4.2 AGRICULTURAL AND FORESTRY RESOURCES

This section evaluates the agricultural and forestry resources impacts of the proposed Plan. The information presented was compiled from multiple sources, including the County of San Diego, SANDAG, the California Department of Conservation (DOC), the United States Department of Agriculture (USDA), CAL FIRE, and local jurisdictions.

4.2.1 EXISTING CONDITIONS

4.2.1.1 AGRICULTURAL RESOURCES

EXISTING AGRICULTURE AND FARMLANDS

For the purposes of this EIR, existing agricultural and farmlands are identified, regardless of parcel size (Figure 4.2-1). Because there is no single comprehensive data set of existing agricultural and farmlands in the San Diego region, SANDAG compiled the most recent information available from the following sources. Data tables are provided in Appendix B of this EIR.

- County Identified Agricultural Lands (2008) – these agricultural lands data were identified by the County of San Diego in its General Plan Update EIR. Agricultural data sources used in this calculation included: FMMP data; DPLU GIS vegetation data; California Department of Water Resources land use data; Cleveland National Forest grazing allotments data; USDA Statistics Service data; and Agricultural Weights and Measures Commodities data.

- SANDAG Land Use (2012) – Current data set of agricultural resources including grazing lands (field crops, grazing lands) and croplands (intensive agriculture, orchards and vineyards, and truck crops).

- San Diego County Agriculture Weights and Measures Agriculture Commodities data (2013) – this database represents field border boundaries of agricultural commodity production sites throughout the region.

- Existing vegetation communities mapping described in Section 4.4 and Appendix E to this EIR – these data include an agricultural lands category.


Each data set uses different categories to classify agricultural and farmlands. In order to create a single data set of existing agricultural and farmlands for this EIR, the data were combined into the following categories as explained in Table B-1 in Appendix B to this EIR:

- General agriculture,
- Field crops,
- Grazing lands,
- Intensive agriculture,
- Orchards and vineyards, and
- Truck crops.
Figure 4.2-1

Existing Agriculture
April 2015

Agriculture Types

- Yellow: Field Crops
- Green: General Agriculture
- Blue: Grazing Lands
- Orange: Intensive Agriculture
- Purple: Orchards and Vineyards
- Green: Truck Crops

Source: Appendix B of this EIR.
As shown in Table 4.2-1, there are approximately 578,000 acres of existing agriculture and farmland in the San Diego region. Grazing lands account for about 366,000 acres or 63 percent of agricultural lands, and are found in locations throughout the San Diego region. General agriculture, field crops, and truck crops tend to be in the northern portion of the San Diego region and in the northeast portions of the unincorporated county. Orchard and Vineyards are concentrated in the north along Interstate 15.

Table 4.2-1
Existing Agricultural Lands in the San Diego Region

<table>
<thead>
<tr>
<th>Agriculture Category</th>
<th>2012 Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Agriculture</td>
<td>38,044</td>
</tr>
<tr>
<td>Field Crops</td>
<td>46,913</td>
</tr>
<tr>
<td>Grazing Lands</td>
<td>365,824</td>
</tr>
<tr>
<td>Intensive Agriculture</td>
<td>6,339</td>
</tr>
<tr>
<td>Orchards and Vineyards</td>
<td>91,233</td>
</tr>
<tr>
<td>Truck Crops</td>
<td>29,293</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>577,646</strong></td>
</tr>
</tbody>
</table>

Source: Appendix B of this EIR

Farmland Mapping and Monitoring Program

The DOC Farmland Mapping and Monitoring Program (FMMP) is one of several sources used to identify existing agricultural lands. FMMP farmland categories are based on local soil characteristics and irrigation status. Farmlands are classified according to soil factors, including available water holding capacity, temperature regime, acidity, depth to the water table, electrical conductivity, flooding potential, erosion hazard, permeability, rock content, and rooting depth. The best quality land is identified as Prime Farmland and Farmland of Statewide Importance.

There are approximately 64,877 acres of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance in the San Diego region. The FMMP designated lands are included in the agricultural lands data and are accounted for in Table 4.2-1.

EXISTING ZONING FOR AGRICULTURAL USE AND LANDS DESIGNATED UNDER THE WILLIAMSON ACT

Agricultural zoning and Williamson Act contracts help preserve agricultural lands in the region. Existing zoning information was obtained from the best available data sources (Appendix B) and includes lands allowed for various types of agricultural operations (Figure 4.2-2). The purpose of agricultural zoning is to accommodate various types of agricultural uses, preserve land, and allow for future development where appropriate.

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments that are much lower than normal because they are based upon farming and open space uses as opposed to full market value. As of 2010, the most recent available data, the San Diego region contains 73,828 acres of lands designated under the Williamson Act (DOC 2010). Figure 4.2-2 shows lands in the San Diego region designated under the Williamson Act. Williamson Act lands are generally located in the eastern portions of the County of San Diego along SR 78, SR 79, and SR 76.
Figure 4.2-2
Zoned Agriculture/Williamson Act Lands
April 2015
- Williamson Act (2012)
- Agriculture Zoning
- Zoned for Agricultural Use

Source: Appendix B of this EIR.
Public agencies may acquire Williamson Act contracted land for a wide range of public improvements. Common reasons for publicly acquiring contracted land include wildlife habitat, water resource management, public open space, and schools. Public acquisitions have been the second leading source of contract termination acreage over the current decade. Before acquiring contracted lands, a public agency must make findings that there is no other noncontracted land reasonably feasible for the purpose, and that the lower cost of contracted land is not a primary factor in its decision. From 2010 to 2011, public acquisitions decreased in San Diego from 128 to 84 acres (DOC 2013).

During the past 25 years, very few property owners have requested to enter into a Williamson Act Contract within the region. A total of 738 acres of farmland contracted under the Williamson Act was in the process of nonrenewal as of 2011 (DOC 2013). The nonrenewal process takes 10 years to complete, during which time property taxes are incrementally raised to remove the tax benefit, and at the end of the 10-year period restrictions to development are lifted.

**4.2.1.2 FORESTRY RESOURCES**

**EXISTING TIMBERLAND**

The California Timberland Productivity Act of 1982 (Government Code Section 51100 et seq.) defines timberland as privately owned land, or land acquired for state forest purposes, which is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, and which is capable of growing an average annual volume of wood fiber of at least 15 cubic feet per acre. A Timberland Production Zone (TPZ) is an area zoned and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses. Compatible uses include those that do not significantly detract from the use of the property for, or inhibit, growing and harvesting timber. Compatible uses include, but are not limited to, watershed management; management for fish and wildlife habitat or hunting and fishing; a use integrally related to the growing, harvesting, and processing of forest products, including but not limited to roads, log landings, and log storage areas; the erection, construction, alteration, or maintenance of gas, electric, water, or communication transmission facilities; grazing; and a residence or other structure necessary for the management of land zoned as timberland production. The San Diego region does not contain any land designated as timberland or as a TPZ (Shih 2002).

**EXISTING FOREST LAND**

Public Resource Code Section 12220(g) defines “forest land” 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. This section analyzes “forest land” using current data sources for forest vegetation communities. Forest vegetation communities in the San Diego region include riparian forest/woodland and upland forest/woodland; these vegetation communities are located mainly in the coastal and montane subregions of the San Diego region and are typically a variety of pine, oak, or other tree type.

Based on the most recent available vegetation data, the San Diego region contains a number of areas that are considered “forest land,” totaling 291,473 acres (SANDAG 2014). Figure 4.2-3 shows lands designated as forest land in the region. A number of state and national parks in the region also contain forest land.
Figure 4.2-3
Forest Land
April 2015

- Forest/Woodland
- Riparian Forest/Woodland

Source: Appendix B of this EIR.
The majority of forest land is located in parks and vacant and undeveloped areas located east of incorporated cities and urbanized communities. A few areas with forest lands are also located near urban centers. National and state parks with forest resources include the Torrey Pines State Natural Reserve (TPSNR), Cleveland National Forest, Agua Tibia Wilderness Area (ATRNA), San Mateo Canyon Wilderness, Santa Rosa Mountains State Wilderness, Palomar Mountain State Park, and Cuyamaca Rancho State Park. The following sections describe national and state parks or preserved areas that contain forest land.

**Torrey Pines State Natural Reserve**

TPSNR, located within the City of San Diego, has more than 2,000 acres of rare native Torrey pine forest and southern maritime chaparral. Recreational uses are managed by the State Parks system. The trees themselves were identified in the mid-1800s as a separate species of pine, and one that grows naturally only along a small strip of coast from Del Mar to La Jolla and on Santa Rosa Island, which lies off in the sea about 170 miles to the northwest. The Torrey pine is the rarest pine in the United States and one of the rarest pines in the world. All natural features in the TPSNR are protected by law (TPSNR 2010).

**The Cleveland National Forest**

The Cleveland National Forest is the southernmost National Forest in California. Consisting of 460,000 acres, the forest offers a wide variety of terrains and recreational opportunities. Part of the Cleveland National Forest is located in the unincorporated areas of San Diego County, in three noncontiguous areas, and portions of the forest are also located in Orange and Riverside counties. It is prohibited to damage or remove any tree or forest product except as authorized by a special-use authorization, timber sale contract, or federal law or regulation (USFS 2008).

**Agua Tibia Wilderness Area**

Agua Tibia Wilderness is a 15,934-acre protected area in Riverside and San Diego counties, mostly within the Palomar Ranger District of the Cleveland National Forest (Chester 2001). ATRNA, located within the wilderness, comprises 480 acres of Bigcone Douglas-fir–canyon live oak forest. The ATRNA was set aside for the study of this forest type in the Peninsular Range province and with emphasis on forest succession, long-range ecological changes, and the effects of resource management practices (USFS 2002).

