

2.2 Agriculture and Forest Resources

This section assesses general agriculture and forest resources in the County of San Diego (County) and identifies potential agriculture and forest resource impacts that could occur as a result of implementation of the proposed project. The information used in this analysis is general in nature and is derived from the most readily available information in applicable resource and planning documents. Site-specific Local Agricultural Resource Assessment (LARA) models were not performed for the proposed project.

2.2.1 Existing Conditions

The County has 6,687 farms, more than any other county in California (USDA 2009). Agriculture in the County provides an array of economic, environmental, and social benefits that contribute to the quality of life in the region. Agricultural production takes place on 315,296 acres of land, less than 12% of the entire county. Additionally, approximately 94% of the County's agricultural value occurs on 60,285 acres, which reflects the high dollar value and intense land use associated with specialty crops such as nursery, flower, fruit, and nut crops, as well as vegetable production (County of San Diego 2009).

Future small wind turbines and Meteorological Testing (MET) facilities as a result of the proposed Zoning Ordinance amendment would be able to occur throughout the County provided that they meet the standards and limitations as outlined in Section 1.4 of the Project Description. All future large turbine projects would be subject to discretionary review and required to obtain a Major Use Permit. There are numerous locations within the County where wind turbines may be developed, many of which include rural areas due to higher wind resource potential. However, the exact location of wind turbines and MET facility projects is currently unknown. As a result, it is not possible to provide more specific information regarding existing agricultural resource conditions that could be affected by the proposed Zoning Ordinance amendment.

Crops and Operations

The County has a subtropical climate that optimizes the production of a variety of crops that would be more difficult to produce elsewhere. With only 6% of the County's soils classified as prime, agriculture has succeeded by finding high value, specialty crops that take advantage of the unique microclimates. The County's unique topography creates a wide fluctuation of microclimates resulting in nearly 30 different types of vegetation communities. The County's climate and vegetation communities support a year-round growing season that facilitates small farms and crop diversification, producing over 200 agricultural commodities—from strawberries along the coast, apples in the mountain areas, to palm trees in the desert. The success of the County's diverse agricultural industry is reflected in 45 commercial crops, each holding a value

of over \$1 million. In the County, 68% of farms are between 1 and 9 acres, with an average farm size of 4 acres. The County's farmers rank number one in both California and the nation in the production value of nursery, floriculture, and avocados. Statewide, the County is in the top five counties in the production of oranges, chickens, fresh market tomatoes, eggs, mushrooms, tangerines, grapefruit, and honey. In terms of agricultural value, major crop categories for the County include nursery and flower crops (cut flowers, bedding plants, foliage), fruit and nut crops (avocados, citrus, berries), vegetable crops (tomatoes, mushrooms, herbs), livestock and poultry (cattle, pigs, chickens), livestock and poultry products (milk, eggs, hide), field crops (barley, hay, oat), timber, and apiary products (honey, bees, wax, pollen). The top 10 crops grown in the County include indoor flowering and foliage plants, ornamental trees and shrubs, bedding plants, avocados, tomatoes, cut flower and foliage, eggs, poinsettias, strawberries, and Valencia oranges. Additionally, the County has the largest community of organic farming with 292 registered organic growers.

Forest Resources

“Forest land” is land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits (California Public Resources Code, Section 12220(g)). The County does not include lands zoned specifically for forest land.

The Cleveland National Forest (CNF) covers a large part of the unincorporated County, including areas in Alpine, Central Mountain, Jamul-Dulzura, Julian, Mountain Empire, North Mountain, and Pendleton-De Luz. However, the CNF is primarily under the land use jurisdiction of the U.S. Forest Service, not the County.

Agricultural Zoning

Approximately 31% of the unincorporated area in the County is zoned A70 limited agriculture or A72 general agriculture. The A70 Use Regulations relate to crop production and allow for a limited number of small farm animals to be kept. The A72 Use Regulation is intended for both crops and animals.

The acreage of land within the County and wind resource areas designated A70 and A72 is identified in the Tables 2.2-1 and 2.2-2.

Agricultural Land Use

The County's General Plan allows agricultural operations to occur under all land use designations. Most agricultural lands fall within the Rural and Semi-Rural land use designation.

The General Plan encourages new or expanded agricultural land uses to provide a buffer of non-intensive agriculture or other appropriate uses (e.g., landscape screening) between intensive uses and adjacent non-agricultural land uses; see Figure 2.2-1, County Identified Agricultural Lands. Uses supportive of and/or compatible with agriculture include estate residential.

Williamson Act Contract Lands

The purpose of the Williamson Act contract is to preserve agricultural and open space lands by discouraging premature and unnecessary conversion to urban uses. In the unincorporated County, approximately 80,504 acres of private, federal, and state lands are in Williamson Act contract; see Figure 2.2-2, Williamson Act Contract Lands. During the past 25 years, very few property owners have requested to enter into a Williamson Act contract within the County. According to the County Assessor's Office, only two contracts were executed in the County between 1980 and 2005, and 40 parcels currently under a Williamson Act contract are in the process of Non-Renewal, as defined by the Williamson Act.

Department of Conservation Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP) produces Important Farmland maps, which identify the suitability of agricultural lands in the State of California on a county-by-county basis. The classification of important farmlands is based on both land use and soil. In order for land to be shown as Prime Farmland or Farmland of Statewide Importance, land must have been used for irrigated agricultural production at some point within 4 years of the Important Farmland map publishing date and must contain soils that meet the physical and chemical requirements for classification as Prime Farmland/Farmland of Statewide Importance, as determined by the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS). The NRCS evaluates soil based on a variety of criteria, including available water capacity, soil temperature, acid-alkali balance, soil sodium content, and permeability rate (DOC 2009). The FMMP maps approximately 47.9 million acres of land in 49 counties in the State of California. FMMP maps are updated and released every 2 years. The Important Farmland Map categories and the acreage of the FMMP categories present in the County are described below.

Prime Farmland has the most favorable combination of physical and chemical features, enabling it to sustain long-term production of agricultural crops. This land possesses the soil quality, growing season, and moisture supply needed to produce sustained high yields. In order to qualify for this classification, the land must have produced irrigated crops at some point during the two update cycles prior to NRCS mapping. The County contains 8,251 acres designated Prime Farmland, or about 0.30% of the total County acreage.

Farmland of Statewide Importance is similar to Prime Farmland, but it possesses minor shortcomings, such as greater slopes and/or less ability to store moisture. In order to qualify for this classification, the land must have produced irrigated crops at some point during the two update cycles prior to NRCS mapping. The County contains approximately 10,959 acres of designated Farmland of Statewide Importance (0.40% of the total County acreage).

Unique Farmland is of lesser quality soils and is used for the production of the state's leading agricultural crops. Unique Farmland does not meet the above-stated criteria for Prime Farmland or Farmland of Statewide Importance, but it consists of areas that have been used for the production of specific crops with high economic value during the two update cycles prior to the mapping date. It has the special combination of soil quality, location, growing season, and moisture supply needed to produce sustained high-quality crop and/or high yields of a specific crop when treated and managed according to current farming methods. This land is usually irrigated, but it may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped some time during the 4 years prior to the mapping date. The County contains approximately 53,250 acres designated as Unique Farmland (1.96% of the total County acreage).

