste in locations where land use conflicts can be minimized. (Refer to **Policy AGP 13**)

Implementation Strategy E 5.3.1 Countywide food waste composting
 Work with the Integrated Waste Management Authority (IWMA), CalPoly, the school districts, and other state and local agencies to develop a Countywide Food Waste Composting Program for businesses, schools, and residents.



Solar Panels Man shapes himself through decisions that shape his environment.

—Rene Dubos

#### <u>Environmentally</u> Preferable Purchasing

(EPP) is the procurement of goods and services that have a reduced impact on human health and the environment as compared to other goods and services serving the same purpose.



#### Policy E 5.4 Construction and demolition waste

Continue to reduce construction and demolition waste in accordance with the County's Construction and Demolition Debris Recycling Ordinance. Support increased diversion rates over time.

**Policy E 5.5 Sustainable materials in County buildings** Reuse building materials, use materials with recycled content, or use materials that are derived from sustainable, renewable, and/or local sources to the greatest extent feasible in County buildings. In proposed County projects, encourage construction that:

- a. Minimizes building materials with high-embodied energy (e.g., cement, metal)
- b. Uses fly ash in concrete. Provide incentives and consider regulations requiring new building projects that use a substantial amount of concrete to incorporate at least 25% fly ash to offset some of the energy use and greenhouse gas emissions associated with the manufacturing of cement
- c. Uses sustainable materials for pipes
- d. Uses spacing, sizes, and modular dimensions that minimize lumber use and optimize performance
- e. Uses recycled aggregate in concrete
- f. Uses straw bale construction in exterior walls.



#### GOAL

6

THE USE OF LOCAL RENEWABLE ENERGY RESOURCES WILL BE MAXIMIZED AS PART OF AN OVERALL ENERGY PORTFOLIO.

#### Policy E 6.1 Sustainable energy sources

Promote the development of sustainable energy sources and renewable energy projects through streamlined planning and development rules, codes, processing, and other incentives.

 Implementation Strategy E 6.1.1 Eliminate obstacles to renewable energy use in the County Revise County policies and regulations as needed by the end of 2010 to eliminate barriers to or unreasonable restrictions on the use of renewable energy.

# Policy E 6.2 Commercial solar and wind power and other renewable energy systems

Encourage and support the development of solar and wind power and other renewable energy systems as commercial energy enterprises.

 Implementation Strategy E 6.2.1 Review of large solar projects

Evaluate large-scale commercial solar projects (i.e. over 20 MW) to favor technologies that maximize the facility's power production and minimize the physical effects of the project. Physical effects include, but are not limited to, noise, area of land disturbance and water use.

Implementation Strategy E 6.2.2 Encourage development of wind power facilities Encourage the development of wind power in areas where wind speeds make commercial wind power feasible. Focus should be placed on locations near existing power facilities and existing transmission lines.

Distributed energy resources (DER) are small, modular, energy generation and storage technologies that provide electric capacity or energy located where it's needed, often at a customer's location. These facilities are typically owned by nonutility entities, such as generation developers or utility customers that offset all or part of the customer's on-site electrical load. DER's typically produce less than 20 megawatts (MW) of power near the point of use and include wind turbines. photovoltaics (PV), fuel cells, microturbines, reciprocating engines, combustion turbines, cogeneration, and energy storage systems. DER systems may be either connected to the local electric power grid or isolated from the grid in stand-alone applications. California Energy Commission

- Implementation Strategy E 6.2.3 Use of disturbed sites Examine the potential for use of previously disturbed sites such as former mine sites, or disturbed urban areas such as parking lots.
- Implementation Strategy E 6.2.4 Use of existing energygenerating sites
   Collaborate with local and State agencies and energy facility operators to develop renewable energy resources at existing energy generating sites.

#### Policy E 6.3 Small-scale renewable energy resources

Develop renewable energy resources in the county, including the safe, effective, and efficient use of small wind energy systems, solar power systems, passive solar buildings, and other renewable energy systems designed for onsite home, farm, and commercial use.

#### Policy E 6.4 Solar electric power facilities

Use solar electric power generating facilities, especially in areas remote from utility services and in places where such systems can meet specialized power needs cost effectively.

#### Policy E 6.5 Geothermal resources

Use geothermal hot water for heating spas, greenhouses, or other beneficial applications that appropriately dispose of waste.

 Implementation Strategy E 6.5.1 Existing energy facility sites

Collaborate with operators of existing energy facilities to study the potential for geothermal development.

#### Policy E 6.6 Distributed energy

Encourage distributed energy resources to increase the efficiency of the power and transmission system and use of local renewable fuel sources.

#### Policy E 6.7 Cogeneration facilities

Encourage cogeneration facilities as a method of reducing overall energy use.

◊ Implementation Strategy E 6.7.1 Cogeneration facility guidelines

In cases where a cogeneration facility does not meet the criteria for an exemption from an environmental determination review the project both for environmental and fiscal impacts of development consistent with the following guidelines:

- a. Cogeneration facilities should be built and operated in conjunction with existing facilities whenever possible.
- b. The risk of public exposure to hazardous materials should be minimized by using the least hazardous materials feasible, engineering safety systems, and state-of-the-art safety management practices.
- c. The cogeneration project will not change performance standards regarding air pollution, noise, traffic, or other possible nuisances to nearby property owners.
- d. The proposed facility shall comply with emission standards for harmful air pollutants, as determined by the San Luis Obispo Air Pollution Control District and the California Energy Commission, when appropriate.
- e. The applicant shall demonstrate that sufficient buffers exist to protect the housing units on adjacent properties from all hazards.

#### Policy E 6.8 Renewable Energy Resources

Designate and protect areas that contain renewable energy resources such as wind, solar, geothermal, and small hydroelectric. Continue to explore and encourage the development of renewable energy resources through further streamlining actions.

- Implementation Strategy E 6.8.1 Mapping of resources
   Use state, federal, or other available data to map areas that contain renewable energy resources.
- Implementation Strategy E 6.8.2 Streamlining of Renewable Energy Facilities

#### Renewable Energy

facilities include but are not limited to the following renewable energy projects: solar power generating facilities, waste-burning biomass facilities, wind energy development, and hydroelectric facilities.

- a. Encourage further broad-based environmental review for renewable energy projects that can be used to streamline the approval of future projects.
- b. Revise existing streamlining efforts in the future as major technological changes occur.

#### *Policy E 6.9 Commercial Renewable Energy Facility Siting*

Renewable energy is developed most effectively where sufficient renewable energy resources exist (e.g., solar energy requires a certain amount of sunlight to be efficient and wind energy requires a certain amount of wind.) In areas where renewable energy resources have been identified and mapped pursuant to Policy E 6.8, renewable energy development is dependent on the mapped resource and shall be given high priority while balancing the protection of other environmental resources.

GOAL

DESIGN, SITING, AND OPERATION OF NON-RENEWABLE ENERGY FACILITIES WILL BE ENVIRONMENTALLY APPROPRIATE.

#### **Policy E 7.1 Non-Renewable Energy Facility Siting** Energy, fossil fuel, and related facilities will be sited, constructed, and operated in a manner to protect the public from potential hazards and significant environmental impacts.

 Implementation Strategy E 7.1.1 Non-Renewable Energy facility design, siting, and operation standards
 Amend the Land Use Ordinance and the Coastal Zone Land

Amend the Land Use Ordinance and the Coastal Zone Land Use Ordinance as needed in order to accomplish the following objectives and codify the following requirements. Until the County adopts the ordinance amendments, use the following objectives and requirements to guide the review of development projects.

#### General

1) Proposed new and major additions to energy and fossil fuel facilities will provide a sufficient buffer zone from

#### Non-Renewable Energy:

energy from sources that use a non-renewable natural resource such as uranium or fossil fuels such as coal, or natural gas.

Fossil fuel facilities include, but are not limited to oil and gas wells, separators, and refineries.

existing or proposed human populations, with special consideration given to those who cannot be quickly evacuated to safety, such as the disabled and elderly. To establish a buffer zone, a comprehensive risk analysis should be completed.

- Underground all existing electrical distribution lines on the project site up to the transformer, to the point of onsite use, or to the point of interconnection to the utility. California Public Utilities Commission standards should be considered during the review process.
- Continue to maintain, operate, monitor, and repair the facility so that it does not constitute a public safety hazard or an environmental threat.
- 4) Employ the best reasonably achievable techniques available to prohibit disruption of environmentally sensitive areas such as wetlands, animal or bird refuges, or habitat of species of special concern. Avoid impacts to habitat of rare, threatened, or endangered species.
- 5) Locate new or expanded facilities outside sensitive view corridors, scenic, or recreational areas.
- If the proposed location visually impacts views of the site from public roads or lands, prepare a screening plan to minimize visual impacts.
- All exterior lighting shall be energy efficient and shielded to not extend beyond the site.
- Avoid or otherwise fully mitigate impacts to significant archeological, paleontological, agricultural, or historic resource sites.
- 9) Locate proposed facilities in geologically stable areas.
- 10) Require that all existing facilities and activities are in compliance with all previous permit conditions and all applicable laws prior to authorizing any new expansion.
- 11) Facilities shall not degrade surface or groundwater resources.



Transmission lines in the rural area

5.25

#### Electric and magnetic fields

- 12) Consider electric and magnetic fields (EMF) in planning for expansion, siting, and construction of future electric facilities. Apply EMF standards established by the California Energy Commission and the California Public Utilities Commission.
- 13) Monitor research and policy developments concerning electric and magnetic fields. If exposure standards are established in the future by state and federal agencies, consider including them in applicable ordinances.

#### **Consolidation of energy facilities**

- 14) Require consolidation of energy facilities in any expansion or modification project to the maximum extent technically, environmentally, and economically feasible. Require concurrent processing of the proposed facilities when appropriate to avoid or reduce project and cumulative impacts.
- 15) When new sites are needed for industrial or energy-related development, expansion of facilities on existing sites (or on land adjacent to existing sites) will take priority over new, undeveloped sites. Exceptions will only be allowed when it can be shown that:
  - a. Existing and adjacent locations are infeasible and the environmental impacts of opening up a new site are less than the impacts of expansion on or adjacent to existing sites.
  - b. To do otherwise would adversely affect the public welfare.
  - c. Adverse environmental impacts are mitigated to the maximum extent feasible.
- 16) Construction and/or expansion of new energy, fossil fuel, or industrial processing facilities at consolidated sites will be considered only if proposed facilities are not redundant. Operators and owners of such sites shall make their facilities and property available for commingled processing

and consolidation of oil and gas facilities on an equitable and non-discriminatory basis.

#### **Extended reach facilities**

- 17) An application for a land use permit for a project including onshore extended reach facilities for the purpose of exploring or developing offshore oil or gas resources may be approved only after a specific plan, as described in government code section 65450 et seq., for overall development of the parcel has been approved.
- 18) If extended reach facilities are proposed, surface disturbance should be minimized by consolidating the drilling facilities and using existing pipeline rights-of-way, where feasible, fully before new sites are considered.

#### Toxic and hazardous releases

- 19) The County's emergency response plan and Office of Emergency Services should be consulted prior to operation of a new energy facility. Local fire departments should also be contacted.
- 20) Reduce the risk of hazardous material releases at power producing facilities consistent with requirements of California Health and Safety Code sections 25500 through 25553. Methods of risk reduction should include (1) use of non-hazardous or less hazardous material, (2) use of engineered safety systems, and (3) use of administrative controls.
- 21) State and federally approved oil spill contingency and countermeasure plans for proposed facilities shall be submitted to the County prior to the start-up of operations. These plans shall demonstrate, at a minimum that adequate containment exists to contain 110% of each tank's contents, unless otherwise required by applicable state and federal regulations.
- 22) In the event of a petroleum or hydrocarbon release, the County will implement the following:
  - a. Emergency response and initial cleanup of the spill site shall be completed as soon as possible. An emergency



Morro Bay Power Plant



permit shall be granted as appropriate. A state of emergency as defined in the General Plan must exist for a permit to be granted.

- Environmental impacts caused by response and cleanup activities shall be minimized. Environmental monitor(s) shall be onsite to reduce possible impacts.
- c. A post-spill environmental assessment of the site shall be performed to evaluate and quantify the damage to resources.
- Remediation and restoration of the site to pre-spill conditions shall be completed by the responsible party. These activities are subject to the land use permit/environmental review process.
- e. If the site cannot be restored to its pre-spill condition, the responsible party shall contribute to an environmental enhancement fund to be used for on- or offsite mitigation projects.
- 23) Encourage existing and proposed energy facilities to prevent oil, gas, and other toxic releases into the environment by: (1) taking measures to prevent releases and spills, (2) preparing for responding to a spill or release, and (3) providing for the protection of sensitive resources. A review of facilities spill response plans or reports from other agencies should be completed to monitor compliance.

#### **Pipelines**

- 24) Require new pipeline corridors to consolidate within existing pipeline or electrical transmission corridors to the maximum extent technically and environmentally feasible.
- 25) If new pipelines are necessary, encourage common carrier or multiple-user pipeline construction and use.

#### **Transmission lines**

26) Discourage land uses that may expose human populations to undue risk of human exposure to potential hazards of large transmission lines.

- 27) Discretionary development and proposed land divisions should follow the standards established by the California Energy Commission and Public Utilities Commission for electric and magnetic field (EMF) exposure.
- 28) Evaluate proposals for new transmission lines for alternatives that significantly reduce their visibility and impacts to sensitive environmental resources.
- 29) As part of the siting analysis, proposals for new transmission line corridors should consider the following preferences to minimize impacts:
  - a. First preference shall be for projects that upgrade or modify existing lines to meet increased demand. In such instances, the existing right-of-way should be maintained at its present width wherever possible.
  - b. Second preference is for corridor consolidation with existing transmission lines, unless there are cumulative impacts that outweigh the benefits of consolidation. In such instances, the amount of additional right-of-way width to be acquired should be kept to the minimum area feasible for operation of the lines.
  - c. The least preferred option is for transmission line projects that require entirely new corridors. In this instance, consideration shall first be given to using existing utility rights-of-way, including pipelines, railroads, and communication cables.
- 30) Existing access roads should be used wherever possible to avoid unnecessary disturbance of vegetation. If new roads are constructed, existing contours should be followed to minimize ground disturbance. New roads shall be constructed in a way that minimizes vegetation removal. A restoration plan shall be included as part of the application to restore the area to pre-construction conditions as much as possible. Guidelines or equivalent alternatives should be considered by the review authority for all transmission lines.

#### Policy E 7.2 Facility Upgrades and Replacements

Encourage the upgrade or replacement of existing, older facilities to current safety and environmental standards where appropriate, support the decommissioning and redevelopment of existing, older facilities where current safety and environmental standards cannot be met and existing energy production could be replaced with renewable energy sources. Further, develop a cooperative working relationship with the utility and oil and gas industry, including workshops to provide information about the permitting process.

- Implementation Strategy E 7.2.1 Inventory existing facilities
   Develop an inventory of all existing facilities including size, age, condition of the facility, current monitoring programs, and use of hazardous materials.
- Implementation Strategy E 7.2.2 Lifespan and upgrade analysis
   Include a projected lifespan and analysis of upgrade versus decommissioning for each facility.

#### Policy E 7.3 Safety Coordination

The County will coordinate with state and federal agencies to promote an information exchange about safety standards and regulations with regard to electricity and fossil fuel facilities.

 Implementation Strategy E 7.3.1 Establish a safety committee

Establish a safety review committee consisting of qualified individuals from industry, public interest groups, local, state, and federal agencies for proposed major energy projects. The purpose of the group is to review all safety-related issues associated with the operation of the facility and to coordinate responses from enforcement and review agencies as well as the public.

#### Policy E 7.4 National Repository for Nuclear Waste

Carefully monitor the federal government's progress in establishing a national repository for high-level nuclear waste and the state's efforts for low-level nuclear waste disposal. The County

should advocate the safest methods of transportation and storage of nuclear waste.

◊ Implementation Strategy E 7.4.1 Reports on status of national repository

The County should annually request a report on the status of the government's progress in establishing a national repository for highly radioactive waste. The County should collaborate with the California Energy Commission (CEC), the state legislature, and the Attorney General's office to provide local input into the decision into the siting of longer-term and/or permanent disposal sites.

## **Summary of Implementation Strategies**

For each implementation strategy described in this chapter, the following table (**Table E-2**) summarizes the County department or other agency that has primary responsibility for carrying out that strategy. In addition, the table summarizes the priority, estimated year of initiation, and potential source of funding of each strategy. The actual timeframe for implementing the strategies is dependent upon the availability of adequate staff and funding.

| Implementation<br>Strategies  | Responsible<br>Department or<br>Agency <sup>1</sup> | Priority | Timeframe<br>to Start | Possible<br>Funding<br>Sources <sup>2</sup> |
|---|---|----------|-----------------------|---|
| IS E 1.2.1 Evaluate Community<br>Choice Aggregation                                 | APCD, PB, GS  | Medium   | 2011                  | N/A   |
| IS E 1.2.2 Develop a Countywide<br>Emergency Energy Contingency<br>Plan             | OES, PB, PW   | Medium   | 2012                  | GF  |
| IS E 1.2.3 Use of tax assessments to retrofit residential and commercial properties | PB  | High     | 2011                  | TBD   |
| IS E 1.2.4 Renewable Portfolio<br>Standard  | РВ  | High     | 2011                  | DB  |
| IS E 1.3.1 Use of renewable energy at County facilities                             | GS, all departments                                 | High     | 2011                  | GF, DB,<br>Grants                           |



| Implementation<br>Strategies  | Responsible<br>Department or Priority<br>Agency <sup>1</sup> |                               | Timeframe<br>to Start    | Possible<br>Funding<br>Sources <sup>2</sup> |
|---|--|-------------------------------|--------------------------|---|
| IS E 1.3.3 Assess County's use of renewable energy sources and set a target         | PB, GS   | PB, GS High 2011              |                          | DB  |
| IS E 1.3.4 Renewable Energy and<br>Clean Distributed Generation Plan                | PB, GS   | High                          | 2011                     | DB  |
| IS E 1.4.1 Capture methane from<br>landfills and wastewater treatment<br>facilities | PB, PW   | Medium                        | 2012                     | N/A   |
| IS E 2.1.1 Apply Energy Use Policy to all County facilities                         | GS   | High                          | 2011                     | DB  |
| IS E 2.1.2 Use of Life Cycle Costing  | GS, PW   | High                          | 2010                     | N/A   |
| IS E 2.1.3 Energy efficiency in<br>project management                               | GS   | Medium                        | 2011                     | N/A   |
| IS E 2.2.1 Monitor and report<br>energy use   | GS, PW, SS, LIB,<br>Fire                                     | High Immediately <sup>3</sup> |                          | DB  |
| IS E 2.2.2 Implement energy<br>efficiency activities and<br>improvements            | GS High Immediately  |                               | Immediately <sup>3</sup> | DB  |
| IS E 2.3.1 Amend Annual Resource<br>Summary Report: Water<br>Conservation           | PB High  |                               | 2010                     | DB  |
| IS E 3.1.1 Incorporate renewable<br>energy systems in new<br>development            | PB   | High Immediately              |                          | N/A   |
| IS E 3.1.2 Encourage renewable<br>energy in new development                         | PB   | High                          | 2010                     | DB  |
| IS E 3.2.1 Develop energy<br>efficiency program for new<br>development              | PB   | Medium                        | 2011                     | DB  |
| IS E 3.2.2 Energy Efficiency Retrofit<br>Program                                    | PB   | Medium                        | 2011                     | DB  |
| IS E 3.3.1 Evaluate installation of renewable energy systems at water facilities    | PW   | Medium                        | 2011                     | DB  |
| IS E 3.4.1 Voluntary energy<br>efficiency and conservation                          | РВ   | Medium                        | 2010                     | N/A   |

| Implementation<br>Strategies  | Responsible<br>Department or Priority<br>Agency <sup>1</sup> |        | Timeframe<br>to Start | Possible<br>Funding<br>Sources <sup>2</sup> |
|---|--|--------|-----------------------|---|
| IS E 3.4.2 Amend ordinances:<br>energy conservation incentives                            | PB   | Medium | 2012                  | DB  |
| IS E 3.4.3 Encourage energy and water efficiency improvements                             | PB   | Medium | 2010                  | N/A   |
| IS E 3.4.4 Energy efficiency and conservation education: public                           | PB   | Medium | 2010                  | N/A   |
| IS E 3.4.5 Energy efficiency and conservation training and education: County staff        | Administration   | Medium | 2011                  | DB/Grants                                   |
| IS E 3.5.1 Collaborate to provide<br>demonstration projects                               | PB, PW   | Low    | 2012                  | DB, grant                                   |
| IS E 3.6.1 Sponsor energy education to agriculture community                              | AG, ALAB   | High   | 2010                  | DB  |
| IS E 4.1.1 Continue partnerships for green building education                             | РВ   | Medium | Immediately3          | DB  |
| IS E 4.1.2 Develop Green Building<br>Program  | РВ   | High   | 2011                  | DB  |
| IS E 4.1.3 Use of Green Building<br>Checklists  | PB   | High   | Immediately           | N/A   |
| IS E 4.1.4 Collaborate to develop<br>uniform Green Building Codes                         | PB   | Medium | 2011                  | DB  |
| IS E 4.1.5 Encourage green affordable housing   | PB   | Medium | 2013                  | DB  |
| IS E 4.2.1 Remove disincentives to green building   | PB   | High   | 2010                  | DB  |
| IS E 4.2.2 Provide expedited permitting for green building projects                       | PB   | High   | 2010                  | DB  |
| IS E 4.3.1 Prepare a Green<br>Building Checklist for County<br>facilities                 | РВ   | High   | 2010                  | DB  |
| IS E 4.3.2 Apply Green Building<br>Operations and Maintenance to all<br>County operations | GS, PW, PB   | Medium | 2012                  | DB  |
| IS E 4.3.3 Support Green Building<br>Accreditation for County staff                       | PB, GS, PW   | Medium | 2012                  | DB  |



| Implementation<br>Strategies   | Responsible<br>Department or Priority<br>Agency <sup>1</sup> |           | Timeframe<br>to Start    | Possible<br>Funding<br>Sources <sup>2</sup> |
|--|--|-----------|--------------------------|---|
| IS E 4.4.1 Amend ordinances and plans to maximize solar resources                | PB   | Medium    | 2012                     | DB  |
| IS E 4.4.2 Amend ordinances and<br>plans to mitigate urban heat island<br>effect | PB, PW   | Medium    | 2012                     | DB  |
| IS E 4.5.1 Amend ordinances to<br>encourage healthy building<br>materials        | PB   | Medium    | 2012                     | DB  |
| IS E 5.1.1 Achieve Waste Diversion<br>Rate                                       | PW   | High      | 2010                     | DB  |
| IS E 5.1.2 Promote business that promote source reduction                        | PB   | Medium    | 2011                     | N/A   |
| IS E 5.1.3 Accommodate recycling containers in trash enclosures                  | PB, PW Medium 2012   |           | 2012                     | DB  |
| IS E 5.2.1 Adopt an<br>Environmentally Preferable<br>Purchasing Policy           | GS   | Medium    | 2012                     | DB  |
| IS E 5.2.2 Ensure recycling at all<br>County facilities                          | GS   | High      | 2010                     | DB  |
| IS E 5.3.1 Countywide food waste<br>composting                                   | PB   | PB Medium |                          | DB  |
| IS E 6.1.1 Eliminate obstacles to renewable energy use in the County             | PB   | PB High   |                          | DB  |
| IS E 6.2.1 Review of large solar projects  | PB   | High      | Immediately              | DB  |
| IS E 6.2.2 Encourage development of wind power facilities                        | РВ   | High      | Immediately <sup>3</sup> | DB  |
| IS E 6.2.3 Use of disturbed sites  | PB   | High      | Immediately <sup>3</sup> | DB  |
| IS E 6.2.4 Use of existing energy-<br>generating sites                           | PB   | High      | Immediately <sup>3</sup> | DB  |
| IS E 6.7.1 Cogeneration facility guidelines                                      | PB   | Medium    | Immediately              | N/A   |
| IS E 6.8.1 Mapping of resources  | РВ   | High      | 2010                     | DB, grants                                  |



| Implementation<br>Strategies   | Responsible<br>Department or<br>Agency <sup>1</sup> | Priority | Timeframe<br>to Start | Possible<br>Funding<br>Sources <sup>2</sup> |  |
|--|---|----------|-----------------------|---|--|
| IS E 6.8.2 Streamlining of<br>Renewable Energy Facilities  | РВ  | High     | 2010                  | DB, grants                                  |  |
| IS E 7.1.1 Energy facility design, siting, and operation standards   | PB, PW  | Medium   | 2012                  | N/A   |  |
| IS E 7.2.1 Inventory existing fossil fuel facilities   | PB  | Medium   | Immediately           | N/A   |  |
| IS E 7.2.2 Lifespan and upgrade analysis   | РВ  | Medium   | 2010                  | DB  |  |
| IS E 7.3.1 Establish a safety<br>committee   | PB, OES, Fire Medium Immedi                         |          | Immediately           | N/A   |  |
| IS E 7.4.1 Reports on status of<br>national repository   | РВ  | High     | 2010                  | DB, grants                                  |  |
| Notes:         1 Department abbreviations:         Administration = County Administrative Office         AG = County Agriculture Department         ALAB = Agricultural Liaison Board         APCD = SLO Air Pollution Control District         Cities = Incorporated cities         Fire = County Fire Department/CAL FIRE         GS = County General Services Agency         LIB = County Library         OES = County Office of Emergency Services         PB = County Department of Planning and Building         PW = County Department of Public Works         RTA = San Luis Obispo Regional Transit Agency         SS = County Department of Social Services         2         Funding source abbreviations:         GF = General Fund         DB = Planning and Building Department Budget         3 Denotes an ongoing activity.         Source: Department of Planning and Building, 2009. |   |          |                       |   |  |



# MINERAL RESOURCES



#### **Purpose**

The County recognizes the need to balance the economic benefit of mineral extraction with the protection of people and the environment from potential adverse effects of mining activities.

# Introduction

Valuable minerals can be found throughout San Luis Obispo County's physical landscape. Mineral mining dates back to the mid-nineteenth century when copper and coal were first mined. In the early 20th Century, chromite, manganese, and mercury were also mined. Today, mineral extraction consists mainly of sand and gravel mining. (Oil production is addressed in Chapter 5 Energy Resources.) Mineral extraction provides needed raw materials for construction and road base, as examples, and contributes significantly to the county and regional economy. **Appendix 6** provides an overview of mineral resources in the county.

# **Relationship to Other Elements, Plans, and Programs**

Many policies in the water, air quality, soils, and biological resources chapters of this Element and in the Agriculture Element relate to mineral resources. For example, mining of minerals can cause soil erosion, convert farmland, impair downstream water quality, create air quality problems, and affect special status plants and animals. Together, the policies in this Element balance protection of mineral and other resources in order to enable exploitation of important mineral resources while protecting the environment. Refer to **Figure MN-1** for locations of existing mines. The EX (Energy or Extractive Resource Area) and EX<sub>1</sub> (Extractive

# MINERAL RESOURCES

We will recognize success when...

 Valuable mineral resources are extracted in an environmentally sound manner.

 Significant aggregate materials are used in a sustainable manner that balances the rate of extraction with the rate of natural replenishment.

 There is no loss of opportunities to take advantage of valuable mineral resources due to encroachment of incompatible land uses. Resource Area) combining designations (zoning overlays) described in the Land Use Element Framework for Planning contains detailed purpose statements for areas that have been identified as containing or likely to contain significant mineral resources. **Figure MN-2** identifies the areas subject to EX and  $EX_1$  designations. The Land Use Ordinance contains the specific standards for development of mineral extraction, and those standards help implement the following policies.

#### **Major Issues**

Mineral resources play an important part in the county's economic vitality. As such, these resources need to be protected so that they are available to the present and future generations that need them.

- 1) Mineral resources must be identified and mapped before they can be protected.
- Protection of mineral resources requires limiting nearby land uses to those that will not be adversely affected by mining activities, and that will not adversely affect mining operations.
- Mining of mineral resources can cause environmental harm. The exploitation of mineral resources needs to be balanced with the environmental effects of mining.

# Goals, Policies, and Implementation Strategies

The intent of the following goals, policies and implementation strategies is to identify and protect mineral resources for present and future generations. Extraction of these resources makes a valuable contribution to the county's and the region's economic vitality.

# TABLE MN-1 GOALS FOR MINERAL RESOURCES

| Goal MN 1 | Conservation and development of significant mineral deposits will be a high priority, but will be balanced with other County general plan goals and policies. |
|-----------|---|
| Goal MN 2 | Significant mineral resources will be protected from land uses that threaten their availability for future mining.  |
| Goal MN 3 | Balance mining of mineral resources with sensitive natural resources and existing adjacent uses.  |



# CONSERVATION AND DEVELOPMENT OF SIGNIFICANT MINERAL DEPOSITS WILL BE A HIGH PRIORITY, BUT WILL BE BALANCED WITH OTHER COUNTY GENERAL PLAN GOALS AND POLICIES.

#### **Policy MN 1.1 Balance Test**

Evaluate proposed mining operations in areas having open space, scenic, habitat, recreational, or agricultural value by balancing these values against the need for extracting mineral resources from such areas.

# GOAL

2

## SIGNIFICANT MINERAL RESOURCES WILL BE PROTECTED FROM LAND USES THAT THREATEN THEIR AVAILABILITY FOR FUTURE MINING.

#### **Policy MN 2.1 Protect Mineral Resources**

Protect mineral and aggregate resources from incompatible uses in designated areas likely to contain significant mineral deposits in order that such deposits may be available for future use. Extract in-stream aggregate materials in a sustainable manner that balances the rate of extraction with the rate of natural replenishment.



An example of mining activities in the county.







An example of mining activities in the county.

Implementation Strategy MN 2.1.1 Identify Mineral Extraction Areas Continue to identify areas where mineral extraction occurs or is proposed, where mineral reserves of statewide importance exist, and where other significant mineral deposits are or are likely to be found. Amend the Land Use Element to include these areas within the EX and EX<sub>1</sub> combining designations as applicable.

- Implementation Strategy MN 2.1.2 Aggregate Materials Management Plan Require preparation of aggregate materials management plans for watersheds with significant proposed in-stream sand and gravel mining. The management plans shall include, at a minimum:
  - Proposed rates of extraction compared to the sustainable rate of natural replenishment of materials for the entire watershed.
  - 2) Best practices for sustainable operations that protect water and environmental quality and other properties.
  - 3) Identify areas, outside of EX or EX1 combining designations, where mineral extraction is not appropriate.

Coordinate planned development with development of the Salinas River Watershed Plan (See Implementation Strategy BR 4.1.2).

#### **Policy MN 2.2 Incompatible Development**

Protect existing resource extraction operations from encroachment by incompatible land uses, land use category changes, and land divisions that could hinder resource extraction.

