CHAPTER 5 Conservation and Open Space Element

Introduction

Purpose and Scope

The primary focus of the Conservation and Open Space Element is to provide direction to future growth and development in the County of San Diego with respect to the following:

- The conservation, management, and utilization of natural and cultural resources
- The protection and preservation of open space
- The provision of park and recreation resources

Open space is defined as any parcel or area of land or water that is essentially unimproved and devoted to open space use. There is not a specific Open space section in this Element. Open space issues are addressed in every section of this document.

Population growth and development continually require the use of both renewable and nonrenewable resources. Goals and policies provided in this General Plan Element are divided into nine sections that address the following:

- *Biological Resources*—Land use-based conservation goals and policies that protect the ecological and lifecycle needs of threatened, endangered, or otherwise sensitive species and their associated habitats.
- *Water Resources*—Conserve and efficiently use water and protect the groundwater aquifer, water bodies, and water courses, which include reservoirs, rivers, streams, and the watersheds located throughout the region.
- *Agricultural Resources*—Minimize land use conflicts, preserve agricultural resources, and support the long-term presence and viability of agricultural industry as an important component of the region's economy and open space linkage.
- *Cultural Resources*—Federal and State legislation such as the *National Environmental Policy Act* (NEPA), *National Historic Preservation Act* (NHPA), and *California Environmental Quality Act* (CEQA) establish requirements to ensure cultural resources are protected and preserved. This section supplements this legislation with goals and policies that set the framework for local ordinances and regulations that protect these important cultural resources.
- *Paleontological Resources and Unique Geologic Features*—Preserve the County's rich geologic and paleontological history by establishing achievable land-use-based goals and policies.
- *Mineral Resources*—Manage the remaining mineral deposits while striving to ensure that adequate resources are available to support the economic prosperity of future generations of San Diego County residents.
- *Visual Resources*—Protect scenic corridors, geographically extensive scenic viewsheds, and dark skies within the natural environment.
- *Air Quality, Climate Change, and Energy*—Reduce the emissions of criteria air quality pollutants, emissions of greenhouse gases, and energy use in buildings and infrastructure, while promoting the use of renewable energy sources, conservation, and other methods of efficiency.

- *Park and Recreation Facilities*—Ensure that adequate park and recreational facilities will adequately serve current and future residents.

Guiding Principles for Conservation and Open Space

The Guiding Principles for the General Plan are introduced in Chapter 2. Guiding Principles 3, 4, 7 and 8 are relevant to the Conservation and Open Space Element. The conservation of natural resources and the preservation of open space are essential actions required to realize the overall vision of this General Plan, along with the achievement of the County's strategic initiatives.

The Conservation and Open Space Element establishes goals, policies, and programs that value and protect natural resources to ensure they are available for the future. Primary objectives of the Conservation and Open Space Element are to preserve the diverse range of visual, natural, and cultural resources that exemplify the County. The Element strives to minimize the impact of future development in areas with significant visual, natural, and cultural resources and supports the creation and enhancement of important habitat preserves and open space areas that are well managed and maintained. The Element also promotes efficient use of water and other natural resources and strives to ensure the long-term sustainability of non-renewable resources. The Element also supports the preservation and creation of parks, recreational facilities, and open spaces.

Energy production, transportation, and consumption are key contributors to greenhouse gases affecting climate change, poor local air quality, and a variety of other sustainability challenges. The Conservation and Open Space Element encourages and supports land use development patterns and transportation choices that reduce pollutants and greenhouse gases. In addition, the Element encourages renewable energy production, along with efficient energy use in buildings and infrastructure and minimizes the impacts of projects that can generate air pollutants.

The Conservation and Open Space Element also sets forth goals and polices that minimize agricultural land use conflicts and support the long-term presence and viability of the County's agricultural industry.

Relationship to Other General Plan Elements

The effectiveness of the Conservation and Open Space Element depends upon its integration with the other elements comprising this General Plan. Elements that share topics, issues, and policy direction with the Conservation and Open Space Element include Land Use, Mobility, Housing, Noise, and Safety.

Primary objectives of the Land Use Element are to minimize future development in areas with significant natural resources that are identified in the Conservation and Open Space Element; along with areas that may be affected by natural hazards that are identified in both the Conservation and Open Space and Safety Elements. In addition, the Land Use Element encourages the development of vibrant and healthy communities, of which park and recreation facilities are an integral part. The Land Use Element also balances the availability of water with future development, while the Conservation and Open Space Element establishes policies that protect and conserve water resources to ensure they are available for future supplies. The Land Use and Mobility Elements also include goals and policies that address Climate Change by fostering land use patterns that facilitate a reduction in vehicle miles traveled and by planning for

transportation networks that encourage other modes of travel rather than the single-occupant motor vehicle.

The purpose of the Safety Element is to establish policies related to future development that will minimize the risk of personal injury, loss of life, property damage, and environmental damage associated with natural hazards, as identified in both the Conservation and Open Space and Safety Elements. The Safety Element identifies floodplain locations throughout the County, while Figure C-2 (Floodwater Accommodation) identifies the rivers, creeks, streams, flood corridors, riparian habitats, and land that may accommodate floodwater for purposes of groundwater recharge and stormwater management. The Mobility Element includes regional trails and bikeways, which are major recreational assets for the region.

This Element also has connections to the Housing and Noise Elements. Regarding the Housing Element, the goals and policies contained in this Element affect where and how housing is planned and developed, such as requiring development to avoid sensitive resources. With regard to noise issues, biological resources can be adversely affected by noise. Additionally, the mining of mineral resources typically has noise, traffic, air, and groundwater impacts that must be addressed.

Goals and Policies for Conservation and Open Space Element

Biological Resources

CONTEXT

The San Diego region is recognized as one of the most biologically important areas in the United States, and one of the most biologically diverse areas in the world.[1] The diversity of species found in the San Diego region can be attributed to the wide variety of vegetation and habitats associated with the region's range of micro-climates, topography, soils, and other natural features. Unincorporated lands comprise the largest geographical area in the County with natural features that include lagoons, foothills, mountain ranges, and deserts. Today, the San Diego region supports over 400 sensitive plants and animals, ranging in sensitivity from common to critically endangered. All of this diversity is part of the San Diego region's unique natural heritage and a legacy for future generations.

HABITATS & SPECIES

The physical and climatic conditions found in the San Diego region provide for a wide variety of habitats and biological communities. These communities are associations of plants, animals, fungi, and microbes. Different habitat types may occur separately or be intermixed, but because they have different characteristics, they often support unique assemblages of species.

[1] Dobson, A.P., J.P. Rodriquez, W.M. Roberts, and D.S. Wilcove. 1997 Geographic Distribution of Endangered Species in the United States. Science 275(5299): 550-553.

The San Diego region's unique attributes have resulted in a relatively large number of endemic species in the area, that is, species that are only found in a limited geographic location. For example, 26 plant species in the County are found nowhere else in the world[2]. When combined with habitat loss from urban, rural, and agricultural development, the result is that the County is home to an exceptional number of rare, threatened, endangered, or otherwise sensitive species. Both wildfire events and invasive plant and animal species further disrupt native habitat regeneration and pose a threat to conservation of native habitat and endemic species.

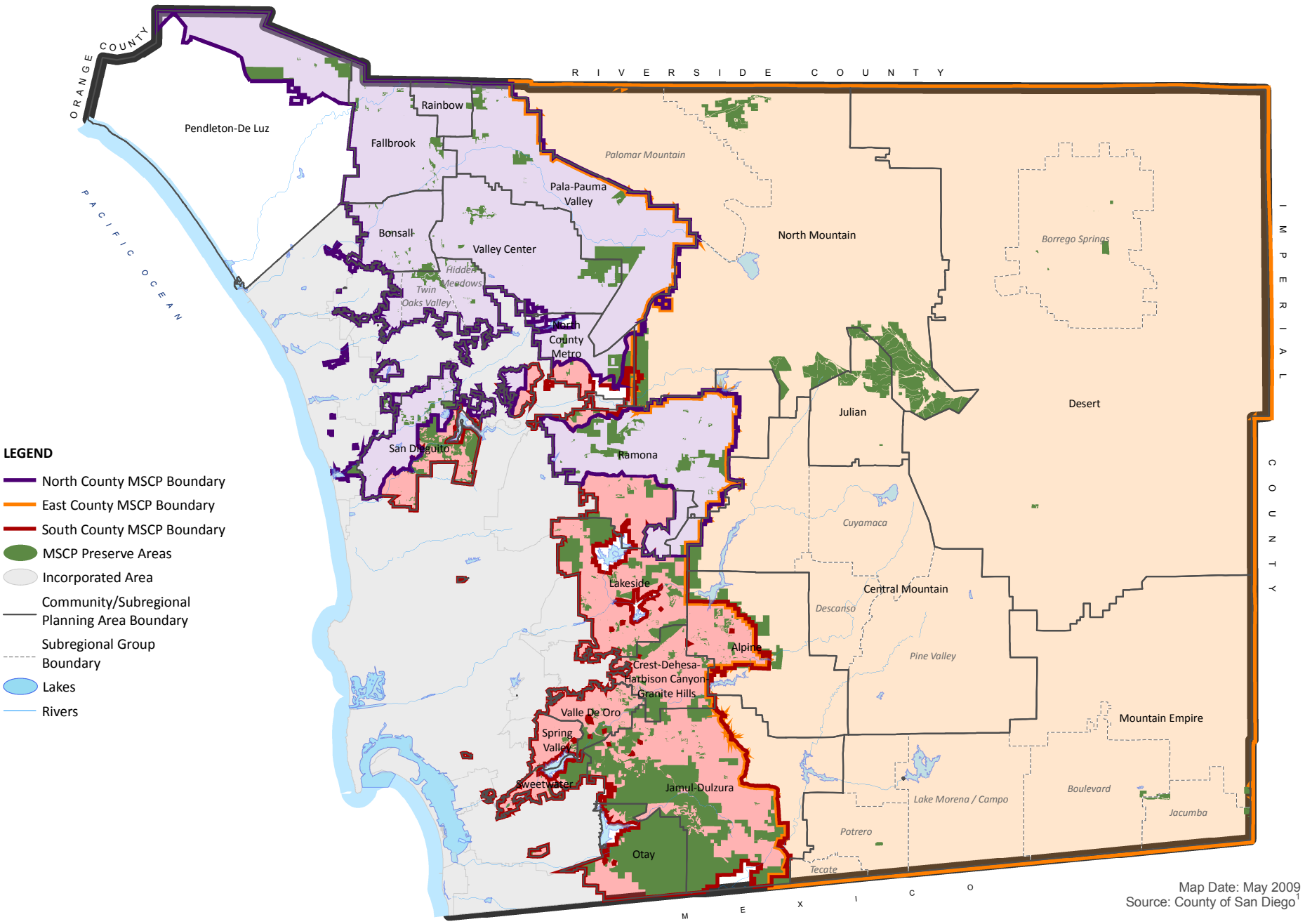
Waterways and their associated riparian vegetation provide important habitat values for wildlife, including several rare species of birds. Moreover, wetlands provide important water quality functions such as pollutant removal, floodwater retention, and greenhouse gas reduction. Valuable wetland resources in the County have been reduced from past development such that they must be protected, along with adjacent upland habitats, to maintain their functions and values.

Protecting the region's resources requires coordination and cooperation with other governmental and non-governmental entities, such as SANDAG, adjacent jurisdictions, California Department of Fish and Game, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, California Regional Water Quality Control Board, California Coastal Commission, and various conservation organizations.

WILDLIFE CORRIDORS AND HABITAT LINKAGES

Significant portions of the County are publicly owned, including areas designated as open space preserves and parks, National Forests, and State Parks. The County strives to work harmoniously with all such entities to achieve common goals. Important wildlife corridors and linkages have been identified to provide connections between areas of undeveloped lands, especially to significant public lands. Species that are well-distributed across their ranges are less susceptible to extinction than species confined to small portions of their range. Therefore, maintaining large, inter-connected blocks of habitat containing sizable and diverse populations of sensitive species is superior to a fragmented landscape with undersized populations. Figure C-1 (Habitat Conservation Programs) identifies existing preserve areas, along with areas where a connected system of preserves will be established as additional easements are recorded for open space and/or lands are acquired for public benefit.

