

SECTION 16 AGRICULTURAL RESOURCES

This section presents the potential adverse impacts of the Water Authority's Proposed Project on local and regional agricultural resources. These potential effects include any necessary modifications to agricultural practices or loss of farmland from construction or operation of the Water Authority's proposed facilities. This section begins with a description of the regional agricultural resources, followed by a discussion of the relevant Federal, State and local regulations. A qualitative analysis of potential agriculture-related effects associated with Proposed Project facilities is provided in Section 16.2. Mitigation measures to avoid, eliminate or reduce effects to a less than significant level are also provided where appropriate.

16.1 REGIONAL SETTING

Agriculture is an important part of the California economy, particularly in the southern portion of the State. California's gross cash income in 2001 for agricultural products was \$27.6 billion (California Department of Food and Agriculture [CDFA] 2002). Residents of San Diego County rely heavily on agriculture as a major source of income as agriculture is the fourth largest industry in San Diego County, after manufacturing, tourism and defense (San Diego Farm Bureau 2003). Agriculture directly contributes \$1.3 billion to the local San Diego economy, 4.7 percent of the total agricultural income for California.

According to the 1997 U.S. Department of Agriculture Census (USDAC), there are 40,121 farms in California of which 5,925 are located in San Diego County – 14.8 percent of the State total. In San Diego County, 66 percent of the farms are between 1 and 9 acres in size and 90 percent are between 1 and 49 acres. There are over 6,000 full-time farmers who call San Diego County home. A total of 88 percent of the farms in the County are family-owned, and 71 percent of farmers live on their land (USDAC 1997). The total acreage of farmland in San Diego County is 339,148 and approximately 70,000 acres of the farmland is irrigated.

Table 16-1 below summarizes and compares the acreages of different agricultural land uses in California and San Diego County. **Table 16-2** provides definitions for the categories used in **Table 16-1**, as established by the CDC. In 1998, agricultural land in San Diego County consisted of 196,813 acres of Important Farmland and 142,335 acres of Grazing Land. The total agricultural land was 339,148 acres, approximately 12.5 percent of the County's total land area. Agricultural land in California makes up 23.5 percent of the total land area in the State. **Figure 16-1** presents a map of agricultural farmland in San Diego County.

Table 16-3 presents the 10 leading agricultural-related commodities produced in San Diego County in 2001 by gross value. The top commodities produced in San Diego County in 2001 were indoor flowers and foliage at approximately \$307 million, 40 percent of the State's total production in 2001. San Diego County also produced 15 percent of the State's nursery products, 46 percent of the avocados, and 24 percent of the eggs.

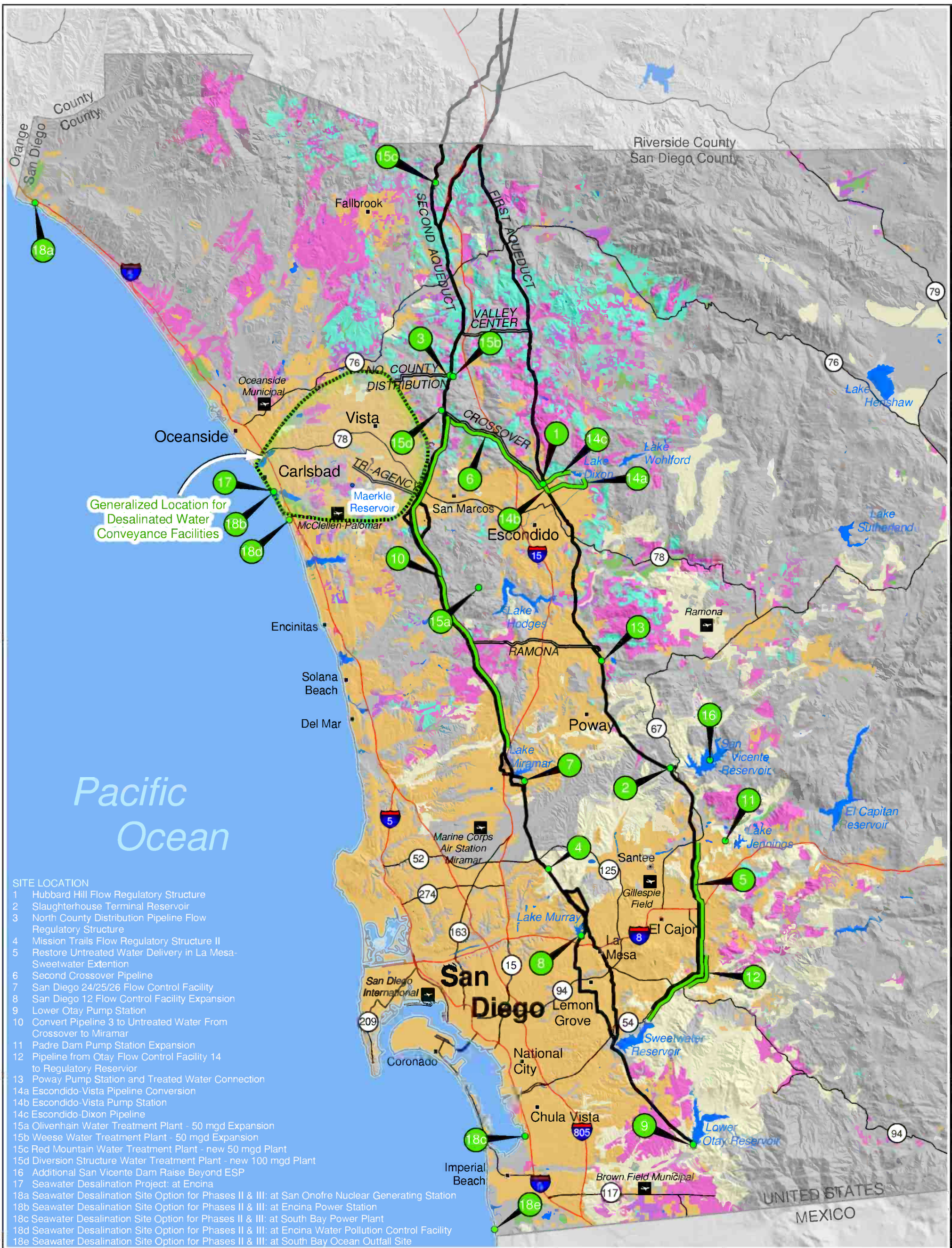
**Table 16-1
A Comparison of Agricultural Land Use
in San Diego County and California in 1998 (Acres)**

