APPENDIX G
ENERGY CONSERVATION

APPENDIX G ENERGY CONSERVATION

Appendix F to the CEQA Guidelines requires that "EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy." As discussed in the first paragraph of Appendix F, Section II, "[in] many instances specific items may not apply…" It is not clear in the CEQA Guidelines that Appendix F is intended for programmatic EIRs since this requirement appears to be more appropriate for project level EIRs. Some examples of where these Guidelines do not necessarily apply include sections requiring CEQA documents to identify specific energy reductions, efficiencies and conservation in construction, operation and maintenance activities. The Property Specific Request (PSR) Subsequent Environmental Impact Report (SEIR) is programmatic in nature in that it proposes land use designations only, and does not include any specific information that would be associated with actual development projects. Following adoption of this SEIR, future development projects would be required to prepare a project specific environmental review.

This PSR SEIR proposes changes to the existing General Plan designations that establish allowable land uses and development intensities for specific parcels within the unincorporated County. Additionally, the Proposed Project includes a revision to the Valley Center Community Plan Residential Policy 8; however, the revision to this policy would not result in an increase in dwelling units or total population and, thus, would not result in an increase in energy consumption or production. This PSR SEIR cannot predict when and how any future development would occur, but can analyze the maximum potential development on a programmatic level according to the land use designations proposed by the Proposed Project. Therefore, this SEIR does not analyze building-specific impacts or efficiencies associated with construction, maintenance or operation activities because they are still unknown at this time. Rather, this PSR SEIR relies on General Plan policies, mitigation/implementation measures, ordinances, design guidelines and procedures to establish requirements for future development that must be met prior to receiving a building permit. Potential impacts associated with subsequent building-specific activities are addressed through state, regional and local laws, regulations, and mitigation programs applied at the project level (e.g., construction, operation and maintenance activities).

The applicable, required information related to Appendix F of the CEQA Guidelines is included within various sections of the SEIR, including but not limited to, the Project Description, Environmental Setting, and evaluations of potential impacts throughout Chapter 2.

SEIR Section 2.16.3.8, Energy Conservation, concluded the Proposed Project would result in the potential increase in overall energy consumption; however, General Plan policies and applicable regulations would reduce the amount of energy consumption per capita, decrease reliance on fossil fuels, and increase reliance on alternative forms of energy. Therefore, the Proposed Project would result in less than significant impacts associated with energy conservation as required to be discussed by Appendix F of the CEQA Guidelines.

The text below sets forth each provision of CEQA Guidelines Appendix F in italics, followed by an explanation of how the information in the SEIR responds to that suggested topic. Appendix F itself explains that in many cases specific items may not apply, and that the listed items should be considered in an EIR when they are applicable or relevant. Consistent with that guidance, in some instances the responsive information consists of a statement that the item in question does not apply, with a reference back to the discussion in the first two paragraphs of this document.

A. Project Description may include the following items:

1. Energy consuming equipment and processes which will be used during construction, operation and/or removal of the project. If appropriate, this discussion should consider the energy intensiveness of materials and equipment required for the project.

This item is not applicable to the Proposed Project. The Proposed Project would result in changes to General Plan land use designations (and to zoning use regulations when necessary for consistency with proposed General Plan land use designations) that establish allowable land uses and intensities of development; therefore, this PSR SEIR cannot predict energy intensiveness of materials and equipment required by unknown subsequent development projects, because it is not known at this time when or if development would occur. This SEIR analyzes the maximum potential development on a programmatic level according to the land use designations proposed by the Proposed Project.

This SEIR includes adopted General Plan policies and 2011 PEIR mitigation measures that would be applied to subsequent projects implemented under this SEIR. The applicable policies and mitigation measures concerning construction and operation of subsequent development projects area discussed below.

Adopted General Plan Policies

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

Policy 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 the California Integrated Waste Management Act (AB 939) that requires each local jurisdiction in the state to divert at least 50 percent of its solid waste from being placed into landfills.

Applicable 2011 PEIR Mitigation Measures

CC-1.1: Update the County Green Building Program to increase effectiveness of encouraging incentives for development that is energy efficient and conserves resources through incentives and education.

CC-1.16: Develop and implement a Strategic Energy Plan to increase energy efficiency in existing County buildings and set standards for any new County facilities that will ultimately reduce GHG emissions. This will include implementation of the following measures as will be detailed within the plan:

- Improve energy efficiency within existing operations through retrofit projects, updated purchasing policies, updated maintenance/operations standards, and education.
- Improve energy efficiency of new construction and major renovations by applying design criteria and participating in incentive programs.
- Provide energy in a reliable and cost-effective manner and utilize renewable energy systems where feasible.