[2] http://www.sdnhm.org/research/botany/sdplants/preface.html



HABITAT CONSERVATION PROGRAMS

San Diego County General Plan

Figure C-1

Wildlife corridors and linkages function better when they support sufficient native habitat conducive for wildlife movement. Linkages are landscape level, regional connections between core habitat areas. They consist of a variety of upland and riparian habitat types which provide resources for year-around foraging, nesting, and local dispersal. Corridors are more local movement paths for species that typically follow naturally occurring paths.

Escondido Creek serves as a wildlife corridor in the San Dieguito Community Planning Area

The San Diego region is an important part of the Pacific Flyway, one of the major migration routes for birds between Alaska and Central and South America. Some migrant birds use parts of the County as winter habitat or as stopover sites for resting and feeding. Stopover sites are just as critical to bird conservation as breeding habitat. Many spring migrants coming north from the Gulf of California or along the west coast of mainland Mexico use the San Diego region, with its comparatively low mountains, as a corridor for crossing the mountains to reach the Pacific coast.

Local migration of birds and other wildlife is also important. For example, in the San Diego region, western bluebirds breed in the mountains but migrate to the coastal lowlands and other warmer regions for the winter. Many of the larger mammals in the County, such as mountain lions, mule deer, and bobcats, move between blocks of habitat as part of their daily routine searching for food, water, and shelter. Inter-connected habitats are also important to prevent isolation of populations of plants and animals.

GOALS AND POLICIES

GOAL COS-1

Inter-Connected Preserve System. A regionally managed, inter-connected preserve system that embodies the regional biological diversity of San Diego County.

Policies

COS-1.1 **Coordinated Preserve System.** Identify and develop a coordinated biological preserve system that includes Pre-Approved Mitigation Areas, Biological Resource Core Areas, wildlife corridors, and linkages to allow wildlife to travel throughout their habitat ranges.

Gnatcatcher

COS-1.2 **Minimize Impacts.** Prohibit private development within established preserves. Minimize impacts within established preserves when the construction of public infrastructure is unavoidable.

COS-1.3 **Management.** Monitor, manage, and maintain the regional preserve system facilitating the survival of native species and the preservation of healthy populations of rare, threatened, or endangered species.

COS-1.4 **Collaboration with Other Jurisdictions.** Collaborate with other jurisdictions and trustee agencies to achieve well-defined common resource preservation and management goals.

COS-1.5 **Regional Funding.** Collaborate with other jurisdictions and federal, state, and local agencies to identify regional, long-term funding mechanisms that achieve common resource management goals.

COS-1.6 **Assemblage of Preserve Systems.** Support the proactive assemblage of biological preserve systems to protect biological resources and to facilitate development through mitigation banking opportunities.

COS-1.7 **Preserve System Funding.** Provide adequate funding for assemblage, management, maintenance, and monitoring through coordination with other jurisdictions and agencies.

COS-1.8 **Multiple-Resource Preservation Areas.** Support the acquisition of large tracts of land that have multiple resource preservation benefits, such as biology, hydrology, cultural, aesthetics, and community character. Establish funding mechanisms to serve as an alternative when mitigation requirements would not result in the acquisition of large tracts of land.

COS-1.9 **Invasive Species.** Require new development adjacent to biological preserves to use non-invasive plants in landscaping. Encourage the removal of invasive plants within preserves.

COS-1.10 **Public Involvement.** Ensure an open, transparent, and inclusive decision-making process by involving the public throughout the course of planning and implementation of habitat conservation plans and resource management plans.

COS-1.11 **Volunteer Preserve Monitor.** Encourage the formation of volunteer preserve managers that are incorporated into each community planning group to supplement professional enforcement staff.

GOAL COS-2

Sustainability of the Natural Environment. Sustainable ecosystems with long-term viability to maintain natural processes, sensitive lands, and sensitive as well as common species, coupled with sustainable growth and development.

Policies

COS-2.1 **Protection, Restoration and Enhancement.** Protect and enhance natural wildlife habitat outside of preserves as development occurs according to the underlying land use designation. Limit the degradation of regionally important natural habitats within the Semi-Rural and Rural Lands regional categories, as well as within Village lands where appropriate.

The preservation of existing native plants and the planting of a variety of native (genetically locally adapted) or compatible non-native, non-invasive plant species enhance wildlife habitat areas.

COS-2.2 **Habitat Protection through Site Design.** Require development to be sited in the least biologically sensitive areas and minimize the loss of natural habitat through site design.

GOAL COS-3

Protection and Enhancement of Wetlands. Wetlands that are restored and enhanced and protected from adverse impacts.

Policies

COS-3.1 **Wetland Protection.** Require development to preserve existing natural wetland areas and associated transitional riparian and upland buffers and retain opportunities for enhancement.

COS-3.2 **Minimize Impacts of Development.** Require development projects to:

- Mitigate any unavoidable losses of wetlands, including its habitat functions and values; and
- Protect wetlands, including vernal pools, from a variety of discharges and activities, such as dredging or adding fill material, exposure to pollutants such as nutrients, hydromodification, land and vegetation clearing, and the introduction of invasive species.

Water Resources

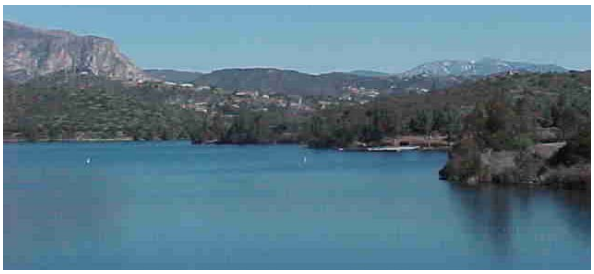
CONTEXT

The County relies upon a safe and reliable supply of this most basic necessity for its quality of life and economic prosperity. Not only do the County's clean water resources provide drinking water, but they also sustain the County's rich natural environment. Water resources may be classified as surface water, which collects in streams, rivers, lakes, reservoirs and groundwater, which resides in subsurface aquifers.

While surface water can drain through the County's watersheds, it can also be infiltrated into the subsurface saturated zone to become groundwater, a resource that many residents of the unincorporated County depend upon. Aquifers are recharged at varying rates depending upon a number of factors, primarily the amount and frequency of rainfall. On average, the County's coastal areas see less than ten inches of rain per year, the mountain peaks in excess of 40 inches, and the deserts less than three inches. Not only must the County have sufficient quantities of groundwater, but the water must also be of a sufficient quality. Figure C-2 (Floodwater Accommodation) identifies the rivers, creeks, streams, flood corridors, riparian habitats, and land that may accommodate floodwater for purposes of groundwater recharge and stormwater management.

Watersheds facilitate the collection and transportation of sediments and pollutants that can degrade water quality and damage downstream environments. Lakes and reservoirs capture flows from many of these watersheds. Watershed management relates to sustaining watersheds at an acceptable level of quality, contributing to resource surface and subsurface quality, and maintaining groundwater supplies.

The County of San Diego is divided into two hydrologic regions—the Colorado Hydrologic Region (CHR) which drains in an easterly direction into the Salton Sea and the San Diego Hydrologic Region (SDHR) which drains in a westerly direction toward the Pacific Ocean and encompasses most of the County, parts of southwestern Riverside County and southwestern Orange County. The watersheds, areas into which surface run-off, streams, creeks, and rivers drain, in the County of San Diego are shown on Figure C-3 (Watersheds).



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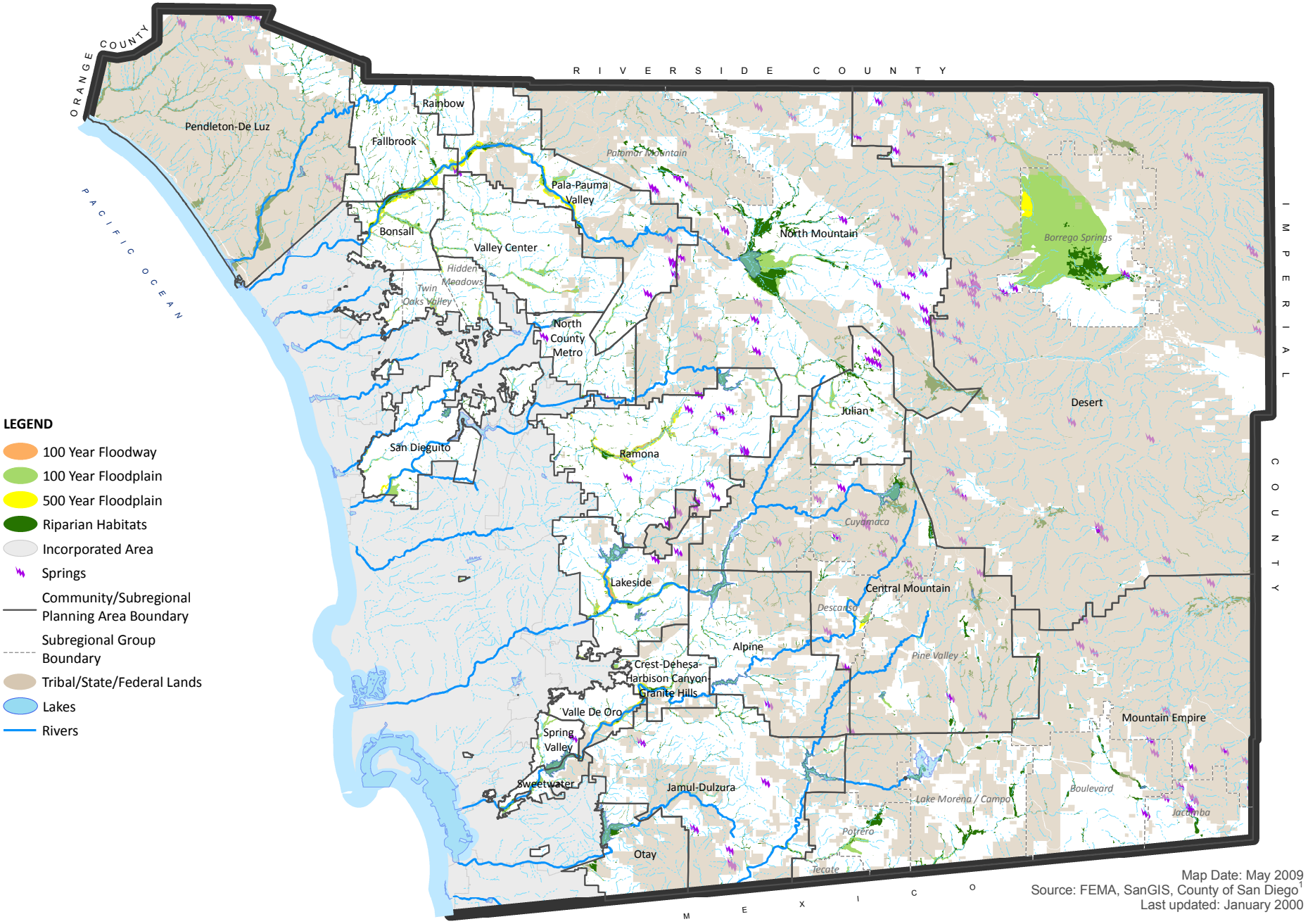
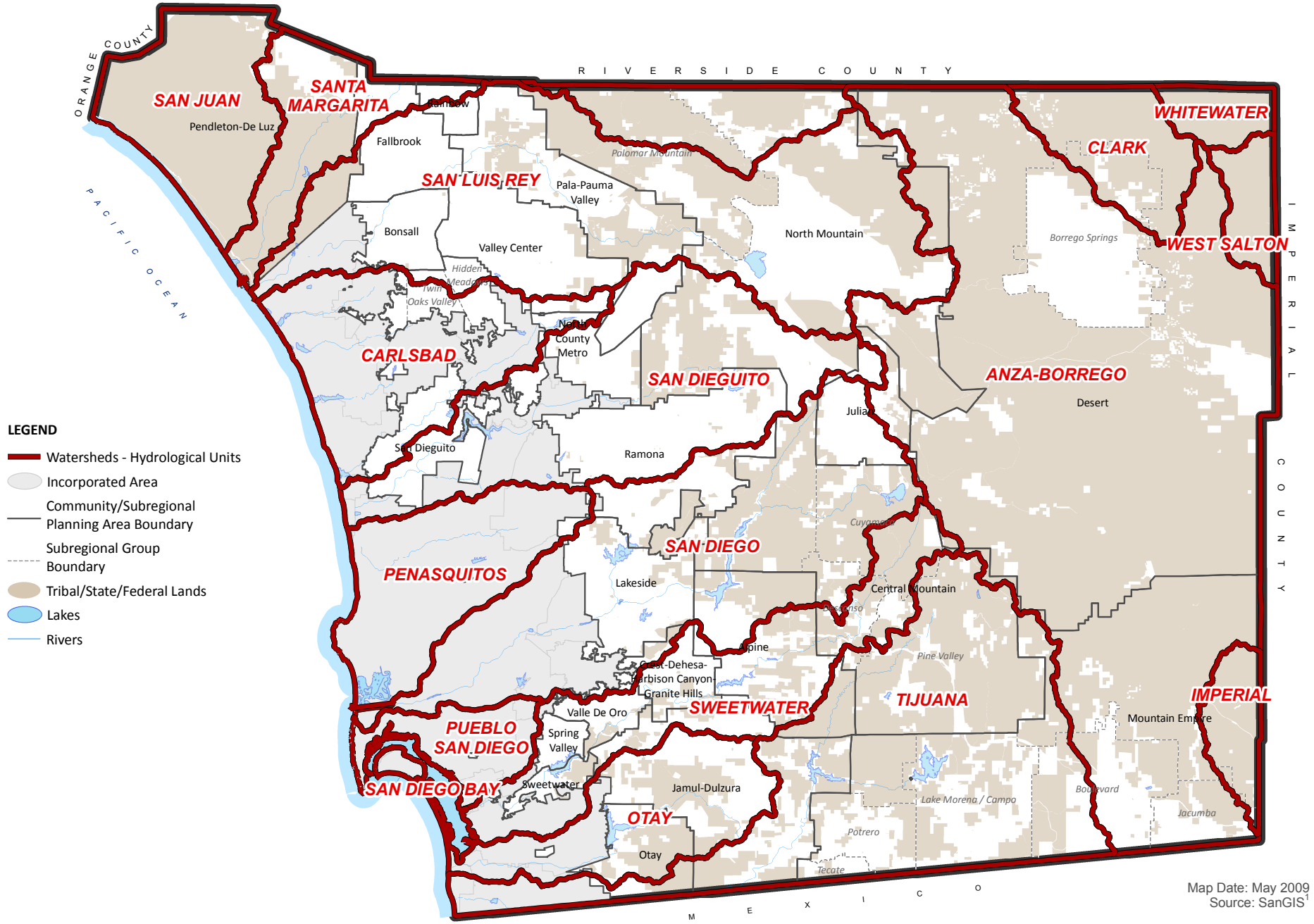