**Palomar Mountain State Park**

Coniferous forests cover much of the 1,862 acres of Palomar Mountain State Park, located in north San Diego County (CSP 2011a). Palomar Mountain State Park has a long history of use as a resort and camping destination, but logging operations have never been fully developed (Brueggeman 2008).

**Cuyamaca Rancho State Park**

Cuyamaca Rancho State Park is a state park located 40 miles east of San Diego in the Laguna Mountains of the Peninsular Ranges. The park's 26,000 acres feature pine, fir, and oak forests, with meadows and streams that exist due to the relatively high elevation of the area compared to its surroundings. The park includes 6,512-foot Cuyamaca Peak, the second highest point in San Diego County (CSP 2011b).
4.2.2 REGULATORY SETTING

FEDERAL LAWS, REGULATIONS, PLANS, AND POLICIES


Congress passed the Agriculture and Food Act of 1981 (Public Law 97-98) containing the Farmland Protection Policy Act (FPPA)—Subtitle I of Title XV, Section 1539-1549. The FPPA is intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. The objective of the FPPA is to ensure that—to the extent possible—federal programs are administered to be compatible with state, local units of government, and private programs and policies to protect farmland. Federal agencies are required to develop and review their policies and procedures to implement the FPPA every 2 years (USDA 2014).

Federal Forest Legacy Program

The objective of the Federal Forest Legacy Program is to identify and protect environmentally important forestlands that are threatened by present or future conversion to nonforest uses. Priority is given to lands that can be effectively protected and managed and that have important scenic, recreational, timber, riparian, fish and wildlife, threatened and endangered species, and other cultural and environmental values. The program is entirely voluntary. Landowners who wish to participate may sell or transfer particular rights, such as the right to develop the property or to allow public access, while retaining ownership of the property and the right to use it in any way consistent with the terms of the easement. The agency or organization holding the easement is responsible for managing the rights it acquires and for monitoring compliance by the landowner. Forest management activities, including timber harvesting, hunting, fishing, and hiking are encouraged provided they are consistent with the program's purpose.

The Federal Forest Legacy Program is not solely a protection program. Eligible properties may be “working forests,” where forestland is managed for the production of forest products and traditional forest uses are maintained. These forest uses will include both commodity outputs and noncommodity values. The purpose of these easements is to maintain these forests intact to provide such traditional forest benefits as timber production, wildlife habitat, watershed protection, and/or open space. These forests remain in private ownership, except for the restrictions on development or other uses conveyed by the conservation easement to the agency selected by the landowner (CAL FIRE 2014).

STATE LAWS, REGULATIONS, PLANS, AND POLICIES

Right to Farm Act

The Right to Farm Act (Civil Code Section 3482.5) 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 will not be considered a nuisance as a result of a new land use.
Coastal Zone Management Act

The Coastal Zone Management Act requires the protection of agricultural lands within the coastal zone. It does so by directly mandating that the maximum amount of prime agricultural land be maintained in production, and by supporting various techniques to limit threats to agricultural productivity. These include establishing stable urban-rural boundaries, agricultural buffers, development priority on lands not suitable for agriculture, subdivision restrictions, and public service expansion controls (Public Resource Code Section 30241).

California Farmland Conservancy Program (CFCP)

The CFCP (Public Resources Code Sec. 10200 et seq.) was formerly known as the Agricultural Land Stewardship Program, which began in 1995. The CFCP provides grants for agricultural conservation easements with the intent to encourage the long-term, private stewardship of agricultural lands through the voluntary use of agricultural conservation easements. The CFCP provides grants to local governments and qualified nonprofit organizations. Easements funded by the CFCP must be of a size and nature suitable for viable commercial agriculture. An agricultural conservation easement is a voluntary, legally recorded deed restriction placed on a property used for agricultural production. The easements are held by land trusts or local governments. The goal is to maintain agricultural land in active production by removing the development pressures from the land. Such easements prohibit practices that would damage or interfere with the agricultural use of the land. Because the easement is a restriction on the deed of the property, the easement remains in effect even when the land changes ownership. While other benefits may accrue because the land is not developed (scenic and habitat values, for example), the primary use of the land is agricultural.

California Land Conservation Act (Williamson Act)

The California Land Conservation Act, better known as the Williamson Act, creates incentives designed to retain prime agricultural land and open space in agricultural use (Government Code Sections 51200–51297.4). The Williamson Act requires 10-year contracts between the local government and participating landowners. The initial term of 10 years renews automatically each year (local governments can establish initial contract terms for longer periods of time). Generally, any commercial agricultural use will be permitted within any agricultural preserve.

The Williamson Act also includes Farmland Security Zone (FSZ) provisions. An FSZ is an area created within an agricultural preserve by a local government upon request by one or more landowners. FSZ contracts offer landowners greater property tax reduction in return for an initial contract term of 20 years, with renewal occurring automatically each year. Land restricted by an FSZ contract is valued for property assessment purposes at 65 percent of its Williamson Act valuation, or 65 percent of its Proposition 13 valuation, whichever is lower. New special taxes for urban-related services must be levied at an unspecified reduced rate unless the tax directly benefits the land or living improvements. Cities and special districts that provide nonagricultural services are generally prohibited from annexing land enrolled under an FSZ contract. Similarly, school districts are prohibited from taking FSZ lands for school facilities (DOC 2014).
Farmland Mapping and Monitoring Program

The FMMP produces maps and statistical data used for analyzing impacts on California’s agricultural resources. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called Prime Farmland. The maps are updated every 2 years with the use of a computer mapping system, aerial imagery, public review, and field reconnaissance. The goal of the FMMP is to provide consistent and impartial data to decision makers for use in assessing present status, reviewing trends, and planning for the future of California’s agricultural land resources (DOC 2015).

The Cortese-Knox-Hertzberg Local Government Reorganization Act

The Cortese-Knox-Hertzberg Local Government Reorganization Act (Government Code Sections 56000 et seq.) establishes procedures for local government changes of organization, including city incorporations, annexations to a city or special district, and city and special district consolidations. This act requires that development or use of land for other than open space will be guided away from existing prime agricultural lands in open space use toward areas containing nonprime agricultural lands, unless that action would not promote that planned, orderly, efficient development of an area.

California Department of Forestry and Fire Protection’s and Resource Assessment Program

The California Department of Forestry and Fire Protection’s and Resource Assessment Program (FRAP) accesses the amount and extent of California’s forest and rangelands. The program analyzes their condition and identifies alternative management and policy guidelines. The assessment links together state requirements for natural resource inventories and strategies and the federal government’s desire to rely more heavily on these state programs in determining priorities for funding (Cal Fire 2015).

Open Space Subvention Act

The Open Space Subvention Act (OSSA, Government Code Sections 16140 et seq.) was enacted on January 1, 1972, to provide for the partial replacement of local property tax revenue foregone as a result of participation in the Williamson Act and other enforceable open space restriction programs. Through 2009, participating local governments received annual payments of foregone property tax revenues on the basis of the quantity (number of acres), quality (soil type and agricultural productivity), and, for FSZ contracts, location (proximity to a city) of land enrolled under eligible enforceable open space restrictions (County of San Diego 2011). These payments have been suspended in more recent years due to revenue shortfalls.

California Forest Legacy Act

The California Forest Legacy Act (CFLA, Public Resources Code Sections 12200 et seq.) was enacted in 2000 and extended in 2007. The CFLA allows the California Department of Forestry and Fire Protection to acquire conservation easements, and permit federal agencies, state agencies, local governments, and nonprofit land trust organizations to hold conservation easements acquired pursuant to the California Forest Legacy Program. The California Forest Legacy Program provides funding for conservation easements, with the objective to protect the forest land base, as well as forest resources such as fish and wildlife habitat and water quality, while ensuring the continuance of traditional uses and protection of landowners’ property rights. Landowners participating in the programs are required to prepare a multi-resource management plan that is the equivalent, or more extensive than, a Forest Stewardship Plan (per U.S. Forest Service guidelines) (CAL FIRE 2011).
REGIONAL AND LOCAL LAWS, REGULATIONS, PLANS, AND POLICIES

Nearly all cities and the County of San Diego have adopted general plans and zoning regulations that address, to some degree, the preservation and use of agricultural lands. Jurisdictions containing lands designated for agriculture typically have zoning codes and regulations that provide detailed direction related to development standards; permitted, conditionally permitted, and prohibited uses; and other regulations. Additionally, coastal communities within the coastal zone rely on Local Coastal Programs (LCPs) as basic planning tools to guide local governments with development in the coastal zone, in partnership with the Coastal Commission. LCPs contain the ground rules for future development and protection of coastal resources as well as agricultural resources in the 76 coastal cities and counties. The LCPs specify appropriate location, type, and scale of new or changed uses of land and water. Each LCP includes a land use plan and measures to implement the plan (such as zoning ordinances). This section focuses on the local regulations, policies, and programs related to preservation of lands designated for agricultural uses in the region, which are provided in Table 4.2-2.

