

2.4 Biological Resources

This section summarizes the existing common and sensitive biological resources in San Diego County, including vegetation communities, and special-status wildlife and plant species. Potential impacts of the project are analyzed, and mitigation measures are provided for those impacts determined to be significant.

Comments received during the Notice of Preparation (NOP) scoping process included the following issues regarding the Climate Action Plan (CAP): implementing an urban tree program; evaluating implications of ecosystem services; locating renewable energy zones closer to consumers to limit loss of carbon and soil disturbance; the need for county-wide carbon sequestration data; evaluate potential impacts of changing climate on native plant and animal species, habitats, and water resources; evaluate connectivity corridors for plant species; protect trees and open space that sequester carbon; grants/incentives for preservation; effects of sea level rise including loss of habitat and ocean acidification-viability of fisheries; consistency with Multi-Species Conservation Plan (MSCP); effects of increase in temperature extremes; effects of increased frequency and drought severity, flood severity, and wildfires. These concerns are addressed and summarized in this section. A copy of the NOP and comment letters received in response to the NOP are included in Appendix A of this Draft Supplement to the 2011 General Plan Update (GPU) Program Environmental Impact Report (2011 GPU PEIR) (Draft SEIR).

2.4.1 Existing Conditions

The 2011 GPU PEIR included a description of existing conditions in Section 2.4.1 of the Biological Resources chapter, which encompassed the unincorporated County of San Diego. No changes to the existing conditions have been identified that would alter the conclusions in the 2011 GPU PEIR. The conclusions of Section 2.4.1 of the 2011 GPU PEIR continue to apply and are hereby incorporated by reference.

2.4.1.1 *Terrestrial Communities and Habitats*

Vegetation communities and habitats within the County of San Diego, as described on pages 2.4-2 through 2.4-11 of the 2011 GPU PEIR include the following: chaparral, coastal sage scrub, coniferous forests, desert chaparral, desert dunes, desert scrub, dry wash woodlands, grasslands, marshes, meadows and seeps, oak forest, other woodlands, pinyon juniper woodland, playas/badlands/mudhill forbs, riparian forest, riparian scrub, riparian woodland, southern foredunes, beach, saltpan, mudflats, urban, disturbed habitat, agriculture, Eucalyptus, and water.

Special-Status Species

Special-status species are plants and animals that are legally protected or otherwise considered sensitive by federal, state, or local resource conservation agencies and organizations. In this document, special-status species are defined as plants and animals in the following categories.

- Species listed or proposed for listing as threatened, rare, or endangered under the federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA).
- Species considered as candidates for listing under the ESA or CESA.
- Wildlife species identified by California Department of Fish and Wildlife (CDFW) as Species of Special Concern.
- Animals fully protected under the California Fish and Game Code.
- Plants considered by CDFW to be “rare, threatened, or endangered in California” (California Rare Plant Ranks [CRPR] of 1A, presumed extinct in California; 1B, considered rare or endangered in California and elsewhere; and 2, considered rare or endangered in California but more common elsewhere). The California Rare Plant Ranks correspond with and replace former California Native Plant Society listings. While these rankings do not afford the same type of legal protection as ESA or CESA, the uniqueness of these species requires special consideration under the California Environmental Quality Act (CEQA).
- Other species determined to be sensitive within the County.

Tables C-1 and C-2 of the 2011 GPU PEIR provided comprehensive lists of special-status plants and special-status animals that were listed at the time of adoption of the 2011 GPU PEIR. Since adoption of the 2011 GPU PEIR, several new special-status species have been added to the California Diversity Database (CNDDB), including 32 plant species, and 11 animal species which are listed at the end of this section in **Table 2.4-1** and **Table 2.4-2** respectively. A total of 115 special-status animal species and 214 special-status plants are now listed as potentially occurring within the boundaries of the County of San Diego.

2.4.2 Regulatory Framework

The 2011 GPU PEIR included a summary of the Regulatory Framework related to biological resources in Chapter 2.4, pages 2.4-13 to 2.4-19, and it is hereby incorporated by reference. Specific regulations discussed in the 2011 GPU PEIR and applicable to the project include the following:

Federal

- Endangered Species Act (ESA)
- Migratory Bird Treaty Act (MBTA)
- Bald and Golden Eagle Protection Act
- Clean Water Act (CWA)

State

- California Endangered Species Act (CESA)

- California Fish and Game Code Sections 3503 and 3503.5
- California Fish and Game Code Section 1602 – Streambed Alteration
- Porter-Cologne Water Quality Control Act
- Natural Community Conservation Planning (NCCP) Act of 1991

Local

- County of San Diego General Plan (2011 GPU)
- San Diego County Zoning Ordinance (Zoning Ordinance)
- Multiple Species Conservation Program (MSCP)
- County of San Diego Code of Regulatory Ordinances Sections 86.501-86.509: Biological Mitigation Ordinance (BMO)
- County of San Diego Code of Regulatory Ordinances Sections 67.801-67.814: Watershed Protection, Stormwater Management, and Discharge Control Ordinance (WPO)
- County of San Diego Code of Regulatory Ordinances Sections 86.601-86.608: Resource Protection Ordinance (RPO)
- County of San Diego Code of Regulatory Ordinances Sections 86.501-86.509: Habitat Loss Permit Ordinance (HLP)

The regulatory framework discussion in the 2011 GPU PEIR regarding biological resources has not changed since adoption of the 2011 GPU, and continues to apply to the unincorporated County as addressed in this Draft SEIR.

Adopted 2011 GPU Policies

The policies addressing biological resources that were adopted as part of the 2011 GPU and are applicable to the project include the following:

Policy 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.

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

Policy 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.

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

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

Policy 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.

Policy 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.

Policy 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.

Policy 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.

Policy 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.

Policy 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.

Policy LU-6.1: Environmental Sustainability. Require the protection of intact or sensitive natural resources in support of the long-term sustainability of the natural environment.

Policy LU-6.2: Reducing Development Pressures. Assign lowest-density or lowest intensity land use designations to areas with sensitive natural resources.

Policy LU-6.3: Conservation-Oriented Project Design. Support conservation-oriented project design. This can be achieved with mechanisms such as, but not limited to, Specific Plans, lot area averaging, and reductions in lot size with corresponding requirements for preserved open space (Planned Residential Developments). Projects that rely on lot size reductions should incorporate specific design techniques, perimeter lot sizes, or buffers, to achieve compatibility with community character. [See applicable community plan for possible relevant policies.]

Policy LU-6.6: Integration of Natural Features into Project Design. Require incorporation of natural features (including mature oaks, indigenous trees, and rock formations) into proposed development and require avoidance of sensitive environmental resources.

Policy LU-6.7: Open Space Network. Require projects with open space to design contiguous open space areas that protect wildlife habitat and corridors; preserve scenic vistas and areas; and connect with existing or planned recreational opportunities.

Policy LU-10.2: Development-Environmental Resource Relationship. Require development in Semi-Rural and Rural areas to respect and conserve the unique natural features and rural character, and avoid sensitive or intact environmental resources and hazard areas.

Adopted 2011 GPU PEIR Mitigation Measures

The mitigation measures addressing biological resources that were adopted as part of the 2011 GPU PEIR and are applicable to the project include the following:

Bio-1.2 Implement and revise existing Habitat Conservation Plans/Policies to preserve sensitive resources within a cohesive system of open space. In addition, continue preparation of MSCP Plans for North County and East County.

Bio-1.3 Implement conservation agreements through Board Policy I-123, as this will facilitate preservation of high-value habitat in the County's MSCP Subarea Plan.

Bio-1.4 Coordinate with nonprofit groups and other agencies to acquire preserve lands.

Bio-1.5 Utilize County Guidelines for Determining Significance for Biological Resources to identify adverse impacts to biological resources. Also, utilize the County's Geographic Information System (GIS) records and the Comprehensive Matrix of Sensitive Species to locate special-status species populations on or near project sites. This information will be used to avoid or mitigate impacts as appropriate.

Bio-1.6 Implement the RPO, BMO, and HLP Ordinance to protect wetlands, wetland buffers, sensitive habitat lands, biological resource core areas, linkages, corridors, high-value habitat areas, subregional coastal sage scrub focus areas, and populations of rare, or endangered plant or animal species.

Bio-1.7 Minimize edge effects from development projects located near sensitive resources by implementing the County Noise Ordinance, the County Groundwater

Ordinance, the County's Landscaping Regulations (currently part of the Zoning Ordinance), and the County Watershed Protection, Storm Water Management, and Discharge Control Ordinance.

Bio-2.1 Revise the Ordinance Relating to Water Conservation for Landscaping to incorporate appropriate plant types and regulations requiring planting of native or compatible non-native, non-invasive plant species in new development.

Bio-2.2 Require that development projects obtain CWA Section 401/404 permits issued by the California Regional Water Quality Control Board and U.S. Army Corps of Engineers for all project-related disturbances of waters of the U.S. and/or associated wetlands. Also, continue to require that projects obtain Fish and Game Code Section 1602 Streambed Alteration Agreements from the California Department of Fish and Game for all project-related disturbances of streambeds.

Bio-2.3 Ensure that wetlands and wetland buffer areas are adequately preserved whenever feasible to maintain biological functions and values.

Bio-2.4 Implement the Watershed Protection, Storm Water Management, and Discharge Control Ordinance to protect wetlands.

2.4.3 Issues Not Discussed Further

As described in Chapter 1.0, Project Description, in response to litigation and considering legislative changes that have occurred since preparation of the 2012 CAP, the County prepared a new CAP (subject of this Draft SEIR). The CAP and the targets and strategies identified therein necessitate changes to Goal COS-20 and Policy COS-20.1 of the County's General Plan (2011 GPU) and mitigation adopted in the 2011 GPU PEIR, Mitigation Measures CC-1.2, CC-1.7, and CC-1.8 to attain consistency with current legislative requirements. These changes require a General Plan Amendment to the County's General Plan and revision to the associated mitigation monitoring and reporting program (hereafter these two actions collectively refer to as (GPA)) as part of the administrative approval process. The Draft SEIR evaluates the GPA as part of the actions associated with the CAP because the changes reflected in the GPA support and are consistent with implementation of the CAP and its GHG targets and GHG reduction measures. Therefore, the GPA is not addressed as a separate impact discussion below, but its impacts are included within the overall impact analysis of the CAP.

The Draft SEIR also evaluates the impacts associated with the implementation of proposed GHG Threshold, Guidelines for Determining Significance for Climate Change (Guidelines), and the Report Format and Content Requirements. The proposed GHG Threshold requires consistency with the CAP, and is the level below which a project would be determined to result in less-than-significant GHG impacts. To achieve consistency, a project will be required to implement the applicable GHG reduction measures outlined in the CAP. All measures have been evaluated throughout the Draft SEIR. Therefore, adoption of a GHG Threshold that establishes a requirement to be consistent with the CAP, the individual measures of which have been evaluated throughout this Draft SEIR,

would not require a separate impact analysis because the impacts of establishing that threshold and what it would take to meet the threshold have been fully evaluated.

The Guidelines would provide direction to project applicants on how a project could achieve consistency with the CAP. The Guidelines are proposed to include a checklist that would require applicants to demonstrate how a project would be consistent with the CAP including through implementation of GHG reduction measures. The specific actions that would result from the Guidelines would be project-specific implementation of approved GHG reduction measures, the environmental impacts of which have been evaluated throughout this Draft SEIR. Therefore, evaluation of the Guidelines as a separate impact discussion is not provided below.

Finally, the Report Format and Content Requirements document would not result in any physical impact on the environment as it simply details the format for how reports should be written. As a result, this document is also not separately discussed below.

In summary, the GPA, GHG Threshold, Guidelines, and Report Format and Content Requirements are not addressed as a separate impact discussion below. The GPA, GHG Threshold, and Guidelines are combined in the overall impact analysis of the CAP, while the Report Format and Content Requirement document provides technical direction to future project applicants and will not result in any physical impacts.

2.4.4 Analysis of Project and Cumulative Impacts

The project impact analysis area includes the unincorporated County, and the cumulative impact analysis study area includes unincorporated and incorporated County for biological resources in the 2011 GPU PEIR as identified in the 2011 GPU PEIR. The CAP would apply to the unincorporated County, and utilizes the same project and cumulative study area for biological resources as the 2011 GPU PEIR, which is hereby incorporated by reference.

Proposed CAP GHG Reduction Measures

Table 1-1 of the Draft SEIR, provides a list of proposed GHG reduction measures and Supporting Efforts that would be implemented by the CAP. However, only those measures that are relevant to biological resources and could potentially result in a significant impact within the County are described and evaluated below. None of the proposed measures indicate where specific improvements would be constructed, their size, or specific characteristics. As a program EIR, the Draft SEIR does not, and cannot, speculate on the individual environmental impacts of specific future projects/improvements. However, implementation of all GHG reduction measures and supporting efforts were considered during preparation of the Draft SEIR to the degree specific information about implementation is known. Consistent with the requirements of CEQA Guidelines Section 15168, this Draft SEIR provides a programmatic discussion of the potential general impacts of implementing these measures, rather than project-level or site-specific physical impacts of such actions. This is consistent with the scope of analysis in the 2011 GPU PEIR.

Strategy T-2: Shift Towards Alternative Modes of Transportation

Measure T-2.1: Improve Roadway Segments as Multi-Modal. Improve roadway segments, intersections, and bikeways to implement multi-modal enhancements for pedestrian and cyclist comfort and safety along County-maintained public roads by improving 700 centerline miles of roadway segments, including 250 intersections and 210 lane miles of bikeway improvements by 2030 and an additional 500 centerline miles of roadway segments, including 250 intersections and 210 lane miles of bikeway improvements by 2050. This measure would implement roadway improvements to reduce Vehicle Miles Traveled (VMT) by calming traffic and improving the bicyclist and pedestrian infrastructure and would occur as part of resurfacing projects within existing paved areas. Implementation of this measure could result in improvements to existing traffic infrastructure, which may affect special-status species near the roadway.