FLOODWATER ACCOMMODATION

San Diego County General Plan

Figure C-2



WATERSHEDS

San Diego County General Plan

Figure C-3

Groundwater aquifers and local surface water reservoirs are of great importance to providing an adequate water supply for communities that are not served by imported water. It is critical to protect the water quality found in the local drinking water reservoirs and aquifers to ensure a continual source of drinking water, as well as increasing local supplies through recycling and conservation efforts. Imported supplies also help to replenish local groundwater basins. The City of San Diego has seven water reservoirs in the unincorporated County that are crucial to protecting habitat. These reservoirs include Barrett, El Capitan, Hodges, Morena, Otay, San Vicente, and Sutherland.

The Metropolitan Water District of Southern California imports water from the Colorado River and Northern California. This water is distributed to water purveyors in San Diego County. The Metropolitan Water District (MWD) sets the targets for lowering demands and securing the necessary supplies in the Integrated Resources Plan (IRP). The so-called "Preferred Resource Mix" is identified based on extensive technical modeling, IRP workgroups, and stakeholder involvement. The 2004 MWD IRP assumed that new local efforts—both increasing supplies and lowering demands—would meet the needs of population growth. Given the challenges facing imported supplies, it is widely expected that the 2009 IRP will have an even greater focus on control of demand through recycling and conservation efforts. (For additional information on water supply and how agencies are planning to meet future demands, refer to the Land Use Element, Community Services and Infrastructure section.)

GOALS AND POLICIES

GOAL COS-4

Water Management. A balanced and regionally integrated water management approach to achieve the long-term viability of the County's water quality and supply.

COS-4.1 **Water Conservation.** Require development to reduce the waste of potable water through use of efficient technologies and conservation efforts that minimize the County's dependence on imported water and conserve groundwater resources.

COS-4.2 **Drought-Efficient Landscaping.** Require efficient irrigation systems and in new development encourage the use of native plant species and non-invasive drought tolerant/low water use plants in landscaping.

COS-4.3 **Stormwater Filtration.** Maximize stormwater filtration and/or infiltration in areas that are not subject to high groundwater by maximizing the natural drainage patterns and the retention of natural vegetation and other pervious surfaces. This policy shall not apply in areas with high groundwater, where raising the water table could cause septic system failures, moisture damage to building slabs, and/or other problems.

COS-4.4 **Groundwater Contamination.** Require land uses with a high potential to contaminate groundwater to take appropriate measures to protect water supply sources.

Potential sources of groundwater contamination include, but are not limited to, landfills, fertilizer, pesticide, manure storage and sales, petroleum product storage tanks, manufacturing plants, and on-site wastewater treatment systems.

COS-4.5 **Recycled Water.** Promote the use of recycled water and gray water systems where feasible.

GOAL COS-5

Protection and Maintenance of Water Resources. Protection and maintenance of local reservoirs, watersheds, aquifer-recharge areas, and natural drainage systems to maintain high-quality water resources.

Water conservation is also addressed in Goal COS-19 in the "Air Quality, Climate Change, and Energy" section below.

Policies

COS-5.1 **Impact to Floodways and Floodplains.** Restrict development in floodways and floodplains in accordance with policies in the Flood Hazards section of the Safety Element.

Development in floodways and floodplains has the potential to alter natural hydrologic flow and cause soil erosion and increased stormwater runoff—including loss of wetland and health issues related to surface and groundwater contamination.

COS-5.2 **Impervious Surfaces.** Require development to minimize the use of directly connected impervious surfaces and to retain stormwater run-off caused from the development footprint at or near the site of generation.

Impervious surface area impairs groundwater recharge and contributes to stormwater runoff and heat retention.

COS-5.3 **Downslope Protection.** Require development to be appropriately sited and to incorporate measures to retain natural flow regimes, thereby protecting downslope areas from erosion, capturing runoff to adequately allow for filtration and/or infiltration, and protecting downstream biological resources.

COS-5.4 **Invasive Species.** Encourage the removal of invasive species to restore natural drainage systems, habitats, and natural hydrologic regimes of watercourses.

COS-5.5 **Impacts of Development to Water Quality.** Require development projects to avoid impacts to the water quality in local reservoirs, groundwater resources, and recharge areas, watersheds, and other local water sources.

Protecting reservoir water quality requires that the quality of the water entering the reservoirs is maintained or improved. Pollutants of high concern are nutrients and related algae, total organic carbon, and total dissolved solids.

Agricultural Resources

CONTEXT

Agricultural uses in Julian

The County of San Diego is the only major urban county with a farm gate value[3] consistently ranked among the top ten agricultural counties (ranked eight for several years) in California.[4] The County has the fourth highest number of farms of any county in the country and third highest number of farms of any county in California.[5] Agriculture is the fifth largest component of the County's economy.[6] Agriculture in the County provides an array of economic, environmental, and social benefits that contribute to the quality of life in the region. Agriculture also provides a valuable open space resource and plays a critical role in regional wildlife conservation by providing usable open space corridors and habitat for some species.

The County of San Diego is the only major urban county with a farm gate value[7] consistently ranked among the top ten agricultural counties (ranked eight for several years) in California.[8] The County has the fourth highest number of farms of any county in the country and third highest number of farms of any county in California.[9] Agriculture is the fifth largest component of the County's economy.[10] Agriculture in the County provides an array of economic, environmental, and social benefits that contribute to the quality of life in the region. Agriculture also provides a valuable open space resource and plays a critical role in regional wildlife conservation by providing usable open space corridors and habitat for some species.

The resources that support the County's agriculture are unique. Unlike other jurisdictions across the nation, farming in San Diego is dependent upon the region's unusual microclimates and often has very little

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[3] The farm gate value of a cultivated product in agriculture or aquaculture is the net value of the product when it leaves the farm, after marketing costs have been subtracted. Since many farms do not have significant marketing costs, it is often understood as the price of the product at which it is sold by the farm (the farm gate price). The farm gate value is typically lower than the retail price consumers pay in a store as it does not include costs for shipping, handling, storage, marketing and profit margins of the involved companies.
[4] Source: USDA National Agricultural Statistics Service, Summary of California County Agricultural Commissioners' Reports, 2004-2005.
[5] Source: USDA National Agricultural Statistics Service, Census of Agriculture, 2002.
[6] Source: San Diego Regional Chamber of Commerce, 2006.

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[8] Source: USDA National Agricultural Statistics Service, Summary of California County Agricultural Commissioners' Reports, 2004-2005.
[9] Source: USDA National Agricultural Statistics Service, Census of Agriculture, 2002.
[10] Source: San Diego Regional Chamber of Commerce, 2006.

relationship to the quality of the soils. Much of the County's climate supports a year-round growing season that facilitates successful small farms and crop diversification producing over 200 agricultural commodities including high value specialty crops, nursery products, and a variety of fruits. Only six percent of the San Diego region's soils are classified as prime agricultural soils. The small percentage of prime soils, the small farm size, and the high value of agriculture in the region highlights the uniqueness of farming in the County.

A number of issues create pressures and stresses for the ongoing success of agriculture. These include conflicts associated with the urban/agricultural interface, land use pressures, water quality issues, and the high economic cost of operation. In addition, agricultural resources are particularly important in riverbeds, but face conflicts with aggregate resource extraction and wildlife corridor protection. These, among other issues, have increased the economic and social pressures faced by San Diego's farmers and represent a challenge to the future success of the County's agricultural industry.

Agriculture is the fifth largest industry in San Diego County

GOALS AND POLICIES

GOAL COS-6

Sustainable Agricultural Industry. A viable and long-term agricultural industry and sustainable agricultural land uses in the County of San Diego that serve as a beneficial resource and contributor to the County's rural character and open space network.

The agriculturally rich Pala-Pauma Valley

Agriculture in semi-rural area near Ramona

Policies

COS-6.1 **Economic Diversity.** Support the economic competitiveness of agriculture and encourage the diversification of potential sources of farm income, including value added products, agricultural tourism, roadside stands, organic farming, and farmers markets.

COS-6.2 **Protection of Agricultural Operations.** Protect existing agricultural operations from encroachment of incompatible land uses by doing the following:

- Limiting the ability of new development to take actions to limit existing agricultural uses by informing and educating new projects as to the potential impacts from agricultural operations
- Encouraging new or expanded agricultural land uses to provide a buffer of non-intensive agriculture or other appropriate uses (e.g., landscape screening) between intensive uses and adjacent non-agricultural land uses

- Allowing for agricultural uses in agricultural areas and designing development and lots in a manner that facilitates continued agricultural use within the development.
- Requiring development to minimize potential conflicts with adjacent agricultural operations through the incorporation of adequate buffers, setbacks, and project design measures to protect surrounding agriculture
- Supporting local and State right-to-farm regulations
- Retain or facilitate large and contiguous agricultural operations by consolidation of development during the subdivision process

Discourage development that is potentially incompatible with intensive agricultural uses includes schools and civic buildings where the public gather, daycare facilities under private institutional use, private institutional uses (e.g., private hospitals or rest homes), residential densities higher than two dwelling units per acre, and offices and retail commercial.

COS-6.3 **Compatibility with Recreation and Open Space.** Encourage siting recreational and open space uses and multi-use trails that are compatible with agriculture adjacent to the agricultural lands when planning for development adjacent to agricultural land uses.

Recreational and open space uses can serve as an effective buffer between agriculture and development that is potentially incompatible with agriculture uses.

COS-6.4 **Conservation Easements.** Support the acquisition or voluntary dedication of agriculture conservation easements and programs that preserve agricultural lands.

In addition to their economic value, agricultural lands provide the added benefit of serving as habitat areas for sensitive animal species.

COS-6.5 **Best Management Practices.** Encourage best management practices in agriculture and animal operations to protect watersheds, reduce GHG emissions, conserve energy and water, and utilize alternative energy sources, including wind and solar power.