Table 4.2-2
Local Agriculture Regulations, Policies, or Programs

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Regulation, Policy, or Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlsbad</td>
<td>The City of Carlsbad Local Coastal Program protects agricultural lands from the premature conversion to more urban land uses by establishing programs that require mitigation for conversion of agricultural property to urban uses. It also established methods to benefit agriculture in the community by providing financial assistance through cash programs. General Plan Policy, Agriculture Implementing Policies and Action Programs (City of Carlsbad 2014): C-1: Support and utilize all measures available, including the Williamson Act, to reduce the financial burdens on agricultural land, not only to prevent premature development, but also to encourage its continued use for agricultural purposes. C-2: Participate with neighboring cities and communities in projects leading to preservation of agricultural resources and other types of open space along mutual sphere of influence boundaries. C-3: The City shall utilize all existing programs and land use protections and explore possible new grant programs and other outside financial assistance to keep the existing Flower Fields in permanent farming and flower production. C-4: Attempt to preserve the flower fields or lands east of I-5 to the first ridgeline between Cannon Road and Palomar Airport Road, through whatever method created and most advantageous to the City of Carlsbad. C-5: Buffer agriculture from more intensive urban land uses with mutually compatible intermediate land uses. C.6 Encourage soil and water conservation techniques in agricultural activities.</td>
</tr>
<tr>
<td>Chula Vista</td>
<td>The Otay Ranch General Development Plan, approved jointly by the City of Chula Vista and County of San Diego for the future development of Otay Ranch, establishes goals, objectives, policies, and implementation measures relative to the protection of agricultural resources. The Range Management Plan for Otay Ranch recommendations and implementing actions provided for ongoing managed grazing activities on conveyed lands if the activity is shown not to negatively affect biological resources (City of Chula Vista 1994).</td>
</tr>
<tr>
<td>Coronado</td>
<td>No applicable agricultural regulations, policies, or programs.</td>
</tr>
<tr>
<td>Del Mar</td>
<td>No applicable agricultural regulations, policies, or programs.</td>
</tr>
<tr>
<td>El Cajon</td>
<td>The City of El Cajon does not have any lands designated for agricultural use but allows limited agricultural uses in large residential zones and open space zones (Shute 2011).</td>
</tr>
<tr>
<td>Encinitas</td>
<td>The Agricultural Overlay Zone restricts development on properties presently under a Williamson Act contract</td>
</tr>
</tbody>
</table>
### 4.2 Agricultural and Forestry Resources

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Regulation, Policy, or Program</th>
</tr>
</thead>
</table>
|                       | and described on the City map delineating the AGO Zone to that which is necessary for agricultural operations. The Land Use Element of the General Plan contains a policy that specific plans will not be approved unless the exclusive agriculture use of the land is no longer feasible, or that to allow development on portions of the plan area will enhance the feasibility of agriculture use of the remaining portions of the area (City of Encinitas 1989).
|                       | The Encinitas Ranch Specific Plan contains policies to ensure the economic viability of agricultural uses in the planning area and preserve sufficient land area so as to ensure the financial viability of agriculture on the property and the continued operation of the Paul Ecke Ranch (City of Encinitas 1994).
| Escondido             | City of Escondido General Plan policies (City of Escondido 1990):
|                       | H1.1: The City shall strive to maintain large-lot residential land uses with appropriate zoning designations in agricultural areas that are compatible with preserving agricultural productivity.
|                       | H1.2: Agriculture should be buffered from more intensive urban uses with intermediate land uses which are mutually compatible, through the implementation of appropriate policies of the Land Use Element. H1.3: The City may explore a variety of techniques to preserve existing agricultural lands. In particular, the City should study:
|                       | (a) The formation of an Agricultural Land Trust, defined as a nonprofit corporation organized according to the Nonprofit Public Benefit Corporation Law of California and Section 501(c)(3) of the Internal Revenue Code. The corporation is empowered to acquire, manage, and/or hold agricultural land for the public benefit but without the necessary expenditures of public revenues. (b) The requirements for projects to transfer development rights from existing agricultural lands to other portions of the project, thereby preserving the agricultural lands in permanent open space, consistent with clustering policies. (c) The “right to farm” in open space areas.
| Imperial Beach        | No applicable agricultural regulations, policies, or programs.                                                                                                                                                                           |
| La Mesa               | No applicable agricultural regulations, policies, or programs.                                                                                                                                                                         |
| Lemon Grove           | No applicable agricultural regulations, policies, or programs.                                                                                                                                                                         |
| National City         | The City of National City Draft General Plan Update policy (City of National City 2012):
|                       | OS-3.3: Encourage the development of unused land such as portions of parks and utility right of ways to be converted to productive space for growing food.
|                       | OS-3.5: Identify potentially feasible site locations for urban agriculture, including locations for street conversions, and identify links between them.
|                       | OS-3.8: Maintain an on-going dialogue with the community to ensure that its needs are being addressed by urban agriculture endeavors.
|                       | OS-3.11: Explore opportunities for the planting of fruit trees and gardens in the public right-of-way, where feasible.                                                                                                               |
| Oceanside             | City of Oceanside General Plan policies (City of Oceanside 2002):
|                       | 2.5 B: Residential development shall be permitted provided such development does not interfere with existing agricultural operations and that the open space character of the area is preserved. Appropriate minimum lot areas shall be determined by the area's topography, adjacent land uses, and the availability of public services and utilities; however, under no circumstances shall lot areas be less than two and one-half (2½) acres. Lot configurations and dimensions shall provide areas of sufficient size to conduct limited, low-intensity agricultural activities such as orchards, gardens, and the keeping of livestock. 2.5 C: The City shall, in all proposed actions converting agricultural lands to other land uses, consider the loss of those lands to the potential agricultural productivity to the community; and shall assure that land use compatibility to agricultural lands is fully defined and assured. 2.5 D: Land use compatibility is of primary importance to agricultural areas, since land use conflicts between...
<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Regulation, Policy, or Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poway</td>
<td>City of Poway General Plan contains a policy to allow agriculture on lands designated Open Space – Resource Management (OS-RM) with approval of the City Council. The City’s General Plan encourages the combination of agriculture and residential uses in High Valley and parts of Green Valley. The City’s General Plan states that numerous areas are lightly developed with activities or facilities that serve the region as unique or outstanding recreational safety or managed production (agriculture, mineral extraction areas). These areas should be retained as open space and in some cases increased to serve the region’s expanding needs [City of Poway 1991].</td>
</tr>
<tr>
<td>City of San Diego</td>
<td>City of San Diego General Plan policies (City of San Diego 2012): CE-L.1. Manage agricultural activity to minimize soil erosion and minimize the release of contaminants into surface and groundwater resources. CE-L.2. Limit retail activity in agriculturally-designated areas to uses that are reasonably related to agriculture (e.g., sale of locally grown farm products). CE-L.3. Encourage agricultural operations such as community farms and gardens (especially on City-leased lands) to provide for educational experiences which demonstrate the history, importance and value of agricultural operations, and to provide more healthy, sustainable, local food options. CE-L.4. Continue water reclamation research programs to develop realistic methods of providing inexpensive means of leaching soils, irrigating crops and preventing salt water intrusion. CE-L.5. Integrate agriculture and sustainability principles that promote clean air and water, and healthy soils, habitats, and ecosystems. Encourage sustainable agricultural and water quality best management practices, such as tillage, use of grass filter strips, runoff detention basins, and organic farming, on all private land and require BMPs on new or renewed City land leased for agricultural purposes. Provide the minimum amount of flood control/channelization. b. Encourage sustainable agricultural operations, especially on City-leased lands, to offer more sustainable, local food choices. CE-L.6. Provide mechanisms to permit private land owners of prime agricultural lands to take advantage of the Williamson Act. CE-L.7. Balance the economic benefits provided by agricultural uses with the competing water resource, biological and cultural resource management and recreation priorities. See also Historic Preservation Element policies HP- A.2, A.3, and A.4 concerning historical and cultural resources, and government-to-government relationships with the Kumeyaay/Diegueno tribes of San Diego. See the Conservation Element Policy CE-B.1.e and Section G for policies pertaining to native plants and biological resources. CE-L.8. Foster an urban agriculture system that is environmentally and economically sustainable. Encourage the use of urban agricultural techniques that require reduced land and water use as compared to conventional methods. Recognize the cultural and economic benefits of providing opportunities for residents to grow healthy, affordable, culturally appropriate foods, and to augment their food budget through urban agriculture. Reduce waste and increase agricultural productivity through increased composting of organic waste. Recognize the essential role of honeybees and other pollinators in healthy ecosystems and in the food supply chain. Support safe and reasonable beekeeping. CE-L.9. Increase opportunities for urban agriculture. Develop land development regulations that allow urban agriculture uses in appropriate locations, with parameters designed to control potential impacts to neighboring uses and properties. Develop land development regulations that increase opportunities for farmers markets on public and private lands.</td>
</tr>
</tbody>
</table>
### Jurisdiction | Regulation, Policy, or Program
---|---
**San Marcos** | No applicable agricultural regulations, policies, or programs.  
**Santee** | The City of Santee allows agricultural use in lands designated as Open Space under special conditions (City of Santee 2009).  
**Solana Beach** | City of Solana Beach General Plan Policy 4.a: The city’s land use plan shall allow for floriculture (or similar agriculture) operations within the city. The only site with this designation is the area north of Patty Hill Drive between Rios Avenue and Barbara Avenue (City of Solana Beach 2006).  
**Vista** | The City of Vista General Plan contains a number of policies to preserve agricultural uses (City of Vista 1998):  
- Right-to-farm provisions  
- Support legislation proposed by other agencies that would provide tax incentives or other economic incentives for agricultural land use  
- Provide lower power and water rates for agricultural endeavors, making reclaimed water readily available  
- Make public lands in the Sphere of Influence available for agricultural leaseholds  
- Adopt a Greenhouse policy  
- Consider the establishment of gardens or groves in open space Green Belt areas of projects as an alternative amenity to natural open or passive recreational facilities  
- Encourage fruit-producing plants in landscape areas  
- Encourage family gardens and or groves in the lower density residential areas  
- Make public lands available for community garden projects in undeveloped parks or other public vacant land when no development is projected  
- Communicate clearly and show by example that there will be no development penalties levied towards any person utilizing their property as interim agriculture  
- In approving Specific Plans and Subdivisions, the City should include standard provisions that specify that interim agricultural uses are encouraged and permitted in considering development projects.  
- In considering development projects involving areas containing agricultural resources the City should negotiate a density transfer or development bonuses that equitably increases building entitlement.  
**County of San Diego** | County of San Diego Code of Regulatory Ordinances Sections 63.401 and 63.402, the Agricultural Enterprises and Notice to Prospective Homeowners Ordinance, defines and limits the circumstances under which agricultural enterprise activities, operations, and facilities will constitute a nuisance.  
- The San Diego County Board of Supervisors Policy I-38, Support and Encouragement of Farming in San Diego County, sets forth policies for the implementation of the Williamson Act.  
- The County of San Diego General Plan policies (County of San Diego 2011):  
- LU-5.3 Rural Land Preservation. Ensure the preservation of existing open space and rural areas (e.g., forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, and groundwater recharge areas) when permitting development under the Rural and Semi Rural Land Use Designations.  
- LU-6.4 Sustainable Subdivision Design. Require that residential subdivisions be planned to conserve open space and natural resources, protect agricultural operations including grazing, increase fire safety and defensibility, reduce impervious footprints, use sustainable development practices, and, when appropriate, provide public amenities. [See applicable community plan for possible relevant policies.]  
- Policy LU-7.1: Agricultural Land Development. Protect agricultural lands with lower density land use designations that support continued agricultural operations.  
- Policy LU-7.2: Parcel Size Reduction as Incentive for Agriculture. Allow for reductions in lot size for compatible development when tracts of existing historically agricultural land are preserved in conservation easements for continued agricultural use.
4.2 Agricultural and Forestry Resources