Farmland of Local Importance is important to the local agricultural economy, as determined by the County of San Diego Board of Supervisors and a local advisory committee. The County defines Farmland of Local Importance as land with the same characteristics as Prime Farmland or Farmland of Statewide Importance with the exception of irrigation. Approximately 134,892 acres of the County area is designated Farmland of Local Importance (about 4.97% of the total County acreage).

Grazing Land is land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres. Approximately 106,680 acres of the County is designated Grazing Land (about 3.93% of the total County acreage).

Urban and Built-up Land consists of land occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes. Currently, there are 345,316 acres of urban and built-up land in the County (about 12.73% of the total County acreage).

Other Land consists of land not included in any other mapping category. Common examples include low-density rural developments; brush, timber, wetland, and riparian areas not suitable

for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines and borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land. There is approximately 1,507,345 acres of land designated as Other Land in the County (about 55.57% of the total County acreage). Figure 2.2-3, Farmland, Mapping and Monitoring Program Lands, shows the most recent farmland data for the important farmland types within the County.

Local Agricultural Resource Assessment Model (LARA)

The LARA model has been developed by the County of San Diego Department of Planning and Land Use to assess the relative value of agricultural resources in the County. The LARA model serves as the local agricultural model that accounts for the variability of local agricultural resources and conditions. The County has chosen to use the LARA model to determine the importance of agricultural resources, rather than the Land Evaluation and Site Assessment model (LESA), because the LARA model accounts for the large number of farms in the County that are less than 10 acres in size and takes into account the County's unique soil conditions. The LESA model does not account for agricultural resources less than 10 acres in size. The County uses the LARA model to determine the importance of agricultural resources in the context of discretionary land use projects. The LARA model considers soils, climate, and water as primary model factors, while also considering the presence of Williamson Act contracts, other preserved lands, and existing land uses in the surrounding area.

2.2.2 Regulatory Setting

Federal Regulations

Farmland Protection Policy Act

The U.S. Department of Agriculture administers the Farmland Protection Policy Act of 1981. This act is intended to minimize the extent to which federal programs contribute to the unnecessary conversion of Farmland to nonagricultural uses. The act also requires these programs to be compatible with state, local, and private efforts to protect Farmland.

Cleveland National Forest Land Management Plan

With the exception of the CNF, forest lands are not common in the County. Approximately 402,434 acres of CNF land is located within the County, and management of forest lands is facilitated through the CNF Land Management Plan. According to the CNF Land Management Plan, the production of wood products, including fuel wood harvesting, is identified as a suitable activity/use within all designated land use zones (fuel wood harvesting is suitable by exception within the Critical Biological (CB) and Wilderness (W) land use zones) (USFS 2005).

State Regulations

California Public Resources Code

Section 4526 of the California Public Resources Code defines timberland as land (other than land owned by the federal government and land designated by the board as experimental forest land) that is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis after consultation with the district committees and others.

According to Section 12220 (g) of the Public Resources Code, forest land refers to “land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.”

California Civil Code Section 3482.5 (The Right to Farm Act)

The Right to Farm Act is designed to protect commercial agricultural operations from nuisance complaints that may arise when an agricultural operation is conducting business in a “manner consistent with proper and accepted customs.” The code specifies that established operations that have been in business for 3 or more years that were not nuisances at the time they began shall not be considered a nuisance as a result of a new land use.

Farmland Mapping and Monitoring Program (FMMP)

The FMMP, established in 1982, produces maps and statistical data used for analyzing impacts to California’s agricultural resources. Agricultural land is rated according to the soil quality and irrigation status, with the best quality land called Prime Farmland. Maps are updated every 2 years, with current land use information gathered from aerial photographs, a computer mapping system, public review, and field reconnaissance.

California Land Conservation Act (Williamson Act)

The Williamson Act of 1965 was designed as an incentive to retain prime agricultural land and open space in agricultural use, thereby slowing its conversion to urban and suburban development. The program requires a 10-year contract between the County and the land owner. While in contract, the land is taxed on the basis of its agricultural use rather than its market value. The land becomes subject to certain enforceable restrictions, and certain conditions need to be met prior to approval of an agreement. The goal of the Williamson Act is to protect agriculture and open space.

California Government Code

Government Code Section 51104 (g) defines a timberland production zone as an area that has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses.

The County Zoning Ordinance does not identify timberland production zones within the unincorporated portion of the County.

Local Regulations

County of San Diego Code of Regulatory Ordinances Sections 63.401 through 63.407, Agricultural Enterprises and Consumer Information Ordinance

The ordinance defines and limits the circumstances under which agricultural enterprise activities, operations, and facilities will constitute nuisance. The ordinance recognizes that the commercial agricultural industry in the County is a significant element of the County's economy and a valuable open space/greenbelt resource for County residents. The ordinance establishes a procedure whereby prospective purchasers of property are notified in writing of the inherent potential conditions associated with agricultural operations found throughout the unincorporated area, including but not limited to noise, odors, dust, insects, rodents, and chemicals.

County of San Diego Board of Supervisors Policy I-38, Agricultural Preserves

The County Board of Supervisors Policy I-38 sets forth policies for the implementation of the Williamson Act. In 1965, the California Legislature added to the Government Code Sections 51200 et. seq., which authorized the County to establish Agricultural Preserves. Board Policy I-38 identifies criteria for the establishment, modification, and disestablishment of an Agricultural Preserve, including processing requirements, application fees, and hearing requirements. The policy also establishes minimum sizes that landowners must meet to be eligible for a contract, requires the application of zoning regulations, establishes eligibility criteria for filing an application for an Agricultural Preserve and contract with the County, and establishes criteria to cancel a contract including cancellation by eminent domain.

County of San Diego Board of Supervisor's Policy I-133 Support and Encouragement of Farming in San Diego County

In 2005, the Board of Supervisors adopted Policy I-133 to establish the County's support of agriculture. The policy recognizes the Board's commitment, support, and encouragement of farming in the County through the establishment of partnerships with landowners and other stakeholders to identify, secure, and implement incentives that support the continuation of

farming as a major industry in San Diego. The intent is to develop and implement programs designed to support and encourage farming in the County.

County of San Diego Farming Program

The County has completed a contract with American Farmland Trust to help develop the Farming Program. The Farming Program is intended to create the framework for an economically and environmentally sustainable farming industry for the County. The plan, if adopted, would include land use policies and programs to keep land available and affordable for farming on a voluntary basis. It would also include economic development tools to help improve farm profitability.

Agricultural Clearing Permit Requirements

A County Agricultural Clearing Permit is typically required for projects involving the clearing and/or removal of natural vegetation on agricultural land. The establishment of a new agricultural operation on or the expansion of an existing operation into any area that has not been in agricultural production for at least 1 of the preceding 5 years may also be required to obtain an agricultural clearing permit.