Strategy T-4: Invest in Local Projects to Offset Carbon Emissions

Measure T-4.1: Establish a Direct Investment Program. Close the 2030 GHG emissions target gap of 195,514 MTCO_{2e} through direct investments in local projects that would offset carbon emissions within the unincorporated county by 2030. This measure would result in direct investments for local projects. The specific protocols that would be utilized are not known and evaluation of such actions would be speculative. However, this Draft SEIR conservatively assumes that some construction-related activities may occur with individual project implementation. Please see Chapter 2.7 and Appendix B of this SEIR for additional information on direct investment projects and protocols. Protocols could include the following types of projects:

- Biomass Conversion,
- Boiler Efficiency Retrofits,
- Wetland Creation,
- Forest Restoration,
- Compost Additions to Rangeland,
- Organic Waste Digestion Capture,
- Manure Management,
- Building Weatherization Programs, and
- Urban Forest Management

Supporting Efforts for the Built Environment and Transportation Category

- Collaborate with incorporated cities, California Department of Transportation (Caltrans) and SANDAG, to consider additional park-and-ride facilities.
- Collaborate with SANDAG to encourage installation of EV charging stations in new residential and non-residential developments.

Strategy E-1: Increase Building Energy Efficiency

Measure E-1.1: Improve Building Energy Efficiency in New Development. Achieve a 10% greater building energy efficiency in all new non-residential development than is required by the current state Energy Code (Title 24 Part 6) by 2020; require all new non-residential development to meet the state's Zero Net Energy (ZNE) standards by 2030. This measure would result in energy efficiency regulations that are 10% more efficient than current standards. Physical changes would be attributed to the installation, operation, and maintenance of small-scale solar systems and battery storage, or small-scale wind turbines with new residential construction which may include roof or ground-mounted systems. Construction and operation of this technology could affect special-status species, riparian habitat or other sensitive natural communities; federally protected wetlands; wildlife movement corridors or nursery sites; or conflict with local policies or ordinances, and adopted habitat conservation plans or NCCPs.

Strategy E-2: Increase Renewable Energy Use

Measure E-2.1: Increase Renewable Electricity. Achieve 90% renewable electricity for the unincorporated county by 2030. Implementation of this measure could result in construction of small-scale distributive energy renewable systems, and large-scale photovoltaic solar, photovoltaic concentrator technology, or wind turbines. Construction and operation of this technology could affect special-status species, riparian habitat or other sensitive natural communities; federally protected wetlands; wildlife movement corridors or nursery sites; or conflict with local policies or ordinances, and adopted habitat conservation plans or NCCPs.

Measure E-2.2: Increase Renewable Electricity in Non-Residential Development. Require installation of renewable energy systems (e.g., solar photovoltaics, wind) on new non-residential development. Implementation could result in development of new solar photovoltaic systems on new non-residential buildings. Construction and operation of this technology could affect special-status species, riparian habitat or other sensitive natural communities; federally protected wetlands; wildlife movement corridors or nursery sites; or conflict with local policies or ordinances, and adopted habitat conservation plans or NCCPs.

Measure E-2.3: Install Solar Photovoltaics in Existing Homes. Increase installation of photovoltaic (PV) electrical systems in 52,273 existing residential homes by 2020 and additional 77,902 homes by 2030. Implementation could result in development of new solar photovoltaic systems on existing residential buildings. Construction and operation of this technology could affect special-status species, riparian habitat or other sensitive natural communities; federally protected wetlands; wildlife movement corridors or nursery sites; or conflict with local policies or ordinances, and adopted habitat conservation plans or NCCPs.

Measure E-2.4: Increase Use of Renewable Electricity for County Operations. Generate 10% of the County's operational electricity with renewables by 2020 and 20% by 2030. Implementation could result in development of new renewable energy systems on County facilities, and could include solar photovoltaic or small-scale wind turbines. Construction and operation of this technology could affect special-status species, riparian habitat or other sensitive natural communities; federally protected wetlands; wildlife movement corridors or nursery sites; or conflict with local policies or ordinances, and adopted habitat conservation plans or NCCPs.

Strategy SW-1: Increase Solid Waste Diversion in the Unincorporated County

Measure SW-1.1: Increase Solid Waste Diversion. Achieve 75% solid waste diversion by 2030. Implementation of this measure could result in construction for additional processing capacity for organics processing, which could affect special-status species, riparian habitat or other sensitive natural communities; federally protected wetlands; wildlife movement corridors or nursery sites; and conflict with local policies or ordinances, and adopted habitat conservation plans or NCCPs.

Supporting Effort for the Water and Wastewater Category

Work with the Padre Dam Municipal Water District (MWD) on the Advanced Water Purification (AWP) Program.

Strategy A-1: Support Conversion of Agricultural Equipment to Alternative Fuels

Measure A-1.2: Convert Stationary Irrigation Pumps to Electric. Convert stationary petroleum-diesel or gas-powered irrigation to achieve four electric stationary irrigation pumps by 2020 and an additional 40 electric stationary irrigation pumps by 2030. Implementation of this measure would result in an incentive program that would convert diesel or gas-powered irrigation pumps to electric-powered pumps. Removal and replacement of diesel or gas-powered pumps with electric pumps, could result in disturbance of special-status species, riparian habitat or other sensitive natural communities; federally protected wetlands; wildlife movement corridors or nursery sites; or conflict with local policies or ordinances, and adopted habitat conservation plans or NCCPs.

2.4.4.1 Issue 1: Special-Status Species

This section describes potential project and cumulative impacts on special-status species, based on potential effects on sensitive and common natural communities that could support special-status species, because of implementation of the project.

Guidelines for Determination of Significance

Based on Appendix G of the CEQA Guidelines, which is reflective of the guidelines that were utilized in the 2011 GPU PEIR, the project could result in a significant adverse effect related to biological resources if it would have a substantial adverse effect, either directly or through

habitat modification, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.

Impact Analysis

2011 GPU PEIR Determination

The 2011 GPU PEIR evaluated impacts to special-status species on a habitat-scale, because biological resources were analyzed at a regional level and the disturbance or loss of some habitats could substantially affect these species. Potential impacts identified in the 2011 GPU PEIR were related to the development of land uses, and construction of new infrastructure to support these land uses. Development, such as construction of new buildings and infrastructure, would result in the removal of several common and sensitive habitat types, which could affect special-status species associated with those habitats. The 2011 GPU PEIR determined that development proposed under the 2011 GPU would result in potentially significant direct (e.g., removal of habitat), indirect (e.g., impacts to water quality, introduction of non-native plants, edge effects), and cumulative impacts to special-status species. The discussion of impacts and mitigation measures related to special-status species can be found in Chapter 2.4, Biological Resources, on pages 2.4-19 through 2.4-25 and 2.4-34 through 2.4-35; and 2.4-37 through 2.4-40 of the 2011 GPU PEIR, and is hereby incorporated by reference. Although these impacts were reduced with implementation of the adopted 2011 GPU policies, 2011 GPU PEIR mitigation measures, and compliance with applicable regulations, they remained significant and unavoidable because even with mitigation measures in place, implementation of the 2011 GPU would allow land uses and development to occur in areas outside of an adopted regional conservation plan, thereby resulting in direct, indirect, and cumulative impacts to species identified as a candidate, sensitive, or special-status species. Specific policies and mitigation measures related to the protection of biological resources are listed above under Section 2.4.2, Regulatory Framework.

CAP Impact Analysis

Implementation of the CAP has the potential to result in significant impacts to sensitive habits and special-status species from GHG reduction measures and supporting efforts that would include construction and operation of traffic calming, bicycle, pedestrian, park-and-ride, solid waste facility expansion, agricultural projects, direct investment projects, and large-scale photovoltaic solar, concentrated solar, wind turbines, and geothermal energy systems that were not explicitly evaluated within the 2011 GPU PEIR. The County's 2012 Wind Energy Ordinance EIR (2012 Wind Energy EIR) evaluated impacts related to the development of small and large-scale wind turbines and impacts from that document are summarized below and hereby incorporated by reference (San Diego County 2012). Additionally, the Padre Dam Municipal Water District's Comprehensive Facilities Master Plan PEIR (2017 Padre Dam PEIR) evaluated impacts related to the development/expansion of water purification infrastructure and impacts that are associated with the Supporting Effort for the Water and Wastewater Category. The analysis from that document is summarized below and hereby incorporated by reference (Padre Dam MWD 2017).

The following section describes the potentially significant impacts to special-status species that could result from the implementation of the CAP.

Bicycle, Pedestrian, Park-and-Ride, Solid Waste Expansion, and Agricultural Projects

Implementation of GHG Reduction Measures T-2.1, SW-1.1, and A-1.2, and their Supporting Efforts, could result in new or expanded park-and-ride facilities, new or expanded pedestrian and bicycle improvements, new or expanded solid waste facilities, and improvements related to agricultural equipment. Specific locations for such improvements have not been identified. However, it is likely that the locations of such improvements would disturb vegetation communities. Although removal of common and sensitive habitats that could support special-status plants or animals is not specifically proposed, implementation of the measures listed above could result in removal of these habitats or other disturbances to special-status species. Construction activities and project operations associated with these measures could result in direct and indirect disturbances or loss of special-status species through ground disturbance, tree removal, or habitat conversion in areas suitable for some special-status species.

Future projects would be required to be evaluated for project-specific impacts under CEQA at the time of application and project-specific mitigation would minimize or eliminate impacts to special-status species to the extent feasible in compliance with CEQA Guidelines Section 15126.4. As explained in the 2011 GPU PEIR, implementation of the 2011 GPU policies and 2011 GPU PEIR mitigation measures located in Chapter 2.4, Biological Resources, on pages 2.4-19 through 2.4-25 and 2.4-34 through 2.4-35; and 2.4-37 through 2.4-40 of the 2011 would also reduce potential impacts to special-status species. All future development projects would be required to follow County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to protection of sensitive biological resources. Furthermore, as described in Section 2.4.2, Regulatory Framework, above, several federal, state, and local regulations and policies (e.g., ESA, CESA) are in place to protect special-status species in the County. With implementation of the applicable 2011 GPU policies and 2011 GPU PEIR mitigation measures; compliance with existing federal, state, and local regulations that protect sensitive resources; and completion of subsequent project-level planning and environmental review, potential impacts to special-status species because of implementation of measures that could result in the construction of bicycle, pedestrian, park-and-ride, solid waste expansion, and agricultural projects would be **less than significant**.

Cumulative Impacts

Project impacts would be cumulative in nature if in combination with effects of other projects, they would contribute to the local or regional loss of special-status species in the cumulative impact analysis area. CEQA Guidelines Section 15130 describes two methods for establishing the cumulative environment in which the project is to be considered: the use of a list of past, present, and probable future projects; or the use of adopted projections from a general plan, other regional planning document, or a certified EIR for such a planning document. This analysis uses a combination of the list and

planning document approach, as described in Chapter 1, Project Description. Physical improvements resulting from implementation of the CAP have the potential to combine with the physical impacts of other past, present, or probable future projects in the County and could result in a cumulative impact based upon proximity and construction schedule. **Table 1-3** in the Project Description contains a list of past, present, and probable future projects that when combined with the project, could result in a cumulatively considerable effect. Cumulative impacts could also result when the physical improvements resulting from implementation of the CAP interact with development associated with build-out of the County's General Plan and potentially increase those impacts resulting in a cumulatively considerable effect.

The 2011 GPU PEIR concluded that although cumulative impacts to special-status species resulting from the build-out associated with the General Plan would be reduced with implementation of the 2011 GPU policies and 2011 GPU PEIR mitigation measures listed above, and compliance with applicable state and federal regulations, they would remain significant and unavoidable. While direct significant impacts are not anticipated from this category of projects, there remains the potential for contributions to the cumulative loss of special-status species or habitats. Therefore, implementation of measures that could result in the construction of bicycle, pedestrian, park-and-ride, solid waste expansion, and agricultural projects **could result in a considerable contribution** to a significant cumulative impact (**Impact BIO-1**).

Direct Investment Program

Implementation of GHG Reduction Measure T-4.1 would result in direct investment of projects to offset carbon emissions. A direct investment project is created when a specific action is taken that reduces, avoids, or sequesters GHG emissions. As described in detail in Chapter 2.7 and Appendix B of this Draft SEIR, projects that could result from implementation of this measure could include but are not limited to: biomass conversion to energy or soil application (i.e., conversion of biomass waste to fuel for electricity generation, or conversion of forestry and agricultural residues to soil compost), boiler efficiency upgrades (i.e., implementing retrofits to increase thermal efficiency in natural-gas fired boilers or process heaters), coastal wetlands creation (i.e., restoring degraded wetlands to recapture soil carbon stock), reforestation projects (i.e., planting of trees to recapture CO₂ sinks), compost additions to rangeland (i.e., increasing soil carbon sequestration and improving quality of soils), organic waste digestion (i.e., diverting organic waste and/or wastewater to a biogas control system), livestock management (i.e., installing biogas control systems for manure management on dairy cattle and swine farms), urban forest and urban tree planting projects (i.e., tree planting, maintenance, and/or improved management activities to increase carbon storage through trees), and winterization (i.e., energy efficiency upgrades to buildings). This list is not intended to be exhaustive, but represents some of the types of projects that could be considered in the future. Protocols for these projects and others that could be considered are described in Chapter 2.7 with page numbers to review the protocols contained in Appendix B.

Most direct investment projects would involve some level of construction and physical disturbance of the land. This analysis assumes that implementation of direct investment

projects under GHG Reduction Measure T-4.1 would result in construction activities that could include: the use of heavy equipment for earthmoving, materials processing, or compost spreading; vehicle trips during construction/equipment replacement/monitoring activities; possible changes in land form and views; and installation or upgrades of mechanical equipment or facilities. Construction activities and project operations associated with these measures could result in direct and indirect disturbances to special-status species or loss of habitat through ground disturbance, tree removal, watering during implementation of tree planting, or conversion of habitat. Depending on the location of these projects, construction could result in erosion, direct removal of habitat, or water quality issues.

Because the variety of projects that may be approved and ultimately undertaken by the County under the Direct Investment Program is not known, it is too speculative to determine the types of impacts that could occur and whether regulations or mitigation measures would be available to minimize potential environmental impacts. However, all projects would be required to comply with applicable existing federal, state, and local regulations. Specifically, projects would be evaluated for their consistency with 2011 GPU policies, 2011 GPU PEIR mitigation measures, County Grading Ordinance regulations, County Resources Protection Ordinance regulations, etc. Future discretionary projects may also be required to undergo additional CEQA analysis to evaluate their project-specific impacts. If a determination is made that potentially significant impacts would result from implementation of direct investment projects, then all feasible mitigation would be required to be implemented in accordance with CEQA Guidelines Section 15126.4.