- Monitor and reduce energy demand through metering, building controls, and energy monitoring systems.
- Increase County fleet fuel efficiency by acquiring more hybrid vehicles, using alternative fuels, and by maintaining performance standards for all fleet vehicles.

CC-1.17: Develop and implement a County Operations Recycling Program. This will include implementation of the following measures as will be detailed within the Program:

- Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).
- Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.
- Recover by-product methane to generate electricity.
- Provide education and publicity about reducing waste and available recycling services.

CC-1.18: Develop and implement a County Operations Water Conservation Program.

2. Total energy requirements of the project by fuel type and end use.

Total electrical and natural gas requirements for each PSR Analysis Area and the former CGSP Area is provided in the Proposed Project's Greenhouse Gas Emissions Study (Appendix C of this SEIR). The Proposed Project analyzed the electricity and natural gas energy requirements, and the associated emissions implications of energy consumption.

3. Energy conservation equipment and design features.

The Proposed Project would implement changes to the General Plan land use designations (and to zoning use regulations when necessary for consistency with proposed General Plan land use designations) that establish allowable land uses and intensities of development for the proposed PSR Analysis Areas and the former Champagne Gardens Specific Plan (CGSP) Areas. It is not known at this time when or if development would occur within the PSR Analysis Areas or former CGSP Areas. Since this is not known, it is not reasonable to predict the actual equipment and design features of future development projects for the proposed land use and zoning changes. This SEIR analyzed the maximum potential development on a programmatic level according to the land use designations proposed by the Proposed Project. However, identified below are the applicable General Plan policies and 2011 PEIR mitigation measures concerning energy conservation requirements for development projects.

Adopted General Plan Policies

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

Policy 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 greenhouse gases and toxic air contaminants.

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

Policy 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.

Policy 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.

4. Identification of energy supplies that would serve the project.

Section 2.16.1.4 of the 2011 PEIR describes the power and energy resources serving the unincorporated County, which include electricity, natural gas, nuclear energy, and alternative energy sources such as biomass/bio-gas energy, hydroelectric power, solar cells, and wind energy. However, as noted in the section, energy supply and demand does not differentiate between jurisdictional boundaries. The data presented in the 2011 PEIR represented the energy conditions for the entire San Diego County region at that time. The PSR SEIR Section 2.16.3.8 provides updated data regarding electricity and natural gas consumption within the entire San Diego County region. Additionally, Table 1-12 presents a list of ongoing or recently completed regional energy and utility projects.

5. Total estimated daily vehicle trips to be generated by the project and the additional energy consumed per trip by mode.

The Proposed Project's Traffic Impact Analysis (Appendix D of this SEIR) identifies the estimated vehicular trips generated within each PSR Analysis Area and the former CGSP Area resulting from buildout of the Proposed Project. The data is presented in average daily vehicle trips (ADT). Table 1 (below) presents the anticipated additional ADT for each PSR Analysis Area resulting from implementation of the Proposed Project. Project specific analysis, as opposed to the programmatic level of this document, would be required for future developments associated with the Proposed Project.

Table 1 Proposed Project Trip Generation by PSR Analysis Area/Former CGSP Area

CPA/Subregion	PSR Analysis Area/ Former CGSP Area	Additional Land Use	Dwelling Unit Increase or Acreage Associated w/Proposed Project	Daily Trip Generation Rate per Dwelling Unit or Acre	Additional ADT
Bonsall	BO18+	Single Family	67	10	670
	CG1, CG6, CG7, CG8 (Referral Map and preliminary staff rec)	Single Family	7	10	70
	CG6, CG8 (Referral Map and preliminary staff rec)	Rural Commercial(1)	6 acres	246/acre	1,476
Crest-Dehesa	CD14	Single Family	7	10	70
Desert	DS8	Single Family	389	10	3,890
	DS24	Single Family	153	10	1,530