2.2.3 Analysis of Project Effects and Determination as to Significance

The proposed project consists of amendment to the Zoning Ordinance related to wind turbine and temporary MET facilities. Under the proposed project, large turbines will continue to require approval of a Major Use Permit, while a small wind turbine or MET facility meeting the height designator of the zone in which it is located would be allowed without discretionary review. The following impact analysis related to agriculture and forest resources has been separated into “Small Turbine(s)/MET Facilities” and “Large Turbine(s)” to reflect the distinction in the level of review required for the establishment of each use (discretionary vs. non-discretionary).

2.2.3.1 Conversion of Farmland

Guidelines for Determination of Significance

Based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines and the County’s *Guidelines for Determining Significance: Agricultural Resources* (County of San Diego 2007), the proposed project would have a significant impact if it would convert County Agricultural Resources (including, but not limited to, Prime Farmland, Unique Farmland, and Farmland of Statewide or Local Importance, pursuant to the FMMP of the California Resource Agency), or other agricultural resources, to non-agricultural use. The guidelines of significance apply to the direct and indirect impact analysis as well as the cumulative impact analysis.

A significant impact would result if:

- The project will result in the conversion of Prime Farmland, Unique Farmland, Farmland of Statewide or Local Importance (Important Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency, or other agricultural resources, to non-agricultural use.

Analysis

The proposed Zoning Ordinance amendment applies to the entire unincorporated County with regard to small turbines, MET facilities, and to a significant portion of the unincorporated County with regard to large turbines (see Section 1.4, Project Description); therefore, it includes all Important Farmland in the County. The proposed project would allow development of wind turbines and MET facilities that could adversely affect Important Farmland through ground-disturbing activities, such as excavation and grading, which have the potential to damage or destroy Farmlands.

Small Turbine(s) and MET Facilities

The proposed project would allow small wind turbines or MET facilities without discretionary review if they meet the zoning verification requirements in the amended ordinance. While some small wind turbines would be roof mounted and would not result in ground disturbance, others would require the erection of turbine towers and construction of concrete foundations. However, small wind turbines would be permitted as accessory uses on designated Farmland and would not convert farmland to a non-agricultural use. The purpose of a small wind turbine is to generate energy that can be used to provide a reliable power source for a uses such as homes, agricultural facilities, or small businesses; therefore, small wind turbines would assist in agricultural operations.

The specific locations of future MET facilities are currently unknown. However, these facilities do not require large foundations and would not result in substantial ground-disturbing activities that may result in the permanent conversion of Important Farmland to a non-agricultural use. If located on Important Farmland, the installation of MET facilities would result in the temporary conversion of Important Farmland to non-agricultural use; however, due to the temporary nature and use of these facilities, previous uses could return once the wind testing phase is complete. Therefore, Important Farmland impacts attributed to MET facilities and small wind turbines would be **less than significant**.

Large Turbine(s)

The proposed project amends certain provisions of the County's Zoning Ordinance related to large wind turbines. These updates are necessary to address advancements in technology that have obviated many of the current provisions. The proposed amendment related to large wind turbines consist of updated definitions and requirements related to setbacks, noise, height, and locations where large turbines are permissible. All future large turbine projects would be subject to discretionary review and required to obtain a Major Use Permit. As part of the County's discretionary review process, all future projects would be evaluated under CEQA and would be required to implement measures to minimize impacts to Important Farmlands, as necessary. CEQA requires proposed projects to provide detailed information on the potentially significant environmental effects they are likely to have, list ways in which the significant environmental effects would be minimized, and identify alternatives that would reduce or avoid the significant impacts identified for the proposed project. As part of the County's discretionary review process, all future projects would be evaluated under CEQA and required to implement feasible mitigation measures. However, as there is ultimately no guarantee on a project-specific level that mitigation measures will reduce impacts to a level below significant, the proposed project may result in significant impacts related to conversion of Farmland (**AGR-1**).

2.2.3.2 *Agricultural Zoning and Williamson Act Contracts*

Guidelines for Determination of Significance

For the purpose of this EIR, the County's *Guidelines for Determining Significance: Agricultural Resources* (County of San Diego 2007) applies to the direct and indirect impact analysis, as well as the cumulative impact analysis.

A significant impact would result if:

- The project will conflict with existing zoning for agricultural use, or a Williamson Act contract.

Analysis

Figure 2.2-1 depicts agricultural lands within the County and Figure 2.2-2 depicts lands with Williamson Act contracts. The proposed Zoning Ordinance amendment applies to the entire unincorporated County with regard to small turbines, MET facilities, and to a significant portion of the unincorporated County with regard to large turbines (see the Project Description, Section 1.4); therefore, it includes sites with agricultural zones and Williamson Act contract within the County. The proposed project would allow development of wind turbines and MET facilities that could adversely affect agricultural zones and Williamson Act contracts through ground-

disturbing activities, such as excavation and grading, which have the potential to damage or destroy agricultural zones and lands with Williamson Act contract.

Small Turbine(s) and MET Facilities

The proposed project would allow small wind turbines or MET facilities without discretionary review if they meet the zoning verification requirements in the amended ordinance.

The proposed Zoning Ordinance amendment would permit small wind turbines (as an accessory use) in zones where agricultural production is allowed. While not specifically permitted by current Williamson Act regulations, small wind turbines and other accessory uses are typically permitted if these uses are compatible with existing agricultural operations. The purpose of a small wind turbine is to generate energy that can be used to provide a reliable power source for uses such as homes, agricultural facilities, or small businesses; therefore, small wind turbines would assist in agricultural operations. Additionally, because the space requirements necessary to construct and operate small wind turbine would be relatively small and because these facilities would be permitted as accessory uses (including (potentially) lands entered into Williamson Act contracts), small wind turbines would not significantly alter or impact the viability of active agricultural operations. Small wind turbines would not preclude agricultural operations on agriculturally zoned lands or lands with Williamson Act contracts. Therefore, impacts associated with agricultural zoning conflicts and Williamson Act contract conflicts would be less than significant.

The proposed Zoning Ordinance amendment would also allow MET facilities that do not exceed the height of the zone in which the facility is proposed to be permitted in absence of a discretionary permit. Future MET facilities developed under the proposed Zoning Ordinance amendments would operate temporarily, and once wind testing has been completed, MET facilities would be removed and previous agricultural uses could return. Also, MET facilities do not require large foundations and would not result in substantial ground-disturbing activities; as such, these facilities would not substantially interfere with existing agriculture operations on agriculturally zoned lands, lands with existing Williamson Act contracts, or lands entered into Williamson Act contracts. Therefore, the proposed Zoning Ordinance amendment related to MET facilities and small wind turbines would have a **less-than-significant** impact.