#### **Policy MN 2.3 General Plan Amendments**

When reviewing general plan amendments in areas that contain mineral reserves of statewide significance and in areas where other significant mineral deposits occur or are likely to occur, give priority to maintaining existing land use categories that allow and are compatible with resource extraction.

# MINERAL RESOURCES

#### **Policy MN 2.4 Discretionary Land Use Permits**

Require that proposed uses that require a discretionary land use permit will not adversely affect the continuing operation or expansion of an existing extraction use.

 Implementation Strategy MN 2.4.1 Mineral Resources Report

For proposed uses other than mineral extraction projects in the EX and  $EX_1$  combining designation, require a mineral resources report, and require that the proposed use will not adversely affect the continuing operation or expansion of a mineral resource extraction use.

# GOAL

#### BALANCE MINING OF MINERAL RESOURCES WITH SENSITIVE NATURAL RESOURCES AND EXISTING ADJACENT USES.

#### **Policy MN 3.1 Environmental effects**

Ensure that all environmental effects are studied before permitting any resource extraction activities (e.g., mining and geothermal development).

#### **Policy MN 3.2 Reclamation**

Require the ongoing reclamation of sand and gravel mining areas by implementing reclamation plans. In conformance with state law, require all mining operations to have up-to-date reclamation plans and adequate financial assurances to the satisfaction of the County.

#### *Policy MN 3.3 Environmentally and Visually Sensitive Areas*

Extraction operations may be established in designated environmentally or visually sensitive areas only when the Board of Supervisors determines that the need for a particular resource or facility outweighs the value of the sensitive land resource. Such sensitive resources may be subject to extraction operations only when no feasible alternative sites are available. We abuse land because we regard it as a commodity belonging to us. When we see the land as a community to which we belong, we may begin to use it with love and respect. —Aldo Leopold

#### **Policy MN 3.4 Site restoration**

Require site restoration and rehabilitation as part of the reclamation plan as required by State law.

Implementation Strategy MN 3.4.1 Site restoration plans Require that applications for proposed extraction operations include plans for preserving the long-term productivity of the site and other affected lands, as well as ensuring on-site and off-site restoration of affected lands. Identify riparian corridors, other sensitive habitats, and Important Agricultural Soils prior to development, and restore and enhance them as a condition of the required land use permit. (Also refer to Soils Policy SL 3.1.)

#### **Policy MN 3.5 Best Management Practices**

Require that construction and access roads to mining, quarrying, and drilling sites meet County road standards and use Best Management Practices to avoid or minimize environmental impacts. Require that extraction site access routes do not create nuisances, hazards, or road maintenance problems.

Implementation Strategy for MN 3.1 – 3.5 Land Use Ordinance Amendments Amend Land Use Ordinance, Coastal Zone Land Use Ordinance, and/or Area Plan standards as needed to assure that proposed mineral or oil extraction projects adequately protect environmentally sensitive resources, Important Agricultural Soils, and existing uses. (Also refer to Soils Policy SL 3.1.)

#### Policy MN 3.6 Site Inventory

Maintain an inventory of existing quarries that lists the status of active and inactive quarries and mines and makes recommendations for restoration of uncontrolled and abandoned sites.

# FIGURE MN-1 MINING (SMARA) LOCATIONS



# FIGURE MN-2

ENERGY AND EXTRACTIVE RESOURCE AREA LOCATIONS (EX AND EX<sub>1</sub>)



# **Summary of Implementation Strategies**

For each implementation strategy described in this chapter, the following table (Table MN-2) summarizes the County department or other agency that has primary responsibility for carrying out that strategy. In addition, the table summarizes the priority, estimated year of initiation, and potential source of funding of each strategy. The actual timeframe for implementing the strategies is dependent upon the availability of adequate staff and funding.

#### **TABLE MN-2**

#### **MINERAL RESOURCES IMPLEMENTATION**

| Implementation<br>Strategy                      | Responsible<br>Department or<br>Agency <sup>1</sup> | Priority | Timeframe<br>to Start | Possible<br>Funding<br>Sources <sup>2</sup> |
|---|---|----------|-----------------------|---|
| MN 2.1.1 Mineral Extraction Areas               | PB  | Medium   | 2011                  | DB  |
| MN 2.1.2 Aggregate Materials<br>Management Plan | PB, other agencies                                  | Medium   | 2011                  | Grants,<br>other<br>agencies,<br>fees       |
| MN 2.4.1 Mineral Resources Report               | PB  | High     | Immediately           | N/A   |
| MN 3.1-3.5 Land Use Ordinance<br>Amendments     | PB, AG  | Medium   | 2013                  | DB  |
| MN 3.4.1 Site restoration plans                 | PB  | High     | Ongoing               | DB  |

Notes:

1 Department abbreviations:

AG = County department of Agriculture

PB = County Department of Planning and Building

2 Funding source abbreviations:

GF = General Fund

DB = Planning and Building Department Budget Source: Department of Planning and Building, 2009.



# **OPEN SPACE RESOURCES**

#### **Purpose**

San Luis Obispo County supports the protection, restoration, and preservation of significant open space features, which are irreplaceable resources for enjoyment by current and future generations. This is necessary in order to enjoy scenic beauty and recreation, discourage premature and unnecessary conversion of open space to urban uses, maintain public health and safety, and maintain a vital economy.

The local Open Space Plan of the County is comprised of this COSE, together with the Agriculture Element and the Parks and Recreation Element, consistent with Government Code section 65560 et seq.

## Introduction

Our county is fortunate to have abundant open space features, including majestic natural landmarks, outstanding scenic vistas, important wildlife habitats, lands with recreational opportunities, and other valuable open space resources.

Diverse open space resources are a defining characteristic of San Luis Obispo County. They provide a major attraction to visitors from around the world and make this county a special place to live. These resources include the unique 1,000,000-year-old landmark volcanic peaks known as The Morros, stretching from Morro Rock to Islay Hill in San Luis Obispo; significant coastal wetlands and rare coastal dune ecosystems; the oak woodlands of the Adelaida area; and the stark beauty and endangered wildlife of the Carrizo Plains. These places are unique and worthy of protection for their intrinsic value. In addition, recreation and Open Space as defined by Government Code section 65560 et seq. includes a broad range of resources. The Government Code definition reads, in part:

Open Space is "...any parcel or area of land or water which is essentially unimproved and devoted to an open space use...as designated on a local ....open space plan as any of the following:

...open space for the preservation of natural resources...

...The managed production of resource

....for outdoor recreation ...for public health and safety..."

(Government code 65560(B))

Agricultural lands and open space resources thereon are addressed in the Agriculture Element. Mineral resources are addressed in Chapter 6 – Mineral Resources.

See Appendix 7 for the full text of the Government Code definition of Open Space tourism that are based on the local open space resources contribute substantially to the local economy. **Appendix 7** provides an overview of the county's open space resources.

Open Space as defined\_by Government Code section 65560 includes a broad range of resources. For purposes of this COSE open space lands are resources or features of the landscape with unique or sensitive habitat for plants and animals, recreational opportunities, distinctive scenic values, hazards that threaten public health and safety, archeological or historical sites\_and\_areas containing major mineral deposits.

# **Relationship to Other Elements, Plans,** and Programs

This chapter provides direction for the protection of the critical and diverse open space resources in the unincorporated areas of the county. State planning law defines open space to include a wide range of resources, including open space for the protection of natural resources, the managed production of resources, including agricultural lands and areas containing major mineral deposits and the protection of public health and safety. For purposes of the County's Open Space Plan, agricultural lands and open space resources thereon are addressed in the Agriculture Element, and areas containing major mineral deposits are addressed in the Mineral Resources chapter (Chapter 6) of this COSE. In addition, the Parks and Recreation Element identifies open space areas and habitats called Natural Areas, for acquisition, preservation, and maintenance. Those areas are primarily for resource protection, with the secondary purpose to provide for passive recreation. Outdoor recreation is also addressed in the Parks and Recreation Element.

This chapter affects the resources described in other chapters of this Element, which in turn affect open space resources. For example, rural development can fragment habitat, reducing wildlife's ability to survive. Maintaining open space in biologically sensitive areas will help prevent loss of habitat. Similarly, soil resources and vegetation are threatened by development on steep slopes. Preserving open space on steeper slopes will avoid erosion and loss of soil, will protect water quality, and may help protect scenic views. In short, protecting important biological, soils, visual, and cultural resources may at the same time help protect important open space resources.

#### HOW DO THE MAPS REFERENCED IN THIS ELEMENT **RELATE TO THE MAPS IN THE LAND USE ELEMENT?**

The land use maps referenced in this document do not zone property. As noted in the Agriculture Element, follow-up rezonings will need to be advertised for public hearings before changing any zoning on property. The California Coastal Commission will also have to hold public hearings and approve any zoning actions on properties located in the coastal zone. Wherever possible, this Element has been prepared to be consistent with the Land Use Element (LUE), and it is the LUE that applies zoning to individual properties.

**Table OS-1** shows the relationship between the map categories referenced in this Element and the corresponding land use categories (zoning) in the LUE. In some cases, the land use designations in this Element include all lands in the corresponding LUE category. In other cases, the designations in this Element include only some lands in the corresponding LUE category, depending on the location and use of a particular site.

# TABLE OS-1 RELATIONSHIP BETWEEN COSE DESIGNATIONS AND **LUE CATEGORIES**

|                                 | Agriculture and Open Space Element Designation <sup>1</sup> |                    |                                  |                                 |                             |  |
|---------------------------------|---|--------------------|----------------------------------|---------------------------------|-----------------------------|--|
| LUE Category                    | AG  | Large-Lot<br>Rural | Multi-Use<br>Public <sup>2</sup> | Small-Lot<br>Rural <sup>2</sup> | Urban<br>Lands <sup>3</sup> |  |
| Agriculture (AG)                | Х   |                    |                                  |                                 | Х                           |  |
| Rural Lands (RL)                |   | Х                  |                                  |                                 |                             |  |
| Recreation (REC)                |   | С                  | С                                |                                 | Х                           |  |
| Residential Rural (RR)          |   |                    |                                  | Х                               |                             |  |
| Rural Suburban (RS)             |   |                    |                                  | Х                               | Х                           |  |
| Residential Single Family (RSF) |   |                    |                                  |                                 | Х                           |  |
| Residential Multi-Family (RMF)  |   |                    |                                  |                                 | Х                           |  |
| Office & Professional (O/P)     |   |                    |                                  |                                 | Х                           |  |



# TABLE OS-1RELATIONSHIP BETWEEN COSE DESIGNATIONS ANDLUE CATEGORIES

|                        | Agriculture and Open Space Element Designation <sup>1</sup> |                    |                                  |                                 |                             |  |
|------------------------|---|--------------------|----------------------------------|---------------------------------|-----------------------------|--|
| LUE Category           | AG  | Large-Lot<br>Rural | Multi-Use<br>Public <sup>2</sup> | Small-Lot<br>Rural <sup>2</sup> | Urban<br>Lands <sup>3</sup> |  |
| Commercial Retail (CR) |   |                    |                                  |                                 | Х                           |  |
| Industrial (IND)       |   |                    |                                  |                                 | Х                           |  |
| Public Facilities (PF) |   |                    | С                                |                                 | Х                           |  |
| Open Space (OS)        |   | С                  | С                                |                                 | Х                           |  |

Notes:

1 These designation correspond to the LUE categories in this table where indicated with an "X" or "C." An "X" means that the designations in the Agriculture Element or this Element include all lands in the corresponding LUE category. A "C" means that the designations in the Agriculture Element or this Element may include the lands in the corresponding LUE category, depending on the location and use of the particular site.

2 Applies only within rural areas (outside of urban and village reserve lines).

3 Applies to areas within urban and village reserve lines as well as some areas planned for commercial, industrial, and other nonagricultural uses outside of urban and village reserve lines.

4 Land Use designations defined in the Land Use and Circulation Element.

Following is a description of the COSE designations and public ownership that are referenced in this plan and identified on **Figures OS-1** and **OS-2**.

#### Land Use Designations

**Agriculture.** This designation includes many different croplands and grazing lands that are individually and collectively important to the local agricultural economy. In addition, all lands covered by Williamson Act agricultural preserve contracts are included in this map designation. A more detailed description of agricultural lands can be found in the Agriculture Element. The Element's Appendix C contains a more detailed explanation of the criteria used in mapping the Agriculture designation.

**Large - Lot Rural.** This designation is applied to privately owned properties that have limited agricultural potential and where rural residences are the primary use on 20 to 320 acre parcels. This designation generally corresponds to the Rural Lands category in the LUE, but may also include some areas in the Recreation land use category that are developed with privately operated recreational uses on large acreage.

4 COUNTY OF SAN LUIS OBISPO

#### **OPEN SPACE RESOURCES**

There are several purposes for this designation, including: very low density rural development in areas of limited agricultural potential recognizing that such uses will be compatible with agricultural uses; protection of open space, watershed and wildlife habitat; maintenance of low population densities in rural areas; and maintaining a clear distinction between the urban/village areas and the surrounding rural areas.

**Small - Lot Rural.** This designation is characterized by residential uses but may also include scattered agricultural specialty uses, part-time agricultural activities, and ranchettes. The designation corresponds to the Residential Rural land use category in the LUE, and may include some areas in the Residential Suburban category where that category is already located outside or urban and village reserve lines.

The purpose of the Small-Lot Rural designation is to provide for low-density residential development and limited non-residential uses that maintain the rural and open landscape in areas where agricultural uses are not sustainable or are clearly secondary uses. The designation includes existing developed areas, rural subdivisions where development of residential uses is appropriate and intervening areas that should be consolidated for rural residential use.

**Multi-Use Public Lands.** Lands owned and administered by federal, state and local government agencies are included in this map designation, along with major land holdings owned by non-profit land conservation organizations. The Multi-Use Public Lands designation includes many properties that are included in the LUE categories of Recreation, Open Space and Public Facilities (refer to Figure OS-3). There is no implied or explicit right of public access to all lands under public ownership or ownership of various non-profit organizations.

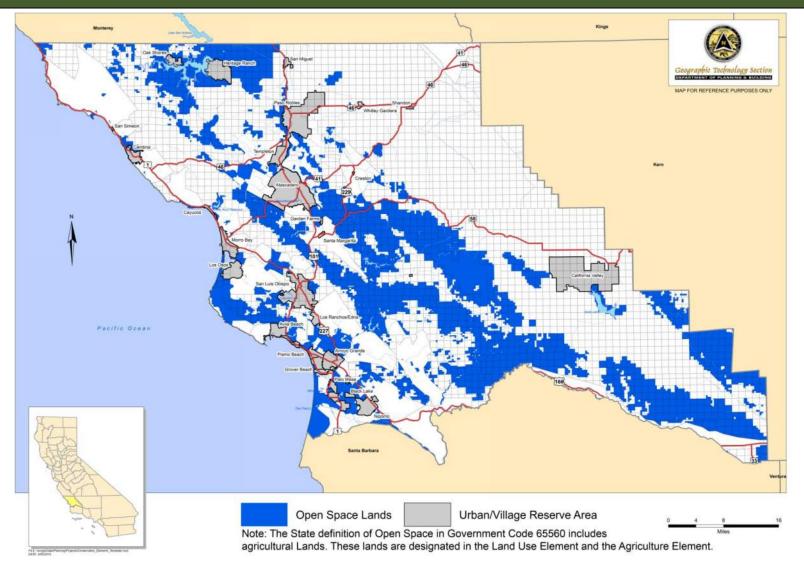
Many of these lands are important for their forest, watershed, scenic and recreational resources. All together, these lands account for about 25 percent of the total county land area. In many instances, the mere fact that the public ownership is extensive in area results in such benefits as providing wildlife

habitat, important watershed, and a visual amenity that contributes to the overall rural character of the county.

**Urban Lands.** This designation includes all areas within the existing urban and village reserve lines shown in the LUE, as well as areas outside those lines that are already developed with or committed to future urban-types of development for commercial, industrial, recreational, residential, or other non-agricultural uses.



# Figure OS-1 COSE Designations



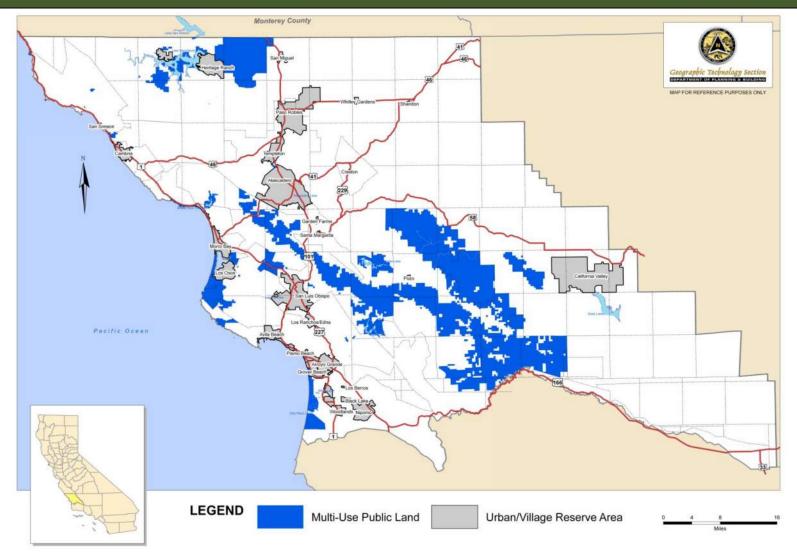
# **OPEN SPACE RESOURCES**

# Figure OS-2

## **COSE Designations – Detailed Perspective**

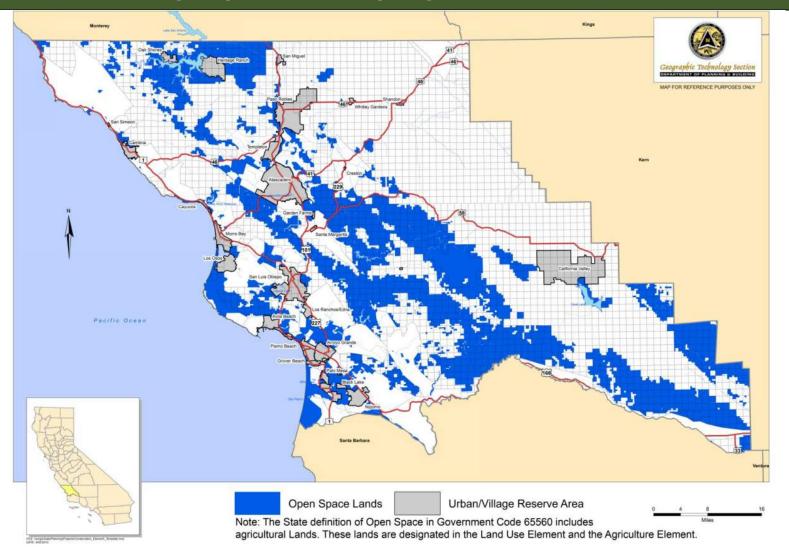


# Figure OS-3 Multi-Use Public Lands



#### Figure OS-4

**Conservation and Open Space Element – Open Space Lands** 



### **Major Issues**

This chapter addresses issues of special importance to open space and other resources and strives to balance what, at times, may be competing interests. San Luis Obispo County contains distinct categories of open space, including:

- Open spaces which warrant special recognition for habitat values or otherwise protect public health, safety or general welfare; and
- Large bodies of water such as local lakes, estuaries and ocean environments.

At least two common issues impact these categories:

- 1) The steadily increasing numbers of people choosing to settle in the rural regions as opposed to the urban communities; and
- 2) Old land parcels recorded before the State adopted the Subdivision Map Act and/or before the County adopted ordinances governing land use planning.

For the most part, the parcels created by these so-called "antiquated subdivisions" remain in private ownership and are, in many instances, capable of development. Many of these old parcels are subdivided on land that might otherwise be better used for production agriculture or for non-agricultural open space purposes.

Continued residential growth in rural and agricultural areas such as the EI Pomar-Estrella Planning Area, especially on smaller parcels, increases the likelihood of land use conflicts with agricultural operations, competition over declining levels of groundwater, and diminished rural character. Since 2000, over 600 parcels have been developed with homes in rural, nonconforming subdivisions--an increase of over one-third. Several of those nonconforming subdivisions are largely developed or "built out." To give further perspective on the pace of growth, in 1977, about 80 percent of those subdivisions were farmed or grazed,



# We will recognize success when...

 The most important open space resources have been prioritized for acquisition from willing owners, are being acquired through a variety of means and are being managed

 There is increased public access to public open space lands, consistent with protection of natural resources and private property.

 There is an increase in the acreage of open space resources being restored on public lands.

 Well defined boundaries between urban and rural areas are maintained by creating community separators, preventing inappropriate breakdown of rural parcels and revising regulations accordingly. and only a small fraction of over 3,500 potentially legal parcels were developed with homes.

As urban areas approach buildout due to resource and infrastructure constraints, the fact that it is easier and sometimes less costly to develop in rural areas will likely increase development pressure in rural and agricultural areas

The following issues are also addressed by the open space goals, policies, and implementation strategies in this chapter:

- Population growth creates pressure to convert lands containing open space resources to non-open space uses.
- Increased population in the rural areas increases the likelihood of conflicts between people and natural systems.
- Rural development fragments habitat.
- Land use decisions often treat conservation and economics as two mutually exclusive considerations
- Although the county contains an abundance of open space, it is not evenly distributed, or it may not be easily accessible where multiple uses could be made of the resource.

# Goals, Policies, and Implementation Strategies

It is the intent of the following goals, policies and implementation strategies to preserve, protect, and restore irreplaceable open space resources for current and future generations, resulting in scenic, recreational, health, safety, economic, and other benefits.

This will be achieved by:

 Identifying open space lands that contain important resources that have unique characteristics and features, and clearly defining how the protection of those resources can be balanced with the needs of agriculture when the resources are located on or adjacent to agricultural lands;

- Developing effective management policies for the protection and enhancement of public lands that contain open space resources;
- Establishing land use policies that effectively define the boundaries between developed communities and the surrounding rural countryside; and
- Encouraging ongoing public awareness of, and participation in, the development of policies for the conservation of open space resources.
- Having open space resources does not imply or condone public access onto those lands unless that access is voluntarily given by the landowner. Many of the open space resources are located on privately owned lands. Protection of the resources on those lands is encouraged to occur through voluntary actions by the landowner.

Because open space resources do not follow man-made boundaries, they occur on both public and private lands. Therefore, the following goals and policies in this chapter refer to the treatment of open space resources on public lands and on private non-agricultural lands.

The Implementation Strategies in this COSE, the Agriculture Element and the Parks and Recreation Element constitute the "Action Plan" described in Government Code section 65564.

# TABLE OS-2GOALS FOR OPEN SPACE RESOURCES

| Goal OS 1 | Important open space areas will be identified, protected, sustained, and where necessary, restored and reclaimed.                     |
|-----------|---|
| Goal OS 2 | Open space resources will be protected and sustained on public lands.   |
| Goal OS 3 | Ongoing public education programs about conservation, protection, and stewardship of open space resources will be encouraged. (OSG 4) |
| Goal OS 4 | Urban sprawl and inappropriate development of rural areas will be prevented.  |
|           |   |





The San Luis Obispo Parks, Open Space and Trails Foundation was created in 1991 to provide special assistance to landowners and to receive gifts.

# GOALIMPORTANT OPEN SPACE AREAS WILL1BE IDENTIFIED, PROTECTED,<br/>SUSTAINED, AND WHERE NECESSARY,<br/>RESTORED AND RECLAIMED.

#### Policy OS 1.1 Future Open Space Protection

Continue to identify and protect open space resources with the following characteristics:

- Recreation areas
- Ecosystems and environmentally sensitive resources such as natural area preserves, streams and riparian vegetation, unique, sensitive habitat, natural communities; significant marine resources
- Archaeological, cultural, and historical resources
- Scenic areas
- Hazard areas
- Rural character
- Implementation Strategy OS 1.1.1 Use of up-to-date science

Incorporate up-to-date scientific information and techniques into programs to identify, protect, and manage open space resources.

# *Policy OS 1.2 Consolidation of Public and Private Lands*

Encourage consolidation of publicly and privately owned lands into larger, more viable units in order to reduce "checkerboard" ownership, establish or expand recreation areas, protect other open space resources, facilitate better land management, or reduce trespass problems.

Implementation Strategy OS 1.2.1 Isolated public parcels Encourage the sale or trade of isolated publicly owned parcels that are contiguous to privately owned lands if the sale or trade leads to better protection of open space resources.



Implementation Strategy OS 1.2.2 Voluntary lot mergers Use voluntary merger or lot line adjustment processes so there is no increase in the number of privately owned parcels near publicly owned open space lands.

#### **Policy OS 1.3 Supporting other agencies**

Encourage and support efforts by state and federal agencies, cities, special districts, and nonprofit and conservation organizations to protect lands containing open space resources.

# *Policy OS 1.4 Retention of public lands for open space*

Retain land in public ownership that has potential for recreation, wildlife habitat and management, conservation of ecosystems, water conservation, or scenic, historic, or other important open space purposes.

 Implementation Strategy OS 1.4.1 Retention of public lands
 Do not remove land from the public domain without careful

study to determine its value to any government agency or the public.

 Implementation Strategy OS 1.4.2 Acquisition and disposal of other public lands
 Review and comment on new plans and policies such as those involving acquisitions and disposal of land proposed by federal, state, and local agencies and private conservation

organizations. Refer major or controversial proposals to the

Board of Supervisors.

Implementation Strategy OS 1.4.3 Disposal of public lands Work with local, state, and federal agencies and conservation organizations to identify lands that are suitable for disposal and exchange. An inventory of these lands should be prepared for review by the Board of Supervisors to determine the appropriate course of action. The County should consider placing permanent agricultural or conservation easements on public lands prior to sale or transfer to public or private ownership.

Implementation Strategy OS 1.4.4 Land Use Element amendments for rural lands Prepare proposed amendments to the purpose and character statements for the Open Space land use category in Framework for Planning of the Land Use Element to include all rural lands designated Multi-Use Public Lands that are not used or planned for active recreation or other intensive public uses.

Implementation Strategy OS 1.4.5 Land Use Element amendments for open space Prepare proposed amendments to the Land Use Element to change the land use category to Open Space where major land holdings are owned by conservation organizations for protecting open space resources.

#### Policy OS 1.5 Retention of BLM lands

Support retention of Bureau of Land Management land in public ownership where it adjoins the National Forest, unless subject to other policies in this Element or in the Agriculture Element.

 Implementation Strategy OS 1.5.1 Land Use Element amendments for BLM lands

Prepare proposed amendments to the Land Use Element to change the land use category of Bureau of Land Management land from Rural Lands to Open Space where the properties are expected to stay in long-term public ownership based on the inventory of Bureau of Land Management properties described in AGP 19 in the Agriculture Element.

#### Policy OS 1.6 Open Space Contracts

Consider the use of open space contracts under the terms of the County's Rules of Procedure to Implement the California Land Conservation Act of 1965 (the Williamson Act) to protect rural properties that contain identified recreational and open space resources.

Implementation Strategy OS 1.6.1 Rules of Procedure amendments

Propose amendments to the County's Rules of Procedure that clearly define the criteria to be used in evaluating the proposed use of Williamson Act contracts to protect and conserve open

space resources. Those criteria should ensure that such open space contracts would not have a negative impact on adjacent agricultural uses or on the existing countywide agricultural preserve program.

- Implementation Strategy OS 1.6.2 Incentive for open space contracts
  - a. As incentives to property owners to enter into contracts, implement a fee schedule for reviewing applications requesting an agricultural preserve for the protection of recreational or open space resources at the next annual review of the countywide fee schedule following adoption of this Element, and
  - Process land use permit applications in a timely manner for development associated with recreational facilities on land subject to a Williamson Act contract
- Implementation Strategy OS 1.6.3 Permits for recreation on Williamson Act lands
   Provide timely processing of land use permit applications for development associated with recreational facilities on lands subject to a Williamson Act contract.

#### Policy OS 1.7 Open space resource protection

Protect open space resources by guiding development away from rural areas to more suitable areas.

 Implementation Strategy OS 1.7.1 TDC program Consider programs to better protect open space resources by guiding development away from rural areas to more suitable areas (e.g. land banking or TDC).

#### **Policy OS 1.8 Land Divisions and Development**

Encourage the use of cluster land divisions and cluster development that will locate residential clusters on the least environmentally sensitive portions of properties.

Implementation Strategy OS 1.8.1 Ordinance amendments Amend the Land Use Ordinance, Coastal Zone Land Use Ordinance, Real Property Division Ordinance (Title 21 of the County Code), and Williamson Act Rules of Procedure as applicable in order to implement the following requirements.

GENERAL PLAN



Until the County adopts the ordinance amendments, implement the following requirements as though they are standards.

- Where a landowner proposes a conventional land division, the proposed parcels shall maintain or enhance the longterm protection of open space resources.
- The size and location of open space areas shall maximize protection of the open space resources. Where possible, located open space contiguous with existing areas of natural open space.
- Where called for by the environmental document as an environmental mitigation, require ongoing management of open space parcels for sustaining the open space resources.

#### **Policy OS 1.9 Acquisition Preferences**

Support implementation of the acquisition strategies identified in and the Parks and Recreation Element. In all cases, acquisition shall be accomplished between willing buyers and sellers.

#### **Policy OS 1.10 Interagency coordination for** acquisition

Coordinate efforts to acquire open space lands with other public agencies and conservation organizations.

#### Policy OS 1.11 County Land Acquisition Consistent with Parks and Recreation Element

Consider acquiring lands from willing sellers based on the Parks and Recreation Element to protect open space resources. If the land involves active agricultural production, consider keeping the land in an agricultural use if such use is compatible with the purpose for which the land was acquired.

♦ Implementation Strategy OS 1.11.1 Habitat banking

The County should establish habitat banking and enhancement programs to purchase land, development rights, or conservation easements to preserve and enhance important habitat areas and protect large, regionally significant areas of habitat or ecosystems.

#### **Policy OS 1.12 Funding of Land Acquisition**

Use a variety of means to fund acquisition of open space resources from willing sellers in accordance with the Parks and Recreation Element.

#### Policy OS 1.13 Tax Default Acquisition and Sale of Excess and Tax Delinquent Properties

Protect on-site or off-site open space resources as appropriate when properties are acquired through tax default or excess properties are disposed of.

 Implementation Strategy OS 1.13.1 Site surveys of tax default acquisition

When the County acquires property through tax default, conduct a site-specific survey or analysis to determine whether open space resources exist on the property. If the survey identifies critical open space resources on the property, take one of the following actions:

- 1) Retain ownership;
- Protect the open space resource through easements or other mechanisms and then offer for sale to a surrounding property owner or other interested party; or
- Consider the trade of such properties if the trade can better protect open space resources elsewhere or can move potential development from rural to urban or suburban areas.
- ◊ Implementation Strategy OS 1.13.2 Disposal of tax delinquent properties

Consider offering excess and tax delinquent properties to adjoining property owners for sale, lease, or management of the resource prior to a public disposition (Implementation Strategy OS 2.18.1), and work with the Assessor, Tax Collector, and Department of General Services to develop a program for consideration by the Board of Supervisors.