Cultural Resources

CONTEXT

Our cultural past has helped shape our present community and will continue to create our future. Archaeological and historic resources, known collectively as cultural resources, are the tangible or intangible remains left by ancestral people who made and used them. Cultural resources, found throughout the County of San Diego, are irreplaceable reminders of the County's prehistoric and historic past that continues to have value for communities today. These resources can provide clues to prehistoric and historic human behaviors, and provide scientific, religious, and other valuable educational information about our cultural past. In addition, these resources such as

One of the historical sites listed on the San Diego County Historic Property Listing, the Somers-Linden Farmhouse was constructed between 1891 and 1892.

sacred places and traditional cultural properties continue to influence and have value for the County's living tribal people. The cultural environment encompasses both the built (post-1769) and the archaeological environments, which include both prehistoric and historic archaeological sites. Cultural resources are found throughout the County and include not only physical evidence of the past such as Native American rock shelters, and pictographs but the intangible evidence such as traditional cultural lands and sacred sites. Examples of historic cultural resources (the built environment) include homes, barns, bridges, fountains, and silos. In 2008, the County of San Diego had more than 23,000 recorded cultural resource sites and this number continues to grow.

GOALS AND POLICIES

GOAL COS-7

Protection and Preservation of Archaeological Resources. Protection and preservation of the County's important archeological resources for their cultural importance to local communities, as well as their research and educational potential.

Policies

COS-7.1 **Archaeological Protection.** Preserve important archaeological resources from loss or destruction and require development to include appropriate mitigation to protect the quality and integrity of these resources.

The importance of archaeological resources must be evaluated from the perspective of the affected community, including local tribes, in addition to the definitions contained in the California Public Resources Code. Input from the affected community on the importance of cultural resources through the consultation process is important in determining what resources should be preserved and what constitutes appropriate mitigation.

COS-7.2 **Open Space Easements.** Require development to avoid archeological resources whenever possible. If complete avoidance is not possible, require development to fully mitigate impacts to archaeological resources.

Avoidance of archaeological resources is normally achieved through the design of the development project in conjunction with the use of open space easements that protect the resources. If complete avoidance is not possible, other forms of mitigation, including data recovery excavations and the incorporation of archaeological features into the project design on a case-by-case basis may be appropriate. The determination of what constitutes adequate mitigation should be based on meaningful consultation with the affected community, including local tribes.

COS-7.3 **Archaeological Collections.** Require the appropriate treatment and preservation of archaeological collections in a culturally appropriate manner

The determination of what constitutes appropriate treatment and preservation of archaeological collections should be based on existing federal curation standards in combination with consultation with the affected community, such as the tribes. Many collections should be placed in a local collections curation facility that meets federal standards per 36 CFR Part 79. The proper storage and treatment of these collections should also be based on consultation with the affected community, such as the tribes. In addition, existing federal and state law governs the treatment of certain cultural items and human remains, requires consultation, and in some circumstances, repatriation. The County is committed to conduct an inventory of collections it holds or are held by cultural resources consulting firms.

COS-7.4 **Consultation with Affected Communities.** Require consultation with affected communities, including local tribes to determine the appropriate treatment of cultural resources.

Consultation should take place with the affected communities concerning the appropriate treatment of cultural resources, including archaeological sites, sacred places, traditional cultural properties, historical buildings and objects, artifacts, human remains, and other items. The County is required by law, Senate Bill 18 Protection of Traditional Tribal Cultural Places (SB-18), to consult with the appropriate tribes for projects that may result in major land use decisions including General Plans, General Plan Amendments, Specific Plans and Specific Plan Amendment. In addition to these types of permits, it is County policy to consult with the appropriate tribes on all other projects that contain or are likely to contain, archaeological resources. Consultation may also include active participation by the tribes as monitors in the survey, testing, excavation, and grading phases of the project.

COS-7.5 **Treatment of Human Remains.** Require human remains be treated with the utmost dignity and respect and that the disposition and handling of human remains will be done in consultation with the Most Likely Descendant (MLD) and under the requirements of Federal, State and County Regulations.

Human remains, including ancestral Native American remains, should be left undisturbed and preserved in place whenever possible. For most development permits, this is required by the County's Resource Protection Ordinance. In the event that human remains are discovered during any phase of an archaeological investigation, the requirements of State and local laws and ordinances, including notification of and consultation with appropriate tribal members, must be followed in determining what constitutes appropriate treatment of those remains.

COS-7.6 **Cultural Resource Data Management.** Coordinate with public agencies, tribes, and institutions in order to build and maintain a central database that includes a notation whether collections from each site are being curated, and if so, where, along with the nature and location of cultural resources throughout the County of San Diego.

This database should be accessible to all qualified individuals while maintaining the confidentiality of the location and nature of sensitive cultural resources, such as archaeological sites. The County maintains a partnership with the local repository of the database, the South Coastal Information Center at San Diego State University, which provides direct access by qualified County personnel to the database so that the information it contains may be used to design development projects to avoid cultural resources at an early point in the process.

GOAL COS-8

Protection and Conservation of the Historical Built Environment. Protection, conservation, use, and enjoyment of the County's important historic resources.

Policies

COS-8.1 **Preservation and Adaptive Reuse.** Encourage the preservation and/or adaptive reuse of historic sites, structures, and landscapes as a means of protecting important historic resources as part of the discretionary application process, and encourage the preservation of historic structures identified during the ministerial application process.

Historic buildings, objects, trails, landscapes and districts are important parts of the multi-cultural heritage of San Diego County and should be preserved for the future enjoyment and education of the County's diverse populations. Preservation and adaptive reuse of these resources should be encouraged during the planning process and an emphasis should be placed on incentives for preservation, such as the Mills Act property tax program, in addition to restrictions on development, where appropriate.

Alpine Women's Club is located in the former Alpine Hall built in 1899

COS-8.2 **Education and Interpretation.** Encourage and promote the development of educational and interpretive programs that focus on the rich multicultural heritage of the County of San Diego.

The County should continue to develop educational and interpretive programs that focus on the history of San Diego County, including but not limited to the important historical resources located on County parks, such as the Adobe at Rancho Penasquitos and Rancho Guajome. Such programs should be for residents and visitors of all ages from all communities and should include docent and self-guided tours, interpretive signage, kiosks, informational pamphlets, books and other audio-visual materials.

Paleontological Resources and Unique Geological Features

CONTEXT

PALEONTOLOGICAL RESOURCES

Paleontological resources are the fossilized remains and/or traces of prehistoric life—both plant and animal—as well as sedimentary formations in which they occur and the locations where they may be collected. Fossils are generally older than 10,000 years, a temporal boundary marking the end of the glacial Pleistocene Epoch and the beginning of the warmer Holocene Epoch in which we live today. For planning purposes, paleontological resources exclude human remains, which are considered cultural resources.

In the San Diego region, fossils typically occur in undisturbed sedimentary rock layers beneath the soil and sometimes may be found in surface outcrops. These fossils are limited and non-renewable. They are considered unique and worthy of preservation when they contain a unique or unusual assemblage of fossil organisms, provide paleo-biological information, provide insight to prehistoric life, or are the best example of its kind in the region.

The County can be divided into three distinct geomorphic regions—the Coastal Plain, the Peninsular Ranges, and the Salton Trough (the desert). Each region is characterized by different climatic, topographic, biological, and geologic settings. Correspondingly, each region contains geologic deposits that are associated with particular types of fossils, some of which are unique within the context of California and even the United States. Since fossils form in sedimentary rocks, most of the fossils in the San Diego region are in the Coastal Plain and Salton Trough strata. In the plutonic Peninsular Ranges, fossils occur only in valleys and other environments where material eroded from the mountains was transported down hill and deposited.

UNIQUE GEOLOGICAL RESOURCES

The San Diego region has a rich geologic history. Unique geological features are those that are locally or regionally unique in the context of the geologic history of California. They may include particular rocks or strata that explain or result from geologic processes that have affected the County and that lend themselves to scientific study.

The present landforms that characterize the San Diego region are the result of a series of geologic events spanning millions of years. These events include intrusive emplacement of magma, regional volcanism, large-scale erosion, river- and ocean-derived sedimentation, local faulting and uplift, and hydrothermal processes. The scale of some of the resulting unique geologic features, such as entire rock formations, can be much larger than the scale of other natural resources in the County. The conservation/preservation of these large-scale features is not necessarily needed or desired, as long as examples of them remain represented in the County. The County defines a "unique geologic feature" as a site that exhibits distinctive characteristics, is exclusive to the region, or provides a key piece of geologic information important in the study of geology or geologic history. Examples may include unique rock outcrops (e.g., natural bridge), type localities of named geologic formations (e.g., type locality of Scripps Formation in the sea cliffs north of Scripps Institute of Oceanography), information-rich geologic exposures (e.g., cliff face exposing faulted sedimentary layers), or unique landform (e.g., Round Mountain in Jacumba Valley, which represents a volcanic plug).

GOALS AND POLICIES

GOAL COS-9

Educational and Scientific Uses. Paleontological resources and unique geologic features conserved for educational and/or scientific purposes.

Policies

COS-9.1 **Preservation.** Require the salvage and preservation of unique paleontological resources when exposed to the elements during excavation or grading activities or other development processes.

COS-9.2 **Impacts of Development.** Require development to minimize impacts to unique geological features from human related destruction, damage, or loss.

Mineral Resources

CONTEXT

Mineral resources are vital to community development and economic prosperity and also support recreational, educational, and scientific pursuits. The County's supply of accessible mineral resources is finite and exhaustible. Management of the remaining mineral deposits is important to ensure adequate resources are available to support the economic prosperity of future generations of County citizens.

MINERAL RESOURCES OF SAN DIEGO COUNTY

The State Geologist has classified certain areas of the County as underlain by significant mineral deposits. These areas are identified as Mineral Resource Zone 2 (MRZ-2) on the maps prepared by the California Geological Survey (Figure C-4 [Mineral Resource Zones]). Some of these areas have also been designated by the State Mining and Geology Board as containing mineral resources of "statewide or regional significance."

The term "mineral resource" refers to a concentration or occurrence of a naturally occurring material in such form or amount that economic extraction of a commodity is currently potentially feasible. In San Diego County, there are three general categories of important mineral resources, including construction materials, industrial and chemical mineral materials, and metallic and rare materials. Although mineral resources of all types are economically important, the continued availability of construction aggregate for the development of roads, homes, buildings, and other infrastructure is essential to the economy of the County. While the County is underlain by vast quantities of mineral deposits from which aggregate can be produced, urban development has encroached upon many existing and potential future mining sites. This development and other non-compatible land uses has reduced or eliminated access to many of the local important mineral deposits.

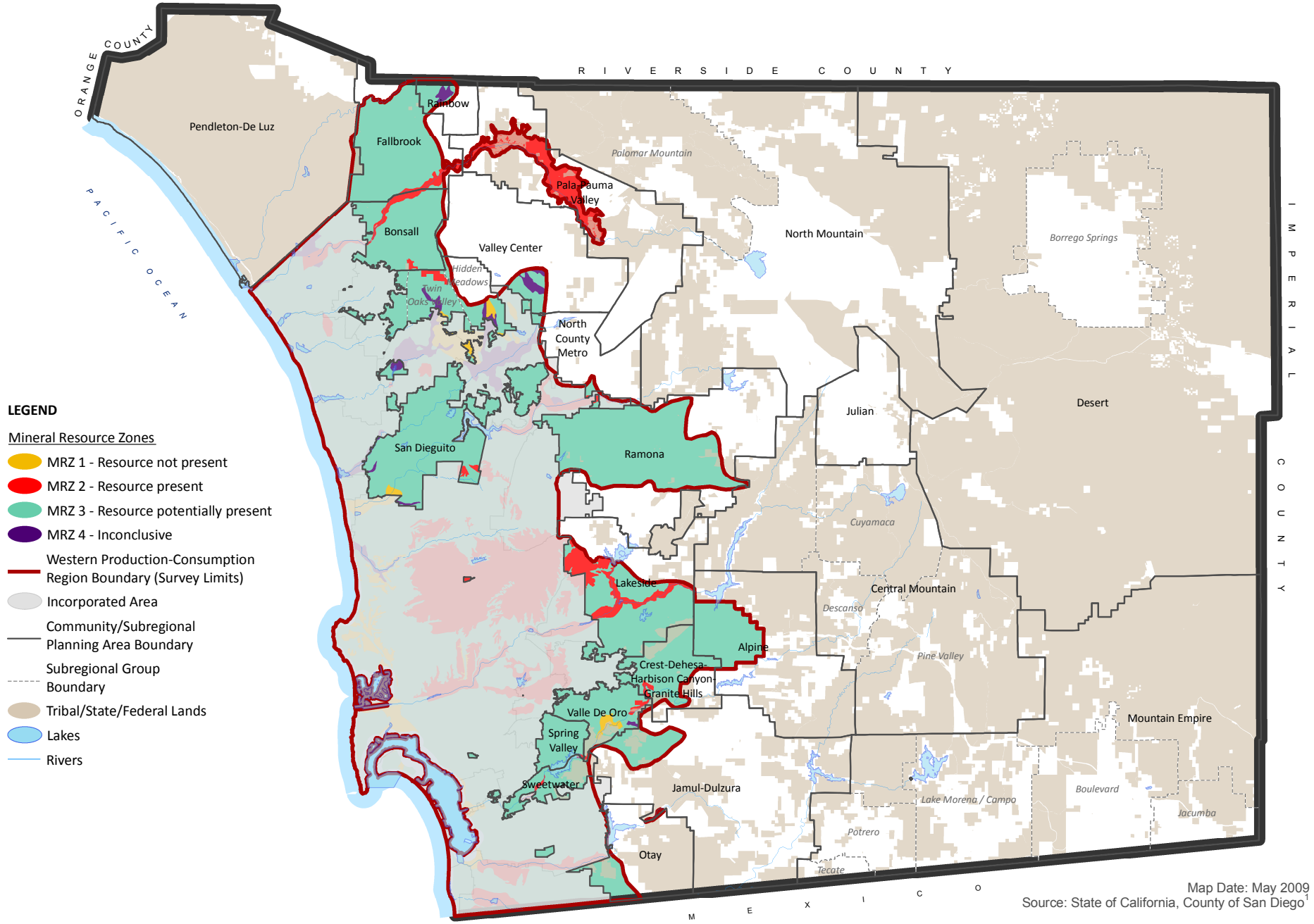
Two mineral classification reports have been completed for San Diego County; these include (1) Mineral Land Classification: Aggregate Materials in the Western San Diego County Production-Consumption Region[11] and (2) Update of Mineral Land Classification: Aggregate Materials in the Western San Diego County Production-Consumption Region.[12] The latter 1996 report concluded that aggregate reserves significantly decreased since the 1982 study and that Portland cement concrete (PCC)-grade aggregate reserves within Western San Diego County were enough to supply the demand for 20 years (until 2016). The report further concluded it was unlikely all identified resources would be mined as access to resources could be substantially restricted by competing conservation measures, such as the MSCP program.