Table 1 Proposed Project Trip Generation by PSR Analysis Area/Former CGSP Area

CPA/Subregion	PSR Analysis Area/ Former CGSP Area	Additional Land Use	Dwelling Unit Increase or Acreage Associated w/Proposed Project	Daily Trip Generation Rate per Dwelling Unit or Acre	Additional ADT
Fallbrook	FB2+	Single Family	16	10	160
	FB17	Single Family	33	10	330
	FB19+	Single Family	1	10	10
	FB21+	Single Family	7	10	70
Mountain Empire	ME26	Single Family	26	10	260
	ME30A	Single Family	29	10	290
North County Metro	NC3A	Single Family	11	10	110
	NC18A	Single Family	34	10	340
	NC22	Single Family	52	10	520
	NC37	Single Family	12	10	120
	NC38+	Single Family	38	10	380
	CG5 (Referral Map)	Single Family	5	10	50
Pala-Pauma	PP30	Single Family	122	10	1,220
San Dieguito	SD15	Single Family	301	10	3,010
	SD15	General Commercial(1)	19 acres	685/acre	13,221
Valley Center	VC7+	Single Family	253	10	2,530
	VC51	Single Family	13	10	130
	VC57+	Single Family	231	10	2,310
	VC67	Medium Impact Industrial	13 acres	200/acre	2,600
	CG2, CG3, CG4 (Referral Map)	Single Family	19	10	190
				Total:	**35,557**

(1) No trip generation rate for rural or general commercial is provided in the SANDAG Not So Brief Guide to Vehicular Traffic Generation Rates; therefore, the trip generation rate is based on the rate used in the SANDAG Series 12 Transportation Forecast Model.

Source: Chen Ryan 2016

B. Environmental Setting may include existing energy supplies and energy use patterns in the region and locality.

Section 2.16.1.4 of the 2011 PEIR includes a discussion regarding regional energy sectors, consumption, and use throughout the San Diego region. Section 2.16.3.8 of this SEIR includes updated energy consumption for natural gas and electricity. Additionally, Table 1-12 of this SEIR includes a list of regional energy and utility projects currently under development or recently completed.

C. Environmental Impacts:

The Guidelines under the environmental impacts category are more applicable to development projects where the actual construction, operation and maintenance activities can be analyzed. This Project proposes to change General Plan land use designations (and zoning use regulations when necessary for consistency with proposed General Plan land use designations). Since no development plans are proposed this is not applicable. However, information is provided below that shows the sections in the SEIR that address these impacts on a programmatic level.

1. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials maybe discussed.

This analysis of energy requirements does not apply to the Proposed Project because it proposes changes to General Plan land use designations (and zoning use regulations when necessary for consistency with proposed General Plan land use designations). No development plans are proposed as part of this project; therefore, the SEIR cannot predict actual energy requirements for the construction, operation, and maintenance of future development projects. In addition, energy use efficiencies are not identified because they are unknown due to the programmatic level of this SEIR. This SEIR analyzes the maximum potential development on a programmatic level according to the land use designations proposed by the Proposed Project.

However, the energy forecast requirements, based on potential buildout of the Proposed Project are discussed in Section 2.16.3.8 of this SEIR. Households in the San Diego region use on average approximately 5,970 kilowatt hours of electricity and 298 therms of natural gas per year (291 therms for the electrically based population). Implementation of the proposed project (an estimated increase of 1,826 potential dwelling units) would potentially result in an increase of approximately 10,901,220 kilowatt hours (10.9 gigawatt hours of electricity), or 0.001 percent increase in electricity consumption compared to the demand in the San Diego region in 2015. The increase in natural gas consumption would potentially amount to an increase of 544,148 therms (0.5 million therms), or a 0.001 percent increase in natural gas consumption as compared to 2015 demand. Additionally, the proposed land use designations in PSR Analysis Areas SD15 and CGSP Subareas CG6 and CG8 (General Commercial and Rural Commercial, respectively on certain portions of these areas) and VC67 (Medium Impact Industrial) would be estimated to consume approximately 16,779,060 kilowatt hours (16.78 gigawatt hours) hours of electricity per year and 58,164 therms (0.05 million therms) of natural gas per year (Appendix C). The combined demand associated with implementation of the Proposed Project would amount to a less than 0.002 percent increase for both electricity and natural gas in the region. As discussed above General Plan Policies COS-15.1 through 15.4 identify the applicable energy conservation requirements for development projects.

2. The effects of the project on local and regional energy supplies and on requirements for additional capacity.

Section 2.16.3.8 of this SEIR determined that development of land uses as designated by the Proposed Project would require energy for construction and operation, thereby increasing energy demand in the county. The increase in energy demand would affect energy facilities that provide energy to PSR Analysis Areas and the former CGSP Area. In order to accommodate the increased energy demand, energy facilities that serve PSR Analysis Areas would need to be expanded, or new facilities would need to be constructed, such as electrical or gas distribution

lines; however, this determination cannot be made on a programmatic level. Individual projects would be required to conduct project specific environmental review to determine the adequacy of existing energy facilities to service the project site. It should be noted that the cumulative energy and utility projects described in Table 1-12 of this SEIR may potentially provide additional energy resources to the San Diego County region. In addition, the SEIR includes a calculation of the increased energy consumption (identified above) based on the increase in dwelling units associated with the Proposed Project.