Implementation Strategy OS 1.13.3 Park and open space fund

Consider directing revenue from the sale of excess and tax delinquent properties that are without open space resources



into the Community Building Fund, or as an alternative, a special park, and open space purchase and improvement fund.

#### *Policy OS 1.14 Land Exchange of County-owned properties*

Exchange publicly owned land that is not needed for open space protection or other public uses for privately owned land with open space resources.

 Implementation Strategy OS 1.14.1 Inventory Countyowned lands
 Prepare an inventory of County-owned lands and develop criteria for land exchanges for approval by the Board of Supervisors.

**Policy OS 1.15 Land Use Designation for County lands** Land that is transferred or sold by the County should receive a land use designation that is compatible with surrounding uses, such as Agriculture or Large Lot Rural.

GOAL

2

# OPEN SPACE RESOURCES WILL BE PROTECTED AND SUSTAINED ON PUBLIC LANDS.

# *Policy OS 2.1 Open space management to protect, sustain and restore*

Manage open space resources on public lands to protect, sustain, and, where necessary, restore the resources. Encourage such management strategies on private lands.

#### Policy OS 2.2 Coordinate open space management

The County will coordinate efforts to manage open space lands with other public agencies and conservation organizations.

# *Policy OS 2.3 Best Management Practices on Public Lands*

Utilize best management practices such as integrated pest management, invasive species control, erosion and water quality control, and holistic forestry management as natural resource



management tools, and consult with the Natural Resource Conservation Service, U.C. Cooperative Extension, and Resource Conservation Districts.

# *Policy OS 2.4 Disposal of biosolids on open space lands*

The County should prohibit disposal of biosolids on open space lands as defined in the COSE glossary.

# *Policy OS 2.5 Grazing and agricultural uses on County lands*

On County-maintained land, consider grazing and other agricultural uses as part of an overall best management strategy, but manage those uses so they will not degrade environmentally sensitive resources.

♦ Implementation Strategy OS 2.5.1 Site-Specific management plans for grazing on County lands The Department of General Services, in consultation with the County Agricultural Commissioner, Resource Conservation Districts designated representatives U.C. and from Cooperative Extension, Grazing Advisory Board, agricultural, organizations, environmental and conservation and representatives from Native American groups, should prepare site-specific management strategies for review and approval by the Board of Supervisors. The management strategies should be used in new or renewed leases and should include establishment of appropriate market-based lease rates.

# *Policy OS 2.6 Support federal and state lands for grazing*

Encourage the federal and state government to lease public lands for grazing where it can be supported without degrading environmentally sensitive resources. Encourage public agencies to manage grazing as part of comprehensive resource management plans.

#### Policy OS 2.7 Coordination open space planning

Coordinate planning and actions with the various public agencies involved in open space protection and management, including the

A Natural Area Preserve

is an area of land or water managed by County Parks, a similar public agency, or a private nonprofit which remains in a predominantly natural or undeveloped state to provide resource protection and passive recreation for present and future generations. Examples include the following Natural Areas that are County-owned or managed: Upper El Chorro, Lopez Lake, Santa Margarita Lake. and Elfin Forest.

cities and special districts in San Luis Obispo County, nonprofit and conservation organizations, and the neighboring counties.

**Policy OS 2.8 Management of Natural Area Preserves** Manage Natural Area Preserves in order to accomplish the following, in accordance with the Parks and Recreation Element:

- a. Protect, restore, and enhance the natural resources of the site.
- b. Provide a recreation/education experience for visitors throughout the county.
- c. Provide an interpretive program that will increase public understanding and appreciation of the natural and cultural resources of the site.
- d. Provide public access that is compatible with the site's natural resources. Control or prohibit public access in areas where there are sensitive resources or where public access is incompatible with adjacent private lands.
- e. Manage Natural Area Preserves in a manner that is compatible with the site's resources, adjoining ecosystems, and adjacent agricultural uses.
- f. Permit only those uses that are of a non-consumptive nature and that are compatible with preservation of the natural resources associated with each site. (Also refer to **Policy AG 27** in the **Agricultural Element**.)
- Implementation Strategy OS 2.8.1 Natural Area Preserve Management Plans
   Carry out the preceding management policies through management plans that are designed specifically for each preserve. (Also refer to the Parks and Recreation Element.)
- Implementation Strategy OS 2.8.2 Prevent trespassing Take all reasonable precautions and necessary management measures to prevent trespass and damage to adjacent properties.

 Implementation Strategy OS 2.8.3 Parks and Recreation Commission approval of management plans
 Prepare proposed management plans (operational plans) for review and approval by the County Parks and Recreation Commission prior to implementation.

#### *Policy OS 2.9 Recreational use of publicly owned open space*

Continue to establish and implement policies and management strategies to provide recreational use of open space. (Also refer to the Parks and Recreation Element and Policy AG 32 in the Agricultural Element.)

- Implementation Strategy OS 2.9.1 Recreation on public lands
   Work closely with other agencies to plan and provide recreational use of publicly owned open space.
- Implementation Strategy OS 2.9.2 Minimize recreation conflicts
   Manage park sites and recreation areas to protect scenic and environmentally sensitive resources, and to not conflict with agricultural or other rural land uses addressed in the Agriculture Element.

#### Policy OS 2.10 Off-Highway Vehicles

Work with County departments and applicable local, state, and federal agencies to provide workable solutions to off-highway vehicle (OHV) uses. (Also refer to **Policy AG 32** in the **Agricultural Element**.)

 Implementation Strategy OS 2.10.1 OHV use on County lands

Coordinate with other local, state, and federal agencies to encourage the prohibition of off-highway vehicles on public lands where the vehicles conflict with the adopted plans of those agencies or County plans and ordinances, conflict with uses of adjacent County-owned properties, result in damage to sensitive resources, or are causing trespassing and destruction on adjacent private lands.





A cyclist enjoys public lands.

GOAL

ONGOING PUBLIC EDUCATION PROGRAMS ABOUT CONSERVATION, PROTECTION, AND STEWARDSHIP OF OPEN SPACE RESOURCES WILL BE ENCOURAGED.

#### **Policy OS 3.1 Ongoing education and outreach** Support and participate in ongoing educational and outreach programs regarding the value, significance, and role of open space resources.

- Implementation Strategy OS 3.1.1 Public education Support and provide, as appropriate, ongoing public education about the importance of the open space resources in the county.
- Implementation Strategy OS 3.1.2 Public participation Encourage public participation through the public hearing process in the ongoing development of plans, policies, and ordinances affecting open space lands through such organizations as the County Parks and Recreation Commission, the Agricultural Liaison Advisory Board, conservation organizations, and community advisory groups.

# *Policy OS 3.2 Conservation and Protection by Private Landowners*

Encourage and provide voluntary incentives to private landowners to protect and maintain open space resources on their properties, for example, through use of conservation easements and voluntary programs managed by the Natural Resources Conservation Service and Resource Conservation Districts.

Implementation Strategy OS 3.2.1 Provide Information Provide public information bulletins regarding the benefits of entering into open space contracts for the long-term protection of recreation and open space resources.

24 COUNTY OF SAN LUIS OBISPO

 Implementation Strategy OS 3.2.2 Ecosystem education Educate private landowners about the importance of protecting and maintaining environmentally sensitive resources and productive ecosystems.

#### GOAL

# URBAN SPRAWL AND INAPPROPRIATE DEVELOPMENT OF RURAL AREAS WILL BE PREVENTED.

#### Policy OS 4.1 Define urban areas to prevent sprawl

Prevent urban sprawl by maintaining a well-defined boundary between urban/village boundaries and surrounding rural areas.

#### Policy OS 4.2 Maintain community separators

Maintain permanent separations between communities in order to retain the rural character of the county. (Also refer to the Community Separators section of Visual Resources Chapter.)

 Implementation Strategy OS 4.2.1 Land Use Element Amendments: RL designations

Prepare proposed amendments to the purpose and character statement for the Rural Lands land use category in the Framework for Planning of the Land Use Element to state that the Rural Lands category is also applied near urban and village areas in order to maintain a clear distinction between urban/village and rural areas and to provide maximum flexibility and options in planning for future orderly growth in urban areas. Prepare public review draft amendments by the end of 2010.

#### **CONVERSION OF RURAL AREAS TO URBAN LANDS**

#### *Policy OS 4.3 Conversion of rural areas to Urban Lands*

Limit the conversion of unincorporated rural areas to Urban Lands in accordance with the considerations for urban and village expansion in Framework for Planning of the Land Use Element.



#### Policy OS 4.4 Annexation of urban development

Urban development will be annexed to an incorporated city or an existing community services district (CSD) or County service area (CSA), specifically in the following scenarios:

- a. Where cluster development from rural property is to be located adjacent to the urban area; or
- b. Where and when higher density development is to occur consistent with resource and service capabilities and orderly extension of urban services.

#### **EXPANSION WITHIN URBAN AND VILLAGE AREAS**

#### Policy OS 4.5 Maintain large parcels

Within urban and village reserve lines, maintain large parcels, preferably at least 10 acres in size, until such time as full urban services can be provided.

#### CONVERSION OF LANDS TO SMALL-LOT RURAL (RESIDENTIAL RURAL AND RESIDENTIAL SUBURBAN IN LUE)

#### Policy OS 4.6 Conversion to small-lot rural parcels

To maintain a well-defined urban boundary, avoid the creation or expansion of Small-Lot Rural designations (Residential Rural/Suburban LUE land use categories) in rural areas.

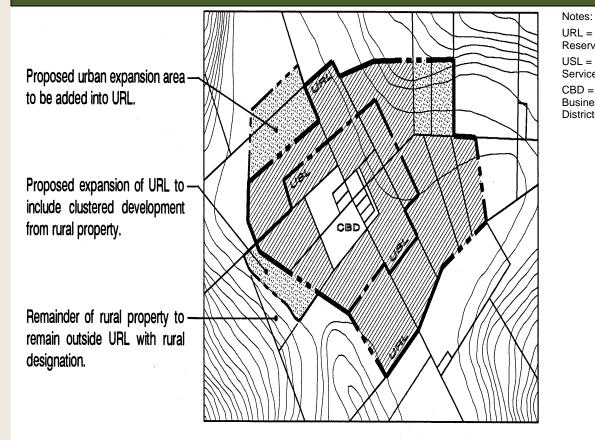
#### Policy OS 4.7 Cooperation with cities

The County shall cooperate with cities that have established "greenbelt" or similar programs, such as the City of San Luis Obispo's greenbelt program and the City of Paso Robles' "purple belt" program.



#### CHAPTER 7

### **FIGURE OS-5 URBAN VILLAGE AREA EXPANSIONS**



URL = Urban **Reserve Line** USL = Urban

Services Line CBD = Central **Business** District

# **Summary of Implementation Strategies**

For each implementation strategy described in this chapter, the following table (Table OS-3) summarizes the County department or other agency that has primary responsibility for carrying out that strategy. In addition, the table summarizes the priority, estimated year of initiation, and potential source of funding of each strategy-The actual timeframe for implementing the strategies is dependent upon the availability of adequate staff and funding.



# TABLE OS-3 OPEN SPACE IMPLEMENTATION

| Implementation<br>Strategies   | Responsible<br>Department or<br>Agency <sup>1</sup> | Priority | Timeframe<br>to Start    | Possible<br>Funding<br>Sources <sup>2</sup> |
|--|---|----------|--------------------------|---|
| IS OS 1.1.1 Use of up-to-date science  | PB, GS  | Medium   | Immediately <sup>3</sup> | DB  |
| IS OS 1.2.1 Isolated public parcels  | GS  | Medium   | Immediately <sup>3</sup> | DB  |
| IS OS 1.2.2 Voluntary lot mergers  | PB  | Medium   | Immediately <sup>3</sup> | N/A   |
| IS OS 1.4.1 Retention of public lands  | GS, PW, PB  | Medium   | Immediately <sup>3</sup> | DB  |
| IS OS 1.4.2 Acquisition and<br>disposal of other public lands                | PB, GS  | Medium   | 2012                     | DB  |
| IS OS 1.4.3 Disposal of public lands   | PB, GS  | Low      | 2013                     | DB  |
| IS OS 1.4.4 Land Use Element<br>amendments for rural lands                   | РВ  | Medium   | 2012                     | DB  |
| IS OS 1.4.5 Land Use Element<br>amendments for open space                    | РВ  | Medium   | 2012                     | DB  |
| IS OS 1.5.1 Land Use Element<br>amendments for BLM lands                     | РВ  | Medium   | 2012                     | DB  |
| IS OS 1.6.1 Rules of Procedure amendments                                    | PB, AG  | Medium   | 2012                     | DB  |
| IS OS 1.6.2 Incentive for open<br>space contracts                            | PB, AG  | Medium   | 2012                     | DB  |
| IS OS 1.7.1 TDC amendments to LCP  | РВ  | Medium   | 2013                     | DB  |
| IS OS 1.8.1 Ordinance amendments   | РВ  | Medium   | Immediately              | N/A   |
| IS OS 1.11.1 Habitat banking   | GS  | Medium   | 2014                     | DB  |
| IS OS 1.13.2 Disposal of tax<br>delinquent properties                        | GS, AS, Tax   | Medium   | Immediately              | N/A   |
| IS OS 1.13.3 Park and open<br>space fund                                     | GS  | Medium   | 2011                     | N/A   |
| IS OS 1.14.1 Inventory County-<br>owned lands                                | GS, PB  | Medium   | 2011                     | DB  |
| IS 2.4.1 Use of bio-solids on open space lands                               | EH, GS  | Medium   | 2013                     | DB  |
| IS OS 2.5.1 Site-Specific<br>management plans for grazing on<br>County lands | GS, AG, UCext                                       | Medium   | 2013                     | DB, grant                                   |



### TABLE OS-3 OPEN SPACE IMPLEMENTATION

| Implementation<br>Strategies   | Responsible<br>Department or<br>Agency <sup>1</sup> | Priority  | Timeframe<br>to Start    | Possible<br>Funding<br>Sources <sup>2</sup> |
|--|---|-----------|--------------------------|---|
| IS OS 2.8.1 Natural Area<br>Preserve Management Plans                          | GS  | Medium    | 2013                     | DB  |
| IS OS 2.8.2 Prevent trespassing  | GS  | Medium    | Immediately <sup>3</sup> | DB  |
| IS OS 2.8.3 Parks and<br>Recreation Commission approval<br>of management plans | GS  | Medium    | 2013                     | DB  |
| IS OS 2.9.1 Recreation on public lands   | GS  | High      | 2010                     | DB  |
| IS OS 2.9.2 Minimize recreation conflicts                                      | GS  | High      | Immediately <sup>3</sup> | DB  |
| IS OS 2.10.1 OHV use on County lands   | GS, PB, other agencies                              | Medium    | 2012                     | DB  |
| IS OS 3.1.1 Public education   | PB, GS  | Medium    | Immediately              | DB  |
| IS OS 3.1.2 Public participation   | PB  | High      | Immediately              | DB  |
| IS OS 3.2.1 Provide Information  | NRCS, RCDs  | Medium    | 2013                     | DB  |
| IS OS 3.2.2 Ecosystem education  | PB  | Medium    | Immediately <sup>3</sup> | DB  |
| IS OS 4.2.1 Land Use Element<br>Amendments: RL designations                    | PB  | Essential | 2010                     | DB  |

Notes:

1 Department abbreviations: Admin = County Administrative Office AG = County Department of Agriculture AS = County Assessor APCD = SLO Air Pollution Control District Cities = Incorporated cities COG = San Luis Obispo Council of Governments CSDs = Community Service Districts EH = County Environmental Health Services Division GS = County General Services Agency NRCS = Natural Resources Conservation Service IT = County Information Technology Department OES = County Office of Emergency Services PB = County Department of Planning and Building PW = County Department of Public Works RCD = Resource Conservation Districts RTA = San Luis Obispo Regional Transit Agency Tax = County Tax Collector 2 Funding source abbreviations: GF = General Fund DB = Planning and Building Department Budget COP = Certificates of Participation 3 Indicates an ongoing activity.

Source: Department of Planning and Building, 2009.





### Purpose

This chapter identifies resource management goals, policies, and strategies that:

- preserve and protect soil resources from degradation or loss by wind and water erosion,
- 2) preserve and protect watershed function and ecological health through soil conservation, and
- 3) protect agricultural soils from conversion to urban and residential uses.

# Introduction

The role that soils play in county watersheds, through capturing, storing and filtering of water, supporting vegetation and producing valuable food and fiber crops, are directly linked to the future of agriculture and the environment, and hence to the vitality of our local economy. Soil loss and degradation from the natural forces of wind and rainfall can be accelerated greatly by urbanization, inappropriate removal of vegetation, overgrazing, cultivation on steep slopes and development without regard to sound conservation practices.

# **Relationship to Other Elements, Plans,** and Programs

Because of the direct connection between soils resources and watershed function, agricultural viability, ecological function, and water quantity and quality, many policies addressing soil resource management can also be found within the Water Resources and "Everything is built on soils" —Cal Poly Earth and Soil Science Department

# We will recognize success when...

 Effective soil conservation practices are employed on private and public lands throughout the county.

 Conversion of the most Important Agricultural soils to non-agricultural uses is minimized and fully mitigated.

 Low Impact Development measures are included in all private and public development projects. Biological Resources chapters of this Element, as well as in the Agriculture Element, and are referenced herein.

#### **Major Issues**

The loss of soil resources has significant economic and environmental consequences. These can include reduced agricultural productivity, loss of watershed and ecological function, and reduced air and water quality.

# Goals, Policies, and Implementation Strategies

The intent of the following goals, policies, and implementation strategies is to protect and preserve soils, and recognize their critical role in the county's watersheds. The soils resources in San Luis Obispo County are essential for preserving economic and environmental vitality and nourishing ecological habitats. They are also essential for the production of food and fiber and other agricultural products. (Also refer to **Figure SL-1, Countywide Soils Map**.)

### TABLE SL-1 GOALS FOR SOIL RESOURCES

| Goal SL 1 | Soils will be protected from wind and water erosion, particularly that caused by poor soil management practices. |
|-----------|--|
| Goal SL 2 | Watershed and ecological function will be maintained through soil conservation.                                  |
| Goal SL 3 | Important Agricultural Soils will be conserved.  |
|           |  |



GOAL

### SOILS WILL BE PROTECTED FROM WIND AND WATER EROSION, PARTICULARLY THAT CAUSED BY POOR SOIL MANAGEMENT PRACTICES.

**Policy SL 1.1 Prevent Loss of Topsoil in All Land Uses** Minimize the loss of topsoil by encouraging broad-based cooperation between property owners, agricultural operators, agencies, and organizations that will lead to effective soil conservation practices on all lands, including County-controlled properties. (Also refer to **Policy AG 9** in the **Agricultural Element** and **Figure SL-1 Important Agricultural Soils**.)

Implementation Strategy SL 1.1.1 Soil erosion: private lands Encourage landowners to participate in programs that reduce soil erosion and maintain soil productivity. The County Department of Agriculture should participate in efforts to educate property owners and agricultural operators about soil conservation through programs developed cooperatively by

agencies such as USDA, Natural Resources Conservation Service, Resource Conservation Districts, University of California Cooperative Extension, and other technical service providers.

Implementation Strategy SL 1.1.2 Soil erosion: public lands Assure that roads and drainage systems on County-controlled properties and facilities do not negatively impact other land uses, including agricultural lands, and that the roads and drainage systems are properly maintained.

#### *Policy SL 1.2 Promote Soil Conservation Practices in All Land Uses*

Require erosion and sediment control practices during development or other soil-disturbing activities on steep slopes and ridgelines. These practices should disperse stormwater so that it infiltrates the soil rather than running off, and protect downslope areas from erosion. Soil conservation is the

1) protection of the soil against physical loss by erosion or against chemical deterioration; that is, excessive loss of fertility by either natural or artificial means. 2) a combination of all management and land use methods that safeguard the soil against depletion or deterioration by natural or by humaninduced factors.

- Soil Science Society of America



#### CHAPTER 8

# SOIL RESOURCES



The soil is the great connector of our lives, the source and destination of all. —Wendell Berry, 1977

An **aquifer means** is an underground, waterbearing layer of earth, porous rock, sand, or gravel, through which water can seep or be held in natural storage.

Set .

 Implementation Strategy SL 1.2.1 Retain natural vegetation and topography Retain natural vegetation and topography to the maximum

extent feasible for all discretionary projects adjacent to blue line streams or in areas designated with at least moderate erosion potential.

 Implementation Strategy SL 1.2.2 Restoration of degraded areas
 Require proposed discretionary development to restore

degraded and eroded areas where feasible by replanting with native vegetation and using other measures approved by soil conservation agencies.

# *Policy SL 1.3 Minimize Erosion associated with New Development*

Avoid development, including roads and driveways, on the steeper portions of a site except when necessary to avoid flood hazards, protect prime soils, and protect sensitive biological and other resources. Avoid grading and site disturbance activities on slopes over 30%. Minimize site disturbance and protect existing vegetation as much as possible.

 Implementation Strategy SL 1.3.1 Low Impact Development (LID)
 Implement Low Impact development (LID) for all new public and private projects. (Also refer to Water Resource Policy WR 4.7.)

GOAL

Ζ

#### WATERSHED AND ECOLOGICAL FUNCTION WILL BE MAINTAINED THROUGH SOIL CONSERVATION.

#### *Policy SL 2.1 Protect Watersheds and Aquifer Recharge Areas*

Give high priority to protecting watersheds, aquifer-recharge areas, and natural drainage systems when reviewing applications for discretionary development. (Also refer to **Water Resource Policies WR 2.4, 3.1, 3.2. 3.3, 3.4, 3.5, 5.1, 5.6, 6.4, 6.5, 6.6, 6.7** and **BR 1.5, 2.7, 4.1, 4.5, 4.6, 6.1 and 7.7**.)

◊ Implementation Strategy SL 2.1.1 Interagency coordination for mapping

Cooperate with agencies such as the Central Coast Regional Water Quality Control Board, the California Department of Water Resources, the County Public Works Department, and other County departments to strengthen existing digital map databases of watersheds and aquifer recharge areas. Examples of such databases include the <u>Central Coast</u> <u>Ambient Monitoring Program's CCAMP Database Browser</u> and the <u>California Department of Water Resources California</u> <u>Groundwater Bulletin 118</u>.

 Implementation Strategy SL 2.1.2 Watershed education for landowners
 Educate landowners about preserving watershed function, retaining natural drainage areas, and implementing low impact development practices.

Implementation Strategy SL 2.1.3 Protect natural stream functions
 Encourage the use of soil conservation practices in development designs near streams and stream crossings in order to protect natural stream functions. (Also refer to Biological Resources Policy BR 6.)

Implementation Strategy SL 2.1.4 Coordinated watershed restoration Encourage the coordination of watershed restoration activities and permit streamlining efforts between the County, state and federal agencies, and other groups for watershed restoration and enhancement projects where they support soil conservation practices.

#### Watershed function

refers to the ecological and hydrologic function of a watershed includes capture, storage, and safe release of water, providing conditions for nutrient cycles and habitat for flora and fauna.



"The nation that destroys its soil, destroys itself." —Franklin Delano Roosevelt



3

IMPORTANT AGRICULTURAL SOILS WILL BE CONSERVED.

**Policy SL 3.1 Conserve Important Agricultural Soils** Conserve the Important Agricultural Soils mapped in Figure SL-1 and listed in Table SL-2. Proposed conversion of agricultural lands to non-agricultural uses shall be evaluated against the applicable policies in this COSE and in the Agriculture Element, including policies such as Policies AGP 18 and AGP 24.

 Implementation Strategy SL 3.1.1 Non-agricultural structures

Coordinate with the Agricultural Commissioner's Office to limit placement of non-agricultural structures and impermeable surfaces on certain Important Agricultural Soils of San Luis Obispo County, consistent with **Policies AGP 18** and **AGP 24** in the Agriculture Element, when discretionary approval is required. (Also refer to **Appendix 8** and **Figure SL-1**.)

- Implementation Strategy SL 3.1.2 Important Agricultural Soils database Update the Department of Planning and Building's digital map database of soils classified as Important Agricultural Soils of San Luis Obispo County. (Also refer to Appendix 8 and Figure SL-1.)
- Implementation Strategy SL 3.1.3 Land Use Ordinance Amendment Coordinate with the Agricultural Commissioner's Office to propose amendments to the Land Use Element and Land Use Ordinance to revise the list of allowable uses in the Agriculture land use category, consistent with Policy AGP 18 in the Agriculture Element.

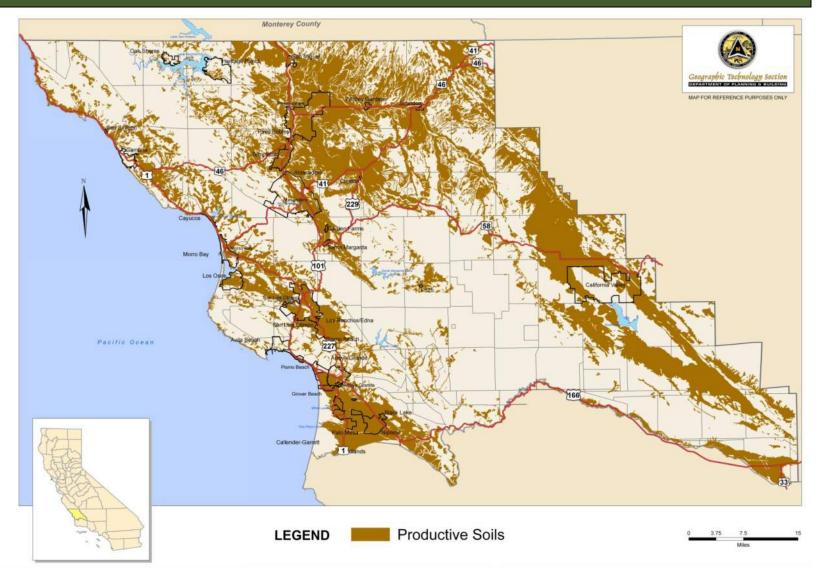
 Implementation Strategy SL 3.1.4 Coordinate discretionary project review with RCD Coordinate with Resource Conservation Districts (RCDs) and local agencies during the discretionary review of development projects that may affect important soil resources.

♦ Implementation Strategy SL 3.1.5 Mitigation of impacts to Important Agricultural Soils Establish mitigation strategies for loss of Important Agricultural Soils through measures such as agricultural easements.



Agricultural soils in the county.