Large Turbine(s)

The proposed project amends certain provisions of the County's Zoning Ordinance related to large wind turbines. These updates are necessary to address advancements in technology that have obviated many of the current provisions. The proposed amendments related to large wind turbines consist of updated definitions and requirements related to setbacks, noise, height, and locations where large turbines are permissible. All future large turbine projects

would be subject to discretionary review and required to obtain a Major Use Permit. As part of the County's discretionary review process, all future projects would be evaluated under CEQA and would be required to implement measures to minimize impacts to conflicts with existing agricultural zones and Williamson Act contract, as necessary. It is not likely that large wind turbine projects would be permissible on lands under Williamson Act contracts because of the restrictions in these contracts. However, one or more large wind turbines could be developed in agriculturally zoned lands or adjacent to Williamson Act lands, thereby potentially causing an adverse impact to important agriculture. CEQA requires proposed projects to provide detailed information on the potentially significant environmental effects they are likely to have, list ways in which the significant environmental effects would be minimized, and identify alternatives that would reduce or avoid the significant impacts identified for the proposed project. As part of the County's discretionary review process, all future large wind turbine projects would be evaluated under CEQA and required to implement feasible mitigation measures. However, as there is ultimately no guarantee on a project-specific basis that mitigation measures will reduce impacts to a level below significant, the proposed project may result in significant impacts related to agricultural zoning or Williamson Act contracts (**AGR-2**).

2.2.3.3 *Forest or Timberland Conflicts*

Guidelines for Determination of Significance

For the purpose of this EIR, the County's *Guidelines for Determining Significance: Agricultural Resources* (County of San Diego 2007) applies to the direct and indirect impact analysis, as well as the cumulative impact analysis. A significant impact would result if:

- The project will conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code, Section 12220(g)), timberland (as defined by Public Resources Code, Section 4526), or timberland zoned Timberland Production (as defined by Government Code, Section 51104(g)).

Analysis

The County does not include lands zoned specifically for forest land, timberland, or timberland zoned Timberland Production. Moreover, the County does not have timberland or Timberland Production Zones. State parks and national forests, which support forest lands, comprise many areas of the unincorporated County, including the CNF. The CNF is primarily under the land use jurisdiction of the U.S. Forest Service, not the County. However, many areas within the County's jurisdiction may contain forest resources.

Small Turbine(s) and MET Facilities

The proposed project would allow small wind turbines or MET facilities without discretionary review if they meet the zoning verification requirements in the amended ordinance. Small turbines and MET facilities that meet the zoning verification requirements would not conflict with zoning or affect forest lands.

While some small wind turbines would be roof mounted and would not result in ground disturbance, others would require the erection of turbine towers and construction of concrete foundations. However, small wind turbines would be permitted as accessory uses would not convert forest land to a non-agricultural use. The purpose of a small wind turbine is to generate energy that can be used to provide a reliable power source for a uses such as homes, agricultural facilities, or small businesses; therefore, small wind turbines would assist in agricultural operations. Therefore, the proposed project **would not result in significant impacts** related to forest land or timberland conflicts as a result of small wind turbine or MET facility development.

Large Turbine(s)

The proposed project would allow large wind turbines subject to discretionary review and approval of a Major Use Permit. As part of the County's discretionary review process, all future projects would be evaluated under CEQA and would be required to implement measures to minimize impacts related to conflicts with forest land or timberland, as necessary. As mentioned above, the County does not have zoning for forest land, timberland, or Timberland Production Zones. In addition, large wind turbines would never require a zone change since they are allowed in any zone upon approval of a Major Use Permit. Therefore, the proposed project **would not result in significant impacts** related to forest land or timberland conflicts as a result of large turbine development.

2.2.3.4 Loss or Conversion of Forest Land

For the purpose of this EIR, the County's *Guidelines for Determining Significance: Agricultural Resources* (County of San Diego 2007) applies to the direct and indirect impact analysis, as well as the cumulative impact analysis. A significant impact would result if:

- The project will result in the loss of forest land or conversion of forest land to non-forest use.

Analysis

Forest land is defined by the Public Resources Code as land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife,

biodiversity, water quality, recreation, and other public benefits. These lands are not designated or mapped, but can occur in many areas throughout the County. Site-specific analysis would be needed to determine if an area qualifies as forest land. The proposed Zoning Ordinance amendment applies to the entire unincorporated County with regard to small turbines, MET facilities, and to a significant portion of the unincorporated County with regard to large turbines (see Section 1.4, Project Description); therefore, it includes any areas that might be considered forest land in the County. The proposed project would allow development of wind turbines and MET facilities that could adversely affect forest land through ground-disturbing activities, such as excavation and grading, which have the potential to destroy forest lands or convert forest lands to non-forest use.

Small Turbine(s) and MET Facilities

The proposed project would allow small wind turbines or MET facilities without discretionary review if they meet the zoning verification requirements in the amended ordinance.

While some small wind turbines would be roof mounted and would not result in ground disturbance, others would require the erection of turbine towers and construction of concrete foundations. However, small wind turbines would be permitted as accessory uses to existing development under the zoning verification and would not convert forest land to a non-forest use.

MET facilities do not require large foundations and would not result in substantial ground-disturbing activities that may result in the loss or conversion of forest land. If located on or near forest lands, the installation of MET facilities would potentially result in minor disturbance of such lands. Due to the temporary nature and use of these facilities, significant loss or conversion of forest land would not occur. Therefore, forest land impacts attributed to MET facilities and small wind turbines would be **less than significant**.

Large Turbine(s)

The proposed project amends certain provisions of the County's Zoning Ordinance related to large wind turbines. These updates are necessary to address advancements in technology that have obviated many of the current provisions. The proposed amendment related to large wind turbines consist of updated definitions and requirements related to setbacks, noise, height, and locations where large turbines are permissible. All future large turbine projects would be subject to discretionary review and required to obtain a Major Use Permit. As part of the County's discretionary review process, all future projects would be evaluated under CEQA and would be required to implement measures to minimize impacts to forest land, as necessary. CEQA requires proposed projects to provide detailed information on the potentially significant environmental effects they are likely to have, list ways in which the significant environmental effects would be

minimized, and identify alternatives that would reduce or avoid the significant impacts identified for the proposed project. As part of the County's discretionary review process, all future projects would be evaluated under CEQA and required to implement feasible mitigation measures. However, as there is ultimately no guarantee on a project-specific level that mitigation measures will reduce impacts to a level below significant, the proposed project may result in significant impacts related to loss or conversion of forest land (**AGR-3**).

2.2.3.5 *Indirect Conversion of Farmland or Forest Land*

Guidelines for Determination of Significance

For the purpose of this EIR, the County's *Guidelines for Determining Significance: Agricultural Resources* (County of San Diego 2007) applies to the direct and indirect impact analysis, as well as the cumulative impact analysis. A significant impact would result if:

- The project will involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

Analysis

The proposed Zoning Ordinance amendment applies to the entire unincorporated County with regard to small turbines and MET facilities, and to a significant portion of the unincorporated County with regard to large turbines (see the Project Description, Section 1.4); therefore, it includes all Important Farmland or forest land in the County. The proposed project would allow development of wind turbines and MET facilities that could indirectly affect Important Farmland or forest land through construction or operation.