3. The effects of the project on peak and base period demands for electricity and other forms of energy.

Appendix C of this SEIR provides the total base electrical and natural gas requirements to serve each PSR Analysis Area and former CGSP Subarea. The modelling results account for the non-residential land uses in PSR Analysis Areas SD15 (General Commercial on a portion), VC67 (Medium Impact Industrial) and CGSP Subareas CG6 and CG8 (Rural Commercial on a portion of each). Although the potential increase in energy consumption is minimal, energy facilities or infrastructure would need to be constructed or expanded to service the PSR Analysis Areas and former CGSP Area, which would have the potential to cause significant environmental effects. However, this guideline to identify the effects on peak demands on electricity and other forms of energy is not applicable because more specific information on actual development projects is required to determine peak demand. This SEIR analyzes the maximum potential development on a programmatic level according to the land use designations proposed by the Proposed Project. This information would be analyzed in the environmental analysis of future development projects, which are generally unknown at this time and are not part of the Proposed Project.

4. The degree to which the project complies with existing energy standards.

Analysis of projects that result from implementation of the Proposed Project would require environmental review to determine compliance with energy standards. At a programmatic level, this SEIR identifies General Plan policies and 2011 PEIR mitigation measures that establish requirements for future projects; however, as previously mentioned, it is impossible to measure the level of impact of future projects with regard to energy standards

General Plan policies and the 2011 PEIR mitigation measures encourage alternative energy sources, energy efficiency, green building programs, and energy recovery for development. The applicable policies that establish compliance with existing standards are identified below.

Adopted General Plan Policies

Policies COS-15.1 and COS-15.3 require new buildings be designed and constructed to maximize use of sustainable resources and renewable energy sources; Policy COS-15.4 implements Title 24 energy standards; and requires the reduction, reuse or recycling of solid waste to comply with State law.

5. The effects of the project on energy resources.

The implementation of Policies COS-15.3, COS-15.4, COS-15.5, and COS-17.1 and mitigation measures listed above would decrease overall per capita energy consumption, decrease reliance on fossil fuels, and increase reliance on renewable energy sources. Section 2.16.3.8 and 2.16.4.8 of the PSR SEIR describes the potential and cumulative impacts associated with energy conservation as it pertains to the Proposed Project.

6. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Appendix C provides the anticipated increase for each PSR Analysis Area in VMT resulting from buildout of the Proposed Project. Project specific analysis, as opposed to the programmatic level of this document, would be required for each future development project associated with the Proposed Project.

Due to the location of the PSR Analysis Areas, "efficient transportation alternatives", such as public transportation, would generally be infeasible in some of the areas. The majority of PSR Analysis Areas are located in semi-rural or rural areas of the County where land use intensity is generally low, which is reflected in the majority of land use designations.

The following General Plan policies and 2011 PEIR mitigation measures are intended to reduce VMT, which would reduce transportation-related energy use.

Adopted General Plan Policies

Policy LU-10.4: **Commercial and Industrial Development.** Limit the establishment of commercial and industrial uses in Semi-Rural and Rural areas that are outside of Villages (including Rural Villages) to minimize vehicle trips and environmental impacts.

Policy M-8.1: Maximize Transit Service Opportunities. Coordinate with SANDAG, the Consolidated Transportation Services Agency, North County Transit District, and Metropolitan Transit Service to provide capital facilities and funding, where appropriate, to:

- Maximize opportunities for transit services in unincorporated communities.
- Maximize the speed and efficiency of transit service through the development of transit priority treatments such as transit signal priority, transit queue jump lanes, and dedicated transit only lanes.
- Provide for transit-dependent segments of the population, such as the disabled, seniors, low income, and children, where possible.
- Reserve adequate rights-of-way to accommodate existing and planned transit facilities including bus stops.

Policy M-8.2: **Transit Service to Key Community Facilities and Services.** Locate key County facilities, healthcare services, educational institutions, and other civic facilities so that they are accessible by transit in areas where transit is available. Require those facilities to be designed so that they are easily accessible by transit.

Applicable 2011 PEIR Mitigation Measure

Tra-1.1: Coordinate with SANDAG and adjacent cities and other jurisdictions during updates to the Regional Plan to identify a transportation network that maximizes efficiency, enhances connectivity between different modes of travel, and minimizes impacts when locating new freeways and state highways.