# TABLE SL-2

| Symbol | Soil Name                                       | Prime<br>Farmland | Farmland of<br>Statewide<br>Importance | Other<br>Productive<br>Soils | Highly<br>Productive<br>Rangeland<br>Soils |
|--------|---|-------------------|--|------------------------------|--|
|        | COAST   | AL SOIL SU        | RVEY AREA                              |                              |  |
| 102    | Arnold loamy sand, 5 to 15%                     |                   | Х                                      |                              |  |
| 104    | Baywood fine sand, 2 to 9%                      |                   |  | Х                            |  |
| 111    | Camarillo sandy loam                            | Х                 |  |                              | Х  |
| 112    | Camarillo loam, drained                         | Х                 |  |                              |  |
| 113    | Capistrano sandy loam, 2-5%                     | Х                 |  |                              |  |
| 114    | Capistrano sandy loam, 5-9%                     | Х                 |  |                              |  |
| 115    | Chamise shaly loam, 9 to 15%                    |                   |  | Х                            |  |
| 116    | Chamise shaly loam, 15 to 30%                   |                   |  | Х                            |  |
| 117    | Chamise shaly sandy clay loam, 5 to 9%          |                   |  | х                            |  |
| 120    | Concepcion loam, 2 to 5%                        |                   | Х                                      |                              |  |
| 121    | Concepcion loam, 5 to 9%                        |                   | Х                                      |                              |  |
| 122    | Concepcion loam, 9 to 15%                       |                   |  | Х                            |  |
| 124    | Corralitos sand, 0 to 2%                        |                   | Х                                      |                              |  |
| 125    | Corralitos sand, 2 to 15%                       |                   | Х                                      |                              |  |
| 126    | Corralitos variant loamy sand                   |                   | Х                                      |                              |  |
| 127    | Cropley clay, 0 to 2%                           | Х                 |  |                              | Х  |
| 128    | Cropley clay, 2 to 9%                           | Х                 |  |                              | Х  |
| 129    | Diablo clay, 5 to 9%                            | Х                 |  |                              | Х  |
| 130    | Diablo and Cibo clays, 9 to 15%                 |                   | Х                                      |                              | Х  |
| 131    | Diablo and Cibo clays, 15 to 30%                |                   |  | х                            | х  |
| 133    | Diablo-Lodo complex, 15 to 50%                  |                   |  |                              | Х  |
| 135    | Elder sandy loam, 2 to 5%                       | Х                 |  |                              | Х  |
| 136    | Elder sandy loam, 5 to 9%                       | Х                 |  |                              | Х  |
| 137    | Elder sandy loam, 9 to 15%                      | Xe                |  | Х                            | Х  |
| 138    | Elder sandy loam, occasionally flooded, 0 to 2% | Х                 |  |                              | Х  |



# TABLE SL-2

| Symbol | Soil Name                                       | Prime<br>Farmland | Farmland of<br>Statewide<br>Importance | Other<br>Productive<br>Soils | Highly<br>Productive<br>Rangeland<br>Soils |
|--------|---|-------------------|--|------------------------------|--|
|        | COAST   | AL SOIL SU        | RVEY AREA                              |                              |  |
| 139    | Elder sandy loam, occasionally flooded, 2 to 9% | х                 |  |                              | х  |
| 140    | Garey sandy loam, 2 to 9%                       | Х                 |  |                              | х  |
| 143    | Gazos-Lodo clay loams, 15 to 30%                |                   |  |                              | х  |
| 158    | Los Osos loam, 5 to 9%                          |                   | Х                                      |                              |  |
| 159    | Los Osos loam, 9 to 15%                         |                   |  | Х                            |  |
| 160    | Los Osos loam, 15 to 30%                        |                   |  | Х                            |  |
| 162    | Los Osos-Diablo complex, 5 to 9%                |                   | х                                      |                              | Х  |
| 163    | Los Osos-Diablo complex, 9 to 15%               |                   |  | х                            | х  |
| 164    | Los Osos-Diablo complex, 15 to 30%              |                   |  | х                            | х  |
| 168    | Los Osos variant clay loam, 15 to 50%           |                   |  |                              | х  |
| 169    | Marimel sandy clay loam, occasionally flooded   | х                 |  |                              | х  |
| 170    | Marimel silty clay loam, drained                | Х                 |  |                              |  |
| 173    | Mocho fine sandy loam                           | Х                 |  |                              |  |
| 174    | Mocho Ioam                                      | Х                 |  |                              |  |
| 175    | Mocho silty clay loam                           | Х                 |  |                              |  |
| 176    | Mocho variant fine sandy loam                   | Х                 |  |                              |  |
| 177    | Nacimiento silty clay loam, 15 to 30%           |                   |  | х                            | х  |
| 180    | Nacimiento-Calodo complex, 15 to 30%            |                   |  |                              | х  |
| 184    | Oceano sand, 0 to 9%                            |                   | Х                                      |                              |  |
| 185    | Oceano sand, 9 to 30%                           |                   |  | Х                            |  |
| 186    | Perkins fine sandy loam, 2 to 9%                | Х                 |  |                              |  |
| 192    | Psamments and Fluvents, occasionally flooded    |                   |  | Х                            |  |

# TABLE SL-2

| Symbol | Soil Name                               | Prime<br>Farmland | Farmland of<br>Statewide<br>Importance | Other<br>Productive<br>Soils | Highly<br>Productive<br>Rangeland<br>Soils |  |  |  |
|--------|---|-------------------|--|------------------------------|--|--|--|--|
|        | COASTAL SOIL SURVEY AREA                |                   |  |                              |  |  |  |  |
| 193    | Psamments and Fluvents, wet             |                   |  | Х                            |  |  |  |  |
| 196    | Salinas loam, 0 to 2%                   | Х                 |  |                              | х  |  |  |  |
| 197    | Salinas silty clay loam, 0 to 2%        | Х                 |  |                              | Х  |  |  |  |
| 198    | Salinas silty clay loam, 2 to 9%        | Х                 |  |                              | х  |  |  |  |
| 208    | Still gravelly loam, 9 to 15%           | Xe                | Х                                      |                              |  |  |  |  |
| 209    | Still gravelly sandy clay loam, 0 to 2% | х                 |  |                              |  |  |  |  |
| 210    | Still gravelly sandy clay loam, 2 to 9% | х                 |  |                              |  |  |  |  |
| 212    | Suey silt loam, 2 to 9%                 | X <sup>e</sup>    | Х                                      |                              | Х  |  |  |  |
| 213    | Suey silt loam, 9 to 15%                |                   |  | Х                            | Х  |  |  |  |
| 214    | Suey silt loam, 15 to 30%               |                   |  | Х                            | Х  |  |  |  |
| 216    | Tierra sandy loam, 2 to 9%              |                   | Х                                      |                              |  |  |  |  |
| 217    | Tierra loam, 9 to 15%                   |                   |  | Х                            |  |  |  |  |
| 219    | Tujunga loamy sand, 0 to 2%             | Х                 |  |                              |  |  |  |  |
| 224    | Zaca clay, 9 to 15%                     |                   | Х                                      |                              | Х  |  |  |  |
| 225    | Zaca clay, 15 to 30%                    |                   |  | Х                            | Х  |  |  |  |
|        | PASO RO                                 | BLES SOIL         | SURVEY ARE                             | 4                            |  |  |  |  |
| 100    | Arbuckle fine sandy loam, 0 to 2%       | Х                 |  |                              |  |  |  |  |
| 101    | Arbuckle fine sandy loam, 2 to 9%       | х                 |  |                              |  |  |  |  |
| 102    | Arbuckle-Positas complex, 9 to 15%      | Xe                |  | х                            |  |  |  |  |
| 103    | Arbuckle-Positas complex, 15 to 30%     |                   |  | Х                            |  |  |  |  |
| 106    | Arbuckle-San Ysidro complex, 2 to 9%    | Xe                | Х                                      |                              |  |  |  |  |
| 109    | Ayar and Diablo soils, 9 to 15%         |                   |  | Х                            | Х  |  |  |  |
|        |   |                   |  |                              |  |  |  |  |



# TABLE SL-2

| Symbol | Soil Name  | Prime<br>Farmland | Farmland of<br>Statewide<br>Importance | Other<br>Productive<br>Soils | Highly<br>Productive<br>Rangeland<br>Soils |
|--------|--|-------------------|--|------------------------------|--|
|        | PASO ROI   | BLES SOIL         | SURVEY ARE                             | <b>A</b>                     |  |
| 110    | Ayar and Diablo soils, 15 to 30%                     |                   |  | Х                            | Х  |
| 114    | Balcom-Nacimiento association, 9-30%                 |                   |  | х                            |  |
| 116    | Botella sandy loam, 2 to 9%                          | Х                 |  |                              |  |
| 119    | Camarillo silty clay loam, partially drained         |                   | х                                      |                              |  |
| 122    | Capay silty clay                                     |                   | Х                                      |                              |  |
| 123    | Capay silty clay, occasionally flooded               |                   | х                                      |                              |  |
| 124    | Chanac loam, 9 to 30%                                | Xe                |  | х                            |  |
| 130    | Clear Lake clay, drained                             | Х                 |  |                              |  |
| 131    | Concepcion sandy loam, 2 to 9%                       |                   |  | Х                            |  |
| 132    | Cropley clay, 0 to 2%                                | Х                 |  |                              |  |
| 133    | Cropley clay, 2 to 9%                                | Х                 |  |                              |  |
| 134    | Dibble clay loam, 9 to 15%                           |                   |  | Х                            |  |
| 135    | Dibble clay loam, 15 to 30%                          |                   |  | Х                            |  |
| 138    | Elder loam, 0 to 2%                                  | Х                 |  |                              |  |
| 139    | Elder loam, 2 to 9%                                  | Х                 |  |                              |  |
| 140    | Elder loam, 0 to 5%, flooded                         | Х                 |  |                              | Х  |
| 142    | Gaviota-San Andreas association, 15-30%              |                   |  |                              | х  |
| 144    | Gazos shaly clay loam, 9 to 30%                      |                   |  | Х                            |  |
| 147    | Hanford and Greenfield soils, 0 to 2%                | х                 |  |                              |  |
| 148    | Hanford and Greenfield soils, 2 to 9%                | X <sup>e</sup>    | х                                      |                              |  |
| 149    | Hanford and Greenfield gravelly sandy loams, 0 to 2% | Х                 |  |                              |  |
| 150    | Hanford and Greenfield gravelly sandy loams, 2 to 9% | Х                 |  |                              |  |
| 152    | Linne-Calodo complex, 9 to 30%                       |                   |  | Х                            |  |

# TABLE SL-2

| Symbol | Soil Name   | Prime<br>Farmland | Farmland of<br>Statewide<br>Importance | Other<br>Productive<br>Soils | Highly<br>Productive<br>Rangeland<br>Soils |
|--------|---|-------------------|--|------------------------------|--|
|        | PASO ROI  | BLES SOIL         | SURVEY ARE                             | 4                            |  |
| 155    | Linne-Diablo complex, 9 to 15%                      |                   | Х                                      |                              |  |
| 157    | Lockwood shaly loam, 0 to 2%                        | Х                 |  |                              |  |
| 158    | Lockwood shaly loam, 2 to 9%                        |                   | Х                                      |                              |  |
| 159    | Lockwood-Concepcion complex, 2 to 9%                |                   | Х                                      |                              |  |
| 160    | Lockwood-Concepcion complex,<br>9 to 15%            |                   |  | х                            |  |
| 166    | Metz loamy sand, 0 to 5%                            |                   | Х                                      |                              |  |
| 167    | Metz-Tujunga complex, occasionally flooded, 0 to 5% |                   |  | х                            |  |
| 169    | Millsholm-Dibble complex, 15 to 30%                 |                   |  |                              | х  |
| 173    | Mocho clay loam, 0 to 2%                            | Х                 |  |                              |  |
| 174    | Mocho clay loam, 2 to 9%                            | Х                 |  |                              |  |
| 175    | Nacimiento silty clay loam, 9 to 30%                |                   |  | Х                            |  |
| 177    | Nacimiento-Ayar complex, 9 to 30%                   |                   |  | х                            | х  |
| 179    | Nacimiento-Los Osos complex, 9 to 30%               |                   |  | х                            |  |
| 182    | Oceano loamy sand, 2 to 9%                          | Х                 |  |                              |  |
| 183    | Pico fine sandy loam, 0 to 2%                       | Х                 |  |                              |  |
| 184    | Pico fine sandy loam, 2 to 9%                       | Х                 |  |                              |  |
| 186    | Polonio clay loam, 2 to 9%                          | Xe                | Х                                      |                              |  |
| 187    | Rincon clay loam, 0 to 2%                           | Х                 |  |                              | Х  |
| 188    | Rincon clay loam, 2 to 9%                           | Х                 |  |                              | Х  |
| 189    | Rincon clay loam, 9 to 15%                          |                   |  | Х                            | Х  |
| 191    | Ryer clay loam, 2 to 9%                             | Х                 |  |                              | Х  |
| 192    | San Andreas sandy loam, 15 to 30%                   |                   |  |                              | Х  |



# TABLE SL-2

| Symbol | Soil Name                               | Prime<br>Farmland | Farmland of<br>Statewide<br>Importance | Other<br>Productive<br>Soils | Highly<br>Productive<br>Rangeland<br>Soils |
|--------|---|-------------------|--|------------------------------|--|
|        | PASO ROI                                | BLES SOIL         | SURVEY ARE                             | 4                            |  |
| 193    | San Andreas-Arujo complex, 9 to 15%     |                   | Х                                      |                              | Х  |
| 194    | San Emigdio fine sandy loam, 0<br>to 2% | х                 |  |                              |  |
| 195    | San Emigdio fine sandy loam, 2 to 9%    | х                 |  |                              |  |
| 196    | San Ysidro sandy loam, 2 to 9%          |                   |  | Х                            |  |
| 197    | San Ysidro loam, 0 to 2%                |                   | Х                                      |                              |  |
| 198    | Santa Lucia-Lopez complex, 15 to 50%    |                   |  | Х                            |  |
| 200    | Sesame sandy loam, 9 to 30%             |                   |  | Х                            |  |
| 205    | Sorrento clay loam, 0 to 2%             | Х                 |  |                              |  |
| 206    | Sorrento clay loam, 2 to 9%             | Х                 |  |                              |  |
| 207    | Still gravelly loam, 0 to 2%            | Х                 |  |                              |  |
| 208    | Still clay loam, 0 to 2%                | Х                 |  |                              |  |
| 209    | Still clay loam, 2 to 9%                | Х                 |  |                              |  |
|        | CARIZZ                                  |                   | RVEY AREA                              |                              |  |
| 101    | Balcom-Nacimiento complex, 15 to 30%    |                   |  |                              | х  |
| 103    | Balcom-Nacimiento complex, 9 to 15%     |                   |  |                              | х  |
| 109    | Capay clay, 0 to 2%                     | Х                 |  |                              | Х  |
| 110    | Capay clay, 2 to 9%                     | Х                 |  |                              | Х  |
| 114    | Calleguas-Nacimiento complex, 9 to 30%  |                   |  |                              | х  |
| 129    | Kilmer-Hillbrick complex, 9 to 15%      |                   |  |                              | х  |
| 130    | Kilmer-Hillbrick complex, 15 to 50%     |                   |  |                              | х  |
| 140    | Choice silty clay, 15 to 30%            |                   |  |                              | Х  |
|        |   |                   |  |                              |  |



## TABLE SL-2

## IMPORTANT AGRICULTURAL SOILS OF SAN LUIS OBISPO COUNTY

| Symbol | Soil Name                                      | Prime<br>Farmland | Farmland of<br>Statewide<br>Importance | Other<br>Productive<br>Soils | Highly<br>Productive<br>Rangeland<br>Soils |
|--------|--|-------------------|--|------------------------------|--|
|        | CARIZ  | ZO SOIL SU        | RVEY AREA                              |                              |  |
| 149    | San Emigdio sandy loam, 0 to 2%                | х                 |  |                              |  |
| 150    | San Emigdio sandy loam, 2 to<br>9%             | Xe                | х                                      |                              |  |
| 154    | San Emigdio loam, 0 to 2%                      | Х                 |  |                              |  |
| 155    | San Emigdio loam, 2 to 9%                      | Xe                | Х                                      |                              |  |
| 159    | Sorrento loam, 0 to 2%                         | Х                 |  |                              |  |
| 160    | Sorrento loam, 2 to 9%                         | Х                 |  |                              |  |
| 169    | Polonio loam, 0 to 2%                          | Х                 |  |                              | Х  |
| 170    | Polonio clay loam, 2 to 9%                     | X <sup>e</sup>    | Х                                      |                              | Х  |
| 173    | Polonio gravelly loam, 2 to 9%                 | Х                 |  |                              | Х  |
| 174    | Polonio-Thomhill complex, 0 to 2%              | Х                 |  |                              | Х  |
| 175    | Polonio-Thomhill complex, 2 to 9%              | х                 |  |                              | х  |
| 179    | Padres sandy loam, 0 to 2%                     | Х                 |  |                              | Х  |
| 180    | Padres sandy loam, 2 to 9%                     | Х                 |  |                              | Х  |
| 182    | Oceano loamy sand, 2 to 9%                     | Х                 |  |                              |  |
| 190    | Reward channery loam, 15 to 30%                |                   |  |                              | х  |
| 200    | Aramburu very channery clay<br>loam, 15 to 30% |                   |  |                              | х  |
| 230    | Padres-Wasioja complex, 2 to<br>9%             |                   | х                                      |                              | х  |
| 251    | Nacimiento clay loam, 15 to 30%                |                   |  |                              | Х  |
| 261    | Aido clay, 15 to 30%                           |                   |  |                              | Х  |
| 270    | Ayar silty clay, 5 to 9%                       |                   | х                                      |                              | Х  |
| 271    | Ayar clay, 15 to 30%                           |                   |  |                              | Х  |
| 274    | Ayar-Hillbrick-Aido complex, 15 to 30%         |                   |  |                              | х  |



## SOIL RESOURCES

## TABLE SL-2

## IMPORTANT AGRICULTURAL SOILS OF SAN LUIS OBISPO COUNTY

| Symbol | Soil Name  | Prime<br>Farmland | Farmland of<br>Statewide<br>Importance | Other<br>Productive<br>Soils | Highly<br>Productive<br>Rangeland<br>Soils |
|--------|--|-------------------|--|------------------------------|--|
|        | CARIZ  | ZO SOIL SU        | RVEY AREA                              |                              |  |
| 280    | Seaback-Panoza-Jenks<br>complex, 9 to 15%                  |                   |  |                              | х  |
| 281    | Seaback-Panoza-Jenks<br>complex, 15 to 30%                 |                   |  |                              | х  |
| 290    | San Timoteo-San Andreas-<br>Bellyspring complex, 15 to 30% |                   |  |                              | х  |
| 301    | Arbuckle sandy loam, 2 to 9%                               | Xe                | Х                                      |                              | Х  |
| 302    | Arbuckle sandy loam, 9 to 15 %                             | X <sup>e</sup>    |  | Х                            | Х  |
| 303    | Arbuckle sandy loam, 15 to 30%                             |                   |  | Х                            |  |
| 310    | Yeguas-Pinspring complex, 0 to 2%                          | х                 |  |                              | х  |
| 311    | Yeguas-Pinspring complex, 2 to 5%                          | х                 |  |                              | х  |
| 321    | Thomhill loam, 2 to 5%                                     | Х                 |  |                              | Х  |
| 330    | Jenks clay loam, 2 to 9%                                   |                   | Х                                      |                              | Х  |
| 450    | Botella loam, 2 to 9%                                      | Х                 |  |                              | Х  |
| 470    | Botella sandy loam, 2 to 9%                                | Х                 |  |                              |  |
| 474    | Elder sandy loam, 0 to 2%                                  | Х                 |  |                              |  |
| 475    | Elder sandy loam, 2 to 9%                                  | Х                 |  |                              |  |
| 480    | Metz loamy sand, 0 to 5%                                   | Х                 |  |                              |  |
| 490    | Wasioja loam, 0 to 2%                                      | Х                 |  |                              | Х  |
| 491    | Wasioja sandy loam, 2 to 5%                                | Х                 |  |                              | Х  |
| 495    | Wasioja-Polonio complex, 2 to 5%                           | х                 |  |                              | х  |
| 497    | Wasioja-Pinspring-Yeguas complex, 2 to 5%                  | х                 |  |                              | х  |
| 561    | Chanac loam, 9 to 30%                                      | Xe                | Х                                      |                              | Х  |
| 906    | Xerofluvents, 0 to 2%                                      | Х                 |  |                              |  |



## TABLE SL-2

## IMPORTANT AGRICULTURAL SOILS OF SAN LUIS OBISPO COUNTY

| Symbol | Soil Name  | Prime<br>Farmland         | Farmland of<br>Statewide<br>Importance | Other<br>Productive<br>Soils | Highly<br>Productive<br>Rangeland<br>Soils |
|--------|--|---------------------------|--|------------------------------|--|
|        | NORTHERN SANTA BARBA                               | ARA (SAN LU<br>OIL SURVEY |  |                              | ΓΙΟΝ)                                      |
| CuA    | Corralitos loamy sand, 0 to 2%                     | Х                         |  |                              | *  |
| EmC    | Elder loam, 2 to 9%                                | Х                         |  |                              | *  |
| MnA    | Metz loamy sand, 0 to 2%                           | Х                         |  |                              | *  |
| MnC    | Metz loamy sand, 2 to 9%                           | Х                         |  |                              | *  |
| MnC2   | Metz loamy sand, 2 to 9%, eroded                   | х                         |  |                              | *  |
| MoA    | Metz loamy sand, overflow, 0 to 2%                 | х                         |  |                              | *  |
| Mt     | Mocho sandy loam, sandy substratum, overflow       | х                         |  |                              | *  |
| Mu     | Mocho fine sandy loam                              | Х                         |  |                              | *  |
| PcA    | Panoche sandy loam, 0 to 2%                        | Х                         |  |                              | *  |
| PcC    | Panoche sandy loam, 2 to 9%                        | Х                         |  |                              | *  |
| PdA    | Panoche sandy loam, overflow,<br>0 to 2%           | х                         |  |                              | *  |
| PdB    | Panoche sandy loam, overflow, 2 to 5%              | х                         |  |                              | *  |
| PeA    | Panoche loam, 0 to 2%                              | Х                         |  |                              | *  |
| PeC    | Panoche loam, 2 to 9%                              | Х                         |  |                              | *  |
| PfA    | Panoche loam, overflow, 0 to 2%                    | Х                         |  |                              | *  |
| PnC    | Pleasanton sandy loam, 2 to 9%                     | Х                         |  |                              | *  |
| PrA    | Pleasanton very fine sandy loam, 0 to 2%           | х                         |  |                              | *  |
| PsD    | Pleasanton gravelly very fine sandy loam, 9 to 15% |                           | Х                                      |                              | *  |
| StA    | Sorrento sandy loam, 0 to 2%                       | Х                         |  |                              | *  |
| StC    | Sorrento sandy loam, 2 to 9%                       | Х                         |  |                              | *  |
| Sx     | Stutzville loamy sand                              |                           | Х                                      |                              | *  |
| Sy     | Stutzville sandy loam                              |                           | Х                                      |                              | *  |
| Sz     | Stutzville loam                                    |                           | Х                                      |                              | *  |
| Szb    | Stutzville silty clay loam                         |                           | Х                                      |                              | *  |

GENERAL PLAN 8.17

## SOIL RESOURCES

## **TABLE SL-2**

## **IMPORTANT AGRICULTURAL SOILS OF SAN LUIS OBISPO COUNTY**

| Symbol | Soil Name   | Prime<br>Farmland        | Farmland of<br>Statewide<br>Importance | Other<br>Productive<br>Soils | Highly<br>Productive<br>Rangeland<br>Soils |
|--------|---|--------------------------|--|------------------------------|--|
|        | NORTHERN SANTA BARBA<br>SC                          | RA (SAN LU<br>DIL SURVEY |  |                              | ΓΙΟΝ)                                      |
| Szc    | Stutzville silty clay loam, strongly saline         |                          |  | Х                            | *  |
| WaC    | Wasioja fine sandy loam, 5 to<br>9%                 | Xe                       | Х                                      |                              | *  |
|        | LOS PAD   | RES SOIL S               | URVEY AREA                             |                              |  |
| 102pr  | Arbuckle-Positas complex, 9 to 15%                  | Xe                       |  | х                            |  |
| 133pr  | Cropley clay, 2 to 9%                               | Х                        |  |                              |  |
| 147pr  | Hanford and Greenfield soils, 0 to 2%               | х                        |  |                              |  |
| 148pr  | Hanford and Greenfield soils, 2 to 9%               | Xe                       | х                                      |                              |  |
| 166pr  | Metz loamy sand, 0 to 5%                            |                          | х                                      |                              |  |
| 167pr  | Metz-Tujunga complex, occasionally flooded, 0 to 5% |                          |  | х                            |  |
| 173pr  | Mocho clay loam, 0 to 2%                            | Х                        |  |                              |  |
| 188pr  | Rincon clay loam, 2 to 9%                           | Х                        |  |                              | Х  |
| 207pr  | Still gravelly loam, 0 to 2%                        | Х                        |  |                              |  |
| 208pr  | Still clay loam, 0 to 2%                            | Х                        |  |                              |  |
| 209pr  | Still clay loam, 2 to 9%                            | Х                        |  |                              |  |
| 301cp  | Arbuckle sandy loam, 2 to 9%                        | Xe                       | Х                                      |                              | Х  |
| 302cp  | Arbuckle sandy loam, 9 to 15 %                      | Xe                       |  | Х                            | х  |
| 303cp  | Arbuckle sandy loam, 15 to 30%                      |                          |  | Х                            |  |
| 470cp  | Botella sandy loam, 2 to 9%                         | Х                        |  |                              |  |
| 475cp  | Elder sandy loam, 2 to 9%                           | Х                        |  |                              |  |

Table Notes:

\*Information on Highly Productive Rangeland Soils not available for the Northern Santa Barbara Soil Survey Area.  $X^e$  - Map units for soils under the heading of Prime Farmland marked a "X<sup>e</sup>" meet the definition of

prime agricultural land (California Government Code 51201(c)) based only upon a rating of 80 to 100 or an "Excellent" rating in the California Revised Storie Index.

Abbreviations used as follows:

pr = Paso Robles Soil Survey

cp = Carrizo Plain Soil Survey



## **Summary of Implementation Strategies**

For each implementation strategy described in this chapter, the following table (Table SL-2) summarizes the County department or other agency that has primary responsibility for carrying out that strategy. In addition, the table summarizes the priority, estimated year of initiation, and potential source of funding of each strategy. The actual timeframe for implementing the strategies is dependent availability of adequate staff and upon the funding.

## **TABLE SL-3**

## **SOIL RESOURCES IMPLEMENTATION**

| Implementation<br>Strategies   | Department<br>or Agency <sup>1</sup> | Priority | Timeframe<br>to Start | Possible<br>Funding<br>Sources <sup>2</sup> |
|--|--------------------------------------|----------|-----------------------|---|
| IS SL 1.1.1 Soil erosion: private lands                                    | AG, RCD,<br>SCS, UC Ext.,<br>PB      | Medium   | 2011                  | DB , grants                                 |
| IS SL 1.1.2 Soil erosion: public lands                                     | PW, GS                               | High     | Immediately           | DB  |
| IS SL 1.2.1 Low Impact Development (LID)                                   | PB, PW                               | High     | Immediately           | N/A   |
| IS SL 1.2.2 Soil Conservation<br>adjacent to streams                       | PB                                   | High     | Immediately           | N/A   |
| IS SL 1.3.1 Low Impact Development (LID)                                   | PB, PW, GS                           | High     | Immediately           | DB , grant                                  |
| IS SL 1.3.2 Land Use Ordinance<br>amendment                                | PB                                   | Medium   | 2012                  | DB  |
| IS SL 2.1.1 Interagency coordination for mapping                           | PB, PW,<br>RWQCB,<br>DWR             | Medium   | 2010                  | DB  |
| IS SL 2.1.2 Watershed education for<br>landowners                          | PB, PW                               | Medium   | 2011                  | DB  |
| IS SL 2.1.3 Protect natural stream<br>functions                            | PB, PW                               | Medium   | Immediately           | DB  |
| IS SL 2.1.4 Coordinated watershed restoration                              | PB, PW, RCD                          | Medium   | 2011                  | DB  |
| IS SL 3.1.1 Non-agricultural structures<br>on Important Agricultural Soils | PB, AG                               | Medium   | Immediately           | N/A   |
| IS SL 3.1.2 Important Agricultural Soils database                          | PB, AG                               | High     | 2010                  | DB  |



8.2

## SOIL RESOURCES

## TABLE SL-3 SOIL RESOURCES IMPLEMENTATION

| Implementation<br>Strategies   | Department<br>or Agency <sup>1</sup> | Priority | Timeframe<br>to Start | Possible<br>Funding<br>Sources <sup>2</sup> |
|--|--------------------------------------|----------|-----------------------|---|
| IS SL 3.1.3 Land Use Ordinance<br>Amendment: Important Agricultural<br>Soils | PB, AG                               | High     | 2011                  | DB  |
| IS SL 3.1.4 Coordinate discretionary project review with RCD                 | РВ                                   | High     | Immediately           | N/A   |
| IS SL 3.1.5 Mitigation of impacts to<br>Important Agricultural Soils         | PB, AG                               | High     | 2011                  | DB  |

|                              | Notes:         1       Department abbreviations:         AG = County Department of Agriculture         EH = County General Services Agency         PB = County Department of Planning and Building         PW = County Department of Public Works         RCD = Resource Conservation Districts         UCext = University of California, Cooperative Extension         2       Funding source abbreviations:         GF = General Fund         DB = Planning and Building, 2009. |
|------------------------------|---|
| 20 COUNTY OF SAN LIUS ORISPO |   |
| 20 COUNTY OF SAN LUIS OBISPO |   |



## Purpose

This chapter guides the appropriate placement of development so that the natural landscape continues to be the dominant view in rural parts of the county and to ensure that visual character contributes to a robust sense of place in urban areas. The County recognizes that:

- Visual resources are part of the sense of place recognized by residents;
- Intact scenic landscapes are highly valued by residents and visitors;
- A high quality visual environment and scenic views contribute to economic growth.

## Introduction

San Luis Obispo County's visual resources consist of **open areas** (agricultural and natural, undeveloped land), **scenic corridors** (areas that have scenic or historic qualities that are visible from recognized roadways), and the **built environment** (urban landscape). A variety of spectacular natural features and scenic areas contribute to the quality of life enjoyed by residents and visitors. Mountains and ridgelines, unique geological forms, bays and coastal views are the most obvious of these features. The county also includes many other visual resources such as open meadows, riparian corridors, wetland areas, forested areas, and open spaces. Agricultural areas also contribute to the county's visual quality. Scenic views of these resources enhance the travel experience on rural roads and highways.

#### AGP 30 – Scenic Resources

This policy in the Agriculture Element states that the scenic corridors and the standards to protect their scenic vistas shall not interfere with agricultural uses on private lands. The policy further states that in designated scenic corridors, land divisions, and new development requiring a discretionary permit shall

-Balance the protection of the scenic resources with the protection of agricultural resources and facilities

-Favor development locations that minimize visibility from the scenic corridor and are compatible with agricultural operations

-In prominent locations, encourage structures that blend with the natural landscape or are traditional for agriculture.



**Appendix 9** provides an overview of the county's scenic resources.

# Relationship to Other Elements, Plans, and Programs

The policies and strategies in this chapter are consistent with other Elements of the General Plan. For example, Policies VR 1.1, 2.1 and 4.1 relate directly to Agriculture Element Policy 30. The visual resources policies also relate to other chapters in this Element, such as Open Space and Biological Resources.

The goals, policies, and implementation strategies in this chapter are applied in concert with additional goals, policies, regulations, or standards in specific planning areas as specified in the Land Use Ordinance and the Local Coastal Program. For example, some important landscapes have been identified and addressed in scenic Sensitive Resource Areas (SRA – combining designations or zoning overlays used to protect certain scenic areas) and in Highway Corridor Design Standards (HCDS). **Figure VR-1** provides a map of designated areas where scenic protection policies apply.

Coastal visual resources are addressed by the County's Local Coastal Program, specifically, the Coastal Plan Policies, the area plans, and Coastal Zone Land Use Ordinance. Policies in this Element supplement the Coastal Plan Policies, except that when the policies of this Element conflict with the Coastal Plan Policies, the Coastal Plan Policies control.

#### **Major Issues**

Scenic Landscapes. Development will inevitably occur within some of the county's scenic areas. The location and design of development in these areas can have a profound effect on urban and rural landscapes. Buildings that are appropriately placed and designed can complement and even blend with the natural landscape. However, inappropriately located and designed development including telecommunication facilities, roads, and billboards can detract from and conflict with an area's overall character. Land management practices may also cause unnecessary harm to visual resources.

**Community Separation.** A characteristic that distinguishes San Luis Obispo County from metropolitan areas is the continued existence of rural-appearing land, called Community Separators, between separate, identifiable communities and towns. Open spaces and the rural character between communities are being lost to urban and suburban uses. As Community Separators are typically rural, many of these areas are also scenic. The *2006 San Luis Obispo County Community Separator Study* recommends ways to maintain community separation in key areas. **Figure VR-2**, a map of Conceptual Community Separators, identifies the general locations where special policies should apply.

Scenic Corridors. Scenic corridors are view areas, or "viewsheds" from popular public roads and highways that have unique or outstanding scenic qualities. Inappropriate development or billboards can intrude upon these viewsheds. Some examples are highly visible graded roads and pads, buildings that are too close to a highway, and building designs that silhouette against the skyline, telecommunications facilities, utilities, signage, and other structures that dominate rather than blend with a natural landscape. Scenic highways and roads are scenic corridors that are designated to conserve and enhance their scenic beauty. Highway One is a designated State Scenic Highway and National Scenic Byway from San Luis Obispo to the Monterey County line. A portion of Lake Nacimiento Drive is also a designated State Scenic Highway. The County or the California Department of Transportation (Caltrans) may designate additional scenic roads and highways through a process that considers local needs and regulations.

The County has adopted Highway Corridor Design Standards along Highway 101 that address residential and related development. An official scenic highway designation could result in more attention to sensitive design and promote tourism. Designating additional scenic roads and highways should not place undue restrictions on private property, or cause impacts to biological resources or unnecessary burdens on agricultural operations.

Scenic Landmarks and Views. Visual resources are often spectacular, steep mountain ranges. the Pacific Ocean shoreline or volcanic peaks. Some outstanding features, such as peaks and coastal views, are so beautiful and dramatic that they have an iconic status as landmarks. These icons of the landscape may be miles long but only visible to the traveling public for a few seconds. Or, like Morro Rock, they may be visible to entire communities. They are especially sensitive to impairment by development. Cooperation and partnerships are essential between land owners, County government and land conservation organizations to conserve and enhance views of these resources.

Scenic Landscapes

include typical landscapes that visually define a region of the county and that are valued by residents and visitors. Examples are the rolling, wooded hills near Templeton and the steep, grassy hills near Shandon. **Built Environments.** New development within urban areas may not reflect the historical and local design of existing buildings. This may diminish the visual identities or character of individual communities or neighborhoods. Thoughtful design can enhance the urban landscape by fitting within the context of existing development. It can also be a counterpart to the natural features that define the county. Good urban design touches on matters of architectural theme, scale, site planning, and orientation, as well as appropriate lighting, signs, and access.