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Regulation, Policy, or Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>COS-6.1 Economic Diversity. Support the economic competitiveness of agriculture and encourage the diversification of potential sources of farm income, including value added products, agricultural tourism, roadside stands, organic farming, and farmers markets.</td>
<td></td>
</tr>
</tbody>
</table>

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

- Limiting the ability of new development to take actions to limit existing agricultural uses by informing and educating new projects as to the potential impacts from agricultural operations.
- Encouraging new or expanded agricultural land uses to provide a buffer of non-intensive agriculture or other appropriate uses (e.g., landscape screening) between intensive uses and adjacent non-agricultural land uses.
- Allowing for agricultural uses in agricultural areas and designing development and lots in a manner that facilitates continued agricultural use within the development.
- Requiring development to minimize potential conflicts with adjacent agricultural operations through the incorporation of adequate buffers, setbacks, and project design measures to protect surrounding agriculture.
- Supporting local and State right-to-farm regulations.
- Retain or facilitate large and contiguous agricultural operations by consolidation of development during the subdivision process.

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

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

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

Local Policies and Programs: Forest Lands

Similar to agriculture, local jurisdictions have adopted general plans, regulations, and policies that address the preservation and use of open space and biological resources, including forest lands. These plans include the Multiple Species Conservation Program (MSCP), Multiple Habitat Conservation Program (MHCP), TransNet Environmental Mitigation Program, and other local biological resources regulations as described in Section 4.4.

4.2.3 SIGNIFICANCE CRITERIA

Appendix G of the CEQA Guidelines (“Appendix G”) provides criteria for determining the significance of a project’s environmental impacts, in the form of Initial Study checklist questions. Unless otherwise noted, the significance criteria specifically developed for this EIR are based on the checklist questions that address the criteria in Appendix G. In some cases, SANDAG has combined checklist questions, edited their wording, or changed their location in the document in an effort to develop significance criteria that reflect the programmatic level of analysis in this EIR, the unique nature of the proposed Plan’s agricultural and forestry resources impacts, and the unique characteristics of the proposed Plan.
Checklist questions for agriculture and forestry are provided in Section II of Appendix G. For purposes of this EIR, the Appendix G questions have been combined and modified. Criterion II (a) is addressed in AG-1. Criteria (b) and (c) related to Williamson Act lands and lands zoned for agriculture are addressed in AG-2. FR-1 addresses criteria (c) and (d) related to forestry resources. Further, criterion (e) addressing other factors that may result in the conversion of agricultural and forestry resources is addressed in all of the criteria below. No timberland exists in the proposed Plan area. For the purposes of this EIR, implementation of the proposed Plan would have a significant agricultural and forestry resources impact if it would:

AG-1 Convert agricultural lands to nonagricultural use.

AG-2 Conflict with existing zoning for agricultural use, or a Williamson Act contract

FR-1 Convert or result in the loss of “Forest Land” as defined in the California Forest Legacy Act of 2007 (Public Resources Code Section 12220(g)).

4.2.4 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

AG-1 CONVERT AGRICULTURAL LANDS TO NONAGRICULTURAL USE.

ANALYSIS METHODOLOGY

Although the proposed Plan’s SCS seeks to preserve farmland through compact development, some conversions of agricultural land to nonagricultural use would occur under the proposed Plan. This section analyzes conversion of existing agricultural lands to nonagricultural use as a result of regional growth and land use change and transportation network improvements under the proposed Plan. Existing agricultural lands used for the analysis are mapped in Figure 4.2-1. Impacts calculated for total agricultural land converted include all agricultural parcels, regardless of parcel size. In addition to impacts from direct conversion of land, the determination of impact significance also considers indirect effects to the viability of continued agricultural production in areas where regional growth and land use change and other pressures would result in indirect impacts to these resources.

Regional Growth and Land Use Change

Any nonagricultural growth and land use change within existing agricultural lands is considered a direct impact to these resources. The direct impacts of regional growth and land use change were quantified using GIS methods by overlaying forecasted regional growth and land use change onto the existing agricultural lands. The analysis quantifies direct impacts to existing agricultural lands using different approaches: (1) growth in land use categories other than Spaced Rural Residential and (2) Spaced Rural Residential.

Growth and land use change (other than growth in the Spaced Rural Residential category) that would occur within existing agricultural lands is considered a 100 percent conversion of existing agricultural land to a nonagricultural use. For these impacts it was possible to calculate impacts to specific subcategories of agricultural land (e.g., orchards and vineyards, field crops).
The analysis of growth in the Spaced Rural Residential land use category uses a different approach to quantify conversion of existing agricultural land to nonagricultural uses. The analysis is based on a conversion factor for the impacts of semi-rural and rural residential development on agricultural lands used by the County of San Diego in its General Plan Update EIR (County of San Diego 2011). Applying the conversion factor to analysis of the impacts of Spaced Rural Residential lands identified in the proposed Plan is appropriate because most of the Spaced Rural Residential lands are semi-rural and rural residential land use designations in the unincorporated County (along with rural residential land use designations in other local jurisdictions with similar density restrictions). Forecasted regional growth and land use change in the proposed Plan is based on adopted local general plans, including the County General Plan Update.

Based on a review of past built-out subdivision projects on existing agricultural lands in the unincorporated County, County staff identified that, on average, subdivision of existing agricultural lands results in permanent conversion of 1.5 acres of agricultural lands to nonagricultural use per lot.

Due to San Diego’s unique agricultural characteristics, land that is subdivided into smaller lots may actually increase agricultural viability, since smaller parcels are more affordable and still conducive for raising crops in the County. For example, 68 percent of farms in the County are between one and nine acres in size, with an average farm size of four acres. Nevertheless, any subdivision of land resulting in the development of housing on lands with agricultural resources would convert some agricultural land to nonagricultural use from development activities such as grading activities and the installation of residences, driveways, utilities, leach fields, and accessory units. For Spaced Rural Residential impacts, without site-specific development proposals, it is not possible to accurately calculate impacts to specific subcategories of agricultural land.

It should be noted that while the methodology for Impact AG-1 uses the same conversion factor for the impacts of semi-rural and rural residential development on agricultural lands used by the County of San Diego in its General Plan Update EIR (i.e., 1.5 acres of permanent agricultural land conversion per subdivided lot), other aspects of this EIR analysis are fundamentally different than the County’s methodology as explained below.

The County methodology uses the County General Plan Land Use Map to identify the total amount of existing agricultural lands designated for rural or semi-rural residential development, and then calculates the maximum amount of lots that could theoretically be created under that designation. It does not take into account any factors that affect whether such land would develop, and if so, how much land and by when. As a result, while the County methodology accurately identifies existing agricultural lands with a rural or semi-rural residential General Plan designation, it greatly overestimates actual physical conversion of agricultural land that would occur as a result of rural residential development by not taking into account a variety of reasonably foreseeable factors and available information related to land development, such as economic and demographic trends, physical and regulatory constraints, proximity to job centers, access to transportation networks (e.g., highways, public transit), and historical development patterns.

The Impact AG-1 methodology uses the locations of forecasted regional growth and development under the proposed Plan, which are based on the Series 13 Regional Growth Forecast. While the forecast is based on the same County land use designations, it provides a finer-grain prediction of specific locations similar in size to individual parcels within rural and semi-rural residential areas on the County General Plan Land Use Map that would develop with rural and semi-rural residential housing, and by when.
The forecast is based on the best available information at the time of Draft EIR preparation and well-proven and verified SANDAG modeling methods. In summary, the forecast process includes two iterative phases. First, a forecast for the entire region is produced based largely on economic and demographic trends. The second phase allocates the forecasted growth down to the jurisdictions and smaller geographic areas similar in size to individual parcels. The subregional forecast model distributes growth based on a variety of factors including available capacity for housing, constraints to development (e.g., floodplains, steep slopes, habitat preserves, historic districts, etc.), proximity and access to jobs and transportation networks, and historical development patterns; however, it does not allocate growth beyond what is allowed by any jurisdiction’s general plan.

Because of the fundamental differences in methods, the two approaches yield different results, with SANDAG’s estimates of actual physical conversion of agricultural land considerably lower than the County estimates of agricultural land that could theoretically be converted under General Plan buildout. For example, take the following County General Plan land use designation: Rural Lands 20 (RL-20), which allows for one dwelling unit per 20 gross acres. Table B-5 of Appendix B shows that, according to the Regional Growth Forecast, a total of 4,552 acres of existing agricultural lands within the RL-20 designation being developed by 2020; by comparison, the County methodology identifies 38,118 acres of existing agricultural land designated as RL-20 by the General Plan. The 4,552 acres of development in the RL-20 designation would result in up to 228 lots (one dwelling unit per lot), whereas 38,118 acres would result in up to 1,906 lots (one dwelling unit per lot). Applying the factor of 1.5 acres of permanent agricultural land conversion per lot results in conversion of about 341 acres under the Impact AG-1 approach, and about 2,859 acres under the County methodology.