As a result, few new mining sites have been recently permitted in the County and the aggregate production rate from existing local mining sites has not kept pace with demand. The total permitted aggregate resources as of January 2006 were 198 million tons, a 28 percent decrease from January 2001.[13] The permitted aggregate resources represent only 17 percent of the 50-year estimated demand (year 2006 to 2056) of 1,164 million tons. To meet demand, substantial volumes of aggregate are being imported from quarries located outside of San Diego County. Due to increased transportation costs, the price for aggregate in the County is among the highest in the State of California. The total permitted area of local mining facilities contains less than a 50-year supply of aggregate for the County. Thus, maintaining access to mineral resources, especially the remaining undeveloped MRZ-2 classified lands, is important for the future economic activity of the County.

PERMITTING AND RECLAMATION OF MINING SITES

In order for a new mining site to be operated, the California *Surface Mining and Reclamation Act* (SMARA) requires that a permit is granted by the local lead agency (the County), and a Reclamation Plan prepared

[11] Kohler, S.L. & Miller, R.V. (1982). California Department of Conservation, Special Report 153
[12] Davis, James F. (1996). California Department of Conservation, DMG Open-File Report 96-04
[13] California Geological Survey (2006), Map Sheet 52 – Aggregate Availability in California



MINERAL RESOURCE ZONES

San Diego County General Plan

Figure C-4

consistent with the minimum standards for reclamation listed in Article 9, Section 3700 et seq. of the State Mining and Geology Board reclamation regulations. The Reclamation Plan is subject to approval by the County in coordination with the California Department of Conservation.

RECYCLING OF CONSTRUCTION MATERIALS

Although not a mining activity, the recycling of construction materials collected from demolished buildings, roadways, or other facilities can incrementally increase the local availability (i.e. production rate) of construction materials and extend the lifespan of existing mining operations. (Recycling also extends the lifespan of local landfills.)

GOALS AND POLICIES

The goals and policies listed below are intended to achieve the following:

- Assure an adequate supply of mineral resources to support the economic activity projected to occur under the County General Plan.
- Comply with the requirements of the SMARA with regard to the conservation of mineral resources, and the permitting and reclamation of mining sites.

GOAL COS-10

Protection of Mineral Resources. The long-term production of mineral materials adequate to meet the local County average annual demand, while maintaining permitted reserves equivalent to a 50-year supply, using operational techniques and site reclamation methods consistent with SMARA standards such that adverse effects on surrounding land uses, public health, and the environment are minimized.

Policies

COS-10.1 **Siting of Development.** Encourage the conservation (i.e., protection from incompatible land uses) of areas designated as having substantial potential for mineral extraction. Discourage development that would substantially preclude the future development of mining facilities in these areas. Design development or uses to minimize the potential conflict with existing or potential future mining facilities. For purposes of this policy, incompatible land uses are defined by SMARA Section 3675.

COS-10.2 **Protection of State-Classified or Designated Lands.** Discourage development or the establishment of other incompatible land uses on or adjacent to areas classified or designated by the State of California as having important mineral resources (MRZ-2), as well as potential mineral lands identified by other government agencies. The potential for the extraction of substantial mineral resources from lands classified by the State of California as areas that contain mineral resources (MRZ-3) shall be considered by the County in making land use decisions.

COS-10.3 **Road Access.** Prohibit development from restricting road access to existing mining facilities, areas classified MRZ-2 or MRZ-3 by the State Geologist, or areas identified in the County Zoning Ordinance for potential extractive use in accordance with SMARA section 2764.a.

COS-10.4 **Compatible Land Uses.** Discourage the development of land uses that are not compatible with the retention of mining or recreational access to non-aggregate mineral deposits. *See Policy COS-10.1 for a definition of incompatible land uses.*

COS-10.5 **Reclamation Plans.** Require all mining projects to be conducted in accordance with a reclamation plan that meets the minimum reclamation standards required by the California *Surface Mining and Reclamation Act* and the associated State Mining and Geology Board regulations. Require the reclamation plan to include a phasing plan that provides for the completion of the surface mining on each segment of the mined lands so that the reclamation can be initiated at the earliest possible time on those portions of the mined lands that will not be subject to further disturbance by the surface mining operation.

COS-10.6 **Conservation of Construction Aggregate.** Encourage the continued operation of existing mining facilities and streamline the permitting of new mining facilities consistent with the goal to establish permitted aggregate resources that are sufficient to satisfy 50 years of County demand.

COS-10.7 **Recycling of Debris.** Encourage the installation and operation of construction and demolition (C&D) debris recycling facilities as an accessory use at permitted (or otherwise authorized) mining facilities to increase the supply of available mineral resources.

COS-10.8 **New Mining Facilities.** Develop specific permit types and procedures for the authorization of new mining facilities that recognize the inherent physical effects of mining operations and the public necessity for available mineral resources adequate to meet local demand, in accordance with PRC Section 2762.

COS-10.9 **Overlay Zones.** Provide zoning overlays for MRZ-2 designated lands and a 1,500-foot-wide buffer area adjacent to such lands. Within these overlay zones, the potential effects of proposed land use actions on potential future extraction of mineral resources shall be considered by the decision-makers.

Visual Resources

CONTEXT

Visual resources are diverse in nature. They are found both within the natural environment and the built, or human-made, environment. Visual resources can be valued both objectively and subjectively based on their quality, uniqueness, prominence, relationship to community identity, and economic contributions, such as to land values and tourism. Visual resources are important from an aesthetic perspective when, based on the characteristics summarized above; they are identified as containing significant scenic value.

While existing visual resources can be preserved or enhanced, the urban growth anticipated by this General Plan provides opportunities to identify or even create new visual resources, both within existing communities and in new growth areas. Goals and policies in this section emphasize the protection of scenic corridors and dark skies within the natural environment and the recognition and enhancement of community character within the built environment.

LANDSCAPE/SETTING

The landscape of the San Diego region is rich in natural open space, unique topographic resources, and scenic vistas. These natural features contribute greatly to the overall quality of the existing visual setting experienced by viewers within the County. Urban land uses are focused in the western third of the County, while the eastern two-thirds are largely undeveloped with mountains and desert dominating the landscape. The County of San Diego has three distinctive geographic regions, listed from west to east:

- Low-lying Coastal Plain
- Mountainous Peninsular Range
- Desert Salton (Imperial) Basin

The diversity of these regions provides San Diego County residents and visitors with an array of natural vistas and scenic environments that provide a unique aesthetic collection from the ocean to the desert.

Throughout these three distinctive geographic provinces are vast amounts of publicly owned lands that provide open space and visual relief from the human-made environment. Examples include the Marine Corps Base Camp Pendleton on the Coastal Plain in northern San Diego County; the Cleveland National Forest in the Peninsular Range; and Anza-Borrego Desert State Park in the Salton (Imperial) Basin. In addition to these examples of large expanses of open space, County parks, habitat preserves, reservoirs, and undeveloped lands contribute to the County's open space lands and overall aesthetic resource value.

Aesthetic value is not limited to open space and rural lands, but also can be demonstrated through architectural design, or in historic structures and districts, streetscapes, and manufactured landscapes. Within the "developed" environment, scenic features can include built uses such as structures of historic significance or architectural merit, open but developed areas such as expansive agricultural fields or groves, and the individual form and character of a unique neighborhood or community. These valuable aesthetic elements of the human-made environment can be found throughout the County. A well-known example is the historic gold-mining community of Julian.

SCENIC CORRIDORS

A highway corridor generally includes the land adjacent to and visible from the vehicular right-of-way. The dimension of the corridor is usually identified using a motorist's line of vision and may include viewshed, extending to the horizon. A "scenic highway" can pertain to any freeway, highway, road, or other vehicular right-of-way along a corridor with considerable natural or otherwise scenic landscape.

State Scenic Highways are those highways that are either officially designated by Caltrans or are eligible for designation. This statewide system of scenic highways is part of the Master Plan of State Highways Eligible for Official State Designation as Scenic Highways. A highway may be designated as "scenic" depending upon how much of the natural landscape can be seen by travelers, the aesthetic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view.

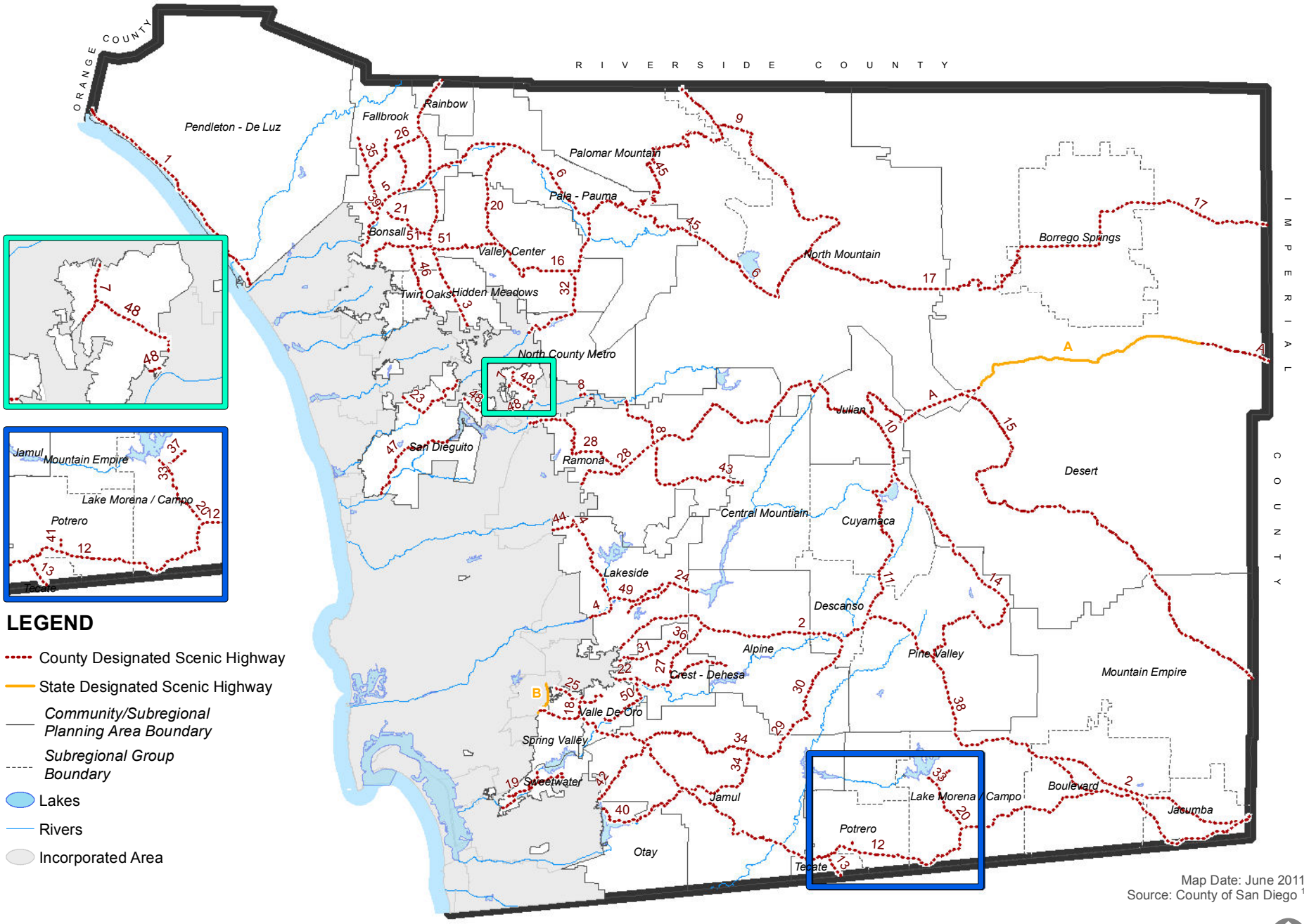
A highway's status changes from "eligible" to "officially designated" when the local jurisdiction adopts a scenic corridor protection program, applies to Caltrans for scenic highway approval, and receives notification from Caltrans that the highway has been designated as an official State Scenic Highway. Two County routes have been designated State Scenic Highways; these include (1) State Route 78 through the Anza-Borrego