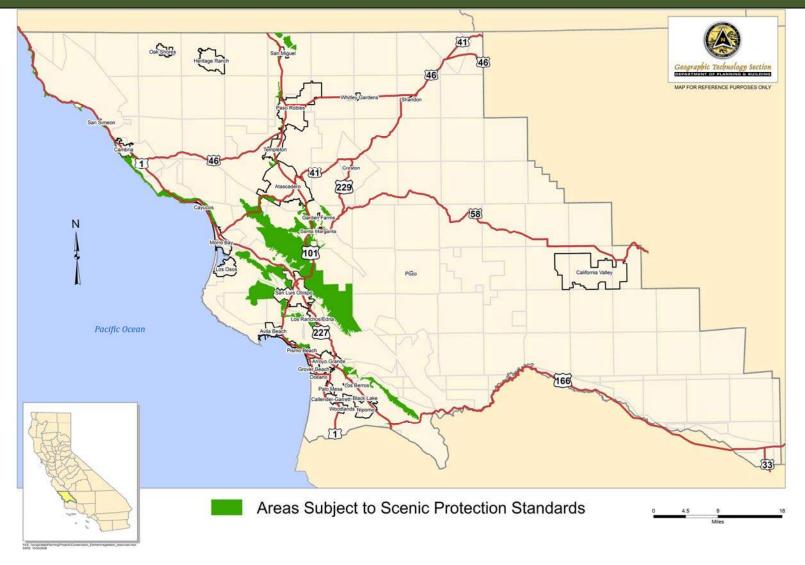


Rural home blended into setting using design and vegetative screening.

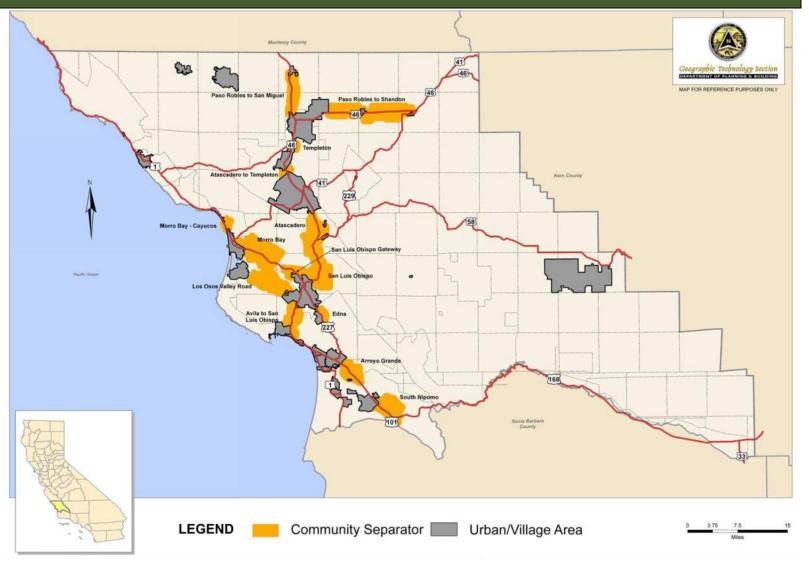


Rural home dominates the setting.





## FIGURE VR-2 CONCEPTUAL COMMUNITY SEPARATORS



## Goals, Policies, and Implementation Strategies

The intent of the following goals, policies, and implementation strategies is to protect the visual character and identity of the county while protecting private property rights, in order to: 1) maintain a sense of place recognized by residents, 2) preserve intact scenic landscapes that are highly valued by residents and visitors, and 3) maintain a high-quality visual environment that enhances tourism, real estate values and economic growth.

## TABLE VR-1 GOALS FOR VISUAL RESOURCES

| Goal VR 1 | The natural and agricultural landscape will continue to be the dominant view in rural parts of the county. |
|-----------|--|
| Goal VR 2 | The natural and historic character and identity of rural areas will be preserved.                          |
| Goal VR 3 | The visual identities of communities will be preserved by maintaining rural separation between them.       |
| Goal VR 4 | Protect visual resource within visual sensitive resource areas (SRAs) for scenic corridors.                |
| Goal VR 5 | Views from scenic vistas and vista points will be protected.   |
| Goal VR 6 | A cohesive visual character will be maintained in urban areas.   |
| Goal VR 7 | Views of the night sky and its constellations of stars will be maintained.                                 |
| Goal VR 8 | Visual intrusions of signs will be minimized within public view corridors                                  |
| Goal VR 9 | The visual effects of utility lines will be minimized.   |



GOALTHE NATURAL AND AGRICULTURAL1LANDSCAPE WILL CONTINUE TO BE THE<br/>DOMINANT VIEW IN RURAL PARTS OF<br/>THE COUNTY.

#### **Policy VR 1.1 Adopt Scenic Protection Standards** Protect scenic views and landscapes, especially visual Sensitive

Resource Areas (SRAs) from incompatible development and land uses

- Implementation Strategy VR 1.1.1 Identify and Designate Scenic Landmarks and Landscapes After extensive public participation, identify and designate scenic landscapes and important scenic landmarks that define the image of the county in order to conserve highly sensitive areas. This effort will refine and supplement the existing designated scenic areas, such as Sensitive Resource Area combining designations for visual resources, using recognized methods.
- Implementation Strategy VR 1.1.2 Amend Plans and Ordinances

Amend the Land Use Ordinance, Coastal Zone Land Use Ordinance, and/or Area Plans, as applicable to enact or revise ordinance standards to protect scenic resources. Adoption and implementation of scenic protection standards shall not interfere with agricultural uses on private lands consistent with AGP30. Standards for land use permits, including industrial and processing uses, and subdivisions should include visual assessments by qualified experts; visually effective setbacks near highways and roadways; siting in unobtrusive locations; and standards for height, architectural design, landscaping, lighting, and signs. The standards should emphasize avoiding visual impacts through alternative locations and designs where feasible. Establish consistent Countywide Viewshed Protection Standards.

## We will recognize success when...

 Land use strategies and standards are in place to maintain clear separations between communities and rural areas, with distinct edges around urban and village areas.

 Standards are in place throughout the county to assure that development protects important scenic landscapes and landmarks, and scenic viewsheds along welltraveled highways and roads, without undue restrictions on private property or agricultural operations.

 The visibility and clarity of the night sky in communities and rural areas is maintained, even as additional development occurs.

.8 COUNTY OF SAN LUIS OBISPO

#### GOAL

## THE NATURAL AND HISTORIC CHARACTER AND IDENTITY OF RURAL AREAS WILL BE PROTECTED.

#### *Policy VR 2.1 Develop in a manner compatible with Historical and Visual Resources*

Through the review of proposed development, encourage designs that are compatible with the natural landscape and with recognized historical character, and discourage designs that are clearly out of place within rural areas.

#### *Policy VR 2.2 Site Development and Landscaping Sensitively*

Through the review of proposed development, encourage designs that emphasize native vegetation and conform grading to existing natural forms. Encourage abundant native and/or drought-tolerant landscaping that screens buildings and parking lots and blends development with the natural landscape. Consider fire safety in the selection and placement of plant material, consistent with Biological Resources Policy BR 2.7 regarding fire suppression and sensitive plants and habitats.

#### Policy VR 2.3 Revise Countywide Design Guidelines

New development should follow Countywide Design Guidelines to protect rural visual and historical character. The guidelines should encourage new development that is compatible with public views of scenic areas, the natural landscape, and existing development.

 Implementation Strategy VR 2.3.1 Amend Countywide Design Guidelines

Amend and strengthen the Countywide Design Guidelines to protect rural visual and historical character. The guidelines or standards should address the following: determining the visual and historical setting; using existing site features in site planning; avoiding and minimizing ridgetop development; setting back development from roads; preserving scenic features; landscaping for screening; selecting unobtrusive building materials and colors; and designing with reference to locally historical architecture. The Countywide Design Guidelines, adopted in 1998, consist of design objectives, guidelines, and examples that help retain the character of the unincorporated communities and the rural area. The Guidelines are not regulatory in nature. The Guidelines encourage urban development that is compact in form and pedestrian-oriented.



GOAL 3 THE VISUAL IDENTITIES OF COMMUNITIES WILL BE PRESERVED BY MAINTAINING RURAL SEPARATION BETWEEN THEM.

#### *Policy VR 3.1 Identify and Protect Community Separators*

Identify Community Separators and propose land use strategies and development standards to maintain separate, identifiable cities and communities with intervening rural land. Involve landowners and communities in this process. Identification and designation of Community Separators shall not interfere with agricultural uses on private lands consistent with AGP 30.

- Implementation Strategy VR 3.1.1 Community Separator: Amend the Land Use Element and Ordinance
   Amend the Land Use Element and Ordinance to identify and include Community Separators as Land Use Element
   Combining Designations with accompanying Land Use
   Ordinance development standards. Amendments will:
  - a. Identify three distinct features (scenic vistas, transition areas and urban arrival areas) within each Community Separator. Mapping of Community Separators will remain conceptual until the Land Use and Circulation Element is completed, and will not be parcel-specific.
  - Establish standards for Community Separators that will retain rural land use designations and density, preserve natural features, and protect the long-term viability of agriculture.
  - c. Within Community Separators, guide development and subdivision design to avoid apparent residential density in excess of one parcel per 20 acres; use visually effective setbacks near roadways and other public recreational areas; and observe height, architectural design, lighting, and sign controls.



Templeton - Atascadero community separation

 Implementation Strategy VR 3.1.2 Community Separator: Frontage Roads
 Amend the Land Use and Circulation Elements to discourage new frontage roads along highways and roadways within

Community Separators.
 Implementation Strategy VR 3.1.3 Community Separator:

 Implementation Strategy VR 3.1.3 Community Separator: TDC

Identify Community Separators as sending sites for the Transfer of Development Credits (TDC) program and facilitate significant transfers.

#### Policy VR 3.2 Community Involvement

Encourage communities adjacent to Community Separators to maintain a sense of place and separation through education about the importance of separators. Community advisory groups or nonprofit organizations could lead these efforts.

#### **Policy VR 3.3 Conservation Tools**

Collaborate with community advisory councils, cities, landowners, and non-profit conservation organizations to propose voluntary scenic, agricultural, or conservation easements and/or greenbelt programs that support private landownership while retaining the visual resources within Community Separators.

#### Policy VR 3.4 Community Edges

Maintain clear community edges for urban and village areas with appropriate plan designations when updating community and area plans. Avoid suburban or low-density sprawl at the edges of communities.

#### **Policy VR 3.5 Annexation in Community Separators**

Avoid annexation of Community Separators or their inclusion in spheres of influence for sewer and water service.



Cuesta Ridge – Scenic Highway 101 Corridor east of San Luis Obispo



GOAL

## PROTECT VISUAL RESOURCES WITHIN VISUAL SENSITIVE RESOURCE AREAS (SRAS) FOR SCENIC CORRIDORS.

#### **Policy VR 4.1 Designation of Scenic Corridors**

Designate scenic corridors based on the recommendations for Scenic Corridor Studies, for the candidate roads and highways listed in **Table VR-2**.

 Implementation Strategy VR 4.1.1 Scenic Corridor: Work Plan

Propose a priority list and work program for consideration by the Board of Supervisors to conduct corridor studies and designate the candidate roads and highways listed in **Table VR-2**. At a minimum, the corridor studies should (a) specify the features that need to be protected through a site-specific analysis of each viewshed; (b) state why it is important to protect those features; (c) where applicable, establish specific mapped boundaries that define the minimum area necessary to protect the identified features; (d) identify the type of inappropriate development that should be regulated; (e) Involve area property owners; and (f) be accompanied by an economic assessment.

◊ .Implementation Strategy VR 4.1.2 Scenic corridor: Design Standards

Establish scenic corridor design standards in conjunction with scenic corridor and highway designations. Regulations should be modeled after the Highway Corridor Design Standards in place in the Land Use Element. Guidelines and standards should require sensitive siting of development and visually effective setbacks. In addition, the guidelines and standards should address siting and building design below ridgetops, access roads, landscaping, building height, signs, lighting, and outdoor advertising. Any regulations should ensure that there would not be undue restrictions on private property or agricultural operations. In addition, design standards for projects subject to discretionary review should balance the protection of scenic resources with protection of agricultural resources and facilities. Industrial, processing and similar uses

#### CHAPTER 9

should be located outside of scenic viewsheds as the first priority, or if not feasible, requiring unobtrusive designs.

- Implementation Strategy VR 4.1.3 Scenic Corridor: Highway Improvements Install, and encourage Caltrans to install, special scenic treatments within scenic road and highway rights-of-way. Those treatments may include viewsensitive sign placement, highway directional signs, guardrails and fences, lighting, scenic outlooks, frontage roads, contoured grading, vegetation, and unobtrusive highway structures.
- Implementation Strategy VR 4.1.4 Scenic Corridor: State Scenic Highway Designation Pursue State Scenic Highway designation from Caltrans for eligible listed corridors.



Highway 101 design in scenic corridor

 Implementation Strategy VR 4.1.5 Scenic Preservation Collaborative Efforts
 Work with property owners to preserve prominent ridgelines and scenic backdrops through open space agreements, contracts, or other appropriate instruments along designated scenic corridors.

#### **Policy VR 4.2 Balanced Protection**

Balance the protection of scenic resources with the protection of biological and agricultural resources that may co-exist within the scenic corridor.

 Implementation Strategy VR 4.2.1 Agricultural Uses in Scenic Corridors
 Designation and management of scenic corridors will not interfere with agricultural uses on private lands.

# TABLE VR-2SUGGESTEDSCENIC CORRIDORS

| Adelaida Road  | Highway 101   |
|--|---|
| Avila Beach Drive  | Huasna Road from Lopez Drive  |
| Chimney Rock Road  | Nacimiento Lake Drive/Interlake Road from Paso<br>Robles to Monterey County                       |
| Cypress Mountain Drive from Santa Rosa<br>Creek Road to Chimney Rock Road      | Orcutt Road from the San Luis Obispo City Limits to Lopez Drive                                   |
| Elkhorn Road/Elkhorn Grade Road in the<br>Carrizo Plain                        | Palo Prieta Cholame Road/Bitterwater Road/Soda<br>Lake Road from Cholame to the California Valley |
| Foothill Road from San Luis Obispo city limits to Los Osos Valley Road         | Pecho Valley Road from Rodman Drive through<br>Montana de Oro State Park                          |
| Hi Mountain Road   | Pozo Road between Hi Mountain Road and Highway<br>58  |
| Highway 41 between Morro Bay and<br>Atascadero                                 | Prefumo Canyon Road/See Canyon Road   |
| Highway 46 East  | Price Canyon Road   |
| Highway 46 West  | Santa Rosa Creek Road   |
| Highway 58 from the Santa Margarita urban reserve line to the Kern County line | South Bay Boulevard from Santa Ysabel Avenue to Highway 1   |
| Lopez Drive from Huasna Road to Lopez Lake<br>Recreation Area                  | Highway 227 from Price Canyon Road to Arroyo Grande City Limits                                   |
|  |   |

#### Policy VR 4.3 Scenic Corridor Roadway Design

The County should develop policies and standards for each designated scenic corridor that will guide all County and State road and highway development projects. An example of such policies and standards is included in **Appendix 6**.



5

## VIEWS FROM SCENIC VISTAS AND VISTA POINTS WILL BE PROTECTED.

#### **Policy VR 5.1 Retain Existing Scenic Access**

Encourage Caltrans to maintain existing scenic vista points. Where vista points and turnouts must be eliminated due to bluff erosion, other hazards, or operational needs, they should be replaced in reasonable proximity if feasible.

#### Policy VR 5.2 Create New Scenic Access

The County and Caltrans, as applicable, should identify, construct, and maintain additional scenic overlooks, turnouts, or vista points along designated scenic corridors. Vista points, overlooks, and turnouts should include parking, support facilities, and interpretive features as appropriate.

#### Policy VR 5.3 Sale of Public Lands

Seek to assure, through required General Plan conformity reports and the disposal of County-owned lands, that the sale of publicly owned land is consistent with the goals and policies in this Element to protect the county's visual resources.

#### GOAL

6

### **A COHESIVE VISUAL CHARACTER WILL BE MAINTAINED IN URBAN AREAS.**

#### Policy VR 6.1 Urban Design

Ensure that new multi-family residential, mixed-use, and commercial or other non-residential development in the urban and village areas is consistent with local character, identity, and sense of place.

♦ Implementation Strategy VR 6.1.1 Urban Desian: **Community Design Guidelines** Revise the Countywide Design Guidelines as needed to address local character, identity, and "sense of place." Consider amending the Land Use Ordinance and Coastal Zone Land Use Ordinance to incorporate the Guidelines,



together with the community design plans, into a consolidated set of design guidelines and standards.

**3**0AL **7** 

## VIEWS OF THE NIGHT SKY AND ITS CONSTELLATIONS OF STARS WILL BE MAINTAINED.

#### Policy VR 7.1 Nighttime Light Pollution

Protect the clarity and visibility of the night sky within communities and rural areas, by ensuring that exterior lighting, including streetlight projects, is designed to minimize nighttime light pollution.

Implementation Strategy VR 7.1.1 Night Sky: Review of Exterior Lighting Amend the Land Use Ordinance to clarify the content and review of exterior lighting plans and to make other changes as needed to minimize impacts to the night sky from glare and the

GOAL



amount of light.

## VISUAL INTRUSIONS OF SIGNS WILL BE MINIMIZED WITHIN PUBLIC VIEW CORRIDORS.

#### **Policy VR 8.1 Billboards**

Continue to prohibit new off-site advertising signs (billboards). The County should initiate programs for billboard removal and support community efforts to buy the rights to current billboard operations.

- Implementation Strategy VR 8.1.1 Billboards Work with property owners to fund and purchase the rights to existing billboards and off-site signs, especially within view of the Candidate Scenic Corridors listed in Table VR-2.
- Implementation Strategy VR 8.1.2 Nonconforming Billboards

Revise Titles 22 and 23 regarding destroyed nonconforming signs to clarify that a billboard (outdoor commercial advertising sign) may not be replaced or reconstructed (if the sign and site cannot be brought into conformity with the Land Use

Ordinance) if 75% or more of the physical structure of the sign is destroyed.

#### Policy VR 8.2 Informational or Interpretive Signs

Encourage creation of a system of roadside informational signs to meet the legitimate need of motorists for tourist information. These signs should be constructed of materials compatible with the surrounding environment and the county's heritage. (Refer to Implementation Strategy VR 4.1.3)

Implementation Strategy VR 8.2.1Informational Signs Collaborate with Caltrans to develop an unobtrusive yet effective program for informational highway signs. These signs should be constructed of materials that reflect the environment and the county's heritage.

#### GOAL

9

#### THE VISUAL EFFECTS OF UTILITY LINES WILL BE MINIMIZED.

#### **Policy VR 9.1 Underground Utilities**

Encourage all existing areas with overhead lines, particularly the candidate Scenic Corridors listed in **Table VR-2**, to be placed underground through special districts, supplementing existing funding through Rule 20A utility fees. The County Undergrounding Coordinating Committee should give high priority to these critical areas, as well as central business districts and urban corridors. Government agencies should set an example by ensuring that utilities serving public properties are relocated underground as part of the construction or remodeling of public facilities.

#### Policy VR 9.2 Utility Service Lines

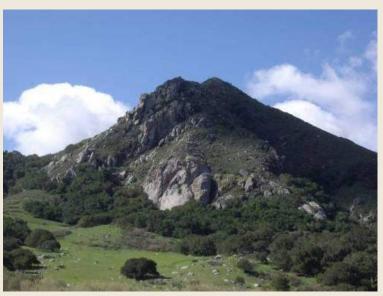
Utility companies should prepare long-range corridor plans for service lines in consultation with local organizations and government agencies. New transmission lines that would be visually damaging should be designed to minimize visual effects. In addition, access roads and right-of-way clearing should be kept to the minimum necessary where new installation or repair of existing installations occurs. **Co-location** includes the installation of antennas operated by different entities in close proximity so that use of substantial elements of the facility such as the antenna tower, equipment shelter, or fenced enclosure is shared.

#### **Policy VR 9.3 Communications Facilities**

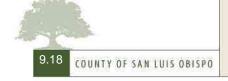
Locate, design and screen communications facilities, including towers, antennas, and associated equipment and buildings in order to avoid views of them in scenic areas, minimize their appearance and visually blend with the surrounding natural and built environments. Locate such facilities to avoid ridge tops where they would silhouette against the sky as viewed from major public view corridors and locations.

#### **Policy VR 9.4 Co-location of communication facilities** Encourage co-location of communications facilities (one or more companies sharing a site, tower or equipment) when feasible and where it would avoid or minimize adverse visual effects.

Implementation Strategy VR 9.4.1 Communication Facilities: Amend Land Use Ordinance Amend the standards in the Land Use Ordinance and Coastal Zone Land Use Ordinance to avoid the adverse visual effects of communications facilities. These standards should include height limitations, setbacks from buildings and property lines, screening and landscaping requirements, and location and design criteria for communication facilities.



Cerro Romauldo – An ancient volcanic peak between San Luis Obispo and Morro Bay



## **Summary of Implementation Strategies**

For each implementation strategy described in this chapter, the following table (Table VR-3) summarizes the County department or other agency that has primary responsibility for carrying out that strategy. In addition, the table summarizes the priority, estimated year of initiation, and potential source of funding of each strategy. The actual timeframe for implementing the strategies is dependent upon the availability of adequate staff and funding.

## **TABLE VR-3 VISUAL RESOURCES IMPLEMENTATION**

| Implementation<br>Strategy  | Responsible<br>Department<br>or Agency <sup>1</sup> | Priority | Timeframe<br>to Start | Potential<br>Funding<br>Sources <sup>2</sup> |
|---|---|----------|-----------------------|--|
| IS VR 1.1.1 Identify and<br>Designate Scenic Landmarks<br>and Landscapes        | PB  | High     | 2011                  | DB   |
| IS VR 1.1.2 Amend Plans and<br>Ordinances                                       | РВ  | Medium   | 2011                  | DB   |
| IS VR 2.3.1 Amend Countywide<br>Design Guidelines                               | РВ  | High     | 2011                  | DB   |
| IS VR 3.1.1 Community<br>Separator: Amend the Land Use<br>Element and Ordinance | PB  | High     | 2010                  | DB   |
| IS VR 3.1.2 Community<br>Separator: Frontage Roads                              | РВ  | Medium   | 2012                  | DB   |
| IS VR 3.1.3 Community<br>Separator: TDC   | РВ  | Medium   | 2011                  | DB   |
| IS VR 4.1.1 Scenic Corridors:<br>Work Plan                                      | РВ  | Medium   | 2012                  | DB   |
| IS VR 4.1.2 Scenic Corridors:<br>Standards                                      | PB  | Medium   | 2012                  | DB   |
| IS VR 4.1.3 Scenic Corridors:<br>Highway Improvements                           | PB  | Medium   | 2012                  | DB, grant                                    |
| IS VR 4.1.4 Scenic Corridor:<br>State Scenic Highway<br>Designation             | РВ  | Medium   | 2012                  | DB   |
| IS VR 4.1.5 Scenic Preservation<br>Collaborative Efforts                        | PB  | Medium   | 2011                  | DB   |



### **TABLE VR-3 VISUAL RESOURCES IMPLEMENTATION**

| Implementation<br>Strategy   | Responsible<br>Department<br>or Agency <sup>1</sup> | Priority | Timeframe<br>to Start | Potential<br>Funding<br>Sources <sup>2</sup> |
|--|---|----------|-----------------------|--|
| IS V\$ 4.2.1 Agriculture Uses in<br>Scenic Corridors                 | PB  | Medium   | 2012                  | DB   |
| IS VR 6.1.1 Community Design<br>Guidelines: Urban Design             | PB  | Medium   | 2013                  | DB   |
| IS VR 7.1.1 Night Sky: Review of Exterior Lighting                   | PB  | Medium   | 2011                  | DB   |
| IS VR 8.1 .1 Billboards  | РВ  | Medium   | 2011                  | DB   |
| IS VR 8.1 .2 Nonconforming<br>Billboards                             | PB  | Medium   | 2012                  | DB   |
| IS VR 8.2.1 Informational Signs                                      | РВ  | Medium   | 2011                  | DB   |
| IS VR 9.4.1 Communication<br>Facilities: Amend Land Use<br>Ordinance | РВ  | High     | 2010                  | DB   |

Department abbreviations:

1

Caltrans= California Department of Transportation

PB= County Department of Planning and Building PW= County Department of Public Works Funding source abbreviations:

2

GF = General Fund DB = Planning and Building Department Budget Source: Department of Planning and Building, 2009.



#### **Purpose**

The County recognizes water as a valuable and scarce resource; it is essential for the county's environmental, social, and economic well being, and for the public health. This chapter connects water supply and land use planning to ensure a clean, sustainable water supply.

## Introduction

Water resources are of vital importance to the entire county. Clean, reliable, and safe drinking water is essential to public health and the economic well-being of the region.

The County of San Luis Obispo is at a critical juncture, as water demand approaches sustainable supplies. Some areas of the county are experiencing groundwater problems such as seawater intrusion and declining water quality due in part to a lack of available surface water supplies and consistent recharge. This will have significant effects for people and the environment over time.

Reduced water supplies and compromised water quality affect the health of watersheds, and immediate action is needed to protect these valuable resources. Water conservation efforts are already under way in some areas of the county. These efforts represent one of the many solutions to the challenge of managing limited resources. (Refer to **Appendix 10** for more information regarding the county's surface and groundwater resources.)



#### Integrated Regional Water Management Plan

A Strategic Plan for Sustainable Water Resources to Meet Human and Environmental Needs in San Luis Obispo County

10.1

# Relationship to Other Elements, Plans and Programs

This chapter links water supply and land use planning, and it integrates the County's Integrated Regional Water Management (IRWM) Plan with the General Plan. A primary goal of the IRWM Plan is to integrate water supply management with management of water for other purposes such as ecosystem health and flood control. The quality objectives in the IRWM are consistent with the intent of Safe Drinking Water Act goals to protect drinking water "from source to tap." They are also consistent with broader Clean Water Act goals for clean, fishable, and swimmable waters.

In addition to the IRWM Plan, this chapter is closely related to the Strategic Growth principles adopted by the Board of Supervisors that call for directing most growth to cities and communities while conserving agricultural resources and rural character in the rural areas. In order to do so, safe, reliable, and sustainable water supplies will need to be provided in urban areas. At the same time, groundwater supplies will need to be protected for agriculture in accordance with the Agriculture Element.

This chapter establishes comprehensive water policy for the unincorporated portion of the county. The goals, policies and implementation strategies in this chapter are consistent with the goals, policies and implementation strategies of other chapters of the COSE. The water resources policies deal with issues such as protecting groundwater for agriculture, limiting the effects of new development on groundwater basins, protecting water quality and quantity for environmental purposes, and conserving the water resources we currently use. Policies in Biological Resources, Open Space and Energy chapters also address these issues.

#### **Major Issues**

The following issues provide the framework for the goals, policies, and implementation strategies in this chapter. The issues deal with water supply, groundwater monitoring and management, water quality, conservation, water resource management, and flood control. The following is a summary of challenges facing the county.

San Luis Obispo County obtains nearly 80% of its water supply from groundwater. Only 2% of the county's supply comes from imported water and the remaining 17% of water supply is surface waters. The County has 30 groundwater basins.



#### Water Supply

- The conflicting demands on our limited supply of water mean we have difficult policy choices to guide future water use.
- Changing land uses in the county mean changes in water use and availability. Securing adequate water supply for all beneficial uses, especially agricultural land uses, is a priority of the General Plan.
- Strategic growth principles call for redirecting development from areas that rely on groundwater to urban areas served by surface water in order to protect groundwater for agriculture.
- There is a need to secure water supplies to protect environmental resources.

#### Groundwater Monitoring and Management

- Protecting the quantity and quality of groundwater resources is critical to a reliable water supply and is challenging under California water law.
- Groundwater overdraft is a significant and growing problem for the county.
- Limited availability of groundwater data hinders groundwater management efforts.

#### Water Quality

- An increase in the amount of impervious surfaces from development has led to adverse water quality impacts from urban runoff.
- Increased water usage within the county threatens water quality, as evidenced by seawater intrusion and increasing concentrations of contaminants in many areas of the county.

#### Water Conservation

• Conserving the county's limited water supply is one method to reduce the strain on local water sources.

Groundwater overdraft develops when longterm groundwater extraction exceeds aquifer recharge, producing declining trends in aquifer storage. Overdraft is usually evident by, declines in surfacewater levels and stream flow, reduction or elimination of vegetation, land subsidence. and seawater intrusion. (Zekster 2005)



## We will recognize success when...

 Sustainable water supplies are achieved for development, agriculture and environmental needs.

- Critical water supply and water system problems (Levels of Severity II and III) will be reduced (to Level of Severity I) by 2020.
  - There are no further approvals of new lots or increased allowable development densities or intensities in groundwater basins experiencing critical supply problems (Levels of Severity II or III).

 Reclaimed water will comprise 10 percent of total water use by 2020.

- Urban and rural water uses do not compete with agricultural water supplies.
- Levels of pollutants are reduced in groundwater, reservoirs, creeks, estuaries, and beaches.
- Per capita water use is reduced by 20 percent by 2020.

 Water resources are managed using a watershed approach in collaboration with cities, water purveyors, resource conservation districts and landowners. • Water conservation programs in the county vary by community and require coordination, as the programs are run by individual water purveyors such as county service areas, cities, special districts, and private companies.

#### Water Resources Management

- The success of managing water in the future will depend on ensuring that there is adequate funding to maintain and/or develop needed infrastructure, such as pipelines, treatment plants, and desalination facililities.
- More water resource data is needed to make informed and defensible resource management decisions.
- Water management programs (e.g., groundwater management plans) are needed to adequately manage water resources, but they require additional funding.

#### Flood Management

- Solving flood management problems requires an integrated and broad approach.
- Existing flood control regulations and standards do not always provide the appropriate level of flood protection for every situation and often have a narrow perspective (i.e., only drainage or flood control).

## Goals, Policies, and Implementation Strategies

The intent of the following goals, policies, and implementation strategies is to:

- a. recognize water as a valuable and scarce resource;
- b. take early actions to avoid critical situations;
- c. achieve a sustainable water supply;
- d. protect water quality and natural communities, and;
- e. control flooding.

Water is essential for the county's environmental, social, and economic well being, and for the public health.

0.4 COUNTY OF SAN LUIS OBISPO

## TABLE WR-1 GOALS FOR WATER RESOURCES

| Goal WR 1 | The County will have a reliable and secure regional water supply (IRWM).   |
|-----------|--|
| Goal WR 2 | The County will collaboratively manage groundwater resources to ensure sustainable supplies for all beneficial uses. |
| Goal WR 3 | Excellent water quality will be maintained for the health of people and natural communities.                         |
| Goal WR 4 | Per capita potable water use in the county will decline by 20 percent by 2020.                                       |
| Goal WR 5 | The best possible tools and methods available will be used to manage water resources.                                |
| Goal WR 6 | Damage to life, structures, and natural resources from floods will be avoided.                                       |

#### GOAL

#### THE COUNTY WILL HAVE A RELIABLE

AND SECURE REGIONAL WATER SUPPLY (IRWM).