For the reasons presented above, the methodology used in Impact AG-1 constitutes a more accurate method based on the best available information for estimating actual physical conversion of existing agricultural lands to nonagricultural use as a result of the forecasted regional growth and land use change in the proposed Plan.

**Transportation Network Improvements and Programs**

Transportation network improvements would also convert existing agricultural lands to nonagricultural use. The direct impacts of transportation network improvements are evaluated through GIS methods by overlaying transportation improvement project footprints onto the existing agricultural lands dataset described in Section 4.2.1.1. Transportation network improvements that would convert existing agricultural lands to nonagricultural use are calculated for each project that would have a direct impact on existing agricultural lands. Transportation network improvement project footprints are based on available information at the time of analysis. Figures 2.0-15 thru 2.0-23 show the locations of planned transportation network improvements. The GIS analysis uses the best available information for the physical footprint of each improvement including, when available, existing Caltrans engineering project-level CADD designs.

During the timeframe of the proposed Plan, climate change effects that are likely to exacerbate the proposed Plan’s impacts on the conversion of existing agricultural land to nonagricultural use include but are not limited to, higher annual average temperatures, more days of extreme high temperatures, longer and more humid heat waves, less frequent and more intense rainstorms and more frequent flood events, more intense and frequent drought and increased evaporation from soil and reservoirs, more frequent, severe wildfires, and spreading of pests and vector-borne diseases. In general, climate change effects would increase between 2020 and 2050. More information related to climate change effects is provided in Appendix F.
IMPACT ANALYSIS

2020

Regional Growth and Land Use Change

By 2020, population within the region is forecasted to increase by 292,284 people, housing by 83,836 units, and employment by 173,211 jobs. Regional growth and land use change that would convert agricultural lands to nonagricultural use are shown in Figure 4.2-4.

Regional growth and land use change would decrease the viability of agriculture on those lands by direct conversion of agricultural lands to nonagricultural use. As shown in Table 4.2-3, regional growth in land use categories other than Spaced Rural Residential would convert approximately 8,904 acres to nonagricultural use, including 377 acres of Prime Farmland, 110 acres of Farmland of Statewide Importance, and 785 acres of Unique Farmland. Additionally, regional growth in the Spaced Rural Residential land use category would convert an estimated 1,568 acres to nonagricultural use, including about 695 acres of FMMP-designated lands (i.e., Prime Farmland, Farmland of Statewide Importance, and Unique Farmland). A total of about 10,500 acres of existing agricultural land (all parcel sizes) would be converted to nonagricultural uses between 2012 and 2020, including about 2,000 acres of FMMP-designated lands (i.e., Prime Farmland, Farmland of Statewide Importance, Unique Farmland).

Regional growth that occurs in proximity to agricultural lands would also cause land use conflicts that would indirectly result in additional agricultural land conversions. These conflicts include, but are not limited to, noise, odors, water rights and use, chemicals, and runoff. Additionally, urban development near agricultural land increases the value of the agricultural land, which makes land purchase for agricultural expansion difficult, and provides more incentive to sell the property for nonagricultural use. Commercial, office, or industrial uses would also be incompatible uses when abutting lands with agricultural operations.

Table 4.2-3

Conversion of Agricultural Lands to Nonagricultural Use from Regional Growth and Land Use Change, 2012-2020

| Agricultural Land Subcategories | Agricultural Lands (acres) | Conversion to Nonagricultural Use (acres) | | |
|-------------------------------|----------------------------|------------------------------------------|---|---|---|
|                               | 2012                       | 2020                                     | 100 Percent | Spaced Rural Residential | Total |
| General Agriculture           | 38,044                     | 37,631                                   | 413          | --                       | --    |
| Field Crops                   | 46,913                     | 45,741                                   | 1,172        | --                       | --    |
| Grazing Lands                 | 365,824                    | 360,915                                  | 4,909        | --                       | --    |
| Intensive Agriculture         | 6,339                      | 6,243                                    | 96           | --                       | --    |
| Orchards and Vineyards        | 91,233                     | 90,276                                   | 957          | --                       | --    |
| Truck Crops                   | 29,293                     | 27,935                                   | 1,358        | --                       | --    |
| Total                         | 577,646                    | 568,741                                  | 8,904        | 1,568                    | 10,472|

Source: Appendix B of this EIR.

Notes:
Acreages have been rounded after summation.
For growth within the Spaced Rural Residential land use category, it is not possible to calculate the amount of land converted to nonagricultural use for individual agricultural land subcategories. As a result, only total agricultural lands converted are provided for growth within the Spaced Rural Residential land use category.
Figure 4.2-4
Conversion of Agricultural Land to Nonagricultural Use from Regional Growth and Land Use Change
April 2015


Source: Appendix B of this EIR.
Existing laws and programs described in Section 4.2.2, such as the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 and policies of local jurisdictions, would protect some agricultural lands and reduce the pressure to convert agricultural lands to nonagricultural use. However, the proposed Plan regional growth and land use changes would still convert agricultural lands to non-agricultural use, and this impact would be significant.

**Transportation Network Improvements and Programs**

As shown in Table 4.2-4 approximately 482 acres of existing agricultural land would be converted to nonagricultural use as a result of the transportation network improvements planned by 2020, including 11 acres of Prime Farmland, 3 acres of Farmland of Statewide Importance, and 14 acres of Unique Farmland, for a total of 28 acres of FMMP-designated lands. The proposed Plan transportation network improvements would convert agricultural lands to non-agricultural use, and this impact would be significant.

<table>
<thead>
<tr>
<th>Agricultural Land Subcategories</th>
<th>Agricultural Lands (acres)</th>
<th>Total Conversion to Nonagricultural Use (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012</td>
<td>2020</td>
</tr>
<tr>
<td>General Agriculture</td>
<td>38,044</td>
<td>38,027</td>
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<td>Field Crops</td>
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<td>46,874</td>
</tr>
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<td>Grazing Lands</td>
<td>365,824</td>
<td>365,498</td>
</tr>
<tr>
<td>Intensive Agriculture</td>
<td>6,339</td>
<td>6,332</td>
</tr>
<tr>
<td>Orchards and Vineyards</td>
<td>91,233</td>
<td>91,195</td>
</tr>
<tr>
<td>Truck Crops</td>
<td>29,293</td>
<td>29,238</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>577,646</strong></td>
<td><strong>577,164</strong></td>
</tr>
</tbody>
</table>

Source: Appendix B of this EIR

Note: Acreages have been rounded after summation.

**2020 Conclusion**

Implementation of forecasted regional growth and land use change and planned transportation network improvements would convert 10,954 acres of agricultural lands to nonagricultural use, including about 1,995 acres of FMMP-designated lands (i.e., Prime Farmland, Farmland of Statewide Importance, Unique Farmland). In addition, growth and land use change near agricultural lands would indirectly decrease the viability of agriculture production on those lands. Therefore, this impact (AG-1) in the year 2020 is significant.

**2035**

**Regional Growth and Land Use Change**

By 2035, population within the region is forecasted to increase by 710,269 people (23 percent), housing by 228,965 housing units (20 percent), and employment by 319,025 jobs (24 percent). Regional growth and land use change that would convert agricultural lands to nonagricultural use are shown in Figure 4.2-4.
As shown in Table 4.2-5, regional growth in land use categories other than Spaced Rural Residential would convert approximately 16,751 acres to nonagricultural use, including about 453 acres of Prime Farmland, 238 acres of Farmland of Statewide Importance, and 1,383 acres of Unique Farmland. Additionally, regional growth in the Spaced Rural Residential land use category would convert an estimated 4,275 acres to nonagricultural use, including 2,228 acres of FMMP-designated lands (i.e., Prime Farmland, Farmland of Statewide Importance, and Unique Farmland). A total of about 21,026 acres of existing agricultural land (all parcel sizes) would be converted to nonagricultural uses between 2012 and 2035, including 4,302 acres of FMMP-designated lands (i.e., Prime Farmland, Farmland of Statewide Importance, Unique Farmland).

Regional growth that occurs in proximity to agricultural lands would also cause land use conflicts that would indirectly result in additional agricultural land conversions. These conflicts include, but are not limited to, noise, odors, water rights and use, chemicals, and runoff. Additionally, urban development near agricultural land increases the value of the agricultural land, which makes land purchase for agricultural expansion difficult, and provides more incentive to sell the property for nonagricultural use. Commercial, office, or industrial uses would also be incompatible uses when abutting lands with agricultural operations.

### Table 4.2-5
Conversion of Agricultural Lands to Nonagricultural Use from Regional Growth and Land Use Change, 2012-2035

<table>
<thead>
<tr>
<th>Agricultural Land Subcategories</th>
<th>Agricultural Lands (acres)</th>
<th>Conversion to Nonagricultural Use (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012</td>
<td>2035</td>
</tr>
<tr>
<td>General Agriculture</td>
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<td>37,282</td>
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<tr>
<td>Field Crops</td>
<td>46,913</td>
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<td>Grazing Lands</td>
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<td>Intensive Agriculture</td>
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<td>5,981</td>
</tr>
<tr>
<td>Orchards and Vineyards</td>
<td>91,233</td>
<td>89,358</td>
</tr>
<tr>
<td>Truck Crops</td>
<td>29,293</td>
<td>27,309</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>577,646</td>
<td>560,894</td>
</tr>
</tbody>
</table>

Source: Appendix B of this EIR
Notes:
Acreages have been rounded after summation.
For growth within the Spaced Rural Residential land use category, it is not possible to calculate the amount of land converted to nonagricultural use for individual agricultural land subcategories. As a result, only total agricultural lands converted are provided for growth within the Spaced Rural Residential land use category.