Tra-6.2: Establish comprehensive planning principles for transit nodes such as the SPRINTER Station located in North County Metro.

Tra-6.3: Locate County facilities near transit facilities, whenever feasible.

Tra-6.4: Coordinate with SANDAG, Caltrans, and tribal governments to maximize opportunities to locate park and ride facilities.

Tra-6.5: Coordinate with SANDAG, Caltrans, and transit agencies to expand the mass transit opportunities in the unincorporated county and to review the location and design of transit stops. Establish a Planning and Development Services transit coordinator to ensure land use issues are being addressed.

D. Mitigation Measures may include:

1. Potential measures to reduce wasteful, inefficient and unnecessary consumption of energy during construction, operation, maintenance and/or removal. The discussion should explain why certain measures were incorporated in the project and why other measures were dismissed.

This SEIR does not analyze building-specific impacts or efficiencies associated with construction, maintenance or operation activities because specific development projects are not proposed at this time. However, General Plan policies and mitigation measures identified below are most applicable that would avoid wasteful or inefficient energy consumption of future projects. There is not a discussion of measures that were dismissed because this list is all inclusive to address the wide range of potential development projects, which are unknown at this time.

Adopted General Plan Policies

Policy LU-9.4: Infrastructure Serving Villages and Community Cores. Prioritize infrastructure improvements and the provision of public facilities for villages and community cores and sized for the intensity of development allowed by the Land Use Map.

Policy LU-12.1: Concurrency of Infrastructure and Services with Development. Require the provision of infrastructure, facilities, and services needed by new development prior to that development, either directly or through fees. Where appropriate, the construction of infrastructure and facilities may be phased to coincide with project phasing. In addition to utilities, roads, bicycle and pedestrian facilities, and education, police, and fire services, transit-oriented infrastructure, such as bus stops, bus benches, turnouts, etc., should be provided, where appropriate.

Policy LU-14.1: Wastewater Facility Plans. Coordinate with wastewater agencies and districts during the preparation or update of wastewater facility master plans and/or capital improvement plans to provide adequate capacity and assure consistency with the County's land use plans.

Policy LU-14.2: Wastewater Disposal. Require that development provide for the adequate disposal of wastewater concurrent with the development and that the infrastructure is designed and sized appropriately to meet reasonably expected demands.

Policy LU-14.3: Wastewater Treatment Facilities. Require wastewater treatment facilities serving more than one private property owner to be operated and maintained by a public agency. Coordinate the planning and design of such facilities with the appropriate agency to be consistent with applicable sewer master plans.

Policy LU-14.4: Sewer Facilities. Prohibit sewer facilities that would induce unplanned growth. Require sewer systems to be planned, developed, and sized to serve the land use pattern and

densities depicted on the Land Use Map. Sewer systems and services shall not be extended beyond Village boundaries (or extant Urban Limit Lines), whichever is more restrictive, except:

- When necessary for public health, safety, or welfare;
- When within existing sewer district boundaries;
- When necessary for a conservation subdivision adjacent to existing sewer facilities; or
- Where specifically allowed in the Community Plan.

Policies COS-14.2, along with previously listed Policies COS-15.1, COS15.3, and COS-15.4 encourage mixed alternative transportation to reduce energy demand and apply renewable energy and energy efficiency practices to future development and County facilities.

Applicable 2011 PEIR Mitigation Measures

Air-2.1: Provide incentives such as preferential parking for hybrids or alternatively fueled vehicles such as compressed natural gas (CNG) vehicles or hydrogen- or electric-powered vehicles. The County shall also establish programs for priority or free parking on County streets or in County parking lots for hybrids or alternatively fueled vehicles.

Air-2.4: Provide incentives to promote the siting or use of clean air technologies where feasible. These technologies shall include, but not be limited to, fuel cell technologies, renewable energy sources, and hydrogen fuel.

2. The potential of siting, orientation, and design to minimize energy consumption, including transportation energy, increase water conservation and reduce solid waste.

Adopted General Plan policies and the 2011 PEIR mitigation measures that address siting, orientation, and design to minimize energy consumption, including transportation energy, increase water conservation and reduce solid waste are identified below.

Adopted General Plan Policies

Policy LU-6.5: Sustainable Stormwater Management. Ensure that development minimizes the use of impervious surfaces and incorporates other Low Impact Development techniques as well as a combination of site design, source control, and storm water best management practices, where applicable and consistent with the County Low Impact Development Handbook.