#### Policy WR 1.1 Protect water supplies

Continue to coordinate with water suppliers and managers to identify water management strategies to protect existing and secure new water supplies. (Also refer to **Figure WR-1 Surface Waters**.)

Implementation Strategy WR 1.1.1 Prepare Water Master Plan

Prepare a region-wide Master Water Plan that will:

- Analyze supply and demand by evaluating the potential for new supplies;
- Investigate whether drought contingency plans or other emergency supplies are available to water purveyors;
- c. Evaluate a water demand and water efficiency monitoring program in coordination with the County Planning Department's Resource Management System to monitor municipal, industrial, agricultural, recreational, and environmental demand on an ongoing basis;



#### Water Conservation

means reducing water use, such as turning off taps, shortening shower times, and cutting back on outdoor irrigation.

#### Water Efficiency means

replacing older technologies and practices in order to accomplish the same results with less water, for example, by replacing toilets with new low water using models and by installing "smart controllers" in irrigated areas.

#### Reclaimed water,

sometimes called recycled water, is wastewater that has been treated to remove solids and certain impurities. After treatment, it may be used to recharge the aquifer, often irrigation, dust control, and fire suppression.

- d. Develop a GIS application identifying major land uses and quantifying water demands based on acreage, land use, and consumptive use statistics; and
- e. Identify any deficiencies and recommend projects, policies, and programs to address those deficiencies.

#### **Policy WR 1.2 Conserve Water Resources**

Water conservation is acknowledged to be the primary method to serve the county's increasing population. Water conservation programs should be implemented countywide before more expensive and environmentally costly forms of new water are secured.

Implementation Strategy WR 1.2.1 Revise Resource Management System Revise the Resource Management System Annual Resource Summary Report to collect and report on water usage and trends, water rates and conservation programs (Also refer to Implementation Strategy WR 4.2.1.)

#### Policy WR 1.3 New Water Supply

Development of new water supplies should focus on efficient use of our existing resources. Use of reclaimed water, interagency cooperative projects, desalination of contaminated groundwater supplies, and groundwater recharge projects should be considered prior to using imported sources of water or seawater desalination, or dams and on-stream reservoirs.

#### Policy WR 1.4 Use reclaimed water

The County will be a leader in the use of reclaimed water. Support expanding the use of reclaimed water to make up at least 5% of total water use by 2015 and 10% of total water use by 2020.

- Implementation Strategy WR 1.4.1 Reclaimed water: monitor technology Monitor, explore, and utilize new technologies that lower the cost of advanced tertiary treatment.
- Implementation Strategy WR 1.4.2 Reclaimed water: identify funding sources
   Search for new funding sources for advanced tertiary treatment projects.

- Implementation Strategy WR 1.4.3 Reclaimed water: identify partners
   Identify potential partners and sites for advanced tertiary treatment projects (i.e., agriculture, park fields, etc.) and initiate a long-term public education process for potable water reuse.
- Implementation Strategy WR 1.4.4 Reclaimed water: groundwater recharge Explore opportunities for groundwater recharge with reclaimed water. Opportunities include but are not limited to recharge through use of reclaimed water for irrigation, dust control, and fire suppression.

#### **Policy WR 1.5 Interagency projects**

Help implement interagency projects, including emergency interties between systems, jointly developed facilities, water exchanges, and other methods of enhancing reliability through cooperative efforts.

 Implementation Strategy WR 1.5.1 Sponsor interagency collaboration
 Sponsor discussions between agencies to help facilitate more effective exchange of ideas, and to assess possible cooperative projects.

#### **Policy WR 1.6 Water dependent species**

Protect water sources for water-dependent species and the continuity of riparian communities.

 Implementation Strategy WR 1.6.1 Evaluate ecosystem water needs

As part of the Master Water Plan, evaluate ecosystem water needs and monitoring strategies to understand and provide for the environmental needs for water in each watershed.

#### **Policy WR 1.7 Agricultural operations**

Groundwater management strategies will give priority to agricultural operations. Protect agricultural water supplies from competition by incompatible development through land use controls.

Implementation Strategy WR 1.7.1 Protect agricultural water supplies Consider adopting land use standards, such as growth management ordinance limits for non-agriculturally-related development on certain rural areas, larger minimum parcel sizes in certain rural areas, and merger of substandard rural parcels, in order to protect agricultural water supplies from competing land uses.

#### Policy WR 1.8 Use of surface water projects

Water from surface water projects (e.g. Lopez Lake, Lake Nacimiento) will only be used to serve development within urban and village reserve lines and will not be used to serve development in rural areas.

#### Policy WR 1.9 Discourage new water systems

Enable expansion of public services by community services districts and County service areas to serve contiguous development when water is available. Strongly discourage the formation of new water and sewer systems serving urban development at the fringe and outside of urban or village reserve lines or services lines. Strongly discourage the formation of new mutual or private water companies in groundwater basins with Resource Management System Levels of Severity I, II, or III, except where needed to resolve health and safety concerns.

#### Policy WR 1.10 Water wheeling

When water wheeling is proposed to serve new development, demonstrate that the conveyance facility has an adequate unused capacity in accordance with the California Water Code.

#### Policy WR 1.11 Reduce RMS alert levels

The County will work with local agencies to reduce Resource Management System alert levels for water supply and water systems from recommended or certified Levels of Severity II or III to Level of Severity I or better by 2020.

Water Wheeling occurs when one agency

conveys water through another agency's facility. California Water Code requires that wheeling must not harm any other legal user of water.



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## FIGURE WR-1 SURFACE WATER RESOURCES IN THE COUNTY



SB 221 (chaptered at Government Code Section 66473.7) requires a condition of any tentative map that sufficient water supply shall be available. Proof of the availability of a sufficient water supply shall be requested by the subdivision applicant or local agency, at the discretion of the local agency, and shall be based on written verification from the applicable public water system within 90s days of a request. – California Department of Water Resources

SB 610 (Chaptered at Water Code 10910) requires CEQA review of certain large residential and commercial projects to include a water supply assessment that proves that adequate water exists for the project.  Implementation Strategy WR 1.11.1 Prioritization of resource capacity studies
 Cite highest priority to conducting resource capacity studies

Give highest priority to conducting resource capacity studies for groundwater basins with a Level of Severity designation.

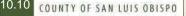
#### Policy WR 1.12 Impacts of new development

Accurately assess and mitigate the impacts of new development on water supply. At a minimum, comply with the provisions of Senate Bills 610 and 221.

- Implementation Strategy WR 1.12.1 Water quality data collection Continue and expand programs to integrate a variety of available water quality data collection and collection and monitoring (including local, state, and federal sources) with land use programs, such as the Resource Management System.
- ◊ Implementation Strategy WR 1.12.2 Require water supply assessments

Require applications for land divisions, which would increase density or intensity in groundwater basins with recommended or certified Levels of Severity II or III for water supply or water systems and are not in adjudication, to include a water supply assessment (WSA) prepared by the applicable urban water supplier (as defined by California Water Code Section 10617). The WSA should:

- a. Determine whether the total projected water supplies for the project during the next 20 years will meet the projected water demand associated with the proposed project, in addition to existing and planned future uses, including agricultural uses.
- b. If water supplies will be insufficient, the WSA should include the water purveyor's plans for acquiring additional water supplies.
- c. If there is no water purveyor, then the County will direct the preparation of the WSA at the subdivider's expense.



#### Policy WR 1.13 Density increases in rural areas

Do not approve General Plan amendments or land divisions that increase the density or intensity of non-agricultural uses in rural areas that have a recommended or certified Level of Severity II or III for water supply until a Level of Severity I or better is reached, unless there is an overriding public need.

#### Policy WR 1.14 Avoid net increase in water use

Avoid a net increase in non-agricultural water use in groundwater basins that are recommended or certified as Level of Severity II or III for water supply. Place limitations on further land divisions in these areas until plans are in place and funded to ensure that the safe yield will not be exceeded.

#### **Policy WR 1.15 Desalination opportunities**

Support the expansion of desalination opportunities only if other new water sources are not feasible (e.g. increased efficiency and conservation, taking full allotments of existing surface water projects such as the Nacimiento Water Project). Evaluation of proposed desalination projects will balance water supply needs with potential effects on biological resources, especially marine resources. Desalination projects will be powered by non-fossil fuel sources where feasible.

- Implementation Strategy WR 1.15.1 Desalination: monitor technology Monitor and explore new technologies that lower the cost of desalination.
- Implementation Strategy WR 1.15.2 Desalination: identify funding Search for new funding sources for desalination projects.
- Implementation Strategy WR 1.15.3 Desalination: identify partners
   Continue to identify potential partners for desalination projects.

**Desalination** refers to any of several processes that remove excess salt and other minerals from water often for conversion to fresh water suitable for human consumption or irrigation.

#### CHAPTER 10

## WATER RESOURCES



Lake Nacimiento

"I encourage each and every Californian to look at ways to reduce their water usage whenever possible."

Governor Schwarzenegger (September 30, 2008, in press release "Gov. Schwarzenegger Signs Legislation to Improve Water Supply Reliability and Conservation")





THE COUNTY WILL COLLABORATIVELY MANAGE GROUNDWATER RESOURCES TO ENSURE SUSTAINABLE SUPPLIES FOR ALL BENEFICIAL USES.

#### **Policy WR 2.1 Groundwater quality assessments**

Prepare groundwater quality assessments, including recommended monitoring, and management measures.

- Implementation Strategy WR 2.1.1 Groundwater monitoring: secure funding
   Continue efforts to prioritize and secure funding for groundwater monitoring and management.
- Implementation Strategy WR 2.1.2 Consider countywide groundwater ordinance
   Adopt a countywide groundwater ordinance to manage groundwater in areas of the county not currently under adjudication.
- Implementation Strategy WR 2.1.3 Prepare groundwater management plans Continue to develop groundwater management plans in conjunction with overlying users in the development of management plans. Provide periodic updates to the Board of Supervisors every five years or less.

**Policy WR 2.2 Groundwater basin reporting programs** Support monitoring and reporting programs for groundwater basins in the region. (Refer to Figure WR-2 Groundwater Basins.)

 Implementation Strategy WR 2.2.1 Collaborate for groundwater data collection
 The County will cooperate with local entities and use local analysis and data to the maximum extent possible to collect and assess groundwater.



#### CHAPTER 10

## WATER RESOURCES

- ♦ Implementation Strategy WR 2.2.2 Improve well permit data collection Improve data obtained from well permit applications regarding location, depth, yield, use, flow direction, and water levels.
- ♦ Implementation Strategy WR 2.2.3 Pursue data collection from all groundwater wells

Secure right of access to all new key wells together with retaining voluntary access to existing wells having useful histories to ensure that the County's investment in these records is protected. Develop a data collection program by seeking permission from each of the well owners for County use with identification of the land owner protected from public or other uses and individual data shall remain confidential.

- ♦ Implementation Strategy WR 2.2.4 Groundwater data collection from water purveyors Require, to the extent feasible, all water purveyors with five or more connections to report monthly pumping data to the Department of Planning and Building on an annual basis for use in the Resource Management System.
- ♦ Implementation Strategy WR 2.2.5 Groundwater data collection for new development

Condition discretionary land use permits for new, nonagricultural uses in groundwater basins with a recommended or certified Level of Severity I, II, or III to monitor and report water use to the Department of Planning and Building on an annual basis for use in the Resource Management System.

#### Policy WR 2.3 Well permits

Require all well permits to be consistent with the adopted groundwater management plans.

♦ Implementation Strategy WR 2.3.1 Revise well permit procedures Revise well permit procedures to address adopted groundwater management plan objectives and adjudication standards.

#### **Policy WR 2.4 Groundwater recharge**

Where conditions are appropriate, promote groundwater recharge with high-quality water.



Santa Margarita Lake

"People have a fundamental vearning for great bodies of water. But the very movement of the people toward the water can also destroy the water."

-Christopher Alexander, Sara Ishikawa, and Murray Silverstein, A Pattern Language: Towns. Buildings, Construction (Oxford, 1977)



## FIGURE WR-2 GROUNDWATER BASINS



10.14





#### **Policy WR 2.5 Groundwater banking programs** Encourage groundwater-banking programs.

 Implementation Strategy WR 2.5.1 Evaluate groundwater banking

Consider in-county opportunities for groundwater banking in the development of the Master Water Plan.

#### WATER QUALITY



## EXCELLENT WATER QUALITY WILL BE MAINTAINED FOR THE HEALTH OF PEOPLE AND NATURAL COMMUNITIES.

#### Policy WR 3.1 Prevent water pollution

Take actions to prevent water pollution, consistent with federal and state water policies and standards, including but not limited to the federal Clean Water Act, Safe Drinking Water Act, and National Pollutant Discharge Elimination System (NPDES).

- Implementation Strategy WR 3.1.1 Support TMDL's Participate in and support the development and implementation of Total Maximum Daily Loads (TMDLs) with the Regional Water Quality Control Board and State Water Resources Board.
- Implementation Strategy WR 3.1.2 Employ pollution prevention in County operations
   Employ pollution prevention techniques in all County operations and maintenance activities consistent with the Best Management Practices outlined in the County's Stormwater Management Program.
- Implementation Strategy WR 3.1.3 Minimize constructionrelated impacts to water quality Minimize construction and post-construction impacts of development through implementation of the County's Stormwater Management Program and Stormwater Pollution Prevention and Discharge Control Ordinance in compliance with Phase II of the National Pollutant Discharge Elimination System (NPDES).

#### A Best Management

**Practice** (BMP) is a technique, process, activity, or structure used or developed to reduce the pollutant content of a stormwater discharge. (County SWMP) Implementation Strategy WR 3.1.4 Continue water qualityrelated public education Continue to work collaboratively throughout the county to promote water quality and pollution prevention through education programs as identified in the County's Stormwater Management Program (SWMP).

#### **Policy WR 3.2 Protect watersheds**

Protect watersheds, groundwater and aquifer recharge areas, and natural drainage systems from potential adverse impacts of development projects.

- Implementation Strategy WR 3.2.1 Minimize runoff from new development Ensure that public and private developments subject to discretionary review are designed to minimize runoff from such sources as homes, golf courses, swimming pools, and roadway maintenance.
- Implementation Strategy WR 3.2.2 Permeable Materials Encourage the use of permeable materials in areas where hardscape is proposed.

#### Policy WR 3.3 Improve groundwater quality

Protect and improve groundwater quality from point and non-point source pollution, including nitrate contamination; MTBE and other industrial, agricultural, and commercial sources of contamination; naturally occurring mineralization, boron, radionuclides, geothermal contamination; and seawater intrusion and salts.

- Implementation Strategy WR 3.3.1 Prioritization and preparation of groundwater management plans
   Give highest priority to preparing and implementing groundwater management plans for basins with evidence of seawater intrusion or other water quality problems.
- Implementation Strategy WR 3.3.2 Maintain database of onsite wastewater systems
   Maintain an electronic database and map database of septic and onsite wastewater treatment systems.





Whale Rock Reservoir

 Implementation Strategy WR 3.3.3 Abatement of failing septic systems
 Pursue the abatement of failing septic systems that are a health and safety hazard and prohibit septic systems in areas where impairment of groundwater quality is likely.

#### Policy WR 3.4 Water quality restoration

Pursue opportunities to participate in programs or projects for water quality restoration and remediation with agencies and organizations such as the Regional Water Quality Control Board (RWQCB), California Department of Fish and Game (CDFG), National Marine Fisheries Service (NMFS), and Resource Conservation Districts (RCDs) in areas where water quality is impaired.

#### *Policy WR 3.5 Support Resource Conservation Districts*

Continue support of and partnerships with Resource Conservation Districts to encourage education and technical assistance regarding erosion and sediment control in agricultural and other land use practices. (Also refer to **Policy AG 9** in the Agriculture Element.)

#### Policy WR 3.6 Prevent pollution of water sources

The County will collaborate with private and nonprofit land managers, Resource Conservation Districts, recreation providers, Community Services Districts, and other stakeholders to prevent pollution or contamination of potable water sources, such as Lake Nacimiento and Lopez Lake. The County will also coordinate with the Nacitone Watershed Plan.

- Implementation Strategy WR 3.6.1 Protect drinking water sources from grading
   Develop specific grading and erosion control regulations near potable water sources. Prepare a public review draft Land use
   Ordinance amendment by the end of 2012.
- Implementation Strategy WR 3.6.2 Abate recreationrelated pollution of drinking water sources
   Pursue abatement of pollution resulting from recreational activities, particularly oil and domestic sewage from boats and recreation vehicles.

 Implementation Strategy WR 3.6.3 Control Quagga mussels and similar invasive species
 Enact measures to control Quagga mussels and other invasive species through measures such as inspections, access limitations, and education in coordination with the California Department of Fish and Game and the Monterey County Water Resources Agency (for Lake Nacimiento).

#### WATER CONSERVATION

## GOAL

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## PER CAPITA POTABLE WATER USE IN THE COUNTY WILL DECLINE BY 20 PERCENT BY 2020.

#### Policy WR 4.1 Reduce water use

Employ water conservation programs to achieve an overall 20% reduction in per capita residential and commercial water use in the unincorporated area by 2020. Continue to improve agricultural water use efficiency consistent with Policy AGP 10 in the Agricultural Element.

 Implementation Strategy WR 4.1.1 Identify baseline per capita water use
 Identify, within six months of adoption of this Conservation and
 Open Space Element, per capita water use baselines, using sub-regional or community data where available.

Implementation Strategy WR 4.1.2 Adopt countywide water conservation ordinance Develop and adopt a countywide water conservation ordinance that includes water efficiency and conservation standards for new development and the retrofit-upon-sale of existing residential and commercial properties. Prepare a public review draft Land Use Ordinance amendment by the end of 2011.

Implementation Strategy WR 4.1.3 Evaluate a countywide water conservation program Evaluate the feasibility of creating a consortium, Joint Powers Authority, Memorandum of Understanding, or other formal partnership with all water purveyors in the county to provide a comprehensive and consistent countywide water conservation program that includes education, outreach, and financial incentives.

Implementation Strategy WR 4.1.4 Expand public education programs for water conservation The County and all other water purveyors in the county will collaborate with local nonprofit and educational organizations and schools such as the Partners in Water Conservation to expand water conservation education programs countywide.

#### Policy WR 4.2 Water pricing structures

Support water-pricing structures to encourage conservation by individual water users and seek to expand the use of conservation rate structures in areas with Levels of Severity II and III for water supply.

Implementation Strategy WR 4.2.1 Incorporate water pricing into RMS Revise the Resource Management System annual report starting with the 2010 report to focus on water rates and water use and to identify disincentives to non-conservation water rate structures.

#### **Policy WR 4.3 Water conservation**

The County will be a leader in water conservation efforts.

- Implementation Strategy WR 4.3.1 Promote water conservation demonstration projects Invite university and community collaboration on water conservation demonstration projects at County facilities such as the replacement of the lawn at the County Courthouse with a native landscape and expansion of water conservation landscaping at regional park facilities.
- Implementation Strategy WR 4.3.2 Assess and monitor County water use
   Assess and monitor water use by County operations, buildings, and facilities on annual basis.

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- Implementation Strategy WR 4.3.3 Reduce water use in County operations
   Reduce exterior and interior use of water in County-owned, operated, or financed facilities through efficient technologies, design and management practices, and other conservation efforts.
- Implementation Strategy WR 4.3.4 Provide water conservation education for County employees Implement employee education programs to reduce water use.

#### Policy WR 4.4 Reuse wastewater

The County will work with wastewater system operators to identify and implement programs for reuse of treated wastewater, particularly in landscaping, irrigation, parks, and public facilities. (WPC5)

 Implementation Strategy WR 4.4.1 Evaluate impact of selfregenerating water softeners
 Evaluate the potential impact of self-regenerating water softeners on the County's ability to effectively treat and use reclaimed water. Amend ordinances as needed.

#### Policy WR 4.5 Water for recharge

Promote the use of supplemental water such as reclaimed sewage effluent and water from existing impoundments to prevent overdraft of groundwater. Consider new ways to recharge underground basins and to expand the use of reclaimed water. Encourage the eventual abandonment of ocean outfalls.

#### **Policy WR 4.6 Graywater**

Encourage the use of graywater systems, rainwater catchments, and other water reuse methods in new development and renovation projects, consistent with state and local water quality regulations.

Implementation Strategy WR 4.6.1 Develop and adopt a graywater ordinance and program Develop and adopt a graywater ordinance and program, including public education that showcases successful local examples, to facilitate the reuse of domestic wastewater for onsite irrigation and other water conservation measures as appropriate.

#### Low Impact Development (LID) is an

innovative stormwater management approach with a basic principle to design the built environment to remain a functioning part of an ecosystem rather than exist apart from it. LID's goal is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source. See also: http://www.lidstormwater.net/ and http://lowimpactdevelopm ent.org/

**Graywater** is untreated wastewater that has not encountered toilet waste. Graywater includes wastewater from bathtubs, showers, bathroom sinks, and clothes washing machines. It does not include wastewater from kitchen sinks, photo lab sinks, dishwashers, or laundry water from soiled diapers.



Changes were enacted to the California Plumbing Code in July 2009 to address residential graywater systems. The changes include definitions of systems that require local permits and those that do not. These changes do not necessitate any revisions to the gray water policies and implementation strategy.

A watershed is the total area above a given point on a watercourse that contributes water to its flow; the entire region drained by a waterway or watercourse that drains to a lake or reservoir.

COUNTY OF SAN LUIS OBISPO

#### Policy WR 4.7 Low Impact Development

Require Low Impact Development (LID) practices in all discretionary and land division projects and public projects to reduce, treat, infiltrate, and manage urban runoff.

 Implementation Strategy WR 4.7.1 Develop and implement a Low Impact Development (LID) Ordinance
 Develop and implement a Low Impact Development (LID)
 Ordinance to provide clear and consistent guidance in the permit application process.

#### **Policy WR 4.8 Efficient irrigation**

Support efforts of the resource conservation districts, California Polytechnic State University (CalPoly), the University of California Cooperative Extension, and others to research, develop, and implement more efficient irrigation techniques.

Implementation Strategy WR 4.8.1 Improve water efficiency conservation in County irrigation systems Evaluate the efficiency of irrigation systems at County Parks and other County facilities with the assistance of Resource Conservation Districts and water purveyors. The goals of such evaluations are to reduce water use and improve water efficiencies.

#### WATER RESOURCE MANAGEMENT

5

THE BEST POSSIBLE TOOLS AND METHODS AVAILABLE WILL BE USED TO MANAGE WATER RESOURCES.

#### **Policy WR 5.1 Watershed approach**

The County will consider watersheds and groundwater basins in its approach to managing water resources in order to include ecological values and economic factors in water resources development.

 Implementation Strategy WR 5.1.1 Support watershed management plans
 Support development and implementation of watershed

management plans for all key watersheds in the county in

collaboration with resource conservation districts, water purveyors, cities, and landowners. Watershed management plans should incorporate the information contained in the County's Source Water Assessments (SWAs) and Watershed Sanitary Surveys (WSSs), and should also include:

- a. Water quality monitoring data;
- b. Activities and sources of contamination;
- c. Watershed control and management practices; and
- d. An evaluation of the system's ability to meet surface water treatment requirements and recommendations for corrective actions.
- Implementation Strategy WR 5.1.2 Secure funding for watershed management
   Seek and secure funding to manage water resources on a watershed basis.
- Implementation Strategy WR 5.1.3 Promote the coordination of watershed protection efforts Promote the coordination of watershed protection efforts and open space and agricultural land preservation planning, consistent with Agriculture Element policies AGP 15 and 16.

#### Policy WR 5.2 Climate change

The County will consider ongoing research on long-term changes in climate and precipitation patterns in the county and region and incorporate relevant data in its approach to managing water resources.

# *Policy WR 5.3 Cooperative water planning and management*

Continue to support cooperative, interregional water planning efforts such as the Integrated Regional Water Management Plan, the Resource Management System, and the Water Master Plan.

 Implementation Strategy 5.3.1 Promote the coordination of watershed protection efforts
 Coordinate water resource management plans with other conservation planning efforts, such as those related to open space, parkland, and agricultural preservation.



Implementation Strategy 5.3.2 Cumulative impacts to watersheds Identify mitigation strategies or programs at the watershed, groundwater basin level, or a portion thereof that address cumulative impacts within watersheds, groundwater basins or in portions of watersheds or groundwater basins in coordination with cities and watershed managers.

#### **FLOOD CONTROL**



6

## DAMAGE TO LIFE, STRUCTURES, AND NATURAL RESOURCES FROM FLOODS WILL BE AVOIDED.

The County's Safety Element, Land Use Ordinance, and Hazard Mitigation Plan discuss the potential risks to life, structures, and natural resources from flooding, and identify goals, policies, programs, and standards to minimize risks. Please consult those documents to help evaluate the potential flooding risks or impacts of development, and its consistency with County plans and programs.

The County Flood Control and Water Conservation District, through the County Public Works Department, has the authority to construct and maintain flood control improvements on major drainage facilities located throughout the county for the purpose of protecting life and property from flood hazards.

The County strictly enforces flood hazard regulations in order to reduce flood damage in poorly drained areas and other areas prone to flooding, such as portions of Los Osos, Avila Valley, Santa Margarita, Cambria, and Oceano. The flood hazard regulations also enable the County to identify high-risk areas and participate in the federal flood insurance program.

The County's Land Use Ordinance and Coastal Zone Land Use Ordinance (Titles 22 and 23 of the County Code) include standards that require preparation and submittal of drainage plans for new development. These regulations specify when drainage plans are required, the contents of an adequate drainage plan,

drainage standards, and the plan review and approval process. The Land Use Ordinances also include development standards for areas that have a Flood Hazard (FH) combining designation (overlay). Areas within the FH combining designation have the potential to be inundated by a 100-year flood, and are identified in Table WR-2 FEMA Flood Zones are depicted on Figure WR-4.

#### TABLE WR-2

## FLOOD HAZARD (FH) COMBINING DESIGNATION AREAS

| Planning Area          | Site Name   |
|------------------------|---|
| Adelaida               | Nacimiento River & San Marcos, Las Tablas, Jack, Summit & Dover<br>Canyons, Sheepcamp, Willow, Paso Robles, and Santa Rita Creeks,<br>Morro, Toro, Cayucos, and Villa Creeks and tributaries, Santa Rosa and<br>San Simeon Creeks |
| Estero                 | Los Osos, Chorro, Morro, Toro, Willow, Old, Cayucos, Little Cayucos, and Villa Creeks and tributaries   |
| Huasna-Lopez           | Twitchell Reservoir, Huasna River, Huasna Creek, Alamo Creek, Arroyo<br>Grande Creek and tributaries, Cuyama River  |
| Las Pilatas            | Salinas River, Huer Huero Creek   |
| Nacimiento             | Nacimiento River And Canyon; Dip, Franklin, Las Tablas, Snake And<br>Town Creeks; and Lake Nacimiento   |
| North Coast            | Santa Rosa, Perry, San Simeon, Arroyo De La Cruz, and San Carpoforo<br>Creeks   |
| Salinas River          | Salinas River   |
| Salinas River          | Santa Margarita Creek, Yerba Buena Creek, Estrella River and Huerhuero<br>Creek   |
| San Luis Bay Coastal   | San Luis Obispo, See Canyon, Pismo, Upper Arroyo Grande Los Berros<br>Creeks, Oceano Lagoon   |
| San Luis Bay Inland    | San Luis Obispo, See Canyon, Pismo, Upper Arroyo Grande Los Berros<br>Creeks  |
| San Luis Obispo        | Flood Hazard Areas  |
| Shandon-Carrizo Plains | Estrella River, San Juan Creek, Cammatti Creek, Cholame Creek and Cuyama River  |
| South County Coastal   | Santa Maria River and Nipomo Creek and its tributaries  |
| South County Inland    | Santa Maria River, Twitchell Reservoir, and Nipomo Creek and its tributaries  |



## FIGURE WR-4 FEMA FLOOD ZONES



#### **Policy WR 6.1 Integrated management**

Pursue an integrated management approach for waterway projects that includes flood management, sea level rise, water quality protection, groundwater recharge, and ecosystem enhancement objectives.

#### Policy WR 6.2 Region-wide permitting

The County should coordinate with applicable state, regional, and local permitting agencies to develop and implement a region-wide permitting program that will provide consistent watershed or regional implementation measures.

- ♦ Implementation Strategy WR 6.2.1 Adopt drainage standards to minimize flooding In order to protect development, structures, and ecological processes, adopt additional drainage standards in sub-regions where topography and/or poor soil conditions significantly contribute to or are the primary cause of flooding.
- ♦ Implementation Strategy WR 6.2.2 Flooding problems Distinguish and understand the root cause of flooding problems in urban areas that stem from new development, existing development, sea level rise, and mandatory regulations such as flood hazard mitigation and regulatory barriers to channel clearing. (IRWM)

#### Policy WR 6.3 Drainage problems

Consider drainage problems in the context of an entire watershed. Drainage and flood management plans should address property owner and developer responsibilities. These plans should use an integrated watershed approach that incorporates flood management, water quality, water supply, groundwater, and ecosystem protection and enhancement objectives on a watershed/basin scale.

#### **Policy WR 6.4 Integrated drainage approach**

Assure that proposed development integrates ecosystem enhancement, drainage control, and natural recharge as applicable.



- Implementation Strategy WR 6.4.1 Implement LID In those areas where percolation is the primary means for flood control, implement low impact design (LID) to enhance percolation and allow desirable groundwater recharge to increase supply and minimize seawater intrusion.
- Implementation Strategy WR 6.4.2 Include stormwater management in drainage plans
   Drainage plans will identify measures to detain or retain stormwater as appropriate in order to assist infiltration, including identification of sites for infiltration basins.

The following Policies WR 6.5 and 6.6 do not apply within the coastal zone, where the Local Coastal Program already includes strict standards regarding alteration of streams.

#### Policy WR 6.5 Stream channelization

Prohibit channelization or major alteration of streams. Minor work in streambeds may be necessary to protect valuable farmland from erosion.

#### **Policy WR 6.6 Relocation of stream courses**

Discourage the relocation of stream courses and encourage the use of levees and/or bypass/overpass channels along the borders of the floodway where flood protection is necessary. When an artificial channel is needed for flood protection, require landscaping and replanting of vegetation adjacent to the channel.

#### Policy WR 6.7 Areas prone to flooding

Develop a public information and education program in areas of the county prone to flooding and drainage problems to discourage new development in those areas and to inform residents and property owners about how to deal with drainage and flood control problems, use best management practices, and get assistance.