Small Turbine(s) and MET Facilities

The proposed project would allow small wind turbines or MET facilities without discretionary review if they meet the zoning verification requirements in the amended ordinance. The space requirements necessary to construct and operate a small wind turbine would be relatively minor. While some small wind turbines would be roof mounted and would not result in ground disturbance, others would require the erection of turbine towers and construction of concrete foundations. Construction of the three typical wind turbine tower types may require grading to ensure a level surface on which to locate the concrete turbine foundation, and if sited on Important Farmland or forest land, the project would involve changes to the existing environment. However, the space requirements would be relatively small (small turbines do not require ground-mounted transformers or other ancillary ground facilities typically required by

large turbine) and the construction and operation of these facilities would not result in indirect conversion of Farmland or forest land.

Similarly, MET facilities do not require large foundations and would not result in substantial ground-disturbing activities that may result in the indirect conversion of Farmland or forest land. If located on Important Farmland or forest land, the installation of MET facilities would result in a temporary change of the existing environment; however, due to the temporary and minimally obtrusive nature and use of these facilities, significant indirect impacts resulting in conversion of Farmland or forest land would not occur. Therefore, Important Farmland and forest land impacts attributed to MET facilities and small wind turbines would be **less than significant**.

Large Turbine(s)

The proposed project amends certain provisions of the County's Zoning Ordinance related to large wind turbines. These updates are necessary to address advancements in technology that have obviated many of the current provisions. The proposed amendments related to large wind turbines consist of updated definitions and requirements related to setbacks, noise, height, and locations where large turbines are permissible. All future large turbine projects would be subject to discretionary review and required to obtain a Major Use Permit. As part of the County's discretionary review process, all future projects would be evaluated under CEQA and required to implement feasible mitigation measures. However, as there is ultimately no guarantee on a project-specific level that mitigation measures will reduce impacts to a level below significant, the proposed project may result in significant indirect impacts related to Farmland or forest land (**AGR-4**).

2.2.4 Cumulative Impact Analysis

The geographic scope of cumulative impact analysis for agricultural resources varies depending on the type of resource with potential to be impacted. Geographic scope can be the entire area within which the resource has the potential to occur. For the purpose of this Environmental Impact Report (EIR), the geographic scope for the cumulative analysis of agricultural resources includes the San Diego region, which encompasses the entire County, including both incorporated and unincorporated areas, as well as surrounding counties, and tribal and public lands.

2.2.4.1 Conversion of Farmland

Within the San Diego region, the indirect conversion of farmland is increasing due to population growth and the subsequent development required in order to support the population growth.

Cumulative projects that would have the potential to result in adverse impacts to Farmland include, but are not limited to, development of the General Plan update and the development of land uses as designated under surrounding jurisdictions general plans. These projects are regulated by federal,

state, and local regulations. Important Farmland may occur on tribal lands and be affected by tribal projects such as wind energy projects. Tribal projects may not adhere to state or local regulations and could result in cumulatively considerable impacts to agricultural resources.

Small Turbine(s)/MET Facilities

The development of small wind turbines and MET facilities would require a relatively minor operational footprint primarily associated with the foundations (if warranted), and would be accessory uses that would not directly convert farmland to a non-agricultural use. Therefore, in combination with other past, present, and foreseeable future projects, the proposed project **would not contribute to a cumulatively considerable impact** to Farmland.

Large Turbine(s)

Large wind turbine(s) would be subject to discretionary review and required to obtain a Major Use Permit. As part of the County's discretionary review process, all future projects would be evaluated under CEQA and required to implement feasible mitigation measures. However, as there is ultimately no guarantee on a project-specific level that mitigation measures would reduce impacts to a level below significant, the proposed project may result in a **cumulatively considerable impact** related to conversion of Farmland (**AGR-5**).

2.2.4.2 Agricultural Zoning and Williamson Act Contracts

Within the San Diego region, incorporated cities and surrounding counties designate and adopt agricultural preserves, enter into Williamson Act contracts, and adopt agricultural zoning to protect their agricultural resources. With these regulations in place, cumulative projects occurring in the San Diego region, such as development allowable under surrounding jurisdictions' general plans, would not result in conflicts with existing agricultural zoning or Williamson Act contracts. However, some projects within the County and within adjacent jurisdictions can include zoning amendments or disestablishment of Williamson Act contracts, thereby creating cumulatively considerable impacts related to zoning and Williamson Act conflicts.

Small Turbine(s)/MET Facilities

The proposed project would allow for three turbines or five roof-mounted turbines to be developed on a legal lot as an accessory use to the primary use of the property without discretionary review. Small wind turbines and MET facilities would not preclude agricultural operations on agriculturally zoned lands or lands entered into Williamson Act contracts. Rather, the purpose of a small wind turbine is to generate energy that can be used to provide a reliable power source for a uses such as homes, agricultural facilities, or small businesses; therefore, small wind turbine would assist in the agricultural operations. Therefore, in combination with

other past, present, and foreseeable future projects, the proposed project **would not contribute to a cumulatively considerable impact** related to conflicts with agricultural zoning and Williamson Act contracts.

Large Turbine(s)

Large wind turbine(s) would be subject to discretionary review and required to obtain a Major Use Permit. As part of the County's discretionary review process, all future projects would be evaluated under CEQA and required to implement feasible mitigation measures. However, as there is ultimately no guarantee on a project-specific level that mitigation measures will reduce impacts to a level below significant, the proposed project may result in significant impacts related to agricultural zoning or Williamson Act contracts. Therefore, the proposed project **could contribute to a cumulatively considerable impact (AGR-6)**.

2.2.4.3 *Forest or Timberland Conflicts*

The focused project area does not include lands zoned specifically for forestry, and cumulative projects would, therefore, not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or Timberland Production.

Small Turbine(s)/MET Facilities

The proposed project would allow for three turbines or five roof-mounted turbines to be developed on a legal lot as an accessory use to the primary use of the property without discretionary review. The County does not include lands zoned specifically for forest land, timberland, or Timberland Production Zones. Therefore, in combination with other past, present, and foreseeable future projects, the project **would not contribute to a cumulatively considerable impact** related to zoning for forest land and timberland.

Large Turbine(s)

As part of the County's discretionary review process, all future large wind turbine projects would be evaluated under CEQA and would be required to implement measures to minimize impacts to forest land or timberland, as necessary. In addition, large wind turbine projects would not require rezones since they are allowed within any zone upon approval of a Major Use Permit. Therefore, in combination with other past, present, and foreseeable future projects, the project **would not contribute to a cumulatively considerable impact** related to zoning for forest land and timberland.

2.2.4.4 *Loss or Conversion of Forest Land*

Forest land, as defined by the Public Resources Code, can occur in many areas throughout the County. Cumulative projects that would have the potential to result in adverse impacts to forest land include, but are not limited to, development of the County's General Plan Update and the development of land uses as designated under surrounding jurisdictions general plans. Forest lands may also occur on tribal lands and be affected by tribal projects such as casino expansions or wind energy projects.