Policy LU-12.2: Maintenance of Adequate Services. Require development to mitigate significant impacts to existing service levels of public facilities or services for existing residents and businesses. Provide improvements for Mobility Element roads in accordance with the Mobility Element Network Appendix matrices, which may result in ultimate build-out conditions that achieve a higher level of service but do not achieve a level of service of LOS D or better.

Additionally, Policies LU-12.1, LU-14.1, LU-14.2, LU-14.3, and LU-14.4 require concurrency of infrastructure and services with development, the maintenance of adequate services with development, adequate wastewater facility plans, disposal, treatment facilities, and sewer facilities in order to comply with RWQCB wastewater treatment requirements; additionally, Policies LU-14.1, LU-14.2, LU-14.3, and LU-14.4 apply water conservation measures and preserves the quality of local water supply; Policies COS-15.1 and COS-15.3 require new and existing buildings be designed and constructed in accordance with programs that maximize

energy efficiency; and Policy COS-17.1 reduces future landfill capacity needs through reduction, reuse, or recycling of all types of solid waste.

Applicable 2011 PEIR Mitigation Measures

CC-1.4: Review traffic operations to implement measures that improve flow and reduce idling such as improving traffic signal synchronization and decreasing stop rate and time.

CC-1.6: Implement and expand County-wide recycling and composting programs for residents and businesses. Require commercial and industrial recycling.

CC-1.9: Coordinate with the San Diego Air Pollution Control District, San Diego Gas and Electric, and the California Center for Sustainable Energy to research and possibly develop a mitigation credit program. Under this program, mitigation funds will be used to retrofit existing buildings for energy efficiency to reduce greenhouse gas emissions.

CC-1.11: Revise the Water Conservation Ordinance Landscape Section to further promote water conservation. These measures include:

- The creation of water-efficient landscapes and use water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls.
- The use of reclaimed water for landscape irrigation.
- Restricting watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.
- Providing education about water conservation and available programs and incentives.

Water usage in this region is extremely energy intensive; therefore, implementation of water conservation requirements such as these will result in direct energy and GHG reductions.

CC-1.13: Requires the County to implement and revise as necessary, the Regional Trails Plan and Community Trails Master Plan, connecting parks and publicly accessible open space through shared pedestrian/bike paths and trails which encourage and facilitate walking and bicycling. By expanding opportunities for alternative transportation, the County can reduce GHG emissions associated with vehicle miles traveled.

CC-1.15: Reduction of VMT and encouragement of alternative modes of transportation through implementation of the following measures:

- During Community Plan updates, establish policies and design guidelines that: encourage commercial centers in compact walkable configurations and discourage “strip” commercial development
- Expand community bicycle infrastructure.
- Revise the Off-Street Parking Design Manual to include parking placement concepts that encourage pedestrian activity and concepts for providing shared parking facilities.
- Establish comprehensive planning principles for transit nodes such as the Sprinter Station located in North County Metro.
- Continue to locate County facilities near transit facilities whenever feasible.

- Coordinate with SANDAG, Caltrans, and tribal governments to maximize opportunities to locate park and ride facilities.
- Continue to coordinate with SANDAG, Caltrans, and transit agencies to expand the mass transit opportunities in the unincorporated county and to review the location and design of transit stops. Establish a DPLU transit coordinator to ensure land use issues are being addressed.
- Update the Zoning Ordinance to require commercial, office, and industrial development to provide preferred parking for carpools, vanpools, electric vehicles, and flex cars.

By incorporating more alternative transportation methods, including both public and private, and designing development with the emphasis on walkability and transit nodes, less VMT will be necessary to conduct day to day activities. This will reduce daily VMT and thus, will reduce GHG emissions in accordance with AB 32 strategies.

Tra-6.4: Coordination with SANDAG, Caltrans, and tribal governments to maximize opportunities to locate park and ride facilities. This will enhance alternative transportation opportunities for County residents in areas where it would substantially reduce vehicle miles traveled.

Tra-6.5: Coordination with SANDAG, Caltrans, and transit agencies to expand the mass transit opportunities in the unincorporated county and to review the location and design of transit stops. This measure also requires the County to establish a Department of Planning and Land Use transit coordinator to ensure land use issues are being addressed. This coordination will further ensure consistency between County land use decisions and adopted policies, plans and programs that support alternative transportation.

Tra-6.7: Requires the County to implement and revise the County Bicycle Transportation Plan every five years, or as necessary, to identify a long-range County bicycle network and qualify for State or other funding sources. This also includes coordination with the County Trails Program. By regularly updating the Bicycle Transportation Plan, the County will be able promote alternative transportation while ensuring that conflicts do not occur between adopted land use plans and transportation plans/programs.