## **Summary of Implementation Strategies**

For each implementation strategy described in this chapter, the following table (Table WR-3) summarizes the County department or other agency that has primary responsibility for carrying out that strategy. In addition, the table summarizes the priority, estimated year of initiation, and potential source of funding of each strategy-The actual timeframe for implementing the strategies is dependent upon the availability of adequate staff and funding.

## **TABLE WR-3**

| Implementation<br>Strategies                                | Responsible<br>Department or<br>Agency <sup>1</sup> | Priority | Timeframe<br>to Start    | Possible<br>Funding<br>Sources <sup>2</sup> |
|---|---|----------|--------------------------|---|
| IS WR 1.1.1 Prepare Water<br>Master Plan                    | PW, PB  | High     | 2010                     | FCD   |
| IS WR 1.2.1 Revise Resource<br>Management System            | PB, PW  | High     | Immediately              | DB  |
| IS WR 1.4.1 Reclaimed water: monitor technology             | RWMG  | Medium   | 2013                     | TBD   |
| IS WR 1.4.2 Reclaimed water:<br>identify funding sources    | RWMG  | Medium   | 2011                     | TBD   |
| IS WR 1.4.3 Reclaimed water:<br>identify partners           | RWMG  | Medium   | 2011                     | TBD   |
| IS WR 1.4.4 Reclaimed water: groundwater recharge           | RWMG  | Medium   | 2011                     | TBD   |
| IS WR 1.5.1 Sponsor<br>interagency collaboration            | PB, PW, CSDs, cities                                | Medium   | 2010                     | TBD   |
| IS WR 1.6.1 Evaluate ecosytem water needs                   | PW  | High     | 2010                     | FCD   |
| IS WR 1.7.1 Protect agricultural water supplies             | PB  | Medium   | 2010                     | TBD   |
| IS WR 1.11.1 Prioritization of<br>resource capacity studies | PB, PW  | High     | Immediately              | FCD   |
| IS WR 1.12.1 Water quality data collection                  | PB, PW, WP  | High     | Immediately              | TBD   |
| IS WR 1.12.2 Require water<br>supply assessments            | PB, PW  | High     | Immediately <sup>3</sup> | N/A   |



# **TABLE WR-3**

| Implementation<br>Strategies   | Responsible<br>Department or<br>Agency <sup>1</sup> | Priority | Timeframe<br>to Start    | Possible<br>Funding<br>Sources <sup>2</sup> |
|--|---|----------|--------------------------|---|
| IS WR 1.14.1 Desalination: monitor technology                            | WP  | High     | 2010                     | TBD   |
| IS WR 1.14.2 Desalination:<br>identify funding                           | WP  | High     | 2010                     | TBD   |
| IS WR 1.14.3 Desalination:<br>identify partners                          | WP  | High     | 2010                     | TBD   |
| IS WR 2.1.1 Groundwater<br>monitoring: secure funding                    | PW  | High     | 2010                     | FCD, grant                                  |
| IS WR 2.1.2 Consider<br>countywide groundwater<br>ordinance              | PW, PB  | Medium   | 2011                     | DB, FCD,<br>grants                          |
| IS WR 2.1.3 Prepare<br>groundwater management<br>plans                   | PW, PB  | High     | 2012                     | DB, FCD,<br>grant                           |
| IS WR 2.2.1 Collaborate for groundwater data collection                  | PW, PB, EH  | High     | Immediately              | DB, FCD                                     |
| IS WR 2.2.2 Improve well permit data collection                          | EH, PW  | High     | 2010                     | N/A   |
| IS WR 2.2.3 Pursue data<br>collection from all groundwater<br>wells      | PW, PB, EH  | High     | 2010                     | DB, FCD                                     |
| IS WR 2.2.4 Groundwater data collection from water purveyors             | PB  | High     | Immediately <sup>3</sup> | N/A   |
| IS WR 2.2.5 Groundwater data collection for new development              | PB  | High     | Immediately <sup>3</sup> | N/A   |
| IS WR2.3.1 Revise well permit procedures                                 | EH  | High     | 2012                     | N/A   |
| IS WR 2.5.1 Evaluate groundwater banking                                 | PW  | High     | Immediately              | FCD, grants                                 |
| IS WR 3.1.1 Support TMDL's   | Applicable depts., agencies                         | High     | 2010                     | TBD   |
| IS WR 3.1.2 Employ pollution prevention in County operations             | PW, GS  | High     | 2010                     | PW (Roads<br>TBD)                           |
| IS WR 3.1.3 Minimize<br>construction-related impacts to<br>water quality | PB, PW, GS  | High     | Immediately              | TBD   |



## TABLE WR-3

| Implementation<br>Strategies   | Responsible<br>Department or<br>Agency <sup>1</sup> | Priority | Timeframe<br>to Start    | Possible<br>Funding<br>Sources <sup>2</sup> |
|--|---|----------|--------------------------|---|
| IS WR 3.1.4 Continue water<br>quality-related public education                   | PW, PB  | High     | Immediately              | TBD   |
| IS WR 3.2.1 Minimize runoff<br>from new development                              | PB, PW, GS  | High     | Immediately              | DB  |
| IS WR 3.2.2 Permeable<br>Materials   | PB, PW, GS  | High     | Immediately <sup>3</sup> | DB  |
| IS WR 3.3.1 Prioritization and<br>preparation of groundwater<br>management plans | PW, PB, WP  | High     | Immediately              | TBD   |
| IS WR 3.3.2 Maintain database of onsite wastewater systems                       | РВ  | Medium   | 2011                     | DB  |
| IS WR 3.3.3 Abatement of<br>failing septic systems                               | PB, EH, RWQCB                                       | High     | Immediately              | DB  |
| IS WR 3.6.1 Protect drinking<br>water sources from grading                       | PB, PW  | High     | 2011                     | DB  |
| IS WR 3.6.2 Abate recreation-<br>related pollution of drinking<br>water sources  | EH, GS, PB  | High     | 2011                     | DB, Grants                                  |
| IS WR 3.6.3 Control Quagga<br>mussels and similar invasive<br>species            | GS, PW, MCWRA                                       | High     | Immediately              | TBD   |
| IS WR 4.1.1 Identify baseline per capita water use                               | РВ  | High     | Immediately              | DB  |
| IS WR 4.1.2 Adopt countywide water conservation ordinance                        | РВ  | High     | 2010                     | DB  |
| IS WR 4.1.3 Evaluate a<br>countywide water conservation<br>program               | PB, PW, CSDs, cities                                | High     | 2011                     | TBD   |
| IS WR 4.1.4 Expand public education programs for water conservation              | PW  | Medium   | 2012                     | TBD   |
| IS WR 4.2.1 Incorporate water pricing into RMS                                   | РВ  | High     | 2010                     | DB  |
| IS WR 4.3.1 Promote water<br>conservation demonstration<br>projects              | PB, GS, Cal Poly                                    | Medium   | 2011                     | DB, grant                                   |



# TABLE WR-3WATER RESOURCES IMPLEMENTATION

| Implementation<br>Strategies   | Responsible<br>Department or<br>Agency <sup>1</sup> | Priority | Timeframe<br>to Start    | Possible<br>Funding<br>Sources <sup>2</sup> |
|--|---|----------|--------------------------|---|
| IS WR 4.3.2 Assess and monitor County water use                                      | GS  | High     | 2010                     | DB  |
| IS WR 4.3.3 Reduce water use<br>in County operations                                 | GS  | High     | 2010                     | DB  |
| IS WR 4.3.4 Provide water<br>conservation education for<br>County employees          | GS  | High     | 2010                     | DB  |
| IS WR 4.4.1 Evaluate impact of self-regenerating water softeners                     | PB, Wastewater agencies                             | Medium   | 2012                     | DB  |
| IS WR 4.6.1 Develop and adopt<br>a graywater ordinance and<br>program                | РВ  | Medium   | 2010                     | DB  |
| IS WR 4.7.1 Develop and<br>implement a Low Impact<br>Development (LID) Ordinance     | PB, EH, PW  | Medium   | 2012                     | DB  |
| IS WR 4.8.1 Improve water<br>efficiency conservation in<br>County irrigation systems | GS  | High     | 2010                     | DB, grants                                  |
| IS WR 5.1.1 Support watershed management plans                                       | PW, PB  | High     | 2011                     | DB, Grants                                  |
| IS WR 5.1.2 Secure funding for watershed management                                  | PW, PB  | Medium   | 2010                     | DB  |
| IS WR 5.1.3 Promote the coordination of watershed protection efforts                 | PB, AG, PW  | Medium   | 2012                     | DB  |
| IS WR 5.3.1 Promote the coordination of watershed protection efforts                 | PB, PW, GS  | Medium   | Immediately <sup>3</sup> | DB  |
| IS WR 5.3.2 Cumulative<br>Impacts to Watershed                                       | PB, PW  | Medium   | Immediately <sup>3</sup> | DB  |
| IS WR 6.2.1 Adopt drainage standards to minimize flooding                            | PB, PW  | Medium   | 2011                     | DB  |
| IS WR 6.2.2 Flooding problems  | PW, PB  | Medium   | Immediately <sup>3</sup> | DB  |
| IS WR 6.4.1 Implement LID  | PB, PW  | High     | Immediately              | N/A   |
|  |   |          |                          |   |



## TABLE WR-3

| Implementation<br>Strategies  | Responsible<br>Department or<br>Agency <sup>1</sup>                                      | Priority | Timeframe<br>to Start | Possible<br>Funding<br>Sources <sup>2</sup> |
|---|--|----------|-----------------------|---|
| IS WR 6.4.2 Include stormwater management in drainage plans   | PB, PW   | High     | Immediately           | N/A   |
| <ul> <li>Notes:</li> <li>1 Department abbreviations:<br/>AG = County Agriculture Department<br/>Cities = Incorporated cities<br/>CSDs = Community Service Districts<br/>EH = County Environmental Health Servi<br/>FCD = County Flood Control and Water C<br/>GS = County General Services Agency<br/>MCWRA = Monterey County Water Reso<br/>PB = County Department of Planning and<br/>PW = County Department of Public Work<br/>RWQCB = Regional Water Quality Control<br/>RWMG = Regional Water Management C<br/>WP = Water purveyors</li> <li>2 Funding source abbreviations:<br/>DB = Planning and Building Department I<br/>TBD = To be determined</li> <li>3 Denotes an ongoing activity.<br/>Source: Department of Planning and Building</li> </ul> | Conservation District<br>purces Agency<br>d Building<br>s<br>ol Board<br>Group<br>Budget |          |                       |   |



# GOAL AND POLICY DIGEST

The following tables list the goals and accompanying policy titles for each chapter. The policy titles are for reference and ease of use. Please refer to the text in each chapter to see the complete policies.

## **TABLE 11-1**

## **GOALS AND POLICIES BY CHAPTER**

#### AIR QUALITY GOALS AND POLICIES

Goal AQ 1 Per capita vehicle- miles-traveled countywide will be substantially reduced consistent with statewide targets.

Policy AQ 1.1 Compact development

Policy AQ 1.2 Reduce vehicle miles traveled

Policy AQ 1.3 Convenient alternative transportation

Policy AQ 1.4 Alternative transportation improvements

Policy AQ 1.5 Transportation efficiency

Policy AQ 1.6 Multi-modal transportation

Policy AQ 1.7 Bicycle and pedestrian travel

Policy AQ 1.8 Support SLO Regional Rideshare

Policy AQ 1.9 Use of rail

Goal AQ 2 The County will be a leader in implementing air quality programs and innovations.

Policy AQ 2.1 County employee trip reduction

Policy AQ 2.2 County employee business travel

Policy AQ 2.3 Convert County fleet

Policy AQ 2.4 Waste collection vehicles

Policy AQ 2.5 Use of clean fuels

Policy AQ 2.6 Alternative fuel incentives



#### **AIR QUALITY GOALS AND POLICIES**

Goal AQ 3 State and federal ambient air quality standards will, at a minimum, be attained and maintained.

Policy AQ 3.1 Coordinate with other jurisdictions

Policy AQ 3.2 Attain air quality standards

Policy AQ 3.3 Avoid air pollution increases

Policy AQ 3.4 Toxic exposure

Policy AQ 3.5 Equitable decision making

Policy AQ 3.6 Strategic growth principles

Policy AQ 3.7 Reduce vehicle idling

Policy AQ 3.8 Reduce dust emissions

Goal AQ 4 Greenhouse gas emissions from County operations and community-wide sources will be reduced from baseline levels by a minimum of 15% by 2020.

Policy AQ 4.1 Reduce greenhouse gas emissions

Policy AQ 4.2 Identify greenhouse gas emissions

Policy AQ 4.3 GHG emissions from County operations

Policy AQ 4.4 Development projects and land use activities

Policy AQ 4.5 Carbon Sequestration

Policy AQ 4.6 Regional organizations

Goal AQ 5 The County will adapt to adverse climate change.

Policy AQ 5.1 Adapt to climate change

Policy AQ 5.2 Public awareness

#### **BIOLOGICAL RESOURCES GOALS AND POLICIES**

Goal BR 1 Native habitat and biodiversity will be protected, restored, and enhanced.

Policy BR 1.1 Protect Sensitive Biological Resources

Policy BR 1.2 Limit Development Impacts

Policy BR 1.3 Environmental Review

Policy BR 1.4 No Net Loss

Policy BR 1.5 Establish and Maintain a Network of Major Ecosystems

Policy BR 1.6 Ecosystem Management

Policy BR 1.7 Ecosystem Education

Policy BR 1.8 Effects of Major Ecosystems



## **GOAL AND POLICY DIGEST**

#### CHAPTER 11

#### **BIOLOGICAL RESOURCES GOALS AND POLICIES**

Policy BR 1.9 Preserve Ecotones

Policy BR 1.10 Identify and Protect Ecologically Sensitive Areas

Policy BR 1.11 Protect Wildlife Nursery Areas and Movement Corridors

Policy BR 1.12 Development Impacts to Corridors

Policy BR 1.13 Maintain Safe Wildlife Movement

Policy BR 1.14 Wildlife and Roadways

Policy BR 1.15 Restrict Disturbance in Sensitive Habitat during Nesting Season

Policy BR 1.16 Land Acquisition

Policy BR 1.17 Resource Conservation Districts

Goal BR 2 Threatened, rare, endangered, and sensitive species will be protected.

Policy BR 2.1 Coordinate with Trustee Agencies

Policy BR 2.2 Promote Early Consultation with Other Agencies

Policy BR 2.3 Habitat Conservation Plans

Policy BR 2.4 Species Recovery Programs

Policy BR 2.5 Species Recovery Plans and General Plan Amendments

Policy BR 2.6 Development Impacts to Listed Species

Policy BR 2.7 Fire Suppression and Sensitive Plants and Habitats

Policy BR 2.8 Invasive Plant Species

Policy BR 2.9 Promote Use of Native Plant Species

Policy BR 2.10 Integrated Pest Management

Policy BR 2.11 Control Spread of Non-native Invasive Animal Species

Goal BR 3 Maintain the acreage of native woodlands, forests, and trees at 2008 levels.

Policy BR 3.1 Native Tree Protection

Policy BR 3.2 Protection of Native Trees in New Development

Policy BR 3.3 Oak Woodland Preservation

Policy BR 3.4 Vegetation and Wildlife Disease Management Programs

Policy BR 3.5 Non-native Trees

Goal BR 4 The natural structure and function of streams and riparian habitat will be protected and restored.

Policy BR 4.1 Protect Stream Resources

Policy BR 4.2 Minimize Impacts from Development

Policy BR 4.3 Alluvial Well Extractions

#### **BIOLOGICAL RESOURCES GOALS AND POLICIES**

Policy BR 4.4 Vegetated Treatment Systems (Low Impact Development Techniques)

Policy BR 4.5 Encourage Stream Preservation on Private Lands

Policy BR 4.6 Encourage Stream Preservation on Public Lands

Policy BR 4.7 Contamination from Pesticides

Policy BR 4.8 Runoff from County Lands

Policy BR 4.9 Pesticide Reduction

Policy BR 4.10 Vector Control

Goal BR 5 Wetlands will be preserved, restored, and enhanced.

Policy BR 5.1 Protect Wetlands

Policy BR 5.2 No Net Loss of Wetlands

Policy BR 5.3 Wetland Conversion

Policy BR 5.4 Wetlands on Agricultural Lands

Goal BR 6 The county's fisheries and aquatic habitats will be preserved and improved.

Policy BR 6.1 Avoid Impacts to Fisheries

Goal BR 7 Significant marine resources will be protected.

Policy BR 7.1 Coastal Protection

Policy BR 7.2 Protection of Marine Resources

Policy BR 7.3 Best Management Practices

Policy BR 7.4 Sedimentation

Policy BR 7.5 Morro Bay Watershed

Policy BR 7.6 Morro Bay Estuary Water Quality

Policy BR 7.7 Watershed Protection

CULTURAL RESOURCES GOALS AND POLICIES

Goal CR 1 The County will have a strong, positive community image that honors our history and cultural diversity.

Policy CR 1.1 Cultural Identity

Goal CR 2 The County will promote public awareness and support for the preservation of cultural resources in order to maintain the county's uniqueness and promote economic vitality.

Policy CR 2.1 Community Participation

Policy CR 2.2 Acquisition

Policy CR 2.3 "Living Resources"



## **GOAL AND POLICY DIGEST**

#### **CULTURAL RESOURCES GOALS AND POLICIES**

Goal CR 3 The county's historical resources will be preserved and protected.

Policy CR 3.1 Historic Preservation

Policy CR 3.2 Historic Preservation Programs

Policy CR 3.3 Remodeling and Reconstruction

Goal CR 4 The county's known and potential Native American, archaeological, and paleontological resources will be preserved and protected.

Policy CR 4.1 Non-development Activities

Policy CR 4.2 Protection of Native American Cultural Sites

Policy CR 4.3 Cultural Resources and Open Space

Policy CR 4.4 Development Activities and Archaeological Sites

Policy CR 4.5 Paleontological Resources

Policy CR 4.6 Resources-Based Sensitivity

**ENERGY GOALS AND POLICIES** 

Goal E 1 The County will have an environmentally sustainable, local supply of energy for all county residents.

Policy E 1.1 Meeting energy needs

Policy E 1.2 Local control

Policy E 1.3 Renewable energy and county facilities

Policy E 1.4 Methane

Policy E 1.5 Waste burning

Goal E 2 Energy consumption at County facilities shall be reduced by 20% from 2006 levels by 2020.

Policy E 2.1 Energy efficiency

Policy E 2.2 Energy consumption

Policy E 2.3 Energy and water

Goal E 3 Energy efficiency and conservation will be promoted in both new and existing development.

Policy E 3.1 Use of renewable energy

Policy E 3.2 Energy efficient equipment

Policy E 3.3Use of renewable energy for water and wastewater

Policy E 3.4 Incentives for energy conservation

Policy E 3.5 Demonstration projects

Policy E 3.6 Energy conservation in agriculture

#### **ENERGY GOALS AND POLICIES**

Goal E 4 Green building practices will be integrated into all development.

Policy E 4.1 Integrate green building practices

Policy E 4.2 Green building incentives

Policy E 4.3 Green County facilities

Policy E 4.4 Solar exposure

Policy E 4.5 Healthy indoor environments

Goal E 5 Recycling, waste diversion, and reuse programs will achieve as close to zero waste as possible.

Policy E 5.1 Source reduction and waste diversion

Policy E 5.2 County operations and waste

Policy E 5.3 Biomass and composting

Policy E 5.4 Construction and demolition waste

Policy E 5.5 Sustainable materials in County buildings

Goal E 6 The use of renewable energy resources will be increased.

Policy E 6.1 Sustainable energy sources

Policy E 6.2 Commercial solar and wind power and other renewable energy systems

Policy E 6.3 Small-scale renewable energy resources

Policy E 6.4 Solar electric power facilities

Policy E 6.5 Geothermal resources

Policy E 6.6 Distributed energy

Policy E 6.7 Cogeneration facilities

Policy E 6.8 Renewable Energy Resources

Policy E 6.9 Renewable Energy Facility Siting

Goal E 7 Design, siting, and operation of non-renewable energy facility will be environmentally appropriate.

Policy E 7.1 Energy Facility Siting

Policy E 7.2 Facility Upgrades and Replacements

Policy E 7.3 Safety Coordination

Policy E 7.4 National Repository for Nuclear Waste



## **GOAL AND POLICY DIGEST**

#### MINERAL RESOURCES GOALS AND POLICIES

Goal MN 1 Conservation and development of significant mineral deposits will be a high priority, but will be balanced with other County general plan goals and policies.

Policy MN 1.1 Balance Test

Goal MN 2 Significant mineral resources will be protected from land uses that threaten their availability for future mining.

Policy MN 2.1 Protect Mineral Resources

Policy MN 2.2 Incompatible Development

Policy MN 2.3 General Plan Amendments

Policy MN 2.4 Discretionary Land Use Permits

Goal MN 3 Balance mining of mineral resources with sensitive natural resources and existing adjacent uses.

Policy MN 3.1 Environmental effects

Policy MN 3.2 Reclamation

Policy MN 3.3 Environmentally and Visually Sensitive Areas

Policy MN 3.4 Site restoration

Policy MN 3.5 Best Management Practices

Policy MN 3.6 Site Inventory

**OPEN SPACE RESOURCES GOALS AND POLICIES** 

Goal OS 1 Important open space areas will be identified, protected, sustained, and where necessary, restored and reclaimed.

Policy OS 1.1 Future Open Space Protection

Policy OS 1.2 Consolidation of Public and Private Lands

Policy OS 1.3 Supporting other agencies

Policy OS 1.4 Retention of public lands for open space

Policy OS 1.5 Retention of BLM lands

Policy OS 1.6 Open Space Contracts

Policy OS 1.7 Open space resource protection

Policy OS 1.8 Land Divisions and Development

Policy OS 1.9 Acquisition Preferences

Policy OS 1.10 Interagency coordination for acquisition

Policy OS 1.11 County Land Acquisition Consistent with Parks and Recreation Element



#### **OPEN SPACE RESOURCES GOALS AND POLICIES**

Policy OS 1.12 Funding of Land Acquisition

Policy OS 1.13 Tax Default Acquisition and Sale of Excess and Tax Delinquent Properties

Policy OS 1.14 Land Exchange of County-owned properties

Policy OS 1.15 Land Use Designation for County lands

#### Goal OS 2 Open space resources will be protected and sustained on public lands.

Policy OS 2.1 Open space management to protect, sustain and restore

Policy OS 2.2 Coordinate open space management

Policy OS 2.3 Best Management Practices on Public Lands

Policy OS 2.4 Disposal of biosolids on open space lands

Policy OS 2.5 Grazing and agricultural uses on County lands

Policy OS 2.6 Support federal lands for grazing

Policy OS 2.7 Coordination open space planning

Policy OS 2.8 Management of Natural Area Preserves

Policy OS 2.9 Recreational use of publicly-owned open space

Policy OS 2.10 Off-Highway Vehicles

Goal OS 3 Ongoing public education programs about conservation, protection, and stewardship of open space resources will be encouraged.

Policy OS 3.1 Ongoing education and outreach

Policy OS 3.2 Conservation and Protection by Private Landowners

Goal OS 4 Urban sprawl and inappropriate development of rural areas will be prevented.

Policy OS 4.1 Define urban areas to prevent sprawl

Policy OS 4.2 Maintain community separators

Policy OS 4.3 Conversion of rural areas to Urban Lands

Policy OS 4.4 Annexation of urban development

Policy OS 4.5 Maintain large parcels

Policy OS 4.6 Conversion to small-lot rural parcels

Policy OS 4.7 Cooperation with cities



## **GOAL AND POLICY DIGEST**

#### SOIL RESOURCES GOALS AND POLICIES

Goal SL 1 Soils will be protected from wind and water erosion, particularly that caused by poor soil management practices.

Policy SL 1.1 Prevent Loss of Topsoil in All Land Uses

Policy SL 1.2 Promote Soil Conservation Practices in All Land Uses

Policy SL 1.3 Minimize Erosion associated with New Development

Goal SL 2 Watersheds and ecological function will be maintained through soil conservation.

Policy SL 2.1 Protect Watersheds and Aquifer Recharge Areas

#### Goal SL 3 Important Agricultural Soils will be conserved.

Policy SL 3.1 Conserve Important Agricultural Soils

**VISUAL RESOURCES GOALS AND POLICIES** 

Goal VR1 The natural and agricultural landscape will continue to be the dominant view in rural parts of the county.

Policy VR 1.1 Adopt Scenic Protection Standards

Goal VR 2 The natural and historic character and identity of rural areas will be protected.

Policy VR 2.1 Develop in a manner compatible with Historical and Visual Resources

Policy VR 2.2 Site Development and Landscaping Sensitively

Policy VR 2.3 Revise Countywide Design Guidelines

Goal VR 3 The visual identities of communities will be preserved by maintaining rural separation between them.

Policy VR 3.1 Identify and Protect Community Separators

Policy VR 3.2 Community Involvement

Policy VR 3.3 Conservation Tools

Policy VR 3.4 Community Edges

Policy VR 3.5 Annexation in Community Separators



#### **VISUAL RESOURCES GOALS AND POLICIES**

Goal VR 4 Protect visual resources within visual Sensitive Resource Areas (SRAs) for scenic corridors.

Policy VR 4.1 Designation of Scenic Corridors

Policy VR 4.2 Balanced Protection

Policy VR 4.2.1 Agricultural Uses in Scenic Corridors

Policy VR 4.3 Scenic Corridor Roadway Design

Goal VR 5 Views from scenic vistas and vista points will be protected.

Policy VR 5.1 Retain Existing Scenic Access

Policy VR 5.2 Create New Scenic Access

Policy VR 5.3 Sale of Public Lands

Goal VR 6 A cohesive visual character will be maintained in urban areas.

Policy VR 6.1 Urban Design

Goal VR 7 Views of the night sky and its constellations of stars will be maintained.

Policy VR 7.1 Nighttime Light Pollution

Goal VR 8 Visual intrusions of signs will be minimized within public view corridors.

Policy VR 8.1 Billboards

Policy VR 8.2 Informational or Interpretive Signs

Goal VR 9 The visual effects of utility lines will be minimized.

Policy VR 9.1 Underground Utilities

Policy VR 9.2 Utility Service Lines

Policy VR 9.3 Communications Facilities

Policy VR 9.4 Co-location of communication facilities

#### WATER RESOURCES GOALS AND POLICIES

Goal WR 1 The County will have a reliable and secure regional water supply (IRWM).

Policy WR 1.1 Protect water supplies

Policy WR 1.2 Conserve Water Resources

Policy WR 1.3 New Water Supply

Policy WR 1.4 Use reclaimed water

Policy WR 1.5 Interagency projects



## **GOAL AND POLICY DIGEST**

#### WATER RESOURCES GOALS AND POLICIES

Policy WR 1.6 Water dependent species

Policy WR 1.7 Agricultural operations

Policy WR 1.8 Use of surface water projects

Policy WR 1.9 Discourage new water systems

Policy WR 1.10 Water wheeling

Policy WR 1.11 Reduce RMS alert levels

Policy WR 1.12 Impacts of new development

Policy WR 1.13 Density increases in rural areas

Policy WR 1.14 Avoid net increase in water use

Policy WR 1.15 Desalination opportunities

Goal WR 2 The County will collaboratively manage groundwater resources to ensure sustainable supplies for all beneficial uses.

Policy WR 2.1 Groundwater quality assessments

Policy WR 2.2 Groundwater basin reporting programs

Policy WR 2.3 Well permits

Policy WR 2.4 Groundwater recharge

Policy WR 2.5 Groundwater banking programs

Goal WR 3 Excellent water quality will be maintained for the health of people and natural communities.

Policy WR 3.1 Prevent water pollution

Policy WR 3.2 Protect watersheds

Policy WR 3.3 Improve groundwater quality

Policy WR 3.4 Water quality restoration

Policy WR 3.5 Support Resource Conservation Districts

Policy WR 3.6 Prevent pollution of water sources

Goal WR 4 Per capita potable water use in the county will decline by 20 percent by 2020.

Policy WR 4.1 Reduce water use

Policy WR 4.2 Water pricing structures

Policy WR 4.3 Water conservation

Policy WR 4.4 Reuse wastewater

Policy WR 4.5 Water for recharge

Policy WR 4.6 Graywater



#### WATER RESOURCES GOALS AND POLICIES

Policy WR 4.7 Low Impact development

Policy WR 4.8 Efficient irrigation

Goal WR 5 The best possible tools and methods available will be used to manage water resources.

Policy WR 5.1 Watershed approach

Policy WR 5.2 Climate change

Policy WR 5.3 Cooperative water planning and management

Goal WR 6 Damage to life, structures, and natural resources from floods will be avoided.

Policy WR 6.1 Integrated management

Policy WR 6.2 Region-wide permitting

Policy WR 6.3 Drainage problems

Policy WR 6.4 Integrated drainage approach

Policy WR 6.5 Stream channelization

Policy WR 6.6 Relocation of stream courses

Policy WR 6.7 Areas prone to flooding



# Glossary

**AB 32 (Assembly Bill 32):** Establishes a comprehensive program of regulatory and market mechanisms to achieve real, quantifiable, cost-effective reductions of greenhouse gases (GHG) for the State of California. Makes the <u>California Air Resource Board (CARB)</u> responsible for monitoring and reducing statewide GHG emissions, with a target to reduce emissions to 1990 levels by 2020.

Adaptive Reuse: The conversion of obsolescent or historic buildings from their original or most recent use to a new use. For example, the conversion of former hospital or school buildings to residential use, or the conversion of an historic single-family home to office use.

Agricultural Preserve: Land designated for agriculture or conservation. (See "Williamson Act.")

**Agricultural Activity:** An agricultural activity includes but is not limited to, cultivation, growing, harvesting and production of any agricultural commodity and appurtenant practices incidental to the production of agricultural commodities. The definition includes agricultural grading as described Chapter 22.52 (Grading and Drainage). [Added 1999, Ord. 2863]

**Air Basin:** A land area with generally similar meteorological and geographic conditions throughout. To the extent possible, air basin boundaries are defined by <u>CARB</u> along political boundary lines and include both the <u>source</u> and receptor areas. California is currently divided into 15 air basins.

**Air Pollutants:** Amounts of foreign and/or natural substances occurring in the atmosphere that may result in adverse effects to humans, animals, vegetation, and/or materials.

**Ambient Air:** The air occurring at a particular time and place outside of structures. Often used interchangeably with "outdoor air."

**Aquifer**: An underground, water-bearing layer of earth, porous rock, sand, or gravel, through which water can seep or be held in natural storage. Aquifers generally hold sufficient water to be used as a water supply.

**Archaeology:** The scientific study of historic or prehistoric peoples and their cultures by analysis of their buildings, artifacts, inscriptions, monuments, and other such remains.

**Base Flood:** The flood having a one percent chance of being equaled or exceeded in any given year. Equivalent to a 100-year flood.

**Biodiversity:** Refers to the variety of life and its processes, including the variety of living organisms, the genetic differences among them, and the communities and ecosystems in which they occur.