Desert State Park (18.2-mile segment) and (2) State Route 125 from State Route 94 in Spring Valley to Interstate 8 in La Mesa (two miles of this segment are in the unincorporated County). In addition, Sunrise Highway (S1) is a National Scenic Byway that runs north from Old Highway 80 to State Route 79 through the Cleveland National Forest. Roads within the unincorporated County included in the Scenic Highway system are shown on Figure C-5 (Scenic Highways) and in Table COS-1 (County Scenic Highway System).

Table COS-1 County Scenic Highway System

Map Ref.	Route	Segment
A	State Route 78	Wynola Road east to Imperial County line (excluding portion in Anza-Borrego Desert State Park)
B	State Route 125	State Route 94 to Interstate 8
1	Interstate 5	Oceanside city limits north to Orange County line
2	Interstate 8	El Cajon city limits to Imperial County line
3	Interstate 15	Escondido city limits north to Riverside County line
4	State Route 67	Santee city limits to State Route 78 (excluding portion in city of Poway)
5	State Route 76	Oceanside city limits east to Interstate 15
6	State Route 76	Interstate 15 east to State Route 79
7	Bear Valley Parkway and State Route 78	Escondido city limits southeast to Via Rancho Parkway
8	State Route 78	Via Rancho Parkway to State Route 79 (excluding portion within city of San Diego)
9	State Route 79	Riverside County line to State Route 76
10	State Route 79	State Route 78 (Wynona) south to Old Highway 80
11	State Route 79	Interstate 8 north to Sunrise Highway
12	State Route 94	State Route 125 to Interstate 8
13	State Route 188 (Tecate Road)	U.S. / Mexican Border north to State Route 94
14	Sunrise Highway (S1)	State Route 79 south to Old Highway 80
15	Old Overland Stage Route (S2)	Imperial County line north to State Route 78
16	Lilac Road and Valley Center Road (S6)	State Route 76 to State Route 76
17	San Felipe Road, Montezuma Valley Road, Pal Canyon Road, Peg Leg Road, and Borrego Salton Seaway (S22)	State Route 79 east to Imperial County line
18	Avocado Boulevard	State Route 94 to El Cajon city limits
19	Bonita, San Miguel, Guajolote, and Sweetwater River Roads	Interstate 805 north to State Route 94 (excluding portion within city of Chula Vista)
20	Buckman Springs Road	Lake Morena Drive to State Route 94
21	Camino del Rey west to Lilac Road	Oceanside city limits east to Vista Way
22	Dehesa Road	El Cajon city limits to Tavern Road
23	Elfin Forest Road / Harmony Grove Road	San Marcos city limits to Escondido city limits
24	El Monte Road	El Capitan Reservoir to Lake Jennings Park Road

Table COS-1 County Scenic Highway System		
Map Ref.	**Route**	**Segment**
25	Fuerte Drive	Interstate 8 to Chase Ave.
26	Gird, Reche, Live Oak Park, and Mission Roads	State Route 76 north and east to Interstate 15
27	Harbison Canyon Road	Arnold Way to Dehesa Road
28	Highland Valley Road	San Diego city limits to State Route 67
29	Honey Springs Road	State Route 94 north to Lyons Valley Road
30	Japatul Road	Lyons Valley Road to Interstate 8
31	La Cresta Road	Greenfield Drive to La Cresta Boulevard
32	Lake Wohlford Road	Valley Center Road east (Escondido city limits) to Valley Center Road (excluding portion within city of Escondido)
33	Lake Morena Drive	Buckman Springs Road north to Morena Lake
34	Lyons Valley Road	State Route 94 to Cleveland National Forest
35	Mission and Green Canyon Roads	State Route 76 north and east to Reche Road
36	Mountain View Road/Francis Drive	La Cresta Boulevard to Harbison Canyon Road
37	Oak Drive	Lake Morena Drive north to Buckman Springs Road
38	Old Highway 80	State Route 79 (Pine Valley) to Interstate 8 (Jacumba)
39	Olive Hill Road	State Route 76 to planning area boundary
40	Otay Lakes Road	Chula Vista city limits to State Route 94
41	Potrero Valley Road	State Route 94 to Potrero County Park
42	Proctor Valley Road	Chula Vista city limits to State Route 94
43	San Vicente and Ramona Oaks Roads	State Route 78 to Cleveland National Forest
44	Scripps Poway Parkway	Poway city limits to State Route 67
45	South Grade Road, Canfield Rd/Highway to the Stars, Palomar Divide Road, and Oak Grove Truck Trail	State Route 76 to State Route 78
46	Twin Oaks Valley Road	Gopher Canyon Road to San Marcos city limits
47	Via de la Valle, Paseo Delicias, and Del Dios Highway	San Diego city limits east to Via Rancho Parkway
48	Via Rancho Parkway (San Pasqual Road)	Del Dios Highway to State Route 78 (excluding portions in cities of Escondido and San Diego)
49	Willow and El Monte Roads	State Route 67 to southern end of El Capitan Reservoir
50	Willow Glen Drive	Jamacha Road to Dehesa Road
51	Vista Way, Gopher Canyon, and Old Castle Roads	Vista city limits north and east to Lilac Road



SCENIC HIGHWAYS

ASTRONOMICAL DARK SKIES

Astronomical research has contributed to a greater understanding of our solar system, supported advances in space travel, improved telecommunication systems, advanced weather forecasting, and provided insight to energy production. The maintenance of dark skies in San Diego County is vital to the two world-class observatories that depend on them for astronomical research. The five criteria for a high-quality site include: (1) Elevation over 5,000 feet above sea level; (2) clear, cloud-free night sky; (3) proximity to the Pacific Ocean; (4) distance from urban areas; and (5) freedom from nearby sources of light, dust, and smoke. Sites in the United States that meet these criteria are found only in west Texas, central New Mexico, Arizona, the central California coast, and the San Diego region.

The two sites in the County of San Diego, which meet all of the above criteria, include Palomar and Mount Laguna Observatories. The maintenance of dark skies in the County is vital to their operation and the astronomical research carried out at these facilities. Palomar Observatory, located 5,500 feet at the top of Palomar Mountain in northern San Diego County near Palomar Mountain State Park, is privately owned and operated by the California Institute of Technology (Caltech) and is used to support some of California's and the United States' premier scientific research programs. San Diego State University (SDSU) and the University of Illinois operate the Mount Laguna Observatory jointly. Located at an altitude of 6,100 feet on the eastern edge of the Cleveland National Forest near the Anza-Borrego State Park, 45 miles east of downtown San Diego, the Mount Laguna Observatory is one of the County's best astronomical research and education facilities.

GOALS AND POLICIES

GOAL COS-11

Preservation of Scenic Resources. Preservation of scenic resources, including vistas of important natural and unique features, where visual impacts of development are minimized.

Policies

COS-11.1 **Protection of Scenic Resources.** Require the protection of scenic highways, corridors, regionally significant scenic vistas, and natural features, including prominent ridgelines, dominant landforms, reservoirs, and scenic landscapes.

COS-11.2 **Scenic Resource Connections.** Promote the connection of regionally significant natural features, designated historic landmarks, and points of regional historic, visual, and cultural interest via designated scenic corridors, such as scenic highways and regional trails.

COS-11.3 **Development Siting and Design.** Require development within visually sensitive areas to minimize visual impacts and to preserve unique or special visual features, particularly in rural areas, through the following:

- Creative site planning
- Integration of natural features into the project
- Appropriate scale, materials, and design to complement the surrounding natural landscape
- Minimal disturbance of topography

Potential measures for promoting scenic compatibility may include limiting or avoiding soundwalls, placing utilities underground, minimizing grading, and providing scenic vista points.

- Clustering of development so as to preserve a balance of open space vistas, natural features, and community character.
- Creation of contiguous open space networks

COS-11.4 **Collaboration with Agencies and Jurisdictions.** Coordinate with adjacent federal and State agencies, local jurisdictions, and tribal governments to protect scenic resources and corridors that extend beyond the County's land use authority, but are important to the welfare of County residents.

COS-11.5 **Collaboration with Private and Public Agencies.** Coordinate with the California Public Utilities Commission, power companies, and other public agencies to avoid siting energy generation, transmission facilities, and other public improvements in locations that impact visually sensitive areas, whenever feasible. Require the design of public improvements within visually sensitive areas to blend into the landscape.

COS-11.6 **Billboards.** Prohibit new billboards and other forms of large-scale advertising and signage within scenic corridors. Encourage the removal of existing billboards and other forms of large-scale advertising and signage along State and County scenic highway corridors.

COS-11.7 **Underground Utilities.** Require new development to place utilities underground and encourage "undergrounding" in existing development to maintain viewsheds, reduce hazards associated with hanging lines and utility poles, and to keep pace with current and future technologies.

The concept of "undergrounding" in the initial phases of a project not only increases the aesthetic value of the surrounding viewshed, but can also reduce costs in the long run since less infrastructure is exposed to the elements.

GOAL COS-12

Preservation of Ridgelines and Hillsides. Ridgelines and steep hillsides that are preserved for their character and scenic value.

Policies

COS-12.1 **Hillside and Ridgeline Development Density.** Protect undeveloped ridgelines and steep hillsides by maintaining semi-rural or rural designations on these areas.

COS-12.2 **Development Location on Ridges.** Require development to preserve the physical features by being located down and away from ridgelines so that structures are not silhouetted against the sky.

GOAL COS-13

Dark Skies. Preserved dark skies that contribute to rural character and are necessary for the local observatories.

Policies

COS-13.1 **Restrict Light and Glare.** Restrict outdoor light and glare from development projects in Semi-Rural and Rural Lands and designated rural communities to retain the quality of night skies by minimizing light pollution.

COS-13.2 **Palomar and Mount Laguna.** Minimize, to the maximum extent feasible, the impact of development on the dark skies surrounding Palomar and Mount Laguna observatories to maintain dark skies which are vital to these two world-class observatories by restricting exterior light sources within the impact areas of the observatories.

COS-13.3 **Collaboration to Retain Night Skies.** Coordinate with adjacent federal and State agencies, local jurisdictions, and tribal governments to retain the quality of night skies by minimizing light pollution.

Air Quality, Climate Change, and Energy

CONTEXT

There is a strong correlation between land use planning, transportation system planning, and the emission of air quality pollutants, greenhouse gases (GHG) that contribute to global climate change (GCC) and criteria pollutants that degrade air quality within a region. The primary opportunities to reduce air quality pollutants and GHG emissions are in the urbanized areas of the County where there are land use patterns that can best support the increased use of transit and pedestrian activities since most GHGs and air pollutants result from mobile source emissions. The unincorporated County can also be a part of the solution by producing development patterns that contribute to reducing the dependence on the automobile and by promoting development with lower energy demands.