Tra-6.8: Coordination with SANDAG in the development of a Regional Bicycle Plan to ensure consistency with County transportation plans. This also includes coordination with the County Trails Program. This coordination will prevent potential conflicts between land use plans and the Regional Bicycle Plan, as well as ensuring consistency with the County Trails Program which supports multiple types of alternative transportation.

Tra-6.9: Requires the County to implement and revise as necessary the County Trails Program (CTP) for trail development and management. In addition, the County must implement and revise as necessary the Community Trails Master Plan (CTMP), which incorporates adopted individual community trail and pathway plans, based on community goals, policies, and implementation criteria. This will ensure that the County continues to support and expand upon alternative transportation opportunities through the CTP and CTMP consistent with implementation of the General Plan Update.

USS-2.3: Requires the County to implement, and revise as necessary, the Green Building Program to encourage project designs that incorporate water conservation measures, thereby reducing the potential demand for new water purveyors with the buildout of General Plan Update. This will, in turn, minimize future environmental impacts that would result from new or expanded facilities.

USS-3.1: Amend the Subdivision Ordinance to add additional design requirements for subdivisions that encourage conservation oriented design. Also amend it to require new residential development to be integrated with existing neighborhoods by providing connected and continuous road, pathway/trail and recreation/open space networks. This will reduce scattered development footprints and increase pervious surfaces in site design, thereby minimizing the need for new storm water drainage facilities.

USS-4.2: Implement, and revise as necessary, the County Green Building Program with incentives for development that is energy efficient and conserves resources, including both groundwater and imported water.

3. The potential for reducing peak energy demand.

As discussed in the beginning of this section, the Proposed Project does not include specific development projects where peak energy demand could be determined. Additionally, see section "C. Environmental Impacts, Guideline #3" above, for discussion regarding why peak demand is not applicable to the Proposed Project.

However, the Proposed Project identifies adopted General Plan policies and 2011 PEIR mitigation measures that either require or encourage development to reduce or conserve energy that would ultimately result in a reduction in peak demand. These policies and measures are identified below.

Adopted General Plan Policies

Policies COS-15.1 and COS-15.3 require new and existing buildings be designed and constructed in accordance with programs that maximize energy efficiency.

Applicable 2011 PEIR Mitigation Measures

Mitigation measure USS-3.1 encourages conservation oriented design to minimize the need for new for new storm water drainage facilities; mitigation measure USS-3.2 minimizes the need for new or expanded facilities; and mitigation measure USS-4.2 incentivizes energy efficient development.

4. Alternate fuels (particularly renewable ones) or energy systems.

Adopted General Plan policies and 2011 PEIR mitigation measures identified below will require or encourage the use of alternative fuels.

Adopted General Plan Policies

Policy COS-14.9: Significant Producers of Air Pollutants. Require projects that generate potentially significant levels of air pollutants and/or greenhouse gases 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.

Additionally, Policies COS-15.1 and COS-15.3 require new buildings be designed and constructed to maximize the use of sustainable resources and renewable energy sources.

2011 PEIR Mitigation Measures

Air-2.1: Provide incentives such as preferential parking for hybrids or alternatively fueled vehicles such as compressed natural gas vehicles or hydrogen- or electric-powered vehicles. The County shall also establish programs for priority or free parking on County streets or in County parking lots for hybrids or alternatively fueled vehicles.

Air-2.4: Provide incentives to promote the siting or use of clean air technologies where feasible. These technologies shall include, but not be limited to, fuel cell technologies, renewable energy sources, and hydrogen fuel.

5. Energy conservation which could result from recycling efforts.

Adopted General Plan policies concerning recycling efforts are identified below.

Adopted General Plan Policies

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

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

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

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

Policy 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.

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

Additionally, Policy COS-17.1 encourages recycling facilities and require landfill waste management practices that limit impacts associated with insufficient landfill capacity from future development.

2011 PEIR Mitigation Measures

USS-6.2: Requires the County to review all plans for large scale projects and planned developments to ensure there is space allocation for on-site storage to separate recyclable solid waste. This measure will increase participation in recycling and reduce solid waste output.

USS-6.3: Requires the County to promote and enforce the Management of Solid Waste Ordinance requiring mandatory recycling. This measure further requires the County to evaluate the Zoning Ordinance and other County ordinances, codes and policies to allow the development of the most environmentally sound infrastructure for solid waste facilities including recycling, reuse and composting businesses. This requirement will increase recycling efforts and reduce solid waste output in the

County. In addition, USS-6.3 also requires implementation of the Zoning Ordinance mandate for a Major Use Permit for new landfills to ensure the facilities are sited in accordance with the San Diego County IWMP. This regulation will help with the successful processing of new landfill projects, thereby increasing landfill capacity in the County.