Existing laws and programs described in Section 4.2.2 such as the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 and policies of local jurisdictions, would protect some agricultural lands and reduce the pressure to convert agricultural lands to nonagricultural use. However, the proposed Plan regional growth and land use changes would still convert agricultural lands to nonagricultural use, and this impact would be significant.

### Transportation Network Improvements and Programs

As shown in Table 4.2-6, approximately 662 acres of existing agricultural land would be converted to nonagricultural use as a result of the transportation network improvements planned by 2035, including 13 acres of Prime Farmland, 3 acres of Farmland of Statewide Importance and 18 acres of Unique Farmland, for a total of 34 acres of FMMP-designated lands. The proposed Plan transportation network improvements would convert agricultural lands to nonagricultural use, and this impact would be significant.
### Table 4.2-6

**Conversion of Agricultural Lands to Nonagricultural Use from Planned Transportation Network Improvements, 2012-2035**

<table>
<thead>
<tr>
<th>Agricultural Land Subcategories</th>
<th>Agricultural Lands (acres)</th>
<th>Conversion to Nonagricultural Use (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012</td>
<td>2035</td>
</tr>
<tr>
<td>General Agriculture</td>
<td>38,044</td>
<td>38,014</td>
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<tr>
<td>Field Crops</td>
<td>46,913</td>
<td>46,869</td>
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<td>Grazing Lands</td>
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<td>365,339</td>
</tr>
<tr>
<td>Intensive Agriculture</td>
<td>6,339</td>
<td>6,330</td>
</tr>
<tr>
<td>Orchards and Vineyards</td>
<td>91,233</td>
<td>91,195</td>
</tr>
<tr>
<td>Truck Crops</td>
<td>29,293</td>
<td>29,236</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>577,646</strong></td>
<td><strong>576,983</strong></td>
</tr>
</tbody>
</table>

Source: Appendix B of this EIR

Note: Acreages have been rounded after summation.

**2035 Conclusion**

Implementation of forecasted regional growth and land use change and planned transportation network improvements would convert 21,731 acres of agricultural lands to nonagricultural use, including 4,336 acres of FMMP-designated lands (i.e., Prime Farmland, Farmland of Statewide Importance, and Unique Farmland). In addition, growth and land use change near agricultural lands would indirectly decrease the viability of agriculture production on those lands. Therefore, this impact (AG-1) in the year 2035 is significant.

**2050**

**Regional Growth and Land Use Change**

By 2050, the region is forecasted to increase by 925,330 people (29 percent), 326,117 housing units (28 percent), and 460,492 jobs (34 percent). Regional growth and land use change that would convert agricultural lands to nonagricultural use are shown in Figure 4.2-4.

As shown in Table 4.2-7, regional growth in land use categories other than Spaced Rural Residential would convert approximately 20,993 acres to nonagricultural use, including 566 acres of Prime Farmland, 291 acres of Farmland of Statewide Importance, and 1,690 acres of Unique Farmland. Additionally, regional growth in the Spaced Rural Residential land use category would convert an estimated 5,107 acres to nonagricultural use, including about 4,700 acres of FMMP-designated lands (i.e., Prime Farmland, Farmland of Statewide Importance, and Unique Farmland). A total of about 26,100 acres of existing agricultural land (all parcel sizes) would be converted to nonagricultural uses between 2012 and 2050, including about 7,300 acres of FMMP-designated lands (i.e., Prime Farmland, Farmland of Statewide Importance, Unique Farmland).

Regional growth that occurs in proximity to agricultural lands would also cause land use conflicts that would indirectly result in additional agricultural land conversions. These conflicts include, but are not limited to, noise, odors, water rights and use, chemicals, and runoff. Additionally, urban development near agricultural land increases the value of the agricultural land, which makes land purchase for agricultural expansion difficult, and provides more incentive to sell the property for nonagricultural use. Commercial, office, or industrial uses would also be incompatible uses when abutting lands with agricultural operations.
Table 4.2-7
Conversion of Agricultural Lands to Nonagricultural Use from Regional Growth and Land Use Change, 2012-2050

<table>
<thead>
<tr>
<th>Agricultural Land Subcategories</th>
<th>Agricultural Lands (acres)</th>
<th>Conversion to Nonagricultural Use (acres)</th>
<th>2012</th>
<th>2050</th>
<th>100 Percent</th>
<th>Spaced Rural Residential</th>
<th>Total</th>
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<td>General Agriculture</td>
<td>38,044</td>
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</tr>
<tr>
<td>Field Crops</td>
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<td>2,961</td>
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<tr>
<td>Grazing Lands</td>
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<td>353,978</td>
<td>11,846</td>
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<tr>
<td>Intensive Agriculture</td>
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<td>5,875</td>
<td>464</td>
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<td>Orchards and Vineyards</td>
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<td>Truck Crops</td>
<td>29,293</td>
<td>26,894</td>
<td>2,399</td>
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</tr>
</tbody>
</table>
| Total                           | 577,646                   | 556,652                                  | 20,993| 5,107| 26,100      | Source: Appendix B of this EIR | Notes: Acreages have been rounded after summation. For growth within the Spaced Rural Residential land use category, it is not possible to calculate the amount of land converted to nonagricultural use for individual agricultural land subcategories. As a result, only total agricultural lands converted are provided for growth within the Spaced Rural Residential land use category. Existing laws and programs described in Section 4.2.2, such as the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 and policies of local jurisdictions, would protect some agricultural lands and reduce the pressure to convert agricultural lands to nonagricultural use. However, the proposed Plan regional growth and land use changes would still convert agricultural lands to non-agricultural use, and this impact would be significant.

Transportation Network Improvements and Programs

As shown in Table 4.2-8, approximately 1,255 acres of existing agricultural land would be converted to nonagricultural use as a result of the transportation network improvements planned by 2050, including 17 acres of Prime Farmland, 3 acres of Farmland of Statewide Importance and 18 acres of Unique Farmland, for a total of 38 acres of FMMP-designated lands. The proposed Plan transportation network improvements would convert agricultural lands to non-agricultural use, and this impact would be significant.

Table 4.2-8
Conversion of Agricultural Lands to Nonagricultural Use from Planned Transportation Network Improvements, 2012-2050

<table>
<thead>
<tr>
<th>Agricultural Land Subcategories</th>
<th>Agricultural Lands (acres)</th>
<th>Total Conversion to Nonagricultural Use (acres)</th>
<th>2012</th>
<th>2050</th>
<th>2012</th>
<th>2050</th>
<th>100 Percent</th>
<th>Total</th>
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<tbody>
<tr>
<td>General Agriculture</td>
<td>38,044</td>
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<td>80</td>
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<td>107</td>
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<td>Field Crops</td>
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<td>46,806</td>
<td>107</td>
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<td>138</td>
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<td>Grazing Lands</td>
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<td>842</td>
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<td>1,255</td>
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<tr>
<td>Intensive Agriculture</td>
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<td>14</td>
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<tr>
<td>Orchards and Vineyards</td>
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<td>91,157</td>
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<tr>
<td>Truck Crops</td>
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<tr>
<td>Total</td>
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<td>576,389</td>
<td>1,255</td>
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<td>1,255</td>
<td>1,255</td>
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</tr>
</tbody>
</table>
2050 Conclusion

Implementation of forecasted regional growth and land use change and planned transportation network improvements would convert about 27,355 acres of agricultural lands to nonagricultural use, including 7,338 acres of FMMP-designated lands (i.e., Prime Farmland, Farmland of Statewide Importance, and Unique Farmland). In addition, growth and land use change near agricultural lands would indirectly decrease the viability of agriculture production on those lands. Therefore, this impact (AG-1) in the year 2050 is significant.

MITIGATION MEASURES

AG-1 Convert Agricultural Lands to Nonagricultural Use

2020, 2035, 2050

AG-1A Preserve Existing Agricultural Lands: During project design and project-level CEQA review of transportation network improvements or development projects, SANDAG shall and other transportation project sponsors, the County of San Diego, cities, and other local jurisdictions can and should, preserve existing agricultural lands by avoiding agricultural land conversion when feasible; if not feasible, measures to reduce conversion of agricultural lands to nonagricultural use include, but are not limited to, the following:

- Acquire or dedicate agricultural conservation easements (minimum acreage ratio of 1:1 of comparable quality land).
- If a project requires cancellation of a Williamson Act contract, acquire or dedicate agricultural conservation easements (minimum acreage ratio of 1:1 of comparable quality land).

AG-1B: Reduce Transportation Network Improvement and Development Conflicts with Agricultural Operations: During project design and project-level CEQA review of transportation network improvements or development projects, SANDAG shall and other transportation project sponsors, the County of San Diego, cities, and other local jurisdictions can and should reduce conflicts with agricultural operations through the implementation of project design features and mitigation measures to protect surrounding agriculture, including, but not limited to, the following:

- Provide buffers, berms, setbacks, fencing, or other project design measures to protect surrounding agriculture, such topographic features, and open space, and to reduce conflict between transportation network improvements and/or developments and farming.
- Maintain and expand agricultural land protections such as urban growth boundaries;
- Minimize severance and fragmentation of agricultural land by constructing underpasses and overpasses at reasonable intervals to provide property access.
- Align corridors, incorporate buffer zones and setbacks, and berms and fencing to avoid agricultural lands and to reduce conflicts between transportation projects and agricultural lands.
SIGNIFICANCE AFTER MITIGATION

2020, 2035, 2050

Implementation of the proposed Plan would result in significant impacts to agricultural lands in 2020, 2035, and 2050. While implementation of Mitigation Measures AG-1A and AG-1B would reduce direct and indirect impacts associated with the conversion of agricultural lands to nonagricultural use, there is no assurance that the impacts of all development and transportation network improvement projects implementing the proposed Plan would be reduced to less than significant levels. Therefore, agricultural land conversion impacts would remain significant and unavoidable.