While all feasible mitigation would be applied at the project level as part of the County's discretionary review process, construction of projects associated with GHG Reduction Measure T-4.1 could still adversely affect special-status species because of the nature of the projects. At the programmatic level, it is not possible to determine with certainty that impacts resulting from construction activities to special-status species would be reduced to a level below significance. Therefore, the potential loss of special-status plant or animal species would be a **potentially significant impact (Impact BIO-2)**.

Cumulative Impacts

Impacts would be cumulative in nature if the project, in combination with cumulative development, would contribute to the loss or impairment of special-status species or their habitat in the County. The methodology for determining the cumulative environment described in Chapter 1, Project Description, and summarized above in BIO-2 above applies for this cumulative discussion.

Implementation of GHG Reduction Measure T-4.1, would result in direct investment projects as described above. The 2011 GPU PEIR concluded that although cumulative impacts to special-status species resulting from the build-out associated with the General Plan would be reduced with implementation of the 2011 GPU policies and 2011 GPU PEIR mitigation measures listed above, and compliance with applicable state and federal regulations, they would remain significant and unavoidable. Further projects would be required to be evaluated under CEQA and to reduce and minimize impacts to the

maximum extent feasible, as well as comply with existing federal, state, and local regulations that protect sensitive resources. However, because the exact location and nature of direct investment projects is not known, the potential for projects implemented under a direct investment program to contribute to a cumulatively significant impact would remain. Therefore, implementation of GHG Reduction Measure T-4.1 **could result in a considerable contribution** to a significant cumulative impact (**Impact BIO-3**).

Ground or Roof-Mounted Photovoltaic Solar, Small Wind Turbines, and other Building Retrofits

Implementation of GHG Reduction Measures E-1.1, E-2.1, E-2.2, E-2.3, E-2.4, and Supporting Efforts could result in energy efficiency retrofits on existing residential, new non-residential structures, and County facilities including rooftop or ground-mounted photovoltaic solar arrays or small wind turbines, modern mechanical systems, and other similar improvements. Specific locations for projects and retrofits have not been identified. Because of the nature of the solar photovoltaic and other building retrofits and improvements, it is likely that retrofits would occur in areas of existing development, and new development would install energy-efficient mechanical equipment at the time of construction. New mechanical equipment or new renewable energy equipment would generally occur in developed areas of the County, and would be regulated by existing County codes and policies that protect special-status species. The placement of small-scale photovoltaic solar renewable energy equipment on new and existing buildings is regulated by the existing County Renewable Energy Zoning Ordinance Section 6954(a) which limits the height and scale of these facilities. Rooftop photovoltaic solar energy panels generally do not involve construction that would substantially change roof lines or add substantial massing or height such that the altered buildings would have the potential to interfere with aerial special-status species. The County's Renewable Energy Zoning Ordinance Section 6954(a) requires the height of on-site photovoltaic solar energy systems be no taller than the height designator of the zone, except for on-site energy use systems that may extend no more than 5-feet above the roofline. Ground-mounted solar photovoltaic could result in small-scale impacts to special-status habitat because small systems can be installed as an accessory use without obtaining a discretionary permit. Operation of solar systems and other building retrofits would not result in impacts to sensitive habitats or special-status species.

Future projects would be required to be evaluated for project-specific impacts under CEQA at the time of application and project-specific mitigation would minimize or eliminate impacts to special-status species to the extent feasible in compliance with CEQA Guidelines Section 15126.4. The adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures pertaining to biological resources (listed above) would further limit the project impacts to special-status species. As described above, adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures would ensure that new development would protect unique and sensitive special-status species.

Wind turbines of all sizes are regulated by the County's Wind Energy Ordinance Section 6950-6952 and would be required to comply with regulations specific to the size and scale of the turbines. A small wind turbine is defined as a wind turbine, with or without a tower,

which has a rated capacity of not more than 50 kilowatts (kW); is consistent with the requirements of existing Zoning Ordinance Sections 6156 and 6951; and generates electricity primarily for use on the same lot on which the wind turbine is located. These turbines would be allowed as an accessory use in all zones, provided the turbine complies with the Zoning Ordinance Section 6950 and obtains a Zoning Verification Permit prior to issuance of a building permit.

Operation of small wind turbines could result in significant direct impacts to special-status avian and bat species as described on pages 2.4-27 to 2.4.28 of the 2012 Wind Energy EIR (County of San Diego, 2012). Ground-mounted facilities may require ground disturbance that would not be subject to environmental review (see accessory use discussion above), and, therefore, could affect sensitive species if habitat is present. Roof-mounted facilities are limited to a height of no more than 80 feet (but not more than the height designator of the Zone in which they are located) and have relatively small blades on a vertical or horizontal axis. In addition, these structures cannot include guy wires for structural support or aboveground power lines. Small wind turbines are prohibited within 4,000 feet of a known golden eagle nest, per the County's Guidelines for Determining Significance for Biological Resources. Additionally, pursuant to the County's Wind Energy Ordinance setbacks of 300 feet, or five times the turbine height, whichever is greater, are required from known significant roosts of sensitive bat species, blue-line watercourses, or water bodies mapped on the US Geological Survey topographic maps, and known locations of transmission towers or power lines.

The 2012 Wind Energy EIR concluded that small turbines may result in a potentially significant adverse impact to a special-status species because multiple small turbines are allowed on a single parcel as an accessory use without discretionary review and ground disturbance and infrequent collisions with aerial species may result. (County of San Diego, 2012). The 2012 Wind Energy EIR considered mitigation that would have required the County to prepare and adopt MSCP plans for North and East County infeasible because approvals from other agencies would be required. Therefore, with implementation of the 2011 GPU policies and 2011 GPU PEIR mitigation measures, overall impacts to special-status species associated with implementation of ground or roof-mounted photovoltaic solar arrays and other building retrofits would be less than significant because they would be installed on existing structures or within developed (i.e., non-native lands) area. However, impacts related to special-status species resulting from small wind turbines would be a **potentially significant impact (Impact BIO-4)**.

Cumulative Impacts

Impacts would be cumulative in nature if the project, in combination with cumulative development, would contribute to the loss or impairment of special-status species in the County. The methodology for determining the cumulative environment described in Chapter 1, Project Description, and summarized above in Impact BIO-2 above applies for this cumulative discussion.

The 2011 GPU PEIR concluded that although cumulative impacts to special-status species resulting from the build-out associated with the General Plan would be reduced

with implementation of the 2011 GPU policies and 2011 GPU PEIR mitigation measures listed above, and compliance with applicable state and federal regulations, they would remain significant and unavoidable. Implementation of the GHG Reduction Measures E-1.1, E-2.1, E-2.2, E-2.3, E-2.4, and Supporting Efforts would result in retrofits and new renewable energy infrastructure. With exception of small-scale wind turbines, overall impacts to special-status species associated with implementation of ground or roof-mounted photovoltaic solar arrays and other building retrofits would be less than significant because they would be installed on existing structures or within developed (i.e., non-native lands) area. Therefore, these projects and activities would not have a considerable contribution to significant cumulative impacts. However, implementation of GHG reduction measures that could result in small-scale wind turbines, may result in a potentially significant impact to special-status species, as described on pages 2.4-41 of the 2012 Wind Energy EIR. The 2012 Wind Energy EIR determined that small-scale wind turbines could result in potentially significant impacts to special-status species because the County's Wind Energy Zoning Ordinance allows for three to five small wind turbines to be developed on a legal lot as an accessory use to the primary use of the property without a discretionary permit. Therefore, the project **could result in a considerable contribution** to a significant cumulative impact related to the construction of small-scale wind turbines **(Impact BIO-5)**.

Large-Scale Renewable Energy Infrastructure

Implementation of GHG Reduction Measure E-2.1 could result in the construction of new large-scale renewable energy systems, including large-scale photovoltaic solar, concentrated solar power geothermal systems, and/or wind turbines. Because the amount of demand generated by such a program and the mix of renewable energy types that would be constructed to satisfy demand is unknown, this Draft SEIR evaluates the potential for impacts at the program level. Specific locations for projects have not been identified. While the potential for the construction of large-scale renewable energy infrastructure was not evaluated in the 2011 GPU PEIR, potential wind energy impacts were evaluated in the 2012 Wind Energy EIR and a summary of that analysis is provided below and is hereby incorporated by reference.

Large-scale renewable energy infrastructure would generally be constructed in undeveloped locations that are productive for generating the renewable energy source. Specific locations that may be chosen for these large-scale utility projects are unknown; however, it is likely that suitable locations would include areas that are not highly developed with residential and commercial uses because of the size, massing, coverage, and scale of this type of infrastructure which relies upon large amounts of land unencumbered by buildings or shadowed by buildings or trees. Solar array fields, geothermal infrastructure, and wind turbines typically encompass large areas, and implementation of the projects could result in the conversion of sensitive habitat, resulting in habitat loss or fragmentation.

Photovoltaic, solar concentrator, wind turbines, and geothermal energy systems could result in impacts to special-status species because of construction activities, implementation of access roads and transmission lines, and conversion of large areas of

land to industrial uses, resulting in habitat loss. Wildlife could potentially be displaced within the construction areas and use of access roads around the construction area has the potential to result in the direct mortality of less mobile wildlife and rare plants.

Additionally, as described on pages 2.4-27 through 2.4-31 of the 2012 Wind Energy EIR, both small and large-scale wind turbines could result in direct impacts to avian and bat species because of collision risk. To reduce potential impacts, the Wind Energy Ordinance prohibits small wind turbines within 4,000 feet of a known golden eagle nest. Additionally, setbacks of 300 feet, or five times the turbine height, whichever is greater, are required from known significant roosts of sensitive bat species, blue-line watercourses or water bodies mapped on the US Geological Survey topographic maps, and known locations of transmission towers or power lines. Small turbines cannot include guy wires for structural support or aboveground power lines because these features pose additional collision risk. The environmental design considerations included in the zoning verification process would minimize potential impacts to sensitive species from small wind turbines, but not to a level below significance (County of San Diego, 2012).

All large-scale renewable energy projects are subject to discretionary review and required to obtain a Major Use Permit (MUP). As part of the County's discretionary review process all large-scale energy projects would be evaluated under CEQA and would be required to implement measures to minimize impacts to candidate, sensitive, or special-status species, as necessary. However, permanent impacts to native vegetation communities could potentially result from the construction of wind turbines, solar arrays, solar fields, and geothermal infrastructure including, support facilities, and access roads. Because of the potential for future large-scale projects to directly and indirectly affect sensitive wildlife, rare plants, and native habitat, large-scale renewable projects could result in potentially significant impacts related to candidate, sensitive, or special-status species.

As described in the 2012 Wind Energy EIR on pages 2.4-28 through 2.4-31, all large-scale wind energy projects would be required to obtain a MUP and be evaluated as part of the County's discretionary review process. Additionally, the 2012 Wind Energy EIR adopted Mitigation Measures M-BIO-1 and M-BIO-2 described below in Section 2.4.5 which requires significant impacts to special-status species to be mitigated and requires updates to the County's Guidelines for Determining Significance for Biological Resources to include mitigation which could reduce impacts related to avian and bat species. The 2012 Wind Energy EIR considered mitigation that would have required the County to prepare and adopt MSCP plans for North and East County. However, this mitigation was determined to be infeasible because approvals from other agencies would be required and the timing of these plans could not be guaranteed. The North County MSCP is currently being prepared, but the East County MSCP plan has not been initiated. No other feasible mitigation is available. The measure is still considered infeasible because the timing of completion of these plans is undetermined.

Future projects would be required to be evaluated for project-specific impacts under CEQA at the time of application and project-specific mitigation would minimize or eliminate impacts to special-status species to the extent feasible in compliance with CEQA Guidelines Section 15126.4. Implementation of the 2011 GPU policies and 2011

GPU PEIR mitigation measures listed above would reduce potential impacts to biological resources as part of the County's discretionary review process; however, construction and operation of facilities associated with GHG Reduction Measure E-2.1 could still adversely affect special-status species because of the scale and nature of the projects. At the programmatic level, it is not possible to determine with certainty that impacts to special-status species from construction and operation of large-scale renewable energy projects would occur. The potential loss of special-status plant or animal species would be a **potentially significant impact (Impact BIO-6)**.

Cumulative Impacts

Impacts of the project would be cumulative in nature if in combination with effects of other projects, they would contribute to the local or regional loss of special-status species in the County. The methodology for determining the cumulative environment described in Chapter 1, Project Description, and summarized above in Impact BIO-2 above applies for this cumulative discussion.

The 2011 GPU PEIR concluded that although cumulative impacts to special-status species resulting from the build-out associated with the 2011 GPU would be reduced with implementation of the 2011 GPU policies and 2011 GPU PEIR mitigation measures listed above, and compliance with applicable state and federal regulations, they would remain significant and unavoidable. Additionally, even with implementation of the 2011 GPU policies, 2011 GPU PEIR mitigation, and 2012 Wind Energy EIR Mitigation Measures M-BIO-1 and M-BIO-2, additional significant cumulative impacts to special-status species could result from GHG Reduction Measure E-2.1 because of the scale and nature of the projects and possible construction of multiple projects within a localized area. Therefore, cumulative impacts to special-status species related to the implementation of large-scale renewable energy projects **could result in a considerable contribution** to a significant cumulative impact (**Impact BIO-7**).

Padre Dam Water and Wastewater Supporting Effort

As described in Chapter 1, Project Description, the CAP includes a Water and Wastewater Supporting Effort, that would support participation in the Padre Dam AWP project. The Padre Dam MWD prepared the Padre Dam PEIR and that analysis is hereby incorporated by reference. As described on pages 4.3-20 through 4.3-29 of the Padre Dam PEIR, potentially significant direct and indirect impacts were identified for special-status species. However, all impacts were reduced to a level below significance with implementation of mitigation measures BIO-1A through BIO-1L; BIO-2A and BIO-2B; BIO-3A through BIO-3C; and HYD-1 through HYD-3 as described in the Padre Dam PEIR. Therefore, the potential loss of special-status plant or animal species because of the Padre Dam AWP would be **less than significant**).

Cumulative Impacts

The Padre Dam PEIR evaluated the cumulative special-status species impacts of the project on page 6-16. As described therein, the AWP project would result in less-than-

significant impacts to special-status plant and animal species with implementation of mitigation measures Bio-1A through Bio-1L, Bio-2A, Bio-2B, Bio-3A through Bio-3C, and Hyd-1 through Hyd-3, and it **would not have a considerable contribution** to a significant cumulative impact.