The development of sustainable communities contributes to both the reduction in overall air pollutants as well as solving the larger challenges associated with GCC. A holistic approach to achieving sustainable communities requires the integration of a regionwide multi-modal transportation system with a significant reduction in the reliance on single-occupant motor vehicles, along with buildings that consume less through design and efficient building materials.

AIR QUALITY

The boundaries of the San Diego Air Basin are contiguous with the political boundaries of San Diego County, including the incorporated cities, and encompass approximately 4,260 square miles. The County is divided by the Laguna Mountain Range with peaks that exceed 6,000 feet, which runs approximately parallel to the coast about 45 miles inland and separates the coastal area from the desert. To the north of the County are the Santa Ana Mountains which run along the Orange County coast, turning east to join with the Laguna Mountains near the San Diego-Orange County border.

Air pollutant emission sources in the San Diego Air Basin are typically grouped into two categories: stationary and mobile sources. Mobile source emissions can be attributed to vehicles and transportation related activities. Stationary sources can be further divided into two major subcategories: point and area sources. Point source emissions originate from manufacturing and industrial processes. Area source emissions are generated from residential heaters, small engines, and other consumer products. They are widely distributed and may have a cumulative effect.

According to readings from the ten monitoring stations operated by San Diego APCD, the County has experienced substantial improvement in ambient ozone levels. The number of days above the Federal one-

hour ozone standard has decreased from 39 days in 1990 to zero days in 2005, while the number of days above the more stringent State standard has decreased from 139 days in 1990 to 16 days in 2005. However, in 2004, the County of San Diego was designated a basic non-attainment area for the new eight-hour ozone standard.

Transportation is California's largest source of carbon dioxide, with passenger vehicles and light duty trucks creating more than 46 percent of total climate change emissions.[14] Toxic air contaminants (TAC) include pollutants known or suspected to cause cancer or other adverse health effects such as respiratory irritation or reproductive effects. The regulatory structure for TAC is different than for criteria pollutants. In San Diego County, motor vehicles and natural sources are key contributors of TAC, emitting more than 27 million pounds; while industrial, commercial, and government facilities emit more than three million pounds of TAC. Since 1989, emissions from industrial and commercial sources reduced by approximately 75 percent. Prioritizing and reducing these emissions further will require a continued, cooperative effort by the public, industry, environmental groups, the California Air Resources Board (ARB), and the California Air Pollution Control District (APCD).

CLIMATE CHANGE

The natural "greenhouse effect" allows the earth to remain warm and sustain life. GHGs trap the sun's heat in the atmosphere, like a blanket, and help determine our climate. The amount of GHGs in the atmosphere is being drastically altered by human activity. The onset of the industrial revolution and the increased consumption of fossil fuels (wood, coal, gasoline, etc.) have substantially increased atmospheric levels of GHGs. Temperatures rise as atmospheric concentrations of GHGs (such as carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons) increase. Over time, this rise in temperatures results in climate change. GHGs have been at the center of the widely contested political, economic, and scientific debate surrounding GCC.

State legislation *California Global Warming Solutions Act of 2006* requires that the State's global warming emissions be reduced to 1990 levels by year 2020. Through more efficient land use patterns, promoting a variety of modes of transportation, and encouraging new and existing development to implement a variety of energy efficient, energy conserving and renewable technologies and practices, the County is supporting the legislation and providing the mechanism for reduced emissions throughout the region.

Human activities produce GHGs. For example, burning fossil fuels such as oil, coal, and natural gas for energy to power automobiles, homes, and factories put carbon dioxide into the air. While carbon dioxide is the GHG emitted in the largest quality, other GHGs such as methane, nitrous oxide, and fluorocarbons also contribute to the problem. In California, carbon dioxide accounts for approximately 84 percent of all the GHGs, while methane makes up approximately eight percent, and nitrous oxide and hydrofluorocarbons contribute an additional six percent and two percent, respectively.

The principal sources of carbon dioxide in the atmosphere are fossil fuel combustion and wildland fires. Agriculture is a major source of both methane and nitrous oxide, with additional methane coming primarily from landfills. Cars also emit methane and nitrous oxide. In California, more than half of fossil fuel emissions of carbon dioxide are related in some way to transportation. Fossil fuels account for 98 percent of carbon dioxide emissions, with a two percent contribution from several industrial processes that produce carbon

[14] University of San Diego, September 2008

dioxide as a by-product.[15] Buildings contribute to 40 percent of GHGs worldwide, though this is likely to be less in the County due to the rural characteristics of many areas.

Countywide, over a million tons of organic materials are disposed of in landfills annually, with approximately 200,000 tons disposed from the unincorporated County. Currently operating and closed landfills are significant sources of GHG emissions. An estimated 50 million cubic feet of methane and carbon dioxide are released daily from both closed and active County landfills, but other more potentially impactive greenhouse emissions are also released such as volatile organic carbon gases. Emissions result from the decomposition of organic materials in the anaerobic condition present in landfills.

Although methane recovery systems are placed on closed landfills, the majority of the methane generated by anaerobic decomposition occurs either prior to the recovery system's placement or is not captured by this system. Sequestering carbon through composting stabilizes the carbon in the soil materials, resulting in a very slow release of carbon dioxide and effectively prevents the formation of methane, which is 24 times more retentive of atmospheric heat than carbon dioxide. Capturing methane by anaerobic digestion of agricultural manures and burning the gas for the production of electricity on the farm is also very effective in reducing methane emissions.

ENERGY & SUSTAINABLE DEVELOPMENT

San Diego Gas & Electric (SDG&E) is a regulated public utility that provides electric service to 3.4 million customers within a 4,100-square-mile service area that encompasses 25 cities throughout San Diego and southern Orange Counties. In 2003, the three key energy agencies in California—the California Energy Commission (CEC), the California Power Authority (CPA), and the California Public Utilities Commission (CPUC)—came together to adopt an Energy Action Plan that identifies joint goals for California's energy future and sets forth a commitment to achieve these goals through specific actions. In 2008, an Energy Action Plan Status Update was released to incorporate the CEC's 2007 Integrated Energy Policy Report (IEPR), reflecting the passage of Assembly Bill 32, the California Global Warming Act of 2006. The IEPR includes advanced policies, intended to enable California to meet its energy needs in a carbon-constrained world. The report also provides a comprehensive set of recommended actions to achieve these policies. SDG&E's Long Term Resource Plan (LTRP) sets forth a strategy of mixed resources to ensure long-term, reliable, and affordable power in the region, as established by the CPUC. The CPUC regulates energy issues related to supply, delivery, rates, and tariffs for all SDG&E customers in the County.

Population is the primary driver of increasing demand for new housing. From the 1980s to the 1990s, the rate of growth of population diminished, however, electricity consumption grew by 29 percent, and natural gas consumption grew by 36 percent. In 2001, with the electricity crisis, there was a significant drop in per capita consumption of energy. SANDAG has projected that the population of the San Diego region will grow 38 percent by 2030, resulting in nearly four million people. Therefore, the demand for energy will also rise as this new population seeks ways to cool/heat and light their homes and power their cars.

[15] AB 1493 (Pavley) Briefing Package prepared by the California Environmental Protection Agency at http://www.climatechange.ca.gov/background/index.html

Energy and water are inextricably linked, especially in Southern California, where moving imported water around the State requires large amounts of energy. For example, the California State Water Project uses more energy than any single user. Therefore, reducing water use can save significant amounts of energy.

Energy efficiency, a key to meeting long-term energy needs, implies using less energy to perform the same function. Conserving energy or "doing without", and using energy more efficiently by doing the same task with less energy, are methods where the County can promote to extend the supply of energy, with minimal to no adverse impacts. Installing lighting that uses less electricity, installing additional insulation to reduce heating and cooling requirements, and switching to a vehicle with better gas mileage are energy efficiency measures. Conservation connotes "doing without" in order to save energy rather than using less energy to do the same thing. For example, turning off lights, turning down the air conditioner, and making fewer vehicle trips are all conservation measures.

Renewable sources include everything from small rooftop solar photovoltaic applications to larger renewable developments such as the Kumeyaay Wind project. While the large projects can supply energy to many thousands of homes, they generally require new transmission lines, which can result in land use and aesthetic impacts, along with an increased risk of wildfires. San Diego County depends on fossil fuels and natural gas to generate a large portion of its energy and power. These resources are non-renewable, and can be polluting. It is likely that non-renewable resources will become a more scarce and costly method of producing energy in the future. Other sources of energy can be derived from technologies such as methane recovery at landfills, roof-top solar panels and solar farms, wind turbines, bio-fuels, and rarer projects such as those that harness geothermal or tidal energy. These technologies are renewable, and can supplement existing non-renewable sources, extending the supply of non-renewable fuels and offering an alternative to polluting energy sources.

GOALS AND POLICIES

GOAL COS-14

Sustainable Land Development. Land use development techniques and patterns that reduce emissions of criteria pollutants and GHGs through minimized transportation and energy demands, while protecting public health and contributing to a more sustainable environment. [See also Goal LU-6]

Policies

COS-14.1 **Land Use Development Form.** Require that development be located and designed to reduce vehicular trips (and associated air pollution) by utilizing compact regional and community-level development patterns while maintaining community character.

COS-14.2 **Villages and Rural Villages.** Incorporate a mixture of uses within Villages and Rural Villages that encourage people to walk, bicycle, or use public transit to reduce air pollution and GHG emissions.

COS-14.3 **Sustainable Development.** Require design of residential subdivisions and nonresidential development through "green" and sustainable land development practices to conserve energy, water, open space, and natural resources.

COS-14.4 **Sustainable Technology and Projects.** Require technologies and projects that contribute to the conservation of resources in a sustainable manner, that are compatible with community character, and that increase the self-sufficiency of individual communities, residents, and businesses.

COS-14.5 **Building Siting and Orientation in Subdivisions.** Require that buildings be located and oriented in new subdivisions and multi-structure non-residential projects to maximize passive solar heating during cool seasons, minimize heat gains during hot periods, enhance natural ventilation, and promote the effective use of daylight.

COS-14.6 **Solar Access for Infill Development.** Require that property setbacks and building massing of new construction located within existing developed areas maintain an envelope that maximizes solar access to the extent feasible.

COS-14.7 **Alternative Energy Sources for Development Projects.** Encourage development projects that use energy recovery, photovoltaic, and wind energy .

COS-14.8 **Minimize Air Pollution.** Minimize land use conflicts that expose people to significant amounts of air pollutants.

COS-14.9 **Significant Producers of Air Pollutants.** Require projects that generate potentially significant levels of air pollutants and/or GHGs such as quarries, landfill operations, or large land development projects to incorporate renewable energy, and the best available control technologies and practices into the project design.

The recovered methane from landfills can be pumped through turbines to generate power. This provides a mutual benefit by generating energy and reducing the amount of CO2 and methane being released from landfills. Other uses for closed facilities include photovoltaic (solar) panels, wind, and microturbines, as appropriate for the area they would be located in.

COS-14.10 **Low-Emission Construction Vehicles and Equipment.** Require County contractors and encourage other developers to use low-emission construction vehicles and equipment to improve air quality and reduce GHG emissions.

COS-14.11 **Native Vegetation.** Require development to minimize the vegetation management of native vegetation while ensuring sufficient clearing is provided for fire control.

Plants use photosynthesis to remove carbon from the atmosphere by incorporating it into biomass and releasing oxygen into the atmosphere.

COS-14.12 **Heat Island Effect.** Require that development be located and designed to minimize the "heat island" effect as appropriate to the location and density of development, incorporating such elements as cool roofs, cool pavements, and strategically placed shade trees.

Heat islands formed as urbanized areas replace natural land cover with pavement, buildings, and other infrastructure, resulting in significantly higher average temperatures than the rural areas surrounding them.

COS-14.13 **Incentives for Sustainable and Low GHG Development.** Provide incentives such as expedited project review and entitlement processing for developers that maximize use of sustainable and low GHG land development practices in exceedance of State and local standards.

Additional goals and policies that relate to land use development are contained in the Land Use Element.

GOAL COS-15

Sustainable Architecture and Buildings. Building design and construction techniques that reduce emissions of criteria pollutants and GHGs, while protecting public health and contributing to a more sustainable environment.

Solar panels in Alpine

Policies

COS-15.1 **Design and Construction of New Buildings.** Require that new buildings be designed and constructed in accordance with "green building" programs that incorporate techniques and materials that maximize energy efficiency, incorporate the use of sustainable resources and recycled materials, and reduce emissions of GHGs and toxic air contaminants.