**Bio-solids:** The nutrient rich by-product of wastewater treatment, generated by channeling human waste through treatment plants and collection systems. Although the terms bio-solids and sewage sludge are often used interchangeably, bio-solids are the end product after treating sewage sludge with anaerobic digestion in combination with heat. Federal, state and local ordinances regulate the use of bio-solids. Disposal of bio-solids refers to dumping of bio-solids where there is no agronomic use for the material. This activity is prohibited. Land application of bio-solids means the agronomic use of bio-solids on lands for a beneficial use. Generally, application of bio-solids on agriculturally designated lands is addressed in the Agriculture Element and the application of bio-solids on open space lands is addressed in this Element.

**Best Management Practice (BMP):** A technique, process, activity, or structure used or developed to reduce the pollutant content of a storm-water discharge.

**Blue line stream:** A perennial (continuous flow) or intermittent (seasonal flow) creek, stream or watercourse indicated by a solid or broken blue line on a U.S. Geologic Survey 7.5 minute series quadrangle map.

**Buffer Zone:** An area of land separating two distinct land uses that acts to soften or mitigate the effects of one land use on the other.

**Buildout; Build-out:** Development of land to its full potential or theoretical capacity as permitted under current or proposed planning or zoning designations. (See "Carrying Capacity")

**California Environmental Quality Act (CEQA):** A state law requiring state and local agencies to regulate activities with consideration for environmental protection. If a proposed activity has the potential for a significant adverse environmental impact, an Environmental Impact Report (EIR) must be prepared and certified as to its adequacy before action can be taken on the proposed project. General Plans require the preparation of a "program EIR."

**California Global Warming Solutions Act of 2006:** Sets targets for the reduction of greenhouse gas emissions in California to slow the onset of human-induced climate change.

Caltrans: California Department of Transportation.

**Carbon Dioxide (CO<sub>2</sub>):** A colorless, odorless gas that occurs naturally in the Earth's <u>atmosphere</u>. Significant quantities are also emitted into the air by fossil fuel <u>combustion</u>. (See also the <u>California Climate Change Glossary</u>.)

**Carbon Monoxide (CO):** A colorless, odorless gas resulting from the incomplete combustion of hydrocarbon fuels. CO interferes with the blood's ability to carry oxygen to the body's tissues and results in numerous <u>adverse health effects</u>. Over 80 percent of the CO emitted in urban areas is contributed by motor vehicles. CO is a <u>criteria air pollutant</u>.

**Carbon sequestration:** The process through which agricultural and forestry practices <u>remove</u> <u>carbon dioxide ( $CO_2$ ) from the atmosphere</u>. The term "**carbon sinks**" is also used to describe agricultural and forestry lands that absorb CO2, the most important global warming gas emitted by human activities.

**Certificates of Participation (COP):** Certificates of Participation (COP), the most commonly used form of lease purchase financing, create a tax-exempt lease to finance capital improvement projects or to purchase essential equipment. A COP is a lease purchase agreement that is divided and sold to multiple investors in fractions, similar to stocks, usually in \$5,000 denominations. Most COPs receive investment ratings from a rating agency and each certificate represents a proportional interest in the payments that will be made by the <u>county</u> <u>government</u>. Although rarely done, some counties have their COPs insured rather than receive a rating from an investment agency. (Source: NACO at http://www.naco.org/)

**Channelization**: (1) The straightening and/or deepening of a watercourse for purposes of storm-runoff control or ease of navigation. Channelization often includes lining of stream banks with a retaining material such as concrete. (2) At the intersection of roadways, the directional separation of traffic lanes through the use of curbs or raised islands that limit the paths that vehicles may take through the intersection.

**Clean Air Act**: Requires EPA to set **National Ambient Air Quality Standards** for six common air pollutants, known as "**criteria pollutants**," that are found all over the United States: particle pollution (particulate matter), ground-level ozone, carbon monoxide, sulfur oxides, nitrogen oxides, and lead. EPA regulates them by developing human health-based and/or environmentally based criteria (science-based guidelines) for setting permissible levels.

**Clustered Development**: Development in which a number of dwelling units are placed in closer proximity than usual, or are attached, with the purpose of retaining an open-space area.

**Community Choice Aggregation:** Assembly Bill 117 permits municipalities to aggregate and provide electricity to residents, businesses, and public facilities. Investor-owned utilities (IOUs) continue to own and operate the transmission and distribution system, and provide metering, billing, and other customer service functions.

**Community Service District (CSD)**: A geographic subarea of a city or county used for the planning and delivery of parks, recreation, and other human services based on an assessment

of the service needs of the population in that subarea. A CSD is a taxation district with independent administration.

**Conservation:** Planned management of a natural resource to prevent exploitation, destruction, or neglect.

**Consultation:** The meaningful and timely process of seeking, discussing, and considering carefully the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement. Consultation between government agencies and Native American tribes shall be conducted in a way that is mutually respectful of each party's sovereignty. Consultation shall also recognize the tribes' potential needs for confidentiality with respect to places that have traditional tribal cultural significance (California Government Code Section 65353.4).

**Cultural Landscape:** A significant, historical landscape meeting criteria for listing on the National Register of Historic Places pursuant to guidance provided by the National Park Service and the U.S. Secretary of the Interior.

**Cultural Resources:** Cultural resources encompass archaeological, traditional, and built environment resources, including but not necessarily limited to buildings, structures, objects, districts, and sites. Cultural resources include sites of important events, traditional cultural places and sacred sites, and places associated with an important person (taken from the Caltrans Standard Environmental Reference, Environmental Handbook, Volume I, Chapter 28: Cultural Resources).

**Dedication**: The turning over by an owner or developer of private land for public use, and the acceptance of land for such use by the governmental agency having jurisdiction over the public function for which it will be used. Dedications for roads, parks, school sites, or other public uses often are made conditions for approval of a development by a city or county to develop.

**Desalination:** Refers to any of several processes that remove excess salt and other minerals from water often for conversion to fresh water suitable for human consumption or irrigation.

**Development (Coastal):** Pursuant to PRC 30106, "Development" means, on land, in or under water, the placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials; change in the density or intensity of use of land, including, but not limited to, subdivision pursuant to the Subdivision Map Act (commencing with Section 66410 of the Government Code), and any other division of land, including lot splits, except where the land division is brought about in connection with the purchase of such land by a public agency for public recreational use; change in the intensity of use of water, or of access

thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 (commencing with Section 4511). As used in this section, "structure" includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line.

**Development (Inland):** For purposes of implementing this Conservation and Open Space Element, development is any activity or alteration of the landscape, its terrain contour or vegetation including the erection or alteration of buildings or structures. Development does not include crop production or grazing. New development is any construction, or alteration of an existing structure or land use, or establishment of a land use after the effective date of Title 22.

**Discretionary Development:** Development that is subject to a discretionary permit that requires the exercise of judgment and the resolution of factual issues to determine if the application and requested entitlement conform with the provisions of the Land Use Ordinance (Titles 22 and 23). Generally, a discretionary permit consists of any entitlement that requires a decision to approve, approve subject to conditions or disapprove, based on the judgment of the Planning Commission after a hearing. (Also see "Ministerial Permit").

**Distributed Energy Resources (DER):** Small, modular, energy generation and accessory storage technologies that provide electric capacity or energy located where it's needed, often at a customer's location or close to a load center. These facilities are typically owned by non-utility entities, such as generation developers or utility customers that offset all or part of the customer's on-site electrical load. DER's typically produce less than 20 megawatts (MW) of power near the point of use and include wind turbines, photovoltaics (PV), fuel cells, microturbines, reciprocating engines, combustion turbines, cogeneration, and energy storage systems. DER systems may be either connected to the local electric power grid or isolated from the grid in stand-alone applications. [Amended 2015, Reso 2015-075]

**Easement:** A legal right to use or control the property of another for a designated purpose, which appears of record in favor of the owner of the easement.

**Easement, Conservation**: A tool for acquiring open space with less than full-fee purchase, whereby a public agency buys only certain specific rights from the land owner. These may be positive rights (providing the public with the opportunity to hunt, fish, hike, or ride over the land) or they may be restrictive rights (limiting the uses to which the land owner may devote the land in the future.

**Ecosystem:** A dynamic and interrelating complex of plant and animal communities and their associated environment. Examples are grasslands, forests and sand dunes.

**Ecosystem approach:** A philosophy of resource management that focuses on protecting or restoring the function, structure, and species composition of an ecosystem, recognizing that all components are interrelated.

**Ecotones:** Transitional zones between two adjacent communities, containing species characteristic of both as well as other species occurring only within the zone.

**Emission Standard**: The maximum amount of pollutant legally permitted to be discharged from a single source, either mobile or stationary.

**Rare, Threatened or Endangered Species**: Those plants and animal species identified as candidate, rare, threatened or endangered based upon. State regulations (California Administrative Code, Title 14, Sections 670.2 or 670.5), Federal regulations (Title 50, Code of Federal Regulations, Sections 17.11 or 17.12), or where an unlisted species has been shown to meet the criteria for a rare or endangered species.

**Energy Conservation:** Means reducing energy waste, such as turning lights, heating, and motors off when not needed.

**Energy Efficiency:** Doing the same or more work with less energy, such as replacing incandescent light bulbs with compact fluorescent light bulbs or buying an Energy Star appliance to use less energy for the same or greater output.

**Environment**: In CEQA, "the physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, mineral, flora, fauna, noise, and objects of historic or aesthetic significance."

**Environmental Impact Report (EIR):** A report required by the California Environmental Quality Act (CEQA) which assesses all the environmental characteristics of an area and determines what effects or impacts will result if the area is altered or disturbed by a proposed action or project. See **California Environmental Quality Act (CEQA)**.

**Environmentally Preferable Purchasing (EPP):** <u>California law</u> requires State government to practice Environmentally Preferable Purchasing, which is the procurement of goods and services that have a reduced impact on human health and the environment as compared to other goods and services serving the same purpose.

**Erosion**: The wearing away of the land surface by running water, wind, ice or other geological agents, including such processes as gravitational creep. [Added 1999, Ord. 2863]

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**Exotic species:** Any species or other variable biological material that enters an ecosystem beyond its historic range, including such organisms transferred from one country to another. Also known as nonindigenous or nonnative (State of California 2008a).

**Feasible:** Capable of being accomplished in a successful manner within a reasonable time taking into account economic, environmental, social, and technological factors.

Flood, 100-Year: See "Base Flood."

**Floodplain:** The relatively level land area on either side of the banks of a stream regularly subject to flooding. That part of the floodplain subject to a one percent chance of flooding in any given year is designated as an "area of special flood hazard" by the Federal Insurance Administration.

**Floodway:** The channel of a river or other watercourse and the adjacent land areas that must be reserved to discharge the 100-year flood without cumulatively increasing the water surface elevation more than one foot.

Fossil fuel facilities: Include, but are not limited to oil and gas wells, separators, and refineries.

**Climate Change (also referred to as 'global climate change'):** The term 'climate change' is sometimes used to refer to all forms of climatic inconsistency, but because the Earth's climate is never static, the term is more properly used to imply a significant change from one climatic condition to another. In some cases, climate change' has been used synonymously with the term, 'global warming'; scientists however, tend to use the term in the wider sense to also include natural changes in climate. See also Enhanced Greenhouse Effect.

Graywater: See "Recycled Water."

**Green Building:** Sustainable or "green" building is a holistic approach to design, construction, and demolition that minimizes the building's impact on the environment, the occupants, and the community.

**Greenhouse gas or "greenhouse gases" (GHG):** Gases which cause heat to be trapped in the atmosphere, warming the earth. Greenhouse gases are necessary to keep the earth warm, but increasing concentrations of these gases are implicated in global climate change. Greenhouse gases include all of the following gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The majority of greenhouse gases come from natural sources, although human activity is also a major contributor.

**Greenhouse Gas Inventory:** A greenhouse gas (GHG) inventory provides estimates of the amount of GHGs emitted to and removed from the atmosphere by human activities. A city or

county that conducts an inventory looks at both community emission sources as well as emissions from government operations. A base year is chosen and used to gather all data from that year. Inventories include data collection from such things as vehicle miles traveled (VMTs), energy usage from electricity and gas, and waste. Inventories include estimates for carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), sulfur hexafluoride (SF6), hydroflourocarbons (HFCs), and perflourocarbons (PFCs), which are referred to as the "six Kyoto gases."

**Groundwater:** Subsurface water in a zone of saturation.

**Groundwater Overdraft:** Develops when long-term groundwater extraction exceeds aquifer recharge, producing declining trends in aquifer storage. Overdraft is usually evident by, declines in surface-water levels and stream flow, reduction or elimination of vegetation, land subsidence, and seawater intrusion.

**Groundwater Recharge:** Any of the approved methods that are designed to detain or slow surface water runoff so that percolation is enhanced.

**Habitat:** The physical location or type of environment in which an organism or biological population lives or occurs.

**Habitat Conservation Plan (HCP):** A plan that outlines ways of maintaining, enhancing, and protecting a given habitat type needed to protect species; usually includes measures to minimize impacts, and may include provisions for permanently protecting land, restoring habitat, and relocating plants or animals to another area.

**Hazardous Material:** Any substance that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. The term includes, but is not limited to, hazardous substances and hazardous wastes.

**Historic Preservation:** The preservation of historically significant structures and neighborhoods in order to facilitate restoration and rehabilitation of the building(s) to a former condition.

Important Agricultural Soils as used in this Element consist of the following:

**Prime Farmland** as used in this Element is defined using both federal and state definitions of land that are considered "prime" lands for farming. The United States Department of Agriculture (USDA) Natural Resource Conservation Services (NRCS) has defined these lands as "prime farmland" in the Code of Federal Regulations for Agriculture (<u>http://www.access.gpo.gov/nara/cfr/waisidx\_00/7cfr657\_00.html</u>). The State of California also defines lands that are "prime" for farming as "prime agricultural land"

### (http://www.leginfo.ca.gov/cgi-bin/displaycode?section=gov&group=51001-

<u>52000&file=51200-51207</u>) and the California Coastal Act of 1976. The State's definition of prime agricultural land is based on relevant land capability classifications and the California Revised Storie Index, whether or not land is actually irrigated. The "Prime Farmland" in this Element is based on both federal and state definitions. Table SL-2 lists soils (also known as map units) that meet the County's "Prime Farmland" definition in the COSE. These soil map units in Table SL-2 are identified and mapped by the USDA NRCS and can be viewed at the Web Soil Survey (http://websoilsurvey.nrcs.usda.gov).

**Prime Agricultural Soils** as defined in the Agriculture Element and the Land Use and Coastal Zone Land Use Ordinance are defined in the Agriculture Element.

**Farmland of Statewide Importance** is defined by the USDA NRCS in the Code of Federal Regulations for Agriculture (<u>http://www.access.gpo.gov/nara/cfr/waisidx\_</u>00/7cfr657\_00.html). Farmland of Statewide Importance designation is based on soil physical and chemical criteria, whether or not land is actually irrigated. Farmland of Statewide Importance is identified and mapped as per the Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/). Soil map units mapped as Farmland of Statewide Importance may be found in Table SL-2 and Figure SL-1.

**Other Productive Soils** meet the definition of Unique Farmland, as defined by the USDA NRCS in the Code of Federal Regulations for Agriculture (<u>http://www.access</u>. gpo.gov/nara/cfr /waisidx\_00/7cfr657\_00.html), have a soil slope of 30% or less (except Paso Soil 198, 15-50% slope), and meets at least two of the following three criteria:

- 1) California Revised Storie Index is fair, good or excellent (Storie 1978, O'Green et al 2008);
- 2) Irrigated Capability Class is one through six;
- 3) More than 3% of the soil type is in irrigated/permanent crop use as of 2008.

Criteria 1 and 2 are based upon information from the Web Soil Survey. Criterion 3 is based upon GIS cropland mapping by the San Luis Obispo County Agriculture Department. Soil map units designated as Other Productive Soils may be found in Table SL-2 and Figure SL-1.

**Highly Productive Rangeland Soils** meet all of the following criteria as identified on the Web Soil Survey:

1) Produces forage that is equivalent to 60% or more of the maximum normal year forage production for that soil survey area;

- 2) Majority of the forage produced is herbaceous;
- 3) Slope is less than 30% (except soil types Coastal 133 and 168 and Carizzo 130, each 15-50% slope).

The best source of information for rangeland soils is the USDA NRCS Soil Survey, of which there are three primary survey areas in San Luis Obispo County. These surveys closely follow rainfall patterns, which have an impact on forage production (Weitkamp 1975; USDA FSA County Office Committee 2009). Rangeland soils vary widely in production capability, and within any individual operation, the majority of forage production is from the most productive soils. Cattle prefer grazing in areas with palatable herbaceous growth and slopes less than 30%. Highly Productive Rangeland Soils were not identified for the San Luis Obispo County portion of the Northern Santa Barbara soil survey area. Soil map units designated as Highly Productive Rangeland Soils may be found in Table SL-2 and Figure SL-1.

Citations:

O'Geen, A.T., S.B. Southard, R.J. Southard.2008. A revised Storie Index for use with digital soil information. Regents of the University of California Agriculture and Natural Resources Publication 8335. http://anrcatalog.ucdavis.edu/pdf/8335.pdf (accessed 3/06/09).

Storie, R. E. 1978. Storie Index Soil Rating. Regents of the University of California Agriculture and Natural Resources Legacy Publication. Special Publication 3203. <u>http://anrcatalog.ucdavis.edu/pdf/3203.pdf</u> (accessed 10/02/09).

USDA Farm Service Agency, County Office Committee. 2009. USDA FSA office. 65 S. Main Street, Suite 106. Templeton, CA 93465

Weitkamp, Bill. 1975. The Influence of Climate on Range Forage Production in San Luis Obispo County. Farm Advisor Facts. 2156 Sierra Way, Suite C. San Luis Obispo, CA 93401.

**Imported Water:** Water brought into the county from outside its boundaries (e.g. State water Project).

**Integrated Regional Water Management Plan:** A Strategic Plan for Sustainable Water Resources to Meet Human and Environmental Needs in San Luis Obispo County

**Integrity:** In the context of historical structures, this generally refers to how closely a building, place, or property matches its original condition. As defined by the <u>National Park Service</u>,

"integrity" is measured for seven aspects or qualities: location, design, setting, materials, workmanship, feeling, and association.

**Invasive species:** Species that establish and reproduce rapidly outside of their native range and may threaten the diversity or abundance of native species through competition for resources, predation, parasitism, hybridization with native populations, introduction of pathogens, or physical or chemical alteration of the invaded habitat (State of California 2008a).

**Island effect:** The isolation of one habitat fragment from other areas of habitat. Habitat fragmentation is often caused by land conversion.

**Issues:** Important unsettled community matters or problems that are identified in a community's general plan and dealt with by the plan's objectives, policies, plan proposals, and implementation programs.

**Landmark:** (1) A building, site, object, structure, or significant tree having historical, architectural, social, or cultural significance and marked for preservation by the local, state, or federal government. (2) A visually prominent or outstanding structure or natural feature that functions as a point of orientation or identification.

**LEED:** Leadership in Energy and Environmental Design, a standard established by the U.S. Green Building Council.

**Level of Service (LOS) Standard:** A standard used by government agencies to measure the quality or effectiveness of a municipal service such as police, fire, or library, or the performance of a facility, such as a street or highway.

**Life Cycle Costing (LCC):** The process of evaluating the total overall costs and benefits of buildings or equipment over time, including initial costs of design and construction; operating costs; long-term costs of maintenance, repair and replacement; and other environmental or social costs over its full life, rather than simply based on purchase cost alone.

**Local Coastal Program (LCP)**: The LCP consists of (a) the Local Coastal Plan, (b) the Coastal Zone Land Use Ordinance, and (c) other implementing actions for the coastal zone of the county which meets the requirements of the California Coastal Act of 1976 as certified by the California Coastal Commission.

Low Impact Development (LID): An innovative stormwater management approach with a basic principle to design the built environment to remain a functioning part of an ecosystem rather than exist apart from it. LID's goal is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source.

**Mineral Resource:** Land on which known deposits of commercially viable mineral or aggregate deposits exist. This designation is applied to sites determined by the California Geological Survey as being a resource of regional significance and is intended to help maintain the quarrying operations and protect them from encroachment of incompatible land uses.

**Mixed Use:** Properties on which various uses such as office, commercial, institutional, and residential are combined in a single building or on a single site in an integrated development project with significant functional interrelationships and a coherent physical design. A "single site" may include contiguous properties.

**National Ambient Air Quality Standards:** The pre-scribed level of pollutants in the outside air that cannot be exceeded legally during a specified time in a specified geographical area.

**National Register of Historic Places:** The official list, established by the National Historic Preservation Act, of sites, districts, buildings, structures, and objects significant in the nation's history or whose artistic or architectural value is unique. used in reference to air quality. (See "Attainment.").

**Native Species:** A species within its natural range or natural zone of dispersal, i.e., within the range it would or could occupy without direct or indirect introduction and/or care by humans.

**Natural Area Preserve:** An area of land or water managed by County Parks, a similar public agency, or a private non-profit which remains in a predominantly natural or undeveloped state to provide resource protection and passive recreation for present and future generations. (Parks and Recreation Element)

**Non-Attainment:** The condition of not achieving a desired or required level of performance. Frequently used in reference to air quality.

**Non-Renewable Energy:** Energy from sources that use a non-renewable natural resource such as uranium or fossil fuels such as coal, oil or natural gas.

Oak: Any species in the genus Quercus.

**Oak woodlands:** An oak stand with a greater than 10 percent canopy cover or that may have historically supported greater than 10 percent canopy cover. - *California Oak Woodlands Conservation Act.* 

**Open Space**: Open Space as defined by the Government Code includes a broad range of resources: "...any parcel or area of land or water which is essentially unimproved and devoted to an open space use...as designated on a local ...open space plan as any of the following...open space for the preservation of natural resources...the managed production of

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resource...for outdoor recreation...for public health and safety..." (Government code *65560(B)*; see Appendix 7 of this Element for the complete Government Code definition). This COSE addresses certain of these open space resources called "open space lands" (see the following definition). Agricultural lands and open space resources thereon are addressed in the Agriculture Element. Other open space areas and habitats called Natural Areas are addressed in the Parks and Recreation Element.

**Open space lands**: For the purposes of this Element, open space lands are resources or features of the landscape with unique or sensitive habitat for plants and animals, recreational opportunities, distinctive scenic values, hazards that threaten public health and safety, or archeological or historical sites, and areas containing major mineral deposits.

**Ordinance:** A law or regulation set forth and adopted by a governmental authority, usually a city or county.

**Ozone:** Produced when gases or vapors created by cars, solvents, factories, and pesticides mix and react in the presence of sunlight. This results in certain health effects such as breathing difficulties, lung damage, coughing, and chest pains.

**Paleontology:** The science of the forms of life existing in former geologic periods, as represented by their fossils.

**Particulate Matter (PM10) and Fine Particulate Matter (PM2.5):** Fine mineral, metal, smoke, soot, and dust particles suspended in the air. While particulate matter also has many natural sources, human derived sources such as vehicle exhaust, road dust, mineral quarries, grading, demolition, agricultural tilling, and burning are major contributors to exceedances in our county. In addition to reducing visibility, particulate matter can lodge in the lungs and cause serious, long-term respiratory illness and other health problems. The smaller the size of the particle, the deeper it can penetrate into the lungs, and the more difficult it is to expel.)

**Preservation:** To keep safe from injury, harm, or destruction.

**Production Agriculture:** Refer to the Agriculture Element of the County General Plan, Appendix F, Production Agriculture Determination.

**Reclamation:** The process of land treatment that minimizes and mitigates otherwise unavoidable or existing water degradation, air pollution, damage to aquatic or wildlife habitat, flooding, erosion, and other adverse effects from surface or underground mining operations, including adverse surface effects incidental to underground mines, so that mined lands are reclaimed and restored to a usable condition readily adaptable for alternate land uses and that will constitute no danger to public health or safety. The process may extend to affected lands

surrounding mined lands, and may require backfilling, grading, resoiling, revegetation, soil compaction, stabilization, or other measures.

**Recycled Water, Reclaimed Water, Treated Sewage Effluent Water, or Greywater:** Treated or recycled waste water of a quality suitable for non-potable uses such as landscape irrigation; not intended for human consumption.

**Recovery Plan:** Serves as a guide for activities to be undertaken by Federal, State, or private entities in helping to recover and conserve endangered or threatened species.

**Renewable energy:** Energy from sources that regenerate and are less damaging to the environment, including but not limited to solar, wind, biomass, and small-scale hydroelectric power. [Amended 2015, Reso 2015-075]

**Riparian habitat**: Characterized by vegetated areas along bodies of freshwater including streams, lakes and rivers. It has been identified as the most important habitat to land birds in California. Over 135 bird species depend on riparian habitat not only for nesting, but also stopover sites during migration and places to live during the winter. Riparian habitat that supports healthy bird populations will also support other wildlife, including fish. Riparian habitat also provides riverbank protection, erosion control and improved water quality, as well as numerous recreational and aesthetic values. **Riparian corridors** are highly favorable for wildlife. They are the areas with the most water and the densest plant cover, providing predator protection, shade, breeding and nesting areas, and food sources. (For more information see the <u>Riparian Habitat</u> Joint Venture).

**SB 221** (chaptered at Government Code Section 66473.7): Requires a condition of any tentative map that sufficient water supply shall be available. Proof of the availability of a sufficient water supply shall be requested by the subdivision applicant or local agency, at the discretion of the local agency, and shall be based on written verification from the applicable public water system within 90s days of a request. – California Department of Water Resources

**SB 610** (Chaptered at Water Code 10910): Requires CEQA review of certain large residential and commercial projects to include a water supply assessment that proves that adequate water exists for the project.

**Scenic Corridors:** Scenic corridors are view areas, or "viewsheds" from public roads and highways that have unique or outstanding scenic qualities. Inappropriate development can intrude upon these viewsheds. Some examples are highly visible graded roads and pads, buildings that are too close to a highway, and building designs that highlight structures and dominate rather than blend with a natural landscape. Scenic highways and roads are scenic corridors that are designated to conserve and enhance their scenic beauty.

**Sensitive Biological Resources:** Includes those species listed by the federal or state government as endangered or threatened as well non listed species of concern. Sensitive biological resources also include habitats of limited occurrence or distribution such as riparian and riverine areas subject to Army Corps of Engineers or California Department of Fish and Game jurisdiction.

#### Soils, See Important Agricultural Soils.

**Special Plants:** A broad term used to refer to all the plant taxa inventoried by the Department of Fish and Game's California Natural Diversity Database (CNDDB), regardless of their legal or protection status (State of California 2008c).

**Special-Status Species**, **Listed Species**, **or Sensitive Species**: Are threatened, endangered, fully protected, and species of special concern.

**Special Animals:** A general term that refers to all of the taxa the CNDDB is interested in tracking, regardless of their legal or protection status. This list is also referred to as the list of "species at risk" or "special status species" (State of California 2008b).

**Supplemental water:** A water source not previously used by an area (e.g. pumping from a deeper, isolated groundwater basin or connecting to the new Nacimiento Water Project).

**Sustainability:** Community use of natural resources in a way that does not jeopardize the ability of future generations to live and prosper.

**Sustainable Development:** Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. (Report of the World Commission on Environment and Development: <u>Our Common Future</u> (also known as the <u>Brundtland Commission</u> or Brundtland Report)

**Total Maximum Daily Load (TMDL):** A measure of the amount of contaminants in water. TMDL is used to measure and set targets for water quality.

**Trustee Agency:** A state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California. There are 4 trustee agencies – the Department of Fish and Game, State Lands Commission, the Department of Parks and Recreation, and the University of California.

**Unique farmland:** In general, <u>unique farmland</u> is land other than prime farmland that is used for the production of specific high value food and fiber crops. It has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality and/or high yields of a specific crop when treated and managed

according to acceptable farming methods. Examples of such crops are citrus, tree nuts, olives, cranberries, fruit, and vegetables.

**Urban Heat Island:** The term "heat island" describes built up areas that are hotter than nearby rural areas. On a hot, sunny summer day, roof and pavement surface temperatures can be 50–90°F (27–50°C) hotter than the air, while shaded or moist surfaces remain close to air temperatures. These surface urban heat islands, particularly during the summer, have multiple impacts and contribute to atmospheric urban heat islands. Heat islands can affect communities by increasing summertime peak energy demand, air conditioning costs, air pollution and greenhouse gas emissions, heat-related illness and mortality, and water quality. (USEPA 2008) http://www.epa.gov/heatislands/index.htm

**Urban-Scale Renewable Energy Resources:** Large energy generation and storage technologies that are connected to the electric power grid and that generate electricity or energy primarily for off-site use producing more than 20 megawatts (MW) of power. Technologies may include wind turbines, photovoltaics, fuel cells microturbines, reciprocating engines, combustion turbines, cogeneration, and energy storage.

**Urban Reserve:** An area outside of an urban service area but within an urban growth boundary, in which future development and extension of municipal services are contemplated but not imminent.

**Urban Reserve Line:** As defined in Framework for Planning, Part I of the Land Use Element. [Amended 1995, Ord. 2741]

**Vehicle-Miles Traveled (VMT):** A key measure of overall street and highway use. Reducing VMT is often a major objective in efforts to reduce vehicular congestion and achieve regional air quality goals.

**View Corridor:** The line of sight - identified as to height, width, and distance - of an observer looking toward an object of significance to the community (e.g., ridgeline, river, historic building, etc.); the route that directs the viewer's attention.

Viewshed: see "Scenic Corridors."

**Watershed:** The total area above a given point on a watercourse that contributes water to its flow; the entire region drained by a waterway or watercourse that drains into a lake, or reservoir.

**Water Conservation**: Reducing water use, such as turning off taps, shortening shower times, and cutting back on outdoor irrigation.

**Water Efficiency:** Replacing older technologies and practices in order to accomplish the same results with less water, for example, by replacing toilets with new low water using models and by installing "smart controllers" in irrigated areas

**Water Wheeling:** Occurs when one agency conveys water through another agency's infrastructure. California Water Code requires that wheeling must not harm any other legal user of water.

**Wetlands:** "Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

**Wetlands, Jurisdictional:** Wetlands under the protection of the <u>United States Army Corps of</u> <u>Engineers</u> (USACE) as designated in the Rivers and Harbors Act Section 10 and Section 404 of the Clean Water Act.

**Wildlife Movement Corridors:** Linear features whose primary wildlife function is to connect at least 2 significant habitat areas.

**Williamson Act:** Known formally as the California Land Conservation Act of 1965, it was designed as an incentive to retain prime agricultural land and open-space in agricultural use, thereby slowing its conversion to urban and suburban development. The program entails a tenyear contract between the City or County and an owner of land whereby the land is taxed on the basis of its agricultural use rather than its market value. The land becomes subject to certain enforceable restrictions, and certain conditions need to be met prior to approval of an agreement.

Woodlands: Lands covered with woods or trees.