Impact Summary

With implementation of applicable 2011 GPU policies and 2011 GPU PEIR mitigation measures (listed above); compliance with existing federal, state, and local regulations that protect special-status species and their habitats; and completion of subsequent project-level planning and environmental review, potential direct impacts to special-status species and their habitats because of implementing traffic calming, bicycle, pedestrian, park-and-ride, solid waste expansion, and agricultural projects would be **less than significant**. However, even with implementation of all feasible mitigation at the project level, it is not possible at a programmatic level to ensure that all cumulative impacts will be mitigated. Therefore, implementation of the project **could result in a considerable contribution** to a significant cumulative impact on special-status species. The County's participation in the AWP project would result in **less-than-significant project** special status-species impacts, and **would not have a considerable contribution** to a significant cumulative impact to special-status species.

Regarding small-scale wind and large-scale renewable energy facilities, even with implementation of the 2011 GPU policies, 2011 GPU PEIR mitigation measures, and 2012 Wind Energy EIR Mitigation Measures M-BIO-1 and M-BIO-2, additional significant direct and cumulative impacts to special-status species and habitats could result because of the possibility of installing multiple small-scale turbines without a discretionary review, and the possibility of the construction of multiple large-scale projects within a localized area. Therefore, project impacts to special-status species and habitats which would result from the development of small-and large-scale wind turbines, and large-scale photovoltaic, concentrator solar, and geothermal energy systems would be a **potentially significant impact** and these facilities **could result in a considerable contribution** to a significant cumulative impact on special-status species.

2.4.4.2 Issue 2: Riparian Habitat and Other Sensitive Natural Communities

This section describes potential project and cumulative impacts on riparian habitat or other sensitive natural communities for the project.

Guidelines for Determination of Significance

Based on Appendix G of the CEQA Guidelines, the project could result in a significant adverse effect related to biological resources if it would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS.

Impact Analysis

In the 2011 GPU PEIR, impacts to most sensitive natural communities were considered in the habitat-based analysis of impacts to special-status species and their sensitive habitats, in Section 2.4.4.1 (Issue 1: Special-Status Species). However, Section 2.4.4.2 (Issue 2: Riparian Habitat and Other Sensitive Natural Communities) of the 2011 GPU PEIR focused specifically on impacts to riparian habitat. Therefore, consistent with the 2011 GPU PEIR approach, this section focuses specifically on potential project and cumulative impacts to riparian habitat that could be affected by implementation of the project; other sensitive habitats are considered in Section 2.4.4.1 (Issue 1: Special-Status Species), above.

2011 GPU PEIR Determination

Impacts identified in the 2011 GPU PEIR were primarily related to new development which could affect up to 10,131 acres of riparian habitat within the County. The 2011 GPU PEIR determined that proposed development would result in potentially significant direct (e.g., removal of habitat), indirect (e.g. impacts to water quality, introduction of non-native plants), and cumulative impacts to riparian habitat. The discussion of impacts to riparian habitat can be found in Chapter 2.4, Biological Resources on pages 2.4-25 through 2.4-27 and 2.4-35; and 2.4-40-2.4-41, of the 2011 GPU PEIR and is hereby incorporated by reference. The 2011 GPU PEIR concluded that even with implementation of the applicable 2011 GPU policies and 2011 GPU PEIR mitigation measures listed above, and compliance with applicable state and federal regulations, potential impacts were determined to be significant and unavoidable because implementation of the 2011 GPU would allow land uses and development to occur in areas outside of any adopted regional conservation plan, thereby resulting in direct, indirect, and cumulative impacts to sensitive habitats. Specific policies and mitigation measures related to the protection of biological resources are listed above under Section 2.4.2, Regulatory Framework.

CAP Impact Analysis

Implementation of the CAP has the potential to result in significant impacts to riparian habitat and other sensitive habitat from implementation of GHG reduction measures and supporting efforts that could result in new construction or ground disturbing activities that would include construction of traffic calming, bicycle, pedestrian, park-and-ride, solid waste expansion, direct investment projects, and agricultural projects as well as small-scale renewables and large-scale photovoltaic solar, concentrated solar, wind turbines, and geothermal energy systems that were not explicitly evaluated within the 2011 GPU PEIR. The County's 2012 Wind Energy EIR evaluated impacts specifically related to the development of small and large-scale wind turbines and impacts from that document are summarized below and hereby incorporated by reference (San Diego County, 2012).

Riparian vegetation occurs along rivers, streams, and other drainages in the County. Riparian areas connect terrestrial and aquatic habitats and provide linkages between water bodies and upstream vegetation communities. The following section describes the

potentially significant impacts to riparian habitat that could result from the implementation of the CAP measures.

Bicycle, Pedestrian, Park-and-Ride, Solid Waste Expansion, and Agricultural Projects

As described in detail in Section 2.4.4.1, implementation of GHG reduction measures and supporting efforts as listed above in Section 2.4.3 could result in new park-and-ride facilities, new or expanded pedestrian and bicycle improvements, new or expanded solid waste facilities, improvements related to agriculture projects. While exact locations for these projects have not been determined, it is possible that the locations of such improvements would disturb some riparian communities.

Future projects would be required to be evaluated for project-specific impacts under CEQA at the time of application and project-specific mitigation would minimize or eliminate impacts to riparian habitat to the extent feasible in compliance with CEQA Guidelines Section 15126.4. Although removal of riparian habitat is not specifically proposed, implementation of the measures listed above could result in removal of this habitat type during construction or development of improvements. Construction activities and project operations associated with these measures could result in direct and indirect disturbances or loss of riparian habitat through ground disturbance, tree removal, or conversion of habitat. Depending on the location of these new facilities, construction could result in erosion, or water quality issues. However, as described above in Section 2.4.4.1, compliance with the 2011 GPU policies and 2011 GPU PEIR mitigation measures would reduce potential impacts to riparian habitat to a less-than-significant level. Additionally, all projects would be required to comply with existing federal, state, and local regulations that protect sensitive resources; and complete project-level planning and environmental review. Therefore, potential direct and indirect impacts to riparian habitats because of construction of bicycle, pedestrian, and park-and-ride facilities; new and expanded solid waste facilities; agricultural projects; and direct investment projects would be **less than significant**.

Cumulative Impacts

Impacts would be cumulative in nature if in combination with effects of other projects, they would contribute to the local or regional loss of riparian habitat in the County. The methodology for determining the cumulative environment described in Chapter 1, Project Description, and summarized above in Impact BIO-2 above applies for this cumulative discussion.

The 2011 GPU PEIR concluded that although cumulative impacts to riparian habitat resulting from the build-out associated with the General Plan would be reduced with implementation of the 2011 GPU policies and 2011 GPU PEIR mitigation measures listed above, and compliance with applicable state and federal regulations, they would remain significant and unavoidable because the 2011 GPU would allow for development outside of adopted regional conservation plan areas. While direct significant impacts are not anticipated from this category of projects, there remains the potential for contributions to the cumulative loss of riparian habitats. Therefore, implementation of measures that could result in the construction of bicycle, pedestrian, and park-and-ride facilities; new and

expanded solid waste facilities; and agricultural projects **could result in a considerable contribution** to a significant cumulative impact to riparian habitat (**Impact BIO-8**).

Direct Investments Program

Implementation of GHG Reduction Measure T-4.1 would result in direct investment of projects to offset carbon emissions. As described in detail in Chapter 2.7 and Appendix B of this Draft SEIR, there are a variety of projects that could result from implementation of this measure. See Chapter 2.7 and Appendix B for a detailed list. This list is not intended to be exhaustive, but represents some of the types of projects that could be considered in the future.

Most direct investment projects would involve some level of construction and physical disturbance of the land. This analysis assumes that implementation of direct investment projects under GHG Reduction Measure T-4.1 would result in construction activities that could include: the use of heavy equipment for earthmoving, materials processing, or compost spreading; vehicle trips during construction/equipment replacement/monitoring activities; possible changes in land form and views; and installation or upgrades of mechanical equipment or facilities. Construction activities and project operations associated with these measures could result in direct and indirect disturbances to riparian habitat through ground disturbance, or conversion of habitat. Depending on the location of these projects, construction could result in erosion, direct removal of habitat, or water quality issues.

Because the variety of projects that may be approved and ultimately undertaken by the County under the Direct Investment Program is not known, it is not possible to speculate upon the types of impacts that could occur and whether regulations or mitigation measures would be available to minimize potential environmental impacts. However, all projects would be required to comply with applicable existing federal, state, and local regulations. Specifically, projects would be evaluated for their consistency with 2011 GPU policies, 2011 GPU PEIR mitigation measures, County Grading Ordinance regulations, County Resources Protection Ordinance regulations, etc. Future discretionary projects may also be required to undergo additional CEQA analysis to evaluate its project-specific impacts. If a determination is made that potentially significant impacts would result from implementation of direct investment projects, then all feasible mitigation would be required to be implemented in accordance with CEQA Guidelines Section 15126.4.

While all feasible mitigation would be applied at the project level as part of the County's discretionary review process, construction of projects associated with GHG Reduction Measure T-4.1 could still adversely affect riparian habitat because of the nature of the projects. At the programmatic level, it is not possible to determine with certainty that impacts to riparian habitat because of construction activities, reforestation, or wetland creation, for example, would be reduced below a level of significance. Therefore, the potential impact related to riparian habitat would be a **potentially significant (Impact BIO-9)**.

Cumulative Impacts

Impacts would be cumulative in nature if the project, in combination with cumulative development, would contribute to the local or regional loss of riparian habitat in the County. The methodology for determining the cumulative environment described in Chapter 1, Project Description, and summarized above in Impact BIO-2 above applies for this cumulative discussion.

Implementation of GHG Reduction Measure T-4.1, would result in direct investment projects as described above. The 2011 GPU PEIR concluded that although cumulative impacts to riparian habitat resulting from the buildout associated with the General Plan would be reduced with implementation of the 2011 GPU policies and 2011 GPU PEIR mitigation measures listed above, and compliance with applicable state and federal regulations, they would remain significant and unavoidable. Projects would be required to be evaluated under CEQA and to reduce and minimize impacts to the maximum extent feasible, as well as comply with existing federal, state, and local regulations that protect sensitive resources. However, because the exact location and nature of direct investment projects is not known, the potential for a contribution to a cumulatively significant impact remains. Therefore, implementation of direct investment projects **could result in a considerable contribution** to a significant cumulative impact (**Impact BIO-10**).

Ground or Roof-Mounted Photovoltaic Solar, Small Wind Turbines, and other Building Retrofits

As described in detail in Section 2.4.4.1, implementation of GHG reduction measures and supporting efforts as listed above in Section 2.4.3 could result in energy efficiency retrofits on existing residential and non-residential structures, including rooftop or ground-mounted photovoltaic solar arrays or small wind turbines, modern mechanical systems, and other similar improvements. Specific locations for projects have not been identified. Because of the nature of the solar photovoltaic and other building retrofits and improvements, it is likely that retrofits would occur in areas of existing development, and new development would install energy-efficient mechanical equipment at the time of construction. Implementation of new mechanical equipment or new renewable energy equipment would generally occur in developed areas of the County, and would be regulated by existing County codes and policies that regulate the protection of riparian species. The placement of small-scale photovoltaic solar renewable energy equipment on new and existing buildings is regulated by the existing County Renewable Energy Zoning Ordinance Section 6954(a). Rooftop photovoltaic solar energy panels would not involve construction that would substantially alter riparian habitat, however, ground-mounted solar photovoltaic could result in impacts to riparian habitat because of ground disturbance.

Most future projects would be required to be evaluated for project-specific impacts under CEQA at the time of a discretionary application and project-specific mitigation would minimize or eliminate impacts to riparian habitat to the extent feasible in compliance with CEQA Guidelines Section 15126.4. In cases where photovoltaic systems are less than 500 square feet, property owners may install solar energy panels without a discretionary permit. The adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures

pertaining to biological resources (listed above) would limit the project impacts to riparian habitat in cases where projects are discretionary, but small-scale impacts to riparian habitat could occur in the absence of a discretionary permit.

Wind turbines of all sizes are regulated by the County's Zoning Ordinance, Wind Energy Section 6950-6952 and would be required to comply with regulations specific to the size and scale of the turbines. These turbines would be allowed as an accessory use in all zones provided the turbine complies with the Zoning Ordinance Section 6950 and obtains a Zoning Verification Permit prior to issuance of a building permit. However, small wind turbines could result in significant impacts to riparian habitat as described on pages 2.4-31 to 2.4-32 of the 2012 Wind Energy EIR because of removing or disturbing riparian or sensitive habitat (County of San Diego, 2012). Ground-mounted facilities may require ground disturbance that would not be subject to environmental review and, therefore, could affect riparian habitat if present. The Wind Energy Ordinance requires setbacks of 300 feet, or five times the turbine height, whichever is greater, from blue-line watercourses or water bodies mapped on the US Geological Survey topographic maps.

The 2012 Wind Energy EIR concluded that small turbines may result in a potentially significant adverse impact to riparian habitat because multiple small turbines are allowed on a single parcel as an accessory use without discretionary review (County of San Diego, 2012). The 2012 Wind Energy EIR considered mitigation that would have required the County to prepare and adopt MSCP plans for North and East County. However, this mitigation was determined to be infeasible because approvals from other agencies would be required and the timing of these plans could not be guaranteed. The North County MSCP is currently being prepared, but the East County MSCP plan has not been initiated. No other feasible mitigation is available. Therefore, with implementation of the 2011 GPU policies and 2011 GPU PEIR mitigation measures, overall impacts to riparian species associated with implementation of roof-mounted photovoltaic solar and other building retrofits would be less than significant, but impacts related to riparian species resulting from small wind turbines and ground-mounted solar photovoltaic would remain **potentially significant (Impact BIO-11)**.

Cumulative Impacts

Impacts would be cumulative in nature if the project, in combination with cumulative development, would contribute to the local or regional loss of riparian habitat in the County. The methodology for determining the cumulative environment described in Chapter 1, Project Description, and summarized above in Impact BIO-2 above applies for this cumulative discussion.