Small Turbine(s)/MET Facilities

The development of small wind turbines and MET facilities would require a relatively minor operational footprint primarily associated with the foundations (if warranted), and would be accessory uses to existing development. As such, these facilities would not result in significant loss or conversion of forest land. Therefore, in combination with other past, present, and foreseeable future projects, the proposed project **would not contribute to a cumulatively considerable impact** to forest land.

Large Turbine(s)

Large wind turbine(s) would be subject to discretionary review and required to obtain a Major Use Permit. As part of the County's discretionary review process, all future projects would be evaluated under CEQA and required to implement feasible mitigation measures. However, as there is ultimately no guarantee on a project-specific level that mitigation measures would reduce impacts to a level below significant, the proposed project may result in **a cumulatively considerable impact** related to loss or conversion of forest land (**AGR-7**).

2.2.4.5 *Indirect Conversion of Farmland or Forest Land*

Conversion of Farmland

Within the San Diego region, the indirect conversion of farmland is increasing due to population growth and the subsequent development required in order to support the population growth. Cumulative projects that would have the potential to result in adverse indirect impacts to Farmland or forest land include, but are not limited to, development of the General Plan Update and the development of land uses as designated under surrounding jurisdictions general plans.

Small Turbine(s)/MET Facilities

The proposed project would allow for three turbines or five roof-mounted turbines to be developed on a legal lot as an accessory use to the primary use of the property without

discretionary review. The area of ground disturbance on each lot would be relatively small and MET facilities would be temporary. The development of these facilities would require a relatively minor operational footprint primarily associated with the wind turbine tower foundations (if warranted), and the minimal ground disturbance associated with turbine towers of MET facilities would not substantially affect Farmland or forest land. Therefore, in combination with other past, present, and foreseeable future projects, the proposed project **would not contribute to a cumulatively considerable impact** related to indirect conversion of Farmland or forest land.

Large Turbine(s)

Large wind turbine(s) would be subject to discretionary review and required to obtain a Major Use Permit. As part of the County's discretionary review process, all future projects would be evaluated under CEQA and required to implement feasible mitigation measures. However, as there is ultimately no guarantee on a project-specific level that mitigation measures would reduce direct or indirect impacts to a level below significant, the proposed project may result in significant impacts related to conversion of Farmland or forest land. Therefore, due to the Major Use Permit discretionary review process, the proposed project **could contribute to a cumulatively considerable impact** related to indirect conversion of Farmland or forest land (AGR-8).

2.2.5 Significance of Impacts Prior to Mitigation

The proposed project would result in potentially significant impacts associated with agricultural resources, including conversion of Farmland, conflicts with agricultural zoning/Williamson Act contracts, conversion of forest lands, and indirect effects to Farmland and forest lands prior to mitigation due to the development of large wind turbines. The project would not result in significant impacts related to conflicts with forest/timberland zoning.

2.2.6 Mitigation Measures

2.2.6.1 *Conversion of Farmland*

The proposed project would allow for development of large wind turbines with a Major Use Permit that would have potentially significant adverse effects on Farmland. Mitigation measures (described below) have been identified that would reduce potentially significant impacts to Farmland, but not below a significant level.

Mitigation Measures

M-AGR-1: During the environmental review process for future Major Use Permits for wind turbines, the County Guidelines for Determining Significance for Agricultural Resources shall be applied. When impacts to Farmland 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 agricultural resources; preservation of agriculture; and inclusion of compatibility buffers near areas intended for agricultural uses.

Infeasible Mitigation Measures

The following measure was considered in attempting to reduce direct and cumulative impacts associated with conversion of Farmland within the County to below a level of significance. However, it has been determined that this measure is infeasible for reasons described as follows. Therefore, this measure would not be implemented.

- Prohibit construction of large wind turbine projects in areas supporting Prime Farmland, Unique Farmland, or Farmland of Statewide or Local Importance. This measure would be infeasible because such Farmland may be located within high-quality wind resource areas. This prohibition within the wind resource areas would conflict with the project objectives to facilitate the use of renewable wind energy within the County, to maximize the production of energy from renewable wind sources, and to reduce the potential for energy shortages and outages by facilitating local energy supply.

As it cannot be concluded at this stage that impacts related to conversion of Farmland from large wind turbines allowed with a Major Use Permit under the proposed Zoning Ordinance amendment would be avoided or mitigated, impacts would remain significant and unavoidable. Chapter 4, Project Alternatives, provides a discussion of alternatives to the proposed project that would result in some reduced impacts associated with conversion of Farmland as compared to the proposed project.

2.2.6.2 *Agricultural Zoning and Williamson Act Contracts*

The proposed project would allow for development of large wind turbines with a Major Use Permit that would have potentially significant adverse effects to agricultural zoning and Williamson Act contracts. Mitigation measure **M-AGR-1**, listed in Conversion of Farmland, is also applicable to this issue and is incorporated here by reference. Incorporation of this mitigation measure could reduce potentially significant impacts to agricultural zoning and Williamson Act contracts, but not below a significant level.

Infeasible Mitigation Measures

The following measure was considered in attempting to reduce direct and cumulative impacts associated with agricultural zoning and Williamson Act contracts within the County to below a level of significance. However, it has been determined that this measure is infeasible for reasons described as follows. Therefore, this measure would not be implemented.

- Prohibit construction of large wind turbine projects in areas zoned for agriculture, areas under Williamson Act contract, and areas near Williamson Act contract lands. This measure would be infeasible because high-quality wind resource areas may have agricultural zoning or contracts. This prohibition within the wind resource areas would conflict with the project objectives to facilitate the use of renewable wind energy within the County, to maximize the production of energy from renewable wind sources, and to reduce the potential for energy shortages and outages by facilitating local energy supply.

As it cannot be concluded at this stage that impacts related to agricultural zoning or Williamson Act lands from large wind turbines would be avoided or mitigated, impacts would remain **significant and unavoidable**. Chapter 4, Project Alternatives, provides a discussion of alternatives to the proposed project that would result in some reduced impacts associated with agricultural zoning or Williamson Act lands as compared to the proposed project.

2.2.6.3 Forest or Timberland Conflicts

The proposed project would not result in potentially significant impacts related to forest or timberland zoning conflicts; therefore, no mitigation measures are required.

2.2.6.4 Loss or Conversion of Forest Land

The proposed project would allow for development of large wind turbines with a Major Use Permit that would have potentially significant adverse effects on forest land. Mitigation measures (described below) have been identified that would reduce potentially significant impacts to forest land, but not below a significant level.

Mitigation Measures

M-AGR-2: During the environmental review process for future Major Use Permits for wind turbines, the County Guidelines for Determining Significance for Biological Resources shall be applied. When impacts to forest land 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; and resource management.