AG-2 CONFLICT WITH EXISTING ZONING FOR AGRICULTURAL USE OR A WILLIAMSON ACT CONTRACT

ANALYSIS METHODOLOGY

Impact AG-2 considers conflicts with existing agricultural zoning and lands with Williamson Act contracts. Existing lands with zoning designated for agricultural use, and existing lands under Williamson Act contract, are mapped in Figure 4.2-2. More details regarding the zoning categories are provided in Appendix B.

For Impact AG-2, any existing lands zoned for agricultural use that would be designated for a nonagricultural land use under the proposed Plan are considered conflicts. The methods for estimating conflicts are the same as described for physical conversion in Impact AG-1, except that for Impact AG-2, 100 percent of existing land zoned for agricultural use that would be redesignated as Spaced Rural Residential is identified as a conflict with agricultural zoning. Indirect impacts also are described when growth near lands zoned for agricultural uses causes land use conflicts.

For conflicts with lands with Williamson Act contracts, the analysis assumes that the existing boundaries of these contracts would remain constant during the life of the proposed Plan. Using the 2010 land use data from DOC, conflicts were calculated by reviewing changes in land use designations that would occur on Williamson Act contract lands due to regional growth and land use change. Currently (2012), 73,828 acres of land are covered by Williamson Act contracts.

Transportation network improvements would also conflict with agriculture zoned lands and lands under Williamson Act contract. Transportation network improvement conflicts were determined by overlaying the project footprints for the improvements onto existing lands zoned for agricultural use and lands with Williamson Act contracts.

During the timeframe of the proposed Plan, climate change effects that are likely to exacerbate the proposed Plan’s agricultural land impacts, include but are not limited to higher annual average temperatures, more days of extreme high temperatures, longer and more humid heat waves, less frequent and more intense rainstorms and more frequent flood events, more intense and frequent drought and increased evaporation from soil and reservoirs, more frequent, severe wildfires, and spreading of pests and vector-borne diseases. In general, climate change effects would increase between 2020 and 2050. More information on climate change effects is provided in Appendix F.
IMPACT ANALYSIS

2020

Regional Growth and Land Use Change

By 2020, population within the region is forecasted to increase by 292,284 people, housing by 83,836 units, and employment by 173,211 jobs. New development caused by regional growth and land use change would include new housing units, services, commercial areas, industrial centers, schools, and civic uses.

Currently (2012), 784,559 acres of land in the San Diego region are zoned for agricultural uses (Figure 4.2-2). Forecasted regional growth and land use change by 2020 would conflict with an estimated 40,477 acres of land zoned for agricultural use and about 6,309 acres of Williamson Act contract lands.

Regional growth that occurs in proximity to agricultural-zoned lands (as well as lands under Williamson Act contracts) would also cause land use conflict. These conflicts include, but are not limited to, noise, odors, water rights and use, chemicals, and runoff. Additionally, urban development near agricultural land increases the value of the agricultural land, which makes land purchase for agricultural expansion difficult, and provides more incentive to sell the property for nonagricultural use. Commercial, office, or industrial uses would also be incompatible uses when abutting lands with agricultural operations.

State and local policies and regulations described in Section 4.2.2, such as the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, the Williamson Act, and policies outlined in the general plans of local jurisdictions, may reduce conflicts between regional growth and land use change, and lands zoned for agricultural use or under Williamson Act contract. However, these policies and regulations would be of limited effectiveness in substantially reducing these conflicts. Therefore, this is a significant impact.

Transportation Network Improvements and Programs

The planned transportation network improvements by 2020 would conflict with existing lands zoned for agricultural use, including 49 acres from regional arterial improvements and 121 acres from managed lanes and general purpose lanes. No conflicts would occur as a result of rail or active transportation projects. Total conflicts to lands zoned for agricultural use would be 171 acres. These lands are generally located in areas between SR 52 and SR 56, south of SR 905, and west of I-15.

No conflicts to Williamson Act contract lands would occur from implementation of regional arterials, active transportation projects, or rail improvements. However, planned highway improvements by 2020 would conflict with about one acre of land under a Williamson Act contract. In 2020, transportation network improvements would result in conflicts with land zoned for agriculture use and with land under Williamson Act contract. Therefore, this impact is significant.

2020 Conclusion

By 2020, implementation of the proposed Plan land use changes and transportation network improvements would conflict with 40,647 acres of lands zoned for agricultural use and 6,310 acres of lands with Williamson Act contracts. Therefore, this impact (AG-2) in the year 2020 is significant.
Regional Growth and Land Use Change

New development caused by regional growth and land use change would include new housing units, services, commercial areas, industrial centers, schools, and civic uses. As discussed in the 2020 analysis above, the majority of regional growth would be developed in areas with existing urban development, which would restrict encroachment of residential and commercial uses on lands zoned for agricultural uses and lands under a Williamson Act contract.

Currently (2012), 784,559 acres of land in the San Diego region are zoned for agricultural uses (Figure 4.2-2). The proposed Plan’s forecasted regional growth land use change by 2035 would conflict with an estimated 92,178 acres of land zoned for agricultural use and 19,435 acres of Williamson Act contract lands.

Regional growth that occurs in proximity to agricultural-zoned lands (as well as lands under Williamson Act contracts) would also cause land use conflict. These conflicts include, but are not limited to, noise, odors, water rights and use, chemicals, and runoff. Additionally, urban development near agricultural land increases the value of the agricultural land, which makes land purchase for agricultural expansion difficult, and provides more incentive to sell the property for nonagricultural use. Commercial, office, or industrial uses would also be incompatible uses when abutting lands with agricultural operations.

State and local policies and regulations described in Section 4.2.2, such as the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, the Williamson Act, and policies outlined in the general plans of local jurisdictions, may reduce conflicts between regional growth and land use change, and lands zoned for agricultural use or under Williamson Act contract. However, these policies and regulations would be of limited effectiveness in substantially reducing these conflicts. Therefore, this is a significant impact.

Transportation Network Improvements and Programs

The planned transportation network improvements by 2035 would conflict with existing lands zoned for agricultural use, including 49 acres from regional arterial improvements, 1 acre from active transportation projects, 265 acres from managed lane and general purpose lane improvements, and 16 acres from rail improvements, for a total of 331 acres of conflicts with existing zoning for agricultural use.

No conflicts to Williamson Act contract lands would occur from implementation of regional arterials, active transportation projects, or rail improvements. However, planned highway improvements by 2035 would conflict with about one acre of land under a Williamson Act contract. In 2035, transportation network improvements would result in conflicts with land zoned for agriculture use and with land under Williamson Act contract. Therefore, this impact is significant.
2035 Conclusion

By 2035, implementation of the proposed Plan land use changes and transportation network improvements would conflict with 92,509 acres of lands zoned for agricultural use and 19,436 acres of lands with Williamson Act contracts. This impact (AG-2) in the year 2035 is significant.

2050

Regional Growth and Land Use Change

New development caused by regional growth and land use change would include new housing units, services, commercial areas, industrial centers, schools, and civic uses. As discussed in the 2020 and 2035 analysis above, the majority of regional growth would be developed in areas with existing urban development, which would restrict encroachment of residential and commercial uses on lands zoned for agricultural uses and lands designated under a Williamson Act contract.

Currently (2012), 784,559 acres of land in the San Diego region are zoned for agricultural uses (Figure 4.2-2). The proposed Plan’s forecasted regional growth and land use change by 2050 would conflict with an estimated 105,529 acres of land zoned for agricultural use and 19,754 acres of Williamson Act contract lands.

Regional growth that occurs in proximity to agricultural-zoned lands (as well as lands under Williamson Act contracts) would also cause land use conflict. These conflicts include, but are not limited to, noise, odors, water rights and use, chemicals, and runoff. Additionally, urban development near agricultural land increases the value of the agricultural land, which makes land purchase for agricultural expansion difficult, and provides more incentive to sell the property for nonagricultural use. Commercial, office, or industrial uses would also be incompatible uses when abutting lands with agricultural operations.

State and local policies and regulations described in Section 4.2.2, such as the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, the Williamson Act, and policies outlined in the general plans of local jurisdictions, may reduce conflicts between regional growth and land use change, and lands zoned for agricultural use or under Williamson Act contract. However, these policies and regulations would be of limited effectiveness in substantially reducing these conflicts. Therefore, this is a significant impact.

Transportation Network Improvements and Programs

The planned transportation network improvements by 2050 would conflict with existing lands zoned for agricultural use, including 49 acres from regional arterial improvements, 536 acres from managed lane and general purpose lane improvements, 8 acres from active transportation projects, and 32 acres from rail improvements, for a total of 625 acres of conflicts with existing zoning for agricultural use.

No conflicts to Williamson Act contract lands would occur from implementation of regional arterials, active transportation projects, or rail improvements. However, planned highway improvements by 2050 would conflict with about two acres of land under a Williamson Act contract. In 2050, transportation network improvements would result in conflicts with land zoned for agriculture use, and with land under Williamson Act contract. Therefore, this impact is significant.
2050 Conclusion

By 2050, implementation of the proposed Plan land use changes and transportation network improvements would conflict with 106,153 acres of lands zoned for agricultural use and 19,757 acres of lands with Williamson Act contracts. This impact (AG-2) by the year 2050 is significant.

MITIGATION MEASURES

AG-2 Conflict with Existing Zoning for Agricultural Use or a Williamson Act Contract

2020, 2035, 2050

Mitigation measures AG-1A and AG-1B above are applicable to and reduce this impact.