The 2011 GPU PEIR concluded that although cumulative impacts to riparian habitat resulting from the build-out associated with the General Plan would be reduced with implementation of the 2011 GPU policies and 2011 GPU PEIR mitigation measures listed above, and compliance with applicable state and federal regulations, they would remain significant and unavoidable because the 2011 GPU would allow for development outside of regional conservation plan areas. Additionally, implementation of small-scale wind turbines as described on pages 2.4-41 of the 2012 Wind Energy EIR, were determined to

be potentially significant because it is possible for wind turbines to be developed on a legal lot as an accessory use without a discretionary permit. Ground-mounted solar photovoltaic is also permitted on a legal lot as an accessory use without a discretionary permit and could result in potentially significant impacts because of ground disturbance or habitat removal. Therefore, the project **could result in a considerable contribution** to a significant cumulative impact (**Impact BIO-12**).

Large-Scale Renewable Energy Infrastructure

Implementation of GHG Reduction Measure E-2.1 could result in the construction of new large-scale renewable energy systems, including large-scale photovoltaic solar, concentrated solar power geothermal systems, and/or wind turbines. As described in detail above in Section 2.4.4.1, large-scale renewable energy infrastructure would generally be constructed in undeveloped locations that are productive for generating the renewable energy source. As a result, it is likely that the locations of such renewable energy projects would disturb some riparian communities. Specific locations for projects have not been identified. Photovoltaic, solar concentrator, wind turbines, and geothermal energy systems could result in impacts to riparian habitat and habitat loss because of construction activities, implementation of access roads and transmission lines, and conversion of large areas of land to infrastructure uses.

The 2012 Wind Energy EIR evaluated impacts to riparian habitat associated with the development of large-scale wind turbine facilities on pages 2.4-32 to 2.4-33. Future projects would be required to be evaluated for project-specific impacts under CEQA at the time of application and project-specific mitigation would minimize or eliminate impacts to riparian habitat to the extent feasible in compliance with CEQA Guidelines Section 15126.4. All large-scale wind projects would be subject to discretionary review and required to obtain a MUP. As part of the County's discretionary review process all large wind projects would be evaluated under CEQA and would be required to implement measures to minimize impacts to riparian habitat, as necessary. MUPs are also subject to several biological resource protection ordinances including the County's Resource Protection Ordinance, MSCP, Biological Mitigation Ordinance, Natural Communities Conservation Planning program, and other local or regional plans, policies, or regulations. Additionally, the 2012 Wind Energy EIR adopted Mitigation Measures M-BIO-1 and M-BIO-2 as described below in Section 2.4.5 which requires mitigation of significant impacts to riparian species. While these mitigation programs are in place, there is no guarantee that project-level impacts would not occur. Therefore, the 2012 Wind Energy EIR concluded that impacts to riparian habitat would remain potentially significant because there is no guarantee that mitigation could resolve all impacts (see page 2.4-33).

All other large-scale renewable energy projects allowed under these measures would be required to follow County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to protection of sensitive riparian habitat. Large-scale solar projects over 10 acres and geothermal energy facilities would be required to obtain a MUP and undergo discretionary review under CEQA. Furthermore, as described in Section 2.4.2, Regulatory Framework, several federal, state, and local regulations and policies are in place to protect sensitive biological resources in the

County. Compliance with 2011 GPU polices and 2011 GPU PEIR mitigation measures; compliance with existing local, state, and federal regulations that protect sensitive habitats; and completion of subsequent project-level planning and environmental review, would minimize and reduce potential impacts. However, the construction of renewable energy facilities could still adversely affect riparian habitat because of the scale and nature of the projects. The potential loss of riparian habitat would be a **potentially significant** impact (**Impact BIO-13**).

Cumulative Impacts

Impacts of the project would be cumulative in nature if, in combination with effects of other projects, they would contribute to the local or regional loss or degradation of riparian and other sensitive habitats in the County. The methodology for determining the cumulative environment described in Chapter 1, Project Description, and summarized above in Impact BIO-2 above applies for this cumulative discussion.

The 2011 GPU PEIR concluded that cumulative impacts to riparian habitat associated with buildout of the 2011 GPU would remain significant and unavoidable after implementation of the 2011 GPU policies and 2011 GPU PEIR mitigation measures listed above because the 2011 GPU would allow land uses and development to occur in areas outside of adopted regional conservation plans, thereby resulting in direct, indirect, and cumulative impacts to sensitive habitats. Additionally, the 2012 Wind Energy EIR concluded (see page 2.4-42) that impacts would remain significant related to large-scale wind turbines because it is not possible to guarantee that project-level mitigation could reduce all significant impacts below a level of significance. The project's direct and indirect effects to riparian habitat would be potentially significant even with compliance with applicable local, state and federal regulations because the locations of projects are unknown and it is possible that riparian habitat would be affected. Therefore, the project **could result in a considerable contribution** to a significant cumulative impact (**Impact BIO-14**).

Padre Dam Water and Wastewater Supporting Measure

As described in Chapter 1, Project Description, the CAP includes a Water and Wastewater Supporting Effort, that would support participation in the Padre Dam AWP project. The Padre Dam MWD prepared the Padre Dam PEIR and that analysis is hereby incorporated by reference. As described on pages 4.3-35 through 4.3-38 of the Padre Dam PEIR, potentially significant direct and indirect impacts were identified for riparian habitat. However, all impacts were reduced to a level below significance with implementation of mitigation measures BIO-2A and BIO-2B; and HYD-1 through HYD-3 as described in the Padre Dam PEIR. Therefore, The potential loss of riparian habitat because of the Padre Dam AWP would **less than significant**.

Cumulative Impacts

The Padre Dam PEIR evaluated the cumulative riparian habitat impacts of the project on page 6-16. As described therein, the AWP project would result in less-than-significant impacts to riparian habitat with implementation of mitigation measures Bio-1A through

Bio-1L, Bio-2A, Bio-2B, Bio-3A through Bio-3C, and Hyd-1 through Hyd-3 and it **would not have a considerable contribution** to a significant cumulative impact.

Impact Summary

With implementation of applicable 2011 GPU policies and 2011 GPU PEIR mitigation measures; compliance with existing federal, state, and local regulations that protect riparian habitats; and completion of subsequent project-level planning and environmental review, potential direct and cumulative impacts to riparian habitats because of construction of traffic calming, bicycle, pedestrian, park-and-ride facilities; new or expanded solid waste facilities; and agricultural projects would be **less than significant**. The County's participation in the AWP project would result in **less-than-significant** riparian habitat impacts, and **would not have a considerable contribution** to a significant cumulative impact to riparian habitat.

However, even with implementation of the GPU policies, GPU PEIR mitigation measures, 2012 Wind Energy EIR Mitigation Measures M-BIO-1 and M-BIO-2, additional significant direct and cumulative impacts to riparian habitats could result from new small-scale renewable energy projects because of the ability to install projects without discretionary review, large-scale renewable energy projects because of the scale and nature of the projects, and direct investment projects. Therefore, impacts to riparian habitats related to these types of projects would be **potentially significant** and **could result in a considerable contribution** to a significant cumulative impact.

2.4.4.3 Issue 3: Federally Protected Wetlands

This section describes potential project and cumulative impacts on federally protected wetlands because of implementation of the project.

Guidelines for Determination of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the project could result in a significant adverse effect related to biological resources if it would have a substantial adverse effect on federally protected waters of the United States, including wetlands, as defined by Section 404 of the CWA through direct removal, filling, hydrological interruption, or other means.

Impact Analysis

2011 GPU PEIR Determination

As described in the 2011 GPU PEIR, new development proposed under the 2011 GPU could potentially affect approximately 1,841 acres of federally protected wetlands in the unincorporated County. The GPU PEIR determined that this development would result in potentially significant direct impacts to federally protected wetlands, including direct filling, removal, or hydrological interruption. The discussion of impacts to wetlands can be found in Chapter 2.4 Biological Resources on pages 2.4-27 to 2.4-28 and 2.4-35; and 2.4-41 to 2.4-42, of the 2011 GPU PEIR and is hereby incorporated by reference. With

implementation of the applicable 2011 GPU policies and 2011 GPU PEIR mitigation measures, and compliance with applicable state and federal regulations, these potential impacts were determined to be reduced to a less-than-significant level. Specific policies and mitigation measures related to the protection of biological resources are listed above under Section 2.4.2, Regulatory Framework.

CAP Impact Analysis

GHG Reduction Measures

Implementation of the CAP has the potential to result in significant impacts from implementation of GHG reduction measures and supporting efforts that could result in new construction activities. As described above, implementation of GHG reduction measures as listed above in Section 2.4.3, could result in new park-and-ride facilities, new or expanded pedestrian and bicycle improvements, new or expanded solid waste facilities, direct investment projects, and improvements related to agricultural equipment. Additionally, GHG reduction measures could result in small and-large-scale renewable energy facilities including solar photovoltaic, concentrator solar, wind turbines, and geothermal energy.

Specific locations for projects have not been identified. Although removal of wetlands is not specifically proposed, implementation of the measures and efforts listed above could result in degradation or removal of these wetlands. Depending on the locations of new facilities, construction activities and project operations, these measures could result in direct and indirect disturbances or loss of federally protected wetlands through ground disturbance or conversion of habitat.

Future projects would be required to be evaluated for project-specific impacts under CEQA at the time of discretionary application and project-specific mitigation would minimize or eliminate impacts to federally protected wetlands to the extent feasible in compliance with CEQA Guidelines Section 15126.4. There are many federal, state, and local regulations in place to limit impacts to federally protected wetlands in the County. At the federal level, there are prohibitions regarding the discharge of pollutants or fill materials in waters of the U.S. without obtaining a Section 404 permit and Section 401 Water Quality certification. At the state level, the Lake and Streambed Alteration Program requires written notification to California Department of Fish and Wildlife prior to altering a riparian area (a type of wetland) supported by a lake, river, or stream, including federally protected wetlands. For water quality impacts to all wetlands, the California Porter-Cologne Water Quality Control Act directs the local water boards to develop regional Basin Plans, which, for the San Diego Region, is designed to preserve and enhance the quality of water resources in the region. At the local level, the County's Resource Protection Ordinance restricts impacts from certain project types to various wetlands, wetland buffers, floodways, and floodplain fringe areas, which would potentially contain federally protected wetlands. In addition, both the Watershed Protection Ordinance and the Zoning Ordinance include special protections for wetlands that would apply to federally protected wetlands, and would be applied at the time of discretionary project review. All future development projects would be required to follow County development requirements, including compliance with local policies, ordinances,

and applicable permitting procedures related to protection of sensitive biological resources. Therefore, with implementation of the 2011 GPU polices and 2011 GPU PEIR mitigation measures; compliance with existing local, state, and federal regulations that protect sensitive habitats; and completion of subsequent project-level planning and environmental review, potential direct and indirect impacts on federally protected wetlands resulting from implementation of the project would be **less than significant**.

Cumulative Impacts

Impacts from the project would be cumulative in nature if, in combination with effects of other projects, they would contribute to the local or regional loss or degradation of federally protected wetlands in the County. The methodology for determining the cumulative environment described in Chapter 1, Project Description, and summarized above in Impact BIO-2 above applies for this cumulative discussion.

The 2011 GPU PEIR concluded that cumulative impacts to federally protected wetlands associated with buildout of the General Plan would be reduced with implementation of the 2011 GPU policies and 2011 GPU PEIR mitigation measures listed above, and compliance with applicable state and federal regulations. The project's direct and indirect effects to federally protected wetlands would also be less than significant; therefore, the project **would not have a considerable contribution** such that a new significant cumulative riparian habitat impact would occur.

Padre Dam Water and Wastewater Supporting Measure

As described in Chapter 1, Project Description, the CAP includes a Water and Wastewater Supporting Effort, that would support participation in the Padre Dam AWP project. The Padre Dam MWD prepared the Padre Dam PEIR and that analysis is hereby incorporated by reference. As described on pages 4.3-33 through 4.3-36 of the Padre Dam PEIR, potentially significant direct and indirect impacts were identified for federally protected wetlands. However, all impacts were reduced to a level below significance with implementation of mitigation measures BIO-3A through BIO-3C; and HYD-1 through HYD-3 as described in the Padre Dam PEIR. Therefore, The potential loss of federally protected wetlands because of the Padre Dam AWP would **less than significant**.

Cumulative Impacts

The Padre Dam PEIR evaluated the cumulative riparian habitat impacts of the project on page 6-16. As described therein, the AWP project would result in less-than-significant impacts to federally protected wetlands with implementation of mitigation measures Bio-1A through Bio-1L, Bio-2A, Bio-2B, Bio-3A through Bio-3C, and Hyd-1 through Hyd-3, and it would not have a considerable contribution to a significant cumulative impact.

Impact Summary

With implementation of the applicable 2011 GPU polices and 2011 GPU PEIR mitigation measures; compliance with existing local, state, and federal regulations that protect sensitive habitats; and completion of subsequent project-level planning and environmental

review, potential direct and indirect impacts on wetland habitats resulting from new traffic calming measures, new or expanded park-and-ride facilities, new or expanded pedestrian and bicycle improvements, direct investment projects, new or expanded solid waste facilities, improvements related to agricultural equipment, small-or large-scale renewable energy systems, would be **less than significant** and the project **would not have a considerable contribution** such that a new significant cumulative wetland impact would occur. The County's participation in the AWP project would result in **less-than-significant** federally protected wetlands impacts, and **would not have a considerable contribution** to a significant cumulative impact to federally protected wetlands.

2.4.4.4 Issue 4: Wildlife Movement Corridors and Nursery Sites

This section describes potential direct and cumulative impacts on wildlife movement corridors and nursery sites because of implementation of the project.

Guidelines for Determination of Significance

Based on Appendix G of the CEQA Guidelines, the project could result in a significant adverse effect related to biological resources if it would interfere substantially with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Impact Analysis

2011 GPU PEIR Determination

The 2011 GPU PEIR evaluated impacts to wildlife movement corridors and nursery sites, including effects of new development proposed under the 2011 GPU. The 2011 GPU PEIR determined that new development would result in potentially significant direct (e.g., development resulting in blockage of a corridor, removal of nursery habitat), indirect (e.g., noise, nighttime lighting), and cumulative impacts to wildlife movement corridors or nursery sites. The discussion of impacts can be found in Chapter 2.4 Biological Resources on pages 2.4-28 through 2.4-31 and 2.4-36; and 2.4-42 through 2.4-43, of the 2011 GPU PEIR and is hereby incorporated by reference. Although these impacts would be reduced with implementation of the 2011 GPU policies and 2011 GPU PEIR mitigation measures, and compliance with applicable regulations, they were determined to remain significant and unavoidable. Specific policies and mitigation measures related to the protection of biological resources are listed above under Section 2.4.2, Regulatory Framework.