Green building programs include the Leadership in Energy and Environmental Design (LEED) standards set by the U.S. Green Building Council, the Green Point Rated system standards set by Builditgreen.org, or equivalent programs.

COS-15.2 **Upgrade of Existing Buildings.** Promote and, as appropriate, develop standards for the retrofit of existing buildings to incorporate design elements, heating and cooling, water, energy, and other elements that improve their environmental sustainability and reduce GHG.

COS-15.3 **Green Building Programs.** Require all new County facilities and the renovation and expansion of existing County buildings to meet identified "green building" programs that demonstrate energy efficiency, energy conservation, and renewable technologies.

COS-15.4 **Title 24 Energy Standards.** Require development to minimize energy impacts from new buildings in accordance with or exceeding Title 24 energy standards.

COS-15.5 **Energy Efficiency Audits.** Encourage energy conservation and efficiency in existing development through energy efficiency audits and adoption of energy saving measures resulting from the audits.

Energy-efficiency audits include checking, repairing, and readjusting heating, ventilation, and air conditioning, lighting, water heating equipment, insulation, and weather proofing.

COS-15.6 **Design and Construction Methods.** Require development design and construction methods to minimize impacts to air quality.

GOAL COS-16

Sustainable Mobility. Transportation and mobility systems that contribute to environmental and human sustainability and minimize GHG and other air pollutant emissions.

Policies

COS-16.1 **Alternative Transportation Modes.** Work with SANDAG and local transportation agencies to expand opportunities for transit use. Support the development of alternative transportation modes, as provided by Mobility Element policies.

COS-16.2 **Single-Occupancy Vehicles.** Support transportation management programs that reduce the use of single-occupancy vehicles.

COS-16.3 **Low-Emissions Vehicles and Equipment.** Require County operations and encourage private development to provide incentives (such as priority parking) for the use of low- and zero-emission vehicles and equipment to improve air quality and reduce GHG emissions. [Refer also to Policy M-9.3 (Preferred Parking) in the Mobility Element.]

COS-16.4 **Alternative Fuel Sources.** Explore the potential of developing alternative fuel stations at maintenance yards and other County facilities for the municipal fleet and general public.

COS-16.5 **Transit-Center Development.** Encourage compact development patterns along major transit routes.

The Mobility Element contains additional goals and policies that relate to alternate modes of travel and Transportation Demand Management.

GOAL COS-17

Sustainable Solid Waste Management. Perform solid waste management in a manner that protects natural resources from pollutants while providing sufficient, long term capacity through vigorous reduction, reuse, recycling, and composting programs.

Policies

COS-17.1 **Reduction of Solid Waste Materials.** Reduce greenhouse gas emissions and future landfill capacity needs through reduction, reuse, or recycling of all types of solid waste that is generated. Divert solid waste from landfills in compliance with State law.

COS-17.2 **Construction and Demolition Waste.** Require recycling, reduction and reuse of construction and demolition debris.

On the line at the recycling plant

COS-17.3 **Landfill Waste Management.** Require landfills to use waste management and disposal techniques and practices to meet all applicable environmental standards.

COS-17.4 **Composting.** Encourage composting throughout the County and minimize the amount of organic materials disposed at landfills.

COS-17.5 **Methane Recapture.** Promote efficient methods for methane recapture in landfills and the use of composting facilities and anaerobic digesters and other sustainable strategies to reduce the release of GHG emissions from waste disposal or management sites and to generate additional energy such as electricity.

COS-17.6 **Recycling Containers.** Require that all new land development projects include space for recycling containers.

COS-17.7 **Material Recovery Program.** Improve the County's rate of recycling by expanding solid waste recycling programs for residential and non-residential uses.

COS-17.8 **Education.** Continue programs to educate industry and the public regarding the need and methods for waste reduction, recycling, and reuse.

GOAL COS-18

Sustainable Energy. Energy systems that reduce consumption of non-renewable resources and reduce GHG and other air pollutant emissions while minimizing impacts to natural resources and communities.

Policies

COS-18.1 **Alternate Energy Systems Design.** Work with San Diego Gas and Electric and non-utility developers to facilitate the development of alternative energy systems that are located and designed to maintain the character of their setting.

COS-18.2 **Energy Generation from Waste.** Encourage use of methane sequestration and other sustainable strategies to produce energy and/or reduce GHG emissions from waste disposal or management sites.

COS-18.3 **Alternate Energy Systems Impacts.** Require alternative energy system operators to properly design and maintain these systems to minimize adverse impacts to the environment.

GOAL COS-19

Sustainable Water Supply. Conservation of limited water supply supporting all uses including urban, rural, commercial, industrial, and agricultural uses.

Policies

COS-19.1 **Sustainable Development Practices.** Require land development, building design, landscaping, and operational practices that minimize water consumption.

COS-19.2 **Recycled Water in New Development.** Require the use of recycled water in development wherever feasible. Restrict the use of recycled water when it increases salt loading in reservoirs.

A permit is required from the County Department of Environmental Health for the use of recycled water.[16]

GOAL COS-20

Governance and Administration. Reduction of local GHG emissions contributing to climate change that meet or exceed requirements of the *Global Warming Solutions Act of 2006.*

[16] CPC Title 24, Part 5, California Administrative Code, Appendix G

Policies

COS-20.1 **Climate Change Action Plan.** Prepare, maintain, and implement a climate change action plan with a baseline inventory of GHG emissions from all sources; GHG emissions reduction targets and deadlines, and enforceable GHG emissions reduction measures.

COS-20.2 **GHG Monitoring and Implementation.** Establish and maintain a program to monitor GHG emissions attributable to development, transportation, infrastructure, and municipal operations and periodically review the effectiveness of and revise existing programs as necessary to achieve GHG emission reduction objectives.

COS-20.3 **Regional Collaboration.** Coordinate air quality planning efforts with federal and State agencies, SANDAG, and other jurisdictions.

COS-20.4 **Public Education.** Continue to provide materials and programs that educate and provide technical assistance to the public, development professionals, schools, and other parties regarding the importance and approaches for sustainable development and reduction of GHG emissions.

Parks and Recreation

CONTEXT

This section identifies how the County of San Diego intends to meet the public need for parks and recreation opportunities. This section also identifies how the County intends to meet open space needs including building out the inter-connected preserve system (refer to Goal COS-1) and meeting General Plan goals and County strategic initiatives. The Mobility Element addresses the regional trail network, which further enhances and augments public recreational opportunities and experiences throughout the San Diego region. It should be noted that there are a wide range of park and recreation opportunities within the San Diego region provided by cities, state entities, federal entities, special districts, school districts, and private non-profit organizations in addition to those provided by the County:

- **Local Parks**—Local parks range in acreage depending on the uses and community or neighborhood they serve, and may be associated with joint use facilities such as schools. Typically, local parks contain recreation areas such as a community center, athletic fields, or facilities of special interest to the community. Smaller local parks may be located within or near town centers, where they can be used as common recreation and gathering areas by the community.

The Valle de Oro Community Park is located to the south of the City of El Cajon and to the east of the city of La Mesa.

- **Regional Parks**—Regional parks serve County residents and visitors and are often larger than 200 acres, although smaller facilities may be appropriate for specific sites of regional interest. Regional parks include a variety of passive and active recreational uses and may include an interpretive center. Most regional parks contain open space,

natural resources, cultural resources, and multi-use trails. Most regional parks also contain a local park element by serving as the recreation outlet for a community.

- **Trails**—Trails provide recreational opportunities and allow for enjoyment by the public of parks and open space preserves. Trails provide connection between recreation uses. The County Trail Program is addressed in detail in the Community Trails Master Plan.
- **Recreation Facilities**—Recreational facilities include community centers, teen centers and gymnasiums and are operated and maintained by County staff, volunteers, and service contracts.
- **Preserves**—Preserves include areas of environmental significance and beauty. The dual purpose of preserves is to protect biological, cultural, and historical resources, as well as community character, and to make these resources available for public recreation opportunities. However, typically only minimal improvements such as trails, parking, and restroom facilities are found in preserves. Some preserves may also provide interpretive or educational amenities. Preserves vary in size depending on the resources being protected, and public access can be limited according to the sensitivity of the resources *(see also Goal COS-1 and related policies in the Biological Resources section)*.

Grasslands being preserved as open space in Ramona

Open space in the County is provided by cities, the County, State entities, federal entities, special districts, private non-profit organizations, and land owners as part of the development process. The primary objective of open space within the MSCP preserve system is biological conservation. Open space may also be dedicated / preserved to meet other objectives such as preservation of cultural resources or avoidance of steep slopes. However, open space in general allows for the overall vision of this General Plan, along with the achievement of the County's strategic initiatives, to be met. Other land uses, such as passive recreational opportunities, may be appropriate within open space areas depending on the sensitivity of the resources being protected. In addition to the Park and Recreation goals and policies concerning Open Space, see also goals and policies under the Biological Resources and Cultural Resources sections in this Element.

Existing sources of funding for park acquisition and development include federal, state, and local funds, donations, and through developer exactions. The Park Lands Dedication Ordinance (PLDO) provides funding for local park active recreation. The PLDO specifies that new subdivisions are required to dedicate active park land or pay a fee in-lieu of dedication, or a combination of both, at a level of three acres per 1,000 population. State law allows for up to five acres per 1,000 population if the current active park acreage exceeds the three-acre level. These fees may also be used to provide recreational services in regional parks for local community residents. The County also participates in agreements that establish partnerships with other public and private agencies (typically with non-profit organizations) to develop, operate, and maintain recreation facilities on land typically owned by those agencies. Existing sources of funding for open space land acquisition that will ultimately build out the MSCP preserve include local, state and federal funds and donations.

GOALS AND POLICIES

GOAL COS-21

Park and Recreational Facilities. Park and recreation facilities that enhance the quality of life and meet the diverse active and passive recreational needs of County residents and visitors, protect natural resources, and foster an awareness of local history, with approximately ten acres of local parks and 15 acres of regional parks provided for every 1,000 persons in the unincorporated County.

The historic Rancho Guajome Adobe, Guajome County Park

Policies

COS-21.1 **Diversity of Users and Services.** Provide parks and recreation facilities that create opportunities for a broad range of recreational experiences to serve user interests.

COS-21.2 **Location of Parks.** Locate new local parks and recreation facilities near other community-oriented public facilities such as schools, libraries, and recreation centers where feasible, so that they may function as the "heart" of a community.

COS-21.3 **Park Design.** Design parks that reflect community character and identity, incorporate local natural and cultural landscapes and features, and consider the surrounding land uses and urban form and cultural and historic resources.

COS-21.4 **Regional Parks.** Require new regional parks to allow for a broad range of recreational activities and preserve special or unique natural or cultural features when present.

COS-21.5 **Connections to Trails and Networks.** Connect public parks to trails and pathways and other pedestrian or bicycle networks where feasible to provide linkages and connectivity between recreational uses.

GOAL COS-22

Park and Recreational Services. High-quality parks and recreation programs that promote the health and well-being of County residents while meeting the needs of a diverse and growing population.

Lakeside Community Center

Policies

COS-22.1 **Variety of Recreational Programs.** Provide and promote a variety of high quality active and passive recreation programs that meet the needs of and benefit County residents.

GOAL COS-23

Recreational Opportunities in Preserves. Acquisition, monitoring, and management of valuable natural and cultural resources where public recreational opportunities are compatible with the preservation of those resources.

Policies

Agua Caliente County Park

COS-23.1 **Public Access.** Provide public access to natural and cultural (where allowed) resources through effective planning that conserves the County's native wildlife, enhances and restores a continuous network of connected natural habitat and protects water resources.

COS-23.2 **Regional Coordination.** Coordinate the planning, acquisition, protection, development, and management of open space among governmental agencies and private organizations to maximize opportunities to link regional open space lands.

COS-23.3 **Public Safety Involvement.** Coordinate with public safety agencies to address safety concerns when planning the acquisition and management of open space.

GOAL COS-24

Park and Recreation Funding. Adequate funding for acquisition, development, maintenance, management, and operation of parks, recreation facilities, and preserves.

Patriot Park in 4-S Ranch

Policies

COS-24.1 **Park and Recreation Contributions.** Require development to provide fair-share contributions toward parks and recreation facilities and trails consistent with local, state, and federal law.

COS-24.2 **Funding Opportunities.** Maximize funding opportunities for the following:

- The acquisition, expansion, and development of parks, recreation facilities, preserves, and trails
- The operation, maintenance, and management of parks, recreation facilities, preserves, and trails