Significance after Mitigation

Implementation of the proposed Plan would result in significant impacts by causing conflicts with lands with existing zoning or agricultural use, or under Williamson Act contract to agricultural lands in 2020, 2035, and 2050. While implementation of Mitigation Measures AG-1A and AG-1B would reduce these impacts, there is no assurance that the impacts of all development and transportation network improvement projects implementing the proposed Plan would be reduced to less than significant levels. Therefore, conflicts with lands with existing zoning for agricultural use and under Williamson Act contract would remain significant and unavoidable.

FR-1 CONVERT OR RESULT IN THE LOSS OF “FOREST LAND” AS DEFINED IN THE CALIFORNIA FOREST LEGACY ACT OF 2007 (PUBLIC RESOURCES CODE SECTION 12220(G)).

ANALYSIS METHODOLOGY

Impacts to forest lands from regional growth and land use change and transportation network improvements are analyzed as 100 percent loss by calculating impacts to forest land as mapped on Figure 4.2-3 that would occur with implementation of the proposed Plan (Appendix B). “Forest land” includes riparian forest/woodland and upland forest/woodland. Direct impacts are those resulting in damage to or death of vegetation from the direct actions of regional growth and land use change or transportation network improvements and programs.

For Impact FR-1, any existing forest lands that would be designated as a developed land use under the proposed Plan are considered converted or to result in loss of forest land. The methods for estimating conversion or loss of forest land are the same as described for Impact AG-2; 100 percent of existing forest land that would be redesignated for development, including Spaced Rural Residential, is considered converted or to result in the loss of forest land. Transportation network improvement impacts are determined by using the project footprints for regional arterial improvements, active transportation projects, highway improvements, and rail improvements.
During the timeframe of the proposed Plan, climate change effects that are likely to exacerbate the proposed Plan’s impacts on the conversion or loss of forest land, include but are not limited to higher annual average temperatures, more days of extreme high temperatures, longer and more humid heat waves, less frequent and more intense rainstorms and more frequent flood events, more intense and frequent drought and increased evaporation from soil and reservoirs, more frequent, severe wildfires, and spreading of pests and vector-borne diseases. In general, climate change effects would increase between 2020 and 2050. More information related to the effects of climate change is provided in Appendix F.

IMPACT ANALYSIS

2020

Regional Growth and Land Use Change

By 2020, population within the region is forecasted to increase by 292,284 people, housing by 83,836 units, and employment by 173,211 jobs. New development caused by regional growth and land use change would include new housing units, services, commercial areas, industrial centers, schools, and civic uses. By 2020, regional growth and land use changes would result in the loss of 10,561 acres of forest lands. Most of this land occurs within the unincorporated areas of San Diego along SR 76, SR 78, and SR 79.

While adherence to the Federal Forest Legacy Program and the FRAP as well as additional existing laws, regulations, and programs discussed in Section 4.2.2 would reduce impacts to forest land, regional growth and land use changes would still decrease the acreage of, and have adverse indirect impacts on, forest lands. This is a significant impact.

Transportation Network Improvements and Programs

The proposed Plan includes a variety of network improvements and programs by 2020. By 2020, transportation network improvements would result in loss of 114 acres of forest lands. These include improvements on I-805, I-5, and SR 76. This is a significant impact.

2020 Conclusion

By 2020, implementation of regional growth and land use change and transportation network improvements would result in a direct loss of 10,675 acres of forest land. This impact (FR-1) in the year 2020 is significant.

2035

Regional Growth and Land Use Change

By 2035 regional growth and land use change would result in loss of 25,375 acres of forest lands. While adherence to the Federal Forest Legacy Program and the FRAP as well as additional existing laws, regulations, and programs discussed in Section 4.2.2 would reduce impacts to forest lands upon implementation of the proposed Plan, it cannot be concluded at the current level of analysis that they would fully avoid all impacts. This is a significant impact.
Transportation Network Improvements and Programs

The proposed Plan includes a variety of network improvements and programs by 2035. Although many of the proposed transportation improvements would occur within already established transportation corridors, ground-disturbing activities such as brush clearing, grading, trenching, excavation, and/or soil removal of any kind, associated with transportation improvements, would impact forest lands and other vegetation communities. By 2035, transportation network improvements would result in a loss of 134 acres of forest lands.

While adherence to the Federal Forest Legacy Program and the FRAP as well as additional existing laws, regulations, and programs discussed in Section 4.2.2 would reduce impacts to forest lands upon implementation of the proposed Plan, it cannot be concluded at the current level of analysis that they would fully avoid all impacts. This is a significant impact.

2035 Conclusion

By 2035, implementation of regional growth and land use change and transportation network improvements would result in a direct loss of 25,509 acres of forest land. This impact (FR-1) in the year 2035 is significant.

2050

Regional Growth and Land Use Change

By 2050, forecasted regional growth and land use change would result in the loss of 27,810 acres of forest lands, primarily in the unincorporated County.

While adherence to the Federal Forest Legacy Program and the FRAP as well as additional existing laws, regulations, and programs discussed in Section 4.2.2 would reduce impacts to forest lands upon implementation of the proposed Plan, it cannot be concluded at the current level of analysis that they would fully avoid all impacts. This is a significant impact.

Transportation Network Improvements and Programs

By 2050, transportation network improvements would result in the loss of 166 acres of forest lands. This is a significant impact.

While adherence to the Federal Forest Legacy Program and the FRAP as well as additional existing laws, regulations, and programs discussed in Section 4.2.2 would reduce impacts to forest lands upon implementation of the proposed Plan, it cannot be concluded at the current level of analysis that they would fully avoid all impacts. This is a significant impact.

2050 Conclusion

By 2050, implementation of regional growth and land use change and transportation network improvements associated with the proposed Plan would result in the loss of 27,976 acres of forest land. This impact (FR-1) in the year 2050 is significant.
MITIGATION MEASURES

FR-1 Convert or Result in the Loss of “Forest Land”

2020, 2035, 2050

FR-1A: Reduce Impacts to Forest Lands During project planning, design and project-level CEQA review of transportation network improvements or development projects, SANDAG shall and other transportation project sponsors, the County of San Diego, cities and other local jurisdictions can and should preserve forest lands through avoiding conversion of forest lands when feasible, and if not feasible, through the implementation of measures to reduce impacts to forest lands. As a result, during project planning, design and project-level CEQA review, SANDAG shall and other transportation project sponsors, the County of San Diego, cities and other local jurisdictions can and should apply, but not be limited to, the following measures to reduce impacts to forest lands:

- **Implement Compensatory Mitigation of Forest Lands.** Provide compensatory mitigation using mitigation ratios as specified through consultation with resource agencies and in approved habitat conservation plans and ordinances. Consistent with the above plans and ordinances, compensatory mitigation outside the Coastal Zone may be provided either through the purchase of credits at an existing authorized mitigation bank or in lieu fee program, or through project-specific mitigation. Compensatory mitigation for impacts inside the Coastal Zone may not be satisfied through in lieu fee programs and would occur within the Coastal Zone close to the impact. To the extent allowed by the above plans and ordinances, project specific mitigation may be provided through on-site restoration of temporary impacts, on-site or off-site preservation of existing habitats, or off-site restoration.

- **Implement Offsite Mitigation.** When off-site mitigation is needed, provide off-site mitigation through acquisition and restoration (using EMP and other mitigation funds) of lands contiguous with areas of native habitat to maximize the biological value of the habitat provided as mitigation, through purchase of relevant habitat credits at an approved mitigation bank, or through payment into an approved in-lieu mitigation fee program applicable to the impacts (in lieu fee programs would not be used to provide mitigation for impacts located within the Coastal Zone). When mitigation is provided outside of an adopted NCCP/HCP the following conditions would apply: mitigation lands would be connected to existing conserved open space; consideration would be given to contributing in the establishment of large blocks of habitat or lands which are otherwise critical for covered species and/or providing for biological core areas and habitat linkages consistent with current regional conservation planning goals; and impacts to critical habitat would be mitigated within the same Critical Habitat Unit where the impacts occurred. Mitigation lands would be protected in perpetuity (e.g. through a conservation easement or similar legal protection) and adequately managed to maintain the originally intended biological quality and function in perpetuity. Habitat acquisitions, bank purchases, or fee program payments would be coordinated with resource agencies and regional habitat conservation and planning efforts such as the MSCP and MHCP.
• **Implement Compensatory Mitigation of Riparian Forests considered Jurisdictional Wetlands and Waters of the U.S. and/or State.** Provide compensatory mitigation for impacts to riparian forests considered jurisdictional wetlands and water of the U.S. and/or State, either through the purchase of credits at an existing authorized mitigation bank or in lieu fee program, or through project-specific mitigation. Compensatory mitigation for impacts inside the Coastal Zone may not be satisfied through in lieu fee programs and would occur within the Coastal Zone close to the impact. The mitigation ratio for jurisdictional wetlands would be a minimum of 2:1 for the permanent loss of acreage to provide for no net loss of wetlands; however, project-level consultation with USACE and CDFW may result in a higher ratio. A minimum on-site mitigation/restoration ratio of 1:1 would be provided for temporary impacts, unless USACE and CDFW recommend a higher ratio. Prepare a mitigation and monitoring plan per the requirements of USACE and CDFW for all impacts to riparian forests considered jurisdictional wetlands and waters of the U.S. and/or State.

**Significance after Mitigation**

Implementation of the proposed Plan would result in significant forest lands impacts. While implementation of Mitigation Measure FR-1A would reduce direct and indirect impacts to forest lands, there is no assurance that the impacts of all development and transportation network improvement projects implementing the proposed Plan would be reduced to less than significant levels. Therefore, direct and indirect impacts on forest lands would remain significant and unavoidable.