CAP Impact Analysis

Implementation of the project has the potential to result in significant impacts from implementation of GHG reduction measures and supporting efforts described above in Section 2.4.4.1 because of new construction or ground-disturbing activities could result in the loss of wildlife corridors or nursery sites. Intensified development near wildlife corridors or nursery sites would have the potential to result in direct or indirect impacts to core habitat areas and linkages. Direct impacts to wildlife movement corridors generally occur from

blockage or interference with the connectivity between blocks of habitat, a decrease in the width of a corridor or linkage that constrains movement, or the loss of visual continuity within a linkage or corridor. Depending on the locations of new facilities, construction activities and project operations associated with these measures could result in the conversion and fragmentation of habitat, and blockage of important movement corridors. The following section describes the potentially significant impacts to wildlife corridors and nursery sites that could result from the implementation of the measures.

Bicycle, Pedestrian, Park-and-Ride, Solid Waste Expansion, and Agricultural Projects

As described in detail in Section 2.4.4.1, implementation of GHG reduction measures and supporting efforts described above in Section 2.4.3 could result in new park-and-ride facilities, new or expanded pedestrian and bicycle improvements, new or expanded solid waste facilities, and improvements related to agriculture. Specific locations for such improvements have not been identified. However, because of the nature and scale of the type of improvements that would result from implementation of these measures, it is anticipated that the improvements would occur in more urbanized or previously developed areas (e.g., pedestrian improvements, park-n-ride, and solid waste facilities) that support existing residents or would be limited to existing agricultural operations, and would not result in disruption to corridors or nursery sites.

Future projects would be required to be evaluated for project-specific impacts under CEQA at the time of application and project-specific mitigation would minimize or eliminate impacts to wildlife corridors and nurseries to the extent feasible in compliance with CEQA Guidelines Section 15126.4. Implementation of the 2011 GPU policies and 2011 GPU PEIR mitigation measures listed above would reduce potential impacts to wildlife movement corridors and nursery sites because it would require the preservation of intact or sensitive natural resources, and require projects to design contiguous open space area, among other reasons. However, development could still occur in areas outside of regional conservation plan areas. While all future development projects would be required to follow County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to protection of sensitive biological resources, because regional conservation plans do not cover all areas of the county and development associated with these measures could occur outside areas where protections are not in place new park-and-ride facilities, new or expanded pedestrian and bicycle improvements, new or expanded solid waste facilities, and improvements related to agriculture could result in potential direct and indirect impacts on wildlife movement corridors and nursery sites. This impact would be **potentially significant (Impact BIO-15)**.

Cumulative Impacts

Impacts from implementation of the project would be cumulative in nature if, in combination with effects of other projects, they would contribute to the loss or degradation of important wildlife movement corridors or nursery sites in the County. The methodology for determining the cumulative environment described in Impact BIO-2 above applies for this cumulative discussion.

As described in the 2011 GPU PEIR, cumulative impacts to wildlife movement corridors and nursery sites were determined to be significant and unavoidable because the 2011 GPU would allow land uses and development to occur in areas outside of an adopted regional conservation plan, thereby resulting in direct, indirect, and cumulative impacts to corridors, linkages, and nursery sites. The project's impacts were determined to be potentially significant even with implementation of the 2011 GPU policies and 2011 GPU PEIR mitigation measures; compliance with existing local, state, and federal regulations that protect sensitive habitats; and completion of subsequent project-level planning and environmental review. Therefore, the project would have a **considerable contribution** to the significant cumulative wildlife movement corridor and nursery site impact (**Impact BIO-16**).

Direct Investments Program

Implementation of GHG Reduction Measure T-4.1 would result in direct investment of projects to offset carbon emissions. As described in detail in Chapter 2.7 and Appendix B of this Draft SEIR, there are a variety of projects that could result from implementation of this measure. See Chapter 2.7 and Appendix B for a detailed list. This list is not intended to be exhaustive, but represents some of the types of projects that could be considered in the future.

Most direct investment projects would involve some level of construction and physical disturbance of the land. This analysis assumes that implementation of direct investment projects under GHG Reduction Measure T-4.1 would result in construction activities that could include: the use of heavy equipment for earthmoving, materials processing, or compost spreading; vehicle trips during construction/equipment replacement/monitoring activities; possible changes in land form and views; and installation or upgrades of mechanical equipment or facilities. Construction activities and project operations associated with these measures could result in direct and indirect disturbances to wildlife corridors and nurseries through ground disturbance, or conversion of habitat. Depending on the location of these projects, construction could result in erosion, direct removal of habitat, or water quality issues.

Because the variety of projects that may be approved and ultimately undertaken by the County under the Direct Investment Program is not known, it is not possible to speculate upon the types of impacts that could occur and whether regulations or mitigation measures would be available to minimize potential environmental impacts. However, all projects would be required to comply with applicable existing federal, state, and local regulations. Specifically, projects would be evaluated for their consistency with 2011 GPU policies, 2011 GPU PEIR mitigation measures, County Grading Ordinance regulations, County Resources Protection Ordinance regulations, etc. Future discretionary projects may also be required to undergo additional CEQA analysis to evaluate its project-specific impacts. If a determination is made that potentially significant impacts would result from implementation of direct investment projects, then all feasible mitigation would be required to be implemented in accordance with CEQA Guidelines Section 15126.4.

While all feasible mitigation would be applied at the project level as part of the County's discretionary review process, construction of projects associated with GHG Reduction Measure T-4.1 could still adversely affect wildlife corridors and nurseries because of the potential impacts of the projects and because development could occur in areas where regional conservation plans are not in place. However, limited information is available on the number, type, and location of projects that would be implemented, as described above. At the programmatic level, it is not possible to determine with certainty that impacts to wildlife corridors and nurseries because of direct investment projects would be reduced below a level of significance. Therefore, direct investment projects would result in **potentially significant** impacts to wildlife corridors and nursery sites (**Impact BIO-17**).

Cumulative Impacts

Impacts would be cumulative in nature if the project, in combination with cumulative development, would contribute to the loss or degradation of important wildlife movement corridors or nursery sites in the County. The methodology for determining the cumulative environment described in Chapter 1, Project Description, and summarized above in Impact BIO-2 above applies for this cumulative discussion.

Implementation of GHG Reduction Measure T-4.1, would result in direct investment projects as described above. The 2011 GPU PEIR concluded that although cumulative impacts to wildlife corridors and nurseries resulting from the build-out associated with the General Plan would be reduced with implementation of the 2011 GPU policies and 2011 GPU PEIR mitigation measures listed above, and compliance with applicable state and federal regulations, they would remain significant and unavoidable. Projects would be required to be evaluated under CEQA and to reduce and minimize impacts to the maximum extent feasible, as well as comply with existing federal, state, and local regulations that protect sensitive resources. However, because the exact location and nature of direct investment projects is not known, the potential for a contribution to a cumulatively significant impact remains. Therefore, implementation of direct investment projects **could result in a considerable contribution** to a significant cumulative impact (**Impact BIO-18**).

Large-Scale Renewable Energy Infrastructure and Ground or Roof-Mounted Photovoltaic Solar, Small Wind Turbines, and other Building Retrofits

As described in detail in Section 2.4.4.1, implementation of GHG reduction measures could result in the construction of new small-and large-scale renewable energy systems, including photovoltaic solar, concentrated solar power, geothermal systems, and/or wind turbines. Large-scale renewable energy infrastructure would generally be constructed in primarily undeveloped locations that are productive for generating the renewable energy source. As a result, it is likely that the locations of such renewable energy projects could disrupt some wildlife corridors and disturb some nursery sites. Photovoltaic, solar concentrator, wind turbines and geothermal energy systems could result in impacts to wildlife corridors and nursery sites because of the scale of the facilities which can require large swaths of land and the possible need for access roadways and transmission lines which result in long linear improvements that could result in a physical deterrent to wildlife

corridors. Small-scale renewable energy systems would likely be constructed in developed residential areas of the County, but could still result in ground disturbance or disruption of habitat because of the ability to install renewable systems without a discretionary permit if criteria within the Zoning Ordinance are met.

The 2012 Wind Energy EIR evaluated impacts to nursery corridors related to the development of small- and large-scale wind turbine facilities on pages 2.4-36 to 2.4-37 (County of San Diego, 2012). Consistent with the County's Guidelines for Determining Significance for Biological Resources, a Biological Resources Report would be required for discretionary projects and must analyze the potential effects of projects on wildlife movement, corridors, and nursery sites, including the application of maximum feasible mitigation. As described on page 2.4-37 of the 2012 Wind Energy EIR, discretionary projects constructed within the County's adopted South County MSCP are required to maintain corridors and linkages. However, the County's Zoning Ordinance allows for the development of small wind turbines without discretionary review if the project meets established criteria. Because these projects would be processed through a ministerial review process, it is possible for small wind turbines to have adverse impacts on wildlife corridors. The EIR concluded that Mitigation Measures M-BIO-1 and M-BIO-2 would minimize impacts related to large-scale wind turbine projects, but found mitigation that would require the County to prepare MSCP plans for North and East County to be infeasible because of the uncertainty of their timing.

Therefore, even though all large wind turbine projects would be subject to discretionary review and required to obtain a MUP, and implement measures to minimize impacts to wildlife corridors, there remains potential for large wind turbine projects to result in direct impacts to wildlife movement and nurseries because of the introduction of new structures or vertical elements, and indirect effects may occur from increased noise levels or nighttime lighting that would discourage movement within corridors or linkages. Nursery sites are located throughout the County and include areas that provide the resources necessary for reproduction of a species, including foraging habitat, breeding habitat, and water sources. Determining whether a specific area is a nursery site requires field surveys, which would be evaluated at the project level during discretionary review. Therefore, direct impacts to nursery sites from implementation of the large wind turbine projects would occur if habitat is removed for development and infrastructure. Indirect impacts to nursery sites would have the potential to result from noise, lighting, changes in drainage patterns, and introduction of pests or domestic animals (2.4-36 to 2.4-37 of the Wind Energy EIR).

Future large-scale solar and geothermal projects would be required to be evaluated for project-specific impacts under CEQA at the time of application and project-specific mitigation would minimize or eliminate impacts to nursery sites and wildlife movement corridors to the extent feasible in compliance with CEQA Guidelines Section 15126.4. All large-scale renewable energy development projects would be required to follow County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to protection of wildlife corridors and sensitive habitat that may contain nursery sites. Furthermore, as described in Section 2.4.2, Regulatory Framework, several federal, state, and local regulations and policies are in

place to protect sensitive biological resources in the County. Implementation of the 2011 GPU policies, 2011 GPU PEIR mitigation measures, and the 2012 Wind Energy EIR Mitigation Measures M-BIO-1 and M-BIO-2 for large wind turbines; compliance with existing local, state, and federal regulations that protect sensitive habitats; and completion of subsequent project-level planning and environmental review, would minimize and reduce potential impacts. However, implementation small-and large-scale renewable energy facilities (e.g., wind, solar, and geothermal) could still adversely affect wildlife corridors and nursery sites because of the ability to install small systems without a discretionary permit, and because of the large swaths of land that would be required for large-scale wind, solar, and geothermal project projects. The potential disruption or loss of habitat would be a **potentially significant impact (Impact BIO-19)**.

Cumulative Impacts

Impacts of the project would be cumulative in nature if, in combination with effects of other projects, the project would contribute to the loss or degradation of important wildlife movement corridors or nursery sites in the County. The methodology for determining the cumulative environment described in Chapter 1, Project Description, and summarized above in Impact BIO-2 above applies for this cumulative discussion.

The 2011 GPU PEIR concluded that cumulative impacts related to disruption of wildlife corridors and nursery sites associated with buildout of the 2011 GPU would remain significant and unavoidable after implementation of the 2011 GPU policies and 2011 GPU PEIR mitigation measures listed above because the 2011 GPU would allow land uses and development to occur in areas outside of adopted regional conservation plans, thereby resulting in direct, indirect, and cumulative impacts to sensitive habitats. Further, the 2012 Wind Energy EIR concluded on page 2.4-43 that both small-and large-scale wind turbine projects could result in disruption of wildlife corridors and nursery sites because of the introduction of new structures and the inability to guarantee that project-specific mitigation could reduce impacts below a level of significance.

Therefore, implementation of new small- and large-scale renewable energy projects (e.g., wind, solar, and geothermal) could result in a cumulative loss of wildlife movement corridors and nursery sites because development would be allowed in areas where sensitive habitat and species occur, where regional conservation plans are not in place, or where discretionary approvals are not required. The project **would have a considerable contribution** to a significant cumulative wildlife corridor and nursery sites impact (**Impact BIO-20**).

Padre Dam Water and Wastewater Supporting Measure

As described in Chapter 1, Project Description, the CAP includes a Water and Wastewater Supporting Effort, that would support participation in the Padre Dam AWP project. The Padre Dam MWD prepared the Padre Dam PEIR and that analysis is hereby incorporated by reference. As described on pages 4.3-37 through 4.3-38 of the Padre Dam PEIR, potentially significant direct and indirect impacts were identified for nursery sites or wildlife corridors. However, all impacts were reduced to a level below significance

with implementation of mitigation measures Bio-1F through Bio-1K as described in the Padre Dam PEIR. Therefore, the potential loss of nursery sites or wildlife corridors because of the Padre Dam AWP would **less than significant**.

Cumulative Impacts

The Padre Dam PEIR evaluated the cumulative nursery sites and wildlife corridor impacts of the project on pages 6-16. As described therein, the AWP project would result in less-than-significant impacts to nursery sites and wildlife corridors with implementation of mitigation measures Bio-1F through Bio-1K and it **would not have a considerable contribution** to a significant cumulative impact.

Impact Summary

With implementation of applicable 2011 GPU policies and 2011 GPU PEIR mitigation measures; compliance with existing federal, state, and local regulations that protect wildlife corridors, nursery sites, and sensitive habitat; and completion of subsequent project-level planning and environmental review, potential direct and cumulative impacts to wildlife corridors and nursery sites as a result of the construction of traffic calming, bicycle, pedestrian, park-and-ride, new and expanded solid waste facilities, agricultural equipment improvement projects; and participation in the AWP Project would be **less than significant** related to wildlife corridors and nursery sites. The County's participation in the AWP project would result in **less-than-significant** nursery sites or wildlife corridor impacts, and **would not have a considerable contribution** to a significant cumulative impact to nursery sites or wildlife corridors.