Infeasible Mitigation Measures

The following measure was considered in attempting to reduce direct and cumulative impacts associated with the conversion of forest land within the County to below a level of significance. However, it has been determined that this measure is infeasible for reasons described as follows. Therefore, this measure would not be implemented.

- Prohibit construction of large wind turbine projects in areas supporting forest land. This measure would be infeasible because forest land may be located within high-quality wind resource areas. This prohibition within the wind resource areas would conflict with the project objectives to facilitate the use of renewable wind energy within the County, to maximize the production of energy from renewable wind sources, and to reduce the potential for energy shortages and outages by facilitating local energy supply.

As it cannot be concluded at this stage that impacts related to loss or conversion of forest land from large wind turbines allowed with a Major Use Permit under the proposed Zoning Ordinance amendment would be avoided or mitigated, impacts would remain **significant and unavoidable**. Chapter 4, Project Alternatives, provides a discussion of alternatives to the proposed project that would result in some reduced impacts associated with the loss or conversion of forest land as compared to the proposed project.

2.2.6.5 Indirect Conversion of Farmland or Forest Land

The proposed project would allow for development of large wind turbines with a Major Use Permit that would have potentially significant adverse effects associated with indirect conversion of Farmland or forest land. Mitigation measures **M-AGR-1** and **M-AGR-2**, listed in Sections 2.2.6.1 and 2.2.6.4 above, are also applicable to this issue and are incorporated here by reference. Incorporation of these mitigation measures could reduce potentially significant indirect impacts to Farmland or forest land, but not below a significant level.

Infeasible Mitigation Measures

The following measure was considered in attempting to reduce direct and cumulative impacts associated with indirect conversion of Farmland or forest land within the County to below a level of significance. However, it has been determined that this measure is infeasible for reasons described as follows. Therefore, this measure would not be implemented.

- Prohibit construction of large wind turbine projects on or near areas supporting Prime

Farmland, Unique Farmland, Farmland of Statewide or Local Importance, or forest land. This measure would be infeasible because Farmland or forest land may be located within or adjacent to high-quality wind resource areas. This prohibition within the wind resource areas would conflict with the project objectives to facilitate the use of renewable wind energy within the County, to maximize the production of energy from renewable wind sources, and to reduce the potential for energy shortages and outages by facilitating local energy supply.

As it cannot be concluded at this stage that impacts related to indirect conversion of Farmland or forest land from large wind turbines allowed with a Major Use Permit under the proposed Zoning Ordinance amendment would be sufficiently avoided or mitigated, impacts would remain **significant and unavoidable**. Chapter 4, Project Alternatives, provides a discussion of alternatives to the proposed project that would result in some reduced impacts associated with indirect conversion of Farmland or forest land as compared to the proposed project.

2.2.7 Conclusion

The following discussion provides a synopsis of the conclusion reached in each of the above impact analyses, and the level of impact that would occur after mitigation measures are implemented.

Conversion of Farmland

Development of small wind turbines and MET facilities pursuant to the proposed Zoning Ordinance amendment would not result in significant adverse effects due to the conversion of Important Farmland. Development of large wind turbines pursuant to the proposed Zoning Ordinance amendment would potentially result in direct and cumulative impacts related to the conversion of Farmland. Impacts would remain potentially significant and unavoidable. Future large wind turbine projects may be able to mitigate impacts to a level below significant on an individual basis, although it cannot be guaranteed.

Agricultural Zoning and Williamson Act Contracts

Development of small wind turbines and MET facilities pursuant to the proposed Zoning Ordinance amendment would not result in significant adverse effects related to conflicts with agricultural zoning and Williamson Act contracts. Development of large wind turbines pursuant to the proposed Zoning Ordinance amendment would potentially result in direct and cumulative impacts to agricultural zoning and Williamson Act contracts. Impacts would remain potentially significant and unavoidable. Future large wind turbine projects may be able to mitigate impacts to a level below significant on an individual basis, although it cannot be guaranteed.

Forest or Timberland Conflicts

The proposed project would not result in any potentially significant impacts related to forest or timberland zoning.

Loss or Conversion of Forest Land

Development of small wind turbines and MET facilities pursuant to the proposed Zoning Ordinance amendment would not result in significant adverse effects related to the loss or conversion of forest land. Development of large wind turbines pursuant to the proposed Zoning Ordinance amendment would potentially result in direct and cumulative impacts related to the loss or conversion of forest land. Impacts would remain potentially significant and unavoidable. Future large wind turbine projects may be able to mitigate impacts to a level below significant on an individual basis, although it cannot be guaranteed.

Indirect Conversion of Farmland or Forest Land

Development of small wind turbines and MET facilities pursuant to the proposed Zoning Ordinance amendment would not result in significant adverse effects due to indirect conversion of Farmland or forest land. Development of large wind turbines pursuant to the proposed Zoning Ordinance amendment would potentially result in indirect and cumulative impacts related to the conversion of Farmland or forest land. Impacts would remain potentially significant and unavoidable. Future large wind turbines projects may be able to mitigate impacts to a level below significant on an individual basis, although it cannot be guaranteed.

Table 2.2-1
Acres of Agricultural Zoned Land and
Percentage of the Unincorporated County Land Area