USS-6.8: Requires the County to conduct recycling and composting public education programs for residents, schools, and businesses; and to develop programs to assist farmers, residents, and businesses to divert organic materials. USS-6.8 requires the County to encourage County and private contractors and developers to practice deconstruction and recycling of construction, demolition and land clearing debris. Implementation of this measure will reduce demand on solid waste facilities through alternative disposal options for the public.

E. Alternatives should be compared in terms of overall energy consumption and in terms of reducing wasteful, inefficient and unnecessary consumption of energy.

The comparison of alternatives in terms of energy consumption is presented in Chapter 4 of this SEIR. Chapter 4 includes discussion of impacts associated with buildout of the different alternatives and facilitates an overall comparison regarding energy impacts regarding the proposed growth associated with the different alternatives.

A more specific comparison of overall energy consumption in terms of reducing wasteful, inefficient, and unnecessary consumption of energy is not feasible given the programmatic level of the Proposed Project. This SEIR analyzes buildout of the Proposed Project on a programmatic level according to the land use intensities proposed by the Proposed Project.

F. Unavoidable Adverse Effects may include wasteful, inefficient and unnecessary consumption of energy during the project construction, operation, maintenance and/or removal that cannot be feasibly mitigated.

This is not applicable to the Proposed Project. The Proposed Project proposes changes to the General Plan land use designations (and to zoning use regulations when necessary for consistency with proposed General Plan land use designations) that establish land uses and intensities and does not determine when and how future development would occur. This SEIR analyzes buildout of the Proposed Project on a programmatic level according to the land use intensities proposed by the Proposed Project.

However, Sections 2.16.3.8 and 2.16.4.8 determined that direct and cumulative impacts would be less than significant with future development of the PSR Analysis Areas because development of land uses as designated by the Proposed Project would implement the above mentioned General Plan policies, thereby decreasing per capita energy consumption, decreasing reliance on fossil fuels, and increasing reliance on renewable energy sources.

G. Irreversible Commitment of Resources may include a discussion of how the project preempts future energy development or future energy conservation.

Renewable, nonrenewable, and limited resources that would likely be consumed as part of future development under the Proposed Project would include but are not limited to oil, gasoline, lumber, construction aggregates, asphalt, surface water and groundwater, energy, steel, and similar materials. Development of land uses under the Proposed Project would require the consumption of lumber, aggregates, asphalt, steel, and other construction materials. Both construction and operation of land uses would require the consumption of oil, gasoline, water,

and energy. For example, construction equipment would require oil and gasoline for operation, and residents of new housing units in the County would consume energy and water during daily activities. Although the environmental impacts associated with the commitment of these resources can generally be reduced by the implementation of General Plan policies and mitigation measures, the commitment would represent an irreversible change. Restoration of the resources to pre-developed conditions would not be feasible given the degree of disturbance, the urbanization of the area, and the level of capital investment. Implementation of the Proposed Project would involve a large commitment of nonrenewable resources.

The Proposed Project would increase the amount of energy consumed in the region. However, compliance with existing General Plan Policies COS-14.3, COS-15.1, COS-15.2, COS-15.3, and COS-15.4, which reduce per capita energy consumption and avoid wasteful use of energy would be required for future development implemented under the Proposed Project

Additionally, future development implemented under the Proposed Project would require compliance with General Plan Policies COS-14.7 and COS-14.9, which require projects to decrease the reliance on fossil fuels and encourage reliance on renewable energy sources.

H. Short-Term Gains versus Long-Term Impacts can be compared by calculating the project's energy costs over the project's lifetime.

This does not apply to the Proposed Project because short-term gains versus long-term impacts cannot be identified at this time. The Proposed Project is not a development project; rather it is a programmatic level project that proposes allowable land use densities in the PSR Analysis Areas.

I. Growth Inducing Effects may include the estimated energy consumption of growth induced by the project.

Growth inducing impacts are analyzed in Section 3.1 of the SEIR. The analysis determined that the Proposed Project would be considered growth-inducing because it would accommodate new residential development that would result in additional population growth and an increase in employment opportunities. The Proposed Project would increase the number of potential dwelling units by 1,826 within PSR Analysis Areas and the former CGSP Area. Based on Section 15358(a)(2) of the CEQA Guidelines, the environmental effects of induced growth are considered indirect impacts and are considered significant environmental impacts.