However, even with implementation of the GPU policies, GPU PEIR mitigation measures, and 2012 Wind Energy EIR Mitigation Measures M-BIO-1 and M-BIO-2, additional significant direct and cumulative impacts to wildlife corridors and nursery sites could result from new small-and large-scale renewable energy systems because of the ability to install small-scale systems without a discretionary permit, and because of the scale and nature of large-scale projects. Therefore, project impacts to wildlife corridors and nursery sites related to the development of new traffic calming measures; new park-and-ride facilities; new or expanded pedestrian and bicycle improvements; new or expanded solid waste facilities; and improvements related to agriculture; small-and large-scale photovoltaic, concentrator solar, wind turbines, and geothermal energy systems; and direct investment projects would be **potentially significant** and these measures **could result in a considerable contribution** to a significant cumulative impact to wildlife corridors and nursery sites.

2.4.4.5 Issue 5: Local Policies or Ordinances

This section describes potential direct and cumulative impacts related to inconsistency with local policies or ordinances because of implementation of the project.

Guidelines for Determination of Significance

Based on Appendix G of the CEQA Guidelines, the project could result in a significant adverse effect related to biological resources if it would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Impact Analysis

2011 GPU PEIR Determination

The 2011 GPU PEIR evaluated consistency of planned new development under the 2011 GPU with local policies and ordinances. The discussion of impacts can be found in Chapter 2.4, Biological Resources on pages 2.4-31 to 2.4-32 and 2.4-36, of the 2011 GPU PEIR and is hereby incorporated by reference. Implementation of the 2011 GPU would result in no project or cumulative impacts related to potential conflict with local policies and ordinances, because future projects proposed under the 2011 GPU would be required to comply with applicable local policies and ordinances. Specific policies and mitigation measures related to the protection of biological resources are listed above under Section 2.4.2, Regulatory Framework.

CAP Impact Analysis

All GHG reduction measures and supporting efforts that would require construction of new facilities could potentially conflict with local policies and ordinances established to protect biological resources. As described in Section 2.4.2, Regulatory Framework, several federal, state, and local regulations and policies are in place to protect biological resources in the County. All future development projects would be required to follow County development requirements or other local jurisdiction requirements (e.g., Padre Dam MWD), including compliance with local policies, ordinances, and applicable permitting procedures related to protection of biological resources. Additionally, project-level planning, environmental analysis, and compliance with existing local regulations and policies would identify potentially significant conflicts with local policies; minimize or avoid those impacts through the design, siting, and permitting process; and provide mitigation for any significant effects as a condition of project approval and permitting. Further, as described in Section 2.9, Land Use, implementation of the project would result in less-than-significant impacts related to the potential conflict with a plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental impact. Therefore, implementation of the project would not result in any project or cumulative impacts related conflicts with local policies or ordinances protecting biological resources. **No impact** would occur.

2.4.4.6 Issue 6: Habitat Conservation Plans and NCCPs

This section describes potential project and cumulative impacts related to inconsistencies with local habitat conservation plans or NCCPs because of implementation of the project.

Guidelines for Determination of Significance

Based on Appendix G of the CEQA Guidelines, the project could result in a significant adverse effect related to biological resources if it would conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

Impact Analysis

2011 GPU PEIR Determination

The 2011 GPU PEIR evaluated consistency of planned new development under the 2011 GPU with the applicable habitat conservation plans (HCPs) and NCCPs for the County. The discussion of impacts can be found in Chapter 2.4, Biological Resources on pages 2.4-33 to 2.4-34 and 2.4-37, of the 2011 GPU PEIR and is hereby incorporated by reference. Implementation of the 2011 GPU would result in no impact related to potential conflict with applicable HCPs and NCCPs, because future projects proposed under the 2011 GPU would be required to comply with applicable HCPs and NCCPs. Specific policies and mitigation measures related to the protection of biological resources are listed above under Section 2.4.2, Regulatory Framework.

CAP Impact Analysis

All GHG reduction measures and supporting efforts that would require construction of new facilities have the potential to conflict with applicable HCPs and NCCPs. As described in Section 2.4.2, Regulatory Framework, future development projects located within County would be required to comply with applicable HCP/NCCP requirements promulgated by local, state, and/or federal agencies to proceed with development. Therefore, implementation of the project would not result in any project or cumulative impacts related conflicts with an adopted HCP or NCCP. **No impact** would occur.

2.4.5 Mitigation

2.4.5.1 Issue 1: Special-Status Species

The 2012 Wind Energy EIR included the following mitigation measures to minimize the potentially significant impacts related to large wind turbine projects:

Mitigation Measure M-BIO-1: During the environmental review process for future MUPs for wind turbines, the County Guidelines for Determining Significance for Biological Resources shall be applied. When impacts to biological resources are determined to be significant, feasible and appropriate project-specific mitigation measures shall be incorporated. Examples of standard mitigation measures within the County Guidelines include: avoidance of sensitive resources; preservation of habitat; revegetation; resource management; and restrictions on lighting, runoff, access, and/or noise.

Mitigation Measure M-BIO-2: Update the County Guidelines for Determining Significance for Biological Resources to include, or incorporate by reference, recommendations from the California Department of Fish and Game, the Avian Power Line Interaction Committee, the USFWS Draft Guidance, and the California Energy Commission (e.g., California Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development). Examples of recommended mitigation measures include: site screening; pre-permitting monitoring; acoustic monitoring; buffer zone inclusion; reduction of foraging resources near turbines; specific lighting to reduce bird collisions; post-construction monitoring; and avian protection plans.

As described in Section 2.4.4.1, additional wind turbine mitigation was considered but rejected as infeasible through the 2012 Wind Energy EIR. Mitigation Measures M-BIO-1 and M-BIO-2 shall be incorporated into the Mitigation Monitoring and Reporting Program (MMRP) for the CAP and shall be applied to all large-scale renewable energy projects including but not limited to solar photovoltaic, solar concentrator, wind turbine, and utility-scale geothermal systems during the discretionary review process which would occur as a condition of receiving a MUP. As described during the impacts analysis, future large-scale renewable energy projects would be required to be evaluated for project-specific impacts under CEQA at the time of application and project-specific mitigation would minimize or eliminate impacts to special-status species to the extent feasible in compliance with CEQA Guidelines Section 15126.4. However, because of the uncertainty of the types, locations, and scale of future renewable energy projects, it is not possible to guarantee that all impacts to special-status species would be reduced to a level below significance. Mitigation Measures M-BIO-1 and M-BIO-2 from the 2012 Wind Energy Ordinance EIR have been revised to include all large-scale renewable energy projects as follows:

CAP Mitigation Measure M-BIO-1: During the environmental review process for future MUPs for large-scale renewable energy projects, the County Guidelines for Determining Significance for Biological Resources shall be applied. When impacts to biological resources are determined to be significant, feasible and appropriate project-specific mitigation measures shall be incorporated. Examples of standard mitigation measures within the County Guidelines include: avoidance of sensitive resources; preservation of habitat; revegetation; resource management; and restrictions on lighting, runoff, access, and/or noise.

CAP Mitigation Measure M-BIO-2: Update the County Guidelines for Determining Significance for Biological Resources to include, or incorporate by reference, recommendations from the California Department of Fish and Wildlife, the Avian Power Line Interaction Committee, the USFWS Draft Guidance, and the California Energy Commission (e.g., California Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development). Examples of recommended mitigation measures include: site screening; pre-permitting monitoring; acoustic monitoring; buffer zone inclusion; reduction of foraging resources near turbines and transmission lines; specific lighting to reduce bird collisions; post-construction monitoring; and avian protection plans.

Additional mitigation was contemplated as part of this Draft SEIR that would implement a development cap upon large-scale renewable energy projects. That mitigation was rejected as infeasible because it may reduce the effectiveness of GHG Reduction Measure E-2.1 diminish the potential for the County to achieve the 2030 GHG emissions reduction target established by the CAP. This mitigation would also be infeasible because it would conflict with the County's goal for expanding renewable energy resources. It is unknown how many numbers and types of renewable large-scale renewable energy facilities would be required to meet the GHG reduction goals of the CAP because the design, siting, and economic feasibility characteristics of the options under consideration vary widely. No other additional feasible mitigation is available.

Therefore, as described above in Section 2.4.4.1 Special-Status Species, even with implementation of the adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measures M-BIO-1 and M-BIO-2 (listed above) that protect special-status species, additional significant project and cumulative impacts to special-status species and habitats could occur from implementation of GHG Reduction Measure E-2.1 because of the scale and nature of the projects and possibility of the construction of multiple projects in a similar vicinity. Individual renewable energy projects that would result in special-status species impacts would be required to comply with all state and federal regulations, including obtaining applicable permits for incidental take of special-status species. Additionally, individual renewable energy projects that were developed within certain areas of the County would be required to comply with the mitigation requirements of adopted habitat conservation plans covering those areas. Where such plans do not exist, the federal and state permitting requirements would apply.

No other feasible project-related mitigation beyond existing federal and state permitting requirements and compliance with the County's adopted 2011 GPU policies or mitigation measures is available and could be applied to individual projects under the CAP. Where a project would comply with existing regulations and habitat conservation plan requirements and would receive applicable permits from regulatory agencies, it would reduce its project-specific impacts to a less-than-significant level and would reduce its contribution to cumulative impacts such that it would not be considerable. However, the project would have a **significant and unavoidable impact** and a **considerable contribution** to a significant cumulative impact to special-status species.

Project level impacts and mitigation measures were identified within the Padre Dam PEIR as described above in Section 2.4.4.1. The County is not currently relying upon GHG reduction from this Water and Wastewater Supporting Effort. However, should the County choose to implement this measure, the County shall provide fair share participation in the mitigation identified in the Padre Dam PEIR as required by CEQA Guidelines Section 15096(g)(1). No additional mitigation is required.

2.4.5.2 Issue 2: Riparian Habitat and Other Sensitive Natural Communities

CAP Mitigation Measures M-BIO-1 and M-BIO-2 shall be incorporated into the MMRP for the CAP and shall be applied to all large-scale renewable energy projects including but not

limited to solar photovoltaic, solar concentrator, wind turbine, and utility-scale geothermal systems during the discretionary review process which would occur as a condition of receiving a MUP. As described during the impacts analysis, future, large-scale renewable energy projects would be required to be evaluated for project-specific impacts under CEQA at the time of application and project-specific mitigation would minimize or eliminate impacts to riparian habitat to the extent feasible in compliance with CEQA Guidelines Section 15126.4. However, because of the uncertainty of the types, locations, and scale of future renewable energy projects, it is not possible to guarantee that all impacts to riparian habitat would be reduced to a level below significance. Additional mitigation that would implement a development cap upon large-scale renewable energy projects was considered but rejected as infeasible because it may reduce the effectiveness of GHG Reduction Measure E-2.1 and achievement of the County's 2030 GHG emissions reduction target. It is unknown how many numbers and types of renewable large-scale renewable energy facilities would be required to meet the GHG reduction goals of the CAP because the design, siting, and economic feasibility characteristics of the options under consideration vary widely. No other additional feasible mitigation is available.

As described above in Section 2.4.4.2 Riparian Habitat, even with implementation of the adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that protect riparian habitat, additional significant project and cumulative impacts to riparian habitat could occur from implementation of the project. All projects that would result in riparian habitat impacts would be required to comply with all local, state and federal regulations. Additionally, projects that were developed within certain areas of the County would be required to comply with the mitigation requirements of adopted habitat conservation plans covering those areas. Where such plans do not exist, the federal and state permitting requirements would apply.

No other feasible project-related mitigation beyond existing federal and state permitting requirements and compliance with the County's adopted 2011 GPU policies or mitigation measures is available and could be applied to individual projects under the CAP. Where a project would comply with existing regulations and habitat conservation plan requirements and would receive applicable permits from regulatory agencies, it would reduce its project-specific impacts to a less-than-significant level and would reduce its contribution to cumulative impacts such that it would not be considerable. However, the project would have a **significant and unavoidable impact** and a **considerable contribution** to a significant cumulative impact to riparian habitat.

Project level impacts and mitigation measures were identified within the Padre Dam PEIR as described above in Section 2.4.4.2. The County is not currently relying upon GHG reduction from this Water and Wastewater Supporting Effort. However, should the County choose to implement this measure, the County shall provide fair share participation in the mitigation identified in the Padre Dam PEIR as required by CEQA Guidelines Section 15096(g)(1). No additional mitigation is required.

2.4.5.3 Issue 3: Federally Protected Wetlands

Project level impacts and contributions to cumulative impacts were determined to be less than significant; therefore, no mitigation measures in addition those identified in the 2011 GPU PEIR are required.

2.4.5.4 Issue 4: Wildlife Movement Corridors and Nursery Sites

As described above in Section 2.4.4.4 Wildlife Movement Corridors and Nursery Sites, even with implementation of the adopted 2011 GPU policies, 2011 GPU PEIR mitigation measures listed in Section 2.4.2 above, and CAP Mitigation Measures M-BIO-1 and M-BIO-2 that protect wildlife corridors and sensitive habitat, additional significant project and cumulative impacts could occur from implementation of the project. As described during the impacts analysis, future projects would be required to be evaluated for project-specific impacts under CEQA at the time of application and project-specific mitigation would minimize or eliminate impacts to wildlife corridors and nurseries to the extent feasible in compliance with CEQA Guidelines Section 15126.4. However, because of the uncertainty of the types, locations, and scale of projects, it is not possible to guarantee that all impacts to wildlife corridors and nurseries would be reduced to a level below significance. Additional mitigation that would implement a development cap upon large-scale renewable energy projects was considered but rejected as infeasible because it may reduce the effectiveness of GHG Reduction Measure E-2.1 and achievement of the County's 2030 GHG emissions reduction target. It is unknown how many numbers and types of renewable large-scale renewable energy facilities would be required to meet the GHG reduction goals of the CAP because the design, siting, and economic feasibility characteristics of the options under consideration vary widely. No other additional feasible mitigation is available.

Projects that would result in wildlife corridor and nursery site impacts would be required to comply with all local, state, and federal regulations. Additionally, projects that were developed within certain areas of the County would be required to comply with the mitigation requirements of adopted habitat conservation plans covering those areas. Where such plans do not exist, the federal and state permitting requirements would apply.