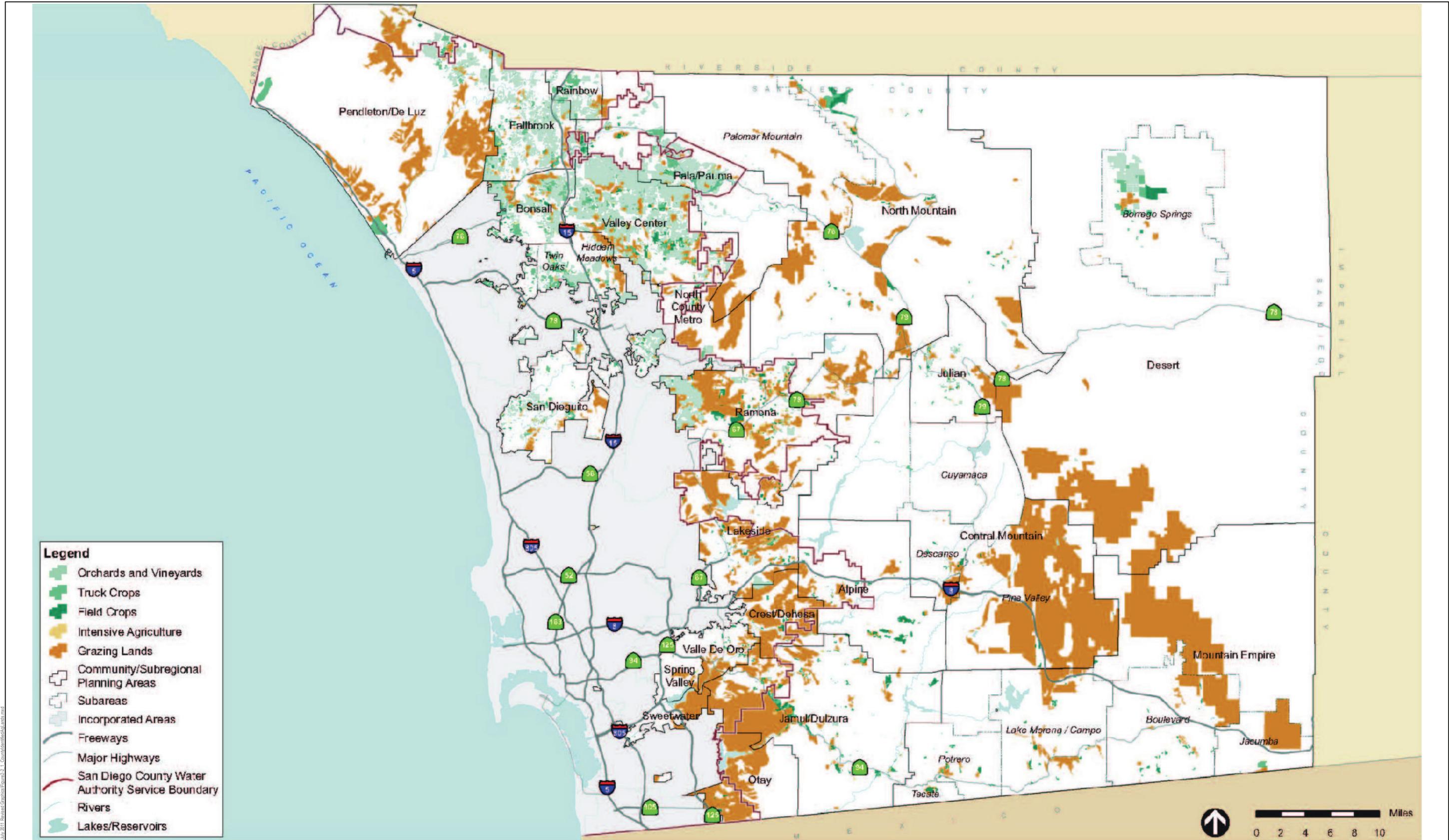
Zone	Acreage	Percent of Total Unincorporated County Land Area
A70	273,209	33.2
A72	180,377	21.9
Total	453,586	55.1

Source: SanGIS and SANDAG regional data 2010

Table 2.2-2
Acres of Agricultural Zoned Land and Percentage of Wind Resource Areas

Zone	Acreage	Percent of Total Wind Resource Area
A70	31,650	3.9
A72	60,579	7.5
Total	92,229	11.4

Source: SanGIS and SANDAG regional data 2010, NREL 2009



- Legend**
- Orchards and Vineyards
 - Truck Crops
 - Field Crops
 - Intensive Agriculture
 - Grazing Lands
 - Community/Subregional Planning Areas
 - Subareas
 - Incorporated Areas
 - Freeways
 - Major Highways
 - San Diego County Water Authority Service Boundary
 - Rivers
 - Lakes/Reservoirs

FIGURE 2.2-1
County Identified Agricultural Lands

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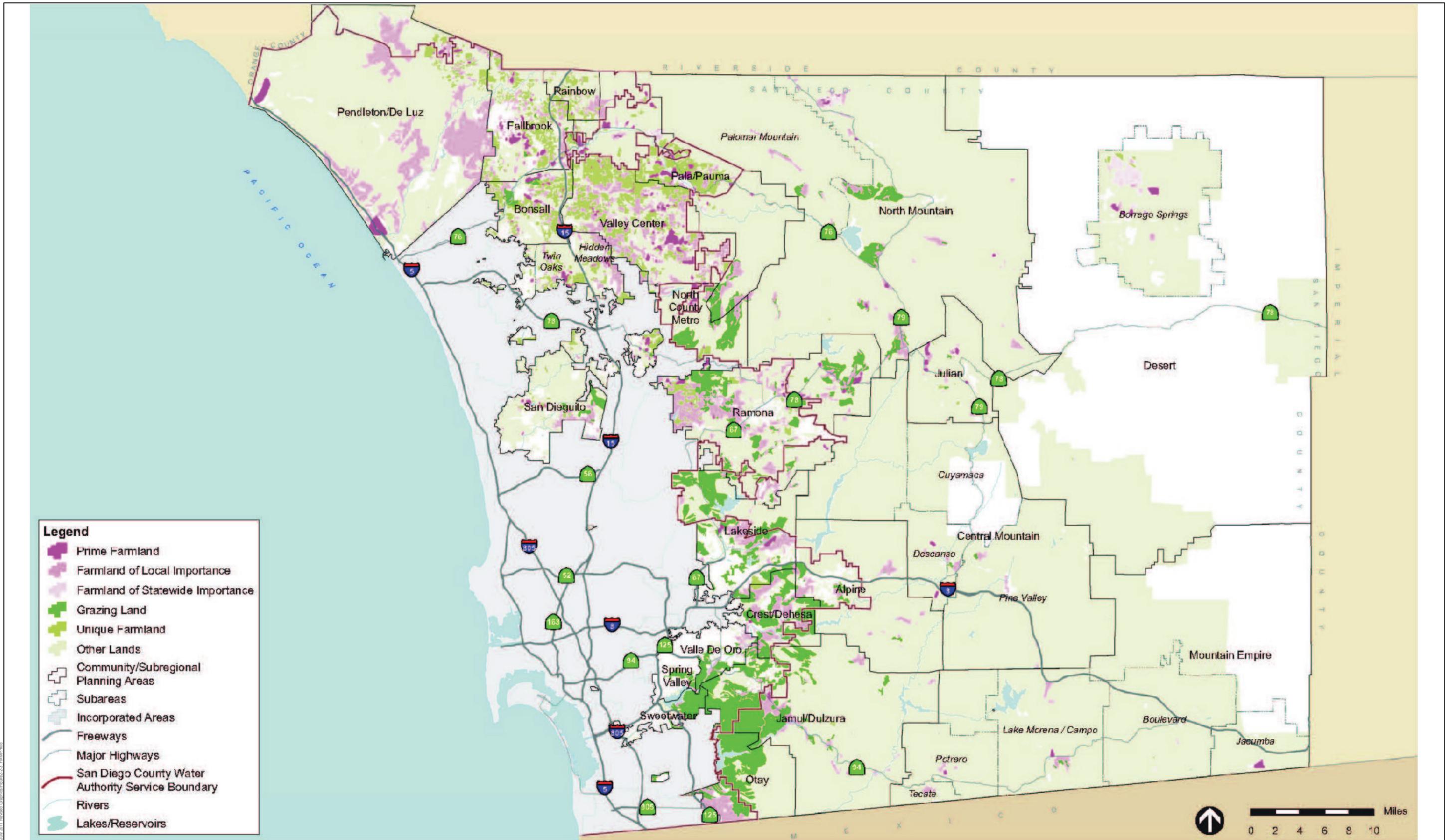


FIGURE 2.2-3
Farmland, Mapping and Monitoring Program Lands

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