No other feasible project-related mitigation beyond existing federal and state permitting requirements and compliance with the County's adopted 2011 GPU policies or mitigation measures, is available and could be applied to individual projects under the CAP. Where a project would comply with existing regulations and habitat conservation plan requirements and would receive applicable permits from regulatory agencies, it would reduce its project-specific impacts to a less-than-significant level and would reduce its contribution to cumulative impacts such that it would not be considerable. However, the project would have a **significant and unavoidable impact** and a **considerable contribution** to a significant cumulative impact to wildlife corridors and nursery sites would remain.

Project level impacts and mitigation measures were identified within the Padre Dam PEIR as described above in Section 2.4.4.4. The County is not currently relying upon GHG reduction from this Water and Wastewater Supporting Effort. However, should the County

choose to implement this measure, the County shall provide fair share participation in the mitigation identified in the Padre Dam PEIR as required by CEQA Guidelines Section 15096(g)(1). No additional mitigation is required.

2.4.5.5 Issue 5: Local Policies or Ordinances

Project level impacts and contributions to cumulative impacts were determined to be less than significant; therefore, no mitigation measures in addition those identified in the 2011 GPU PEIR are required.

2.4.5.6 Issue 6: Habitat Conservation Plans and NCCPs

Project level impacts and contributions to cumulative impacts were determined to be less than significant; therefore, no mitigation measures in addition those identified in the 2011 GPU PEIR are required.

Table 2.4-1 Special-Status Animals in the County of San Diego

Species	Regulatory Status ¹		Habitat
	Federal	State	
Reptiles			
Baja California coachwhip ² <i>Coluber fuliginosus</i>		SSC	In California restricted to southern San Diego County, where it is known from grassland and coastal sage scrub. Open areas in grassland and coastal sage scrub
California glossy snake ² <i>Arizona elegancy occidentalis</i>		SSC	Patchily distributed from the eastern portion of San Francisco bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular Ranges south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.
desert tortoise ² <i>Gopherus agassizii</i>	FT	ST	Joshua tree woodland, Mojavean desert scrub, Sonoran desert scrub. Most common in desert scrub, desert wash, and Joshua tree habitats; occurs in almost every desert habitat. Require friable soil for burrow and nest construction. Creosote bush habitat with large annual wildflower blooms preferred.
green sea turtle ² <i>Chelonia mydas</i>	FT		Marine bay. Marine. Completely herbivorous; needs adequate supply of seagrasses and algae.
sandstone night lizard ² <i>Xantusia gracilis</i>		SSC	Known only from the Truckhaven Rocks in the eastern part of Anza-Borrego State Park. Found in fissures or under slabs of exfoliating sandstone and rodent burrows in compacted sandstone and mudstone
south coast gartersnake ² <i>Thamnophis sirtalis</i> ssp.		SSC	Artificial standing waters, marsh and swamp, riparian scrub, riparian woodland, South coast flowing waters, South coast standing waters, wetland. Southern California coastal plain from Ventura County to San Diego County, and from sea level to about 850 meters. Marsh and upland habitats near permanent water with good strips of riparian vegetation.

Species	Regulatory Status ¹		Habitat
	Federal	State	
Birds			
Swainson's hawk ² <i>Buteo swainsoni</i>	BCC	ST	Great Basin grassland, riparian forest, riparian woodland, valley and foothill grassland. Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.
Fish			
razorback sucker ² <i>Xyrauchen texanus</i>	FE	SE FP	Aquatic, Colorado River basin flowing waters. Found in the Colorado River bordering California. Adapted for swimming in swift currents but also need quiet waters. Spawn in areas of sand/gravel/rocks in shallow water.
Mammals			
lesser long-nosed bat ² <i>Leptonycteris yerbabuenae</i>	FE		Mojavean desert scrub, Sonoran desert scrub, upper Sonoran scrub. Arid regions such as desert grasslands and shrub land. Suitable day roosts (caves and mines) and suitable concentrations of food plants (columnar cacti and agaves) are critical resources. No maternity roosts known from California; may only be vagrant. Caves and mines are used as day roosts. Caves, mines, rock crevices, trees and shrubs, and abandoned buildings are used as night roosts for digesting meals. Nectar, pollen, and fruit eating bat; primarily feeding on agaves, saguaro, and organ pipe cactus.
Palm Springs pocket mouse ² <i>Perognathus longimembris bangsi</i>		SSC	Desert wash, Sonoran desert scrub. Desert riparian, desert scrub, desert wash and sagebrush habitats. most common in creosote-dominated desert scrub. Rarely found on rocky sites. Occurs in all canopy coverage classes.
San Bernardino Merriam's kangaroo rat ² <i>Dipodomys merriami parvus</i>	FE	SSC	Coastal scrub. Alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains. Needs early to intermediate seral stages.
Note: CNDDDB = California Natural Diversity Database			
¹ Legal Status Definitions			
² Species that were not previously included in the 2011 GPU PEIR			
Federal:		State:	
FE Endangered (legally protected)		SD Delisted	
FT Threatened (legally protected)		FP Fully protected (legally protected)	
FD Delisted		SSC Species of special concern (no formal protection other than CEQA consideration)	
FC Candidate for Listing		SE Endangered (legally protected)	
BCC USFWS Bird of Conservation Concern		ST Threatened (legally protected)	
USFS-S US Forest Service Sensitive Species			

Species	Regulatory Status ¹		Habitat
	Federal	State	
			SC <i>Candidate for State Listing</i>
Species with no state or federal status listed are monitored by the CNDDDB because of other non-regulatory status (e.g., NatureServe global rank, International Union for Conservation of Nature (IUCN) ranking, Western Bat Working Group ranking).			
Sources: CNDDDB 2017; USFWS 2017			

Table 2.4-2 Special-Status Plants in the County of San Diego

Species	Regulatory Status ¹			Habitat
	Federal	State	CRPR	
gravel milk-vetch ² <i>Astragalus sabulonum</i>			2B.2	Desert dunes, Mojavean desert scrub, Sonoran desert scrub. Sandy or gravelly flats, washes, and roadsides. 197 to 2,904 ft. in elevation. Blooms February-June.
Higgin's barberry ² <i>Berberis higginsiae</i>			3.2	Chaparral, Sonoran desert scrub. Rocky, sometimes granitic. 2,625 to 3,494 ft. in elevation. Blooms March-April.
Santa Rosa Basalt brodiaea ² <i>Brodiaea santarosae</i>			1B.2	Valley and foothill grassland. Santa Rosa Basalt. 1,919 to 3,428 ft. in elevation. Blooms May-June.
San Jacinto mariposa-lily ² <i>Calochortus palmeri</i> var. <i>munzii</i>			1B.2	Lower montane coniferous forest, chaparral, meadows. Seen in open Jeffrey pine forest as well as in chaparral. 3,084 to 5,955 ft. in elevation. Blooms April-July.
Arizona pussypaws ² <i>Calyptridium arizonicum</i>			2B.1	Sonoran Desert scrub. Metamorphics. In washes. 1,985 to 2,608 ft. in elevation. Blooms March-April.
San Luis Obispo sedge ² <i>Carex obispoensis</i>			1B.2	Closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland. Usually in transition zone on sand, clay, serpentine, or gabbro. In seeps. 16 to 2,772 ft. in elevation. Blooms April-June.
deceiving sedge ² <i>Carex saliniformis</i>			1B.2	Wetland. Coastal prairie, coastal scrub, meadows and seeps, marshes and swamps (coastal salt). Mesic sites. 10 to 755 ft. in elevation. Blooms June-July.
white-bracted spineflower ² <i>Chorizanthe xanti</i> var. <i>leucotheca</i>			1B.2	Mojavean desert scrub, pinyon-juniper woodland, coastal scrub (alluvial fans). Sandy or gravelly places. 984 to 3,937 ft. in elevation. Blooms April-June.
Wiggins' cryptantha ² <i>Cryptantha wigginsii</i>			1B.2	Coastal scrub. Often on clay soils. 148 to 361 ft. in elevation. Blooms February-June.
pink teddy-bear cholla ² <i>Cylindropuntia fosbergii</i>			1B.3	Sonoran desert scrub. 279 to 2,789 ft. in elevation. Blooms March-May.
Harwood's eriastrum ² <i>Eriastrum harwoodii</i>			1B.2	Desert dunes. 246 to 2,362 ft. in elevation. Blooms March-June.
Abrams' spurge ² <i>Euphorbia abramsiana</i>			2B.2	Mojavean desert scrub, Sonoran desert scrub. Sandy sites. -148 to 4,741 ft. in elevation. Blooms August-November.
San Jacinto Mountains bedstraw ² <i>Galium angustifolium</i> ssp. <i>jacinticum</i>			1B.3	Lower montane coniferous forest. Open mixed forest. 3,904 to 8,005 ft. in elevation. Blooms June-August.

Species	Regulatory Status ¹			Habitat
	Federal	State	CRPR	
desert bedstraw ² <i>Galium proliferum</i>			2B.2	Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland. Rocky, limestone substrate. 3,904 to 5,348 ft. in elevation. Blooms March-June.
El Paso gilia ² <i>Gilia mexicana</i>			2B.3	Pinyon and juniper woodland. Alluvial soil in washes, on bajadas, hillsides, arroyos, and plains. 3,445 to 4,839 ft. in elevation. Blooms May.
Palmer's grapplinghook ² <i>Harpagonella palmeri</i>			4.2	Chaparral, coastal scrub, valley and foothill grassland. Clay soils; open grassy areas within shrubland. 66 to 3,133 ft. in elevation. Blooms March-May.
Algodones Dunes sunflower ² <i>Helianthus niveus</i> ssp. <i>tephrodes</i>		SE	1B.2	Desert dunes. On partially stabilized desert dunes. 164 to 328 ft. in elevation. Blooms September-May.
spiny-hair blazing star ² <i>Mentzelia tricuspidis</i>			2B.1	Mojavean desert scrub. Sandy or gravelly slopes and washes. 492 to 4,199 ft. in elevation. Blooms March-May.
intermediate monardella ² <i>Monardella hypoleuca</i> ssp. <i>intermedia</i>			1B.3	Chaparral, cismontane woodland, lower montane coniferous forest (sometimes). Often in steep, brushy areas. 640 to 5,495 ft. in elevation. Blooms April-September.
appressed muhly ² <i>Muhlenbergia appressa</i>			2B.2	Coastal scrub, Mojavean desert scrub, valley and foothill grassland. Rocky slopes, canyon bottoms. 66 to 5,249 ft. in elevation. Blooms April-May.
Twisselmann's nemacladus ² <i>Nemacladus twisselmannii</i>			1B.2	Upper montane coniferous forest. Sandy or rocky granitic soils, open ridgetops and gentle slopes in Jeffrey pine forest. 3,986 to 7,808 ft. in elevation. Blooms July.
short-lobed broomrape ² <i>Orobanche parishii</i> ssp. <i>brachyloba</i>			4.2	Coastal bluff scrub, coastal dunes, coastal scrub. Sandy soil near beaches; reported to grow on <i>Isocoma menziesii</i> and other shrubs. 10 to 1,001 ft. in elevation. Blooms April-October.
Santiago Peak phacelia ² <i>Phacelia keckii</i>			1B.3	Closed-cone coniferous forest, chaparral. Open areas, sometimes along creeks. 1,788 to 5,249 ft. in elevation. Blooms May-June.
Arizona pholistoma ² <i>Pholistoma auritum</i> var. <i>arizonicum</i>			2B.3	Mojavean desert scrub. 902 to 2,740 ft. in elevation. Blooms March.
Thurber's pilostyles ² <i>Pilostyles thurberi</i>			4.3	Sonoran desert scrub. Sandy alluvial plains, sandstone talus. Parasite on <i>Psoralea emoryi</i> (and <i>Psoralea polydenius</i> in Nevada). -164 to 1,198 ft. in elevation. Blooms December-April.
Deep Canyon snapdragon ² <i>Pseudorontium cyathiferum</i>			2B.3	Sonoran desert scrub. Rocky sites. 0 to 2,625 ft. in elevation. Blooms February-April.

Species	Regulatory Status ¹			Habitat
	Federal	State	CRPR	
Hellhole scaleseed ² <i>Spermolepis infernensis</i>			1B.2	Sonoran desert scrub. Rocky or sandy. 755 to 2,198 ft. in elevation. Blooms March-April.
western bristly scaleseed ² <i>Spermolepis lateriflora</i>			2A	Sonoran desert scrub. Rocky or sandy. 1,198 to 2,198 ft. in elevation. Blooms March-April.
prairie wedge grass ² <i>Sphenopholis obtusata</i>			2B.2	Wetland. Cismontane woodland, meadows and seeps. Open moist sites, along rivers and springs, alkaline desert seeps. 984 to 6,562 ft. in elevation. Blooms April-July.
Laguna Mountains jewelflower ² <i>Streptanthus bernardinus</i>			4.3	Chaparral, lower montane coniferous forest. Clay or decomposed granite soils; sometimes in disturbed areas such as streamsides or roadcuts. 4,724 to 8,202 ft. in elevation. Blooms May-August.
rigid fringe pod ² <i>Thysanocarpus rigidus</i>			1B.2	Pinyon and juniper woodland. Dry, rocky slopes and ridges of oak and pine woodland in arid mountain ranges. 1,394 to 7,103 ft. in elevation. Blooms February-May.
Palmer's jackass clover ² <i>Wislizenia refracta</i> ssp. <i>palmeri</i>			2B.2	Chenopod scrub, Sonoran desert scrub, Sonoran thorn woodland, desert dunes, desert wash. Known from desert basins, dunes, washes and benches of sand field ecotones where upland desert scrubs, typically creosote bush scrub or palo verde, transition to halophytic scrub or mesquite. 410 to 574 ft. in elevation. Blooms January-December.
Notes: USFWS = CRPR = California Rare Plant Rank; CNDDDB = California Natural Diversity Database				
¹ Legal Status Definitions				
² Species that were not previously included in the 2011 GPU PEIR				
Federal: <i>E</i> Endangered (legally protected by ESA) <i>T</i> Threatened (legally protected by ESA) State: <i>E</i> Endangered (legally protected by CESA) <i>R</i> Rare (legally protected by CNPPA)			California Rare Plant Ranks: <i>1B</i> Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA) <i>2B</i> Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA) Threat Ranks <i>0.1</i> -Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat) <i>0.2</i> -Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)	
Sources: CNDDDB 2017; Calflora 2017; CNPS 2017				

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