	Important Farmland^a	Grazing Land	Total Agricultural Land^b	Urban and Built-Up Land	Total Land Area	Agricultural Land as a Percentage of Total Land
San Diego County	196,813	142,335	339,148	311,491	2,712,200	12.5%
California	10,219,608	13,603,365	23,822,973	2,977,657	101,445,255	23.5%

^a Important Farmland includes Prime Farmland, Farmland of Statewide Importance, Unique Farmland and Farmland of Local Importance.
^b This category includes both Important Farmland and Grazing Land.
Source: CDC 2003.

**Table 16-2
California Department of Conservation Farmland Category Definitions**

Farmland Category	Definition
Prime Farmland	Land that has the best combination of physical and chemical characteristics for the production of crops. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed, including water management, according to current farming methods. Prime Farmland must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date. Prime Farmland includes all land that qualifies for rating as Class I or Class II in the National Resource Conservation Service (NRCS) land use capability classifications.
Farmland of Statewide Importance	This land is similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to hold and store moisture. Farmland of Statewide Importance must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date.
Unique Farmland	This is land of lesser quality soils used for the production of specific high economic value crops at some time during the two update cycles prior to the mapping date. It has the special combination of soil quality, location, growing season, and moisture supply needed to produce sustained high quality or high yields of a specific crop when treated and managed according to current farming methods. Unique Farmland is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Examples of crops on Unique Farmland include oranges, olives, avocados, rice, grapes and cut flowers. This category does not include publicly-owned land for which there is an adopted policy preventing agricultural use.
Farmland of Local Importance	This is land of importance to the local agricultural economy and is determined by each county's Board of Supervisors and local advisory committees. Examples of this type of land could include dairies, dry land farming, aquaculture, and uncultivated areas with soils qualifying for Prime Farmland and Farmland of Statewide Importance.
Grazing Land	Grazing land is land on which the existing vegetation, whether grown naturally or through management, is suitable for grazing or browsing of livestock.



Generalized Location for Desalinated Water Conveyance Facilities

SITE LOCATION

- 1 Hubbard Hill Flow Regulatory Structure
- 2 Slaughterhouse Terminal Reservoir
- 3 North County Distribution Pipeline Flow Regulatory Structure
- 4 Mission Trails Flow Regulatory Structure II
- 5 Restore Untreated Water Delivery in La Mesa-Sweetwater Extension
- 6 Second Crossover Pipeline
- 7 San Diego 24/25/26 Flow Control Facility
- 8 San Diego 12 Flow Control Facility Expansion
- 9 Lower Otay Pump Station
- 10 Convert Pipeline 3 to Untreated Water From Crossover to Miramar
- 11 Padre Dam Pump Station Expansion
- 12 Pipeline from Otay Flow Control Facility 14 to Regulatory Reservoir
- 13 Poway Pump Station and Treated Water Connection
- 14a Escondido-Vista Pipeline Conversion
- 14b Escondido-Vista Pump Station
- 14c Escondido-Dixon Pipeline
- 15a Olivenhain Water Treatment Plant - 50 mgd Expansion
- 15b Weese Water Treatment Plant - 50 mgd Expansion
- 15c Red Mountain Water Treatment Plant - new 50 mgd Plant
- 15d Diversion Structure Water Treatment Plant - new 100 mgd Plant
- 16 Additional San Vicente Dam Raise Beyond ESP
- 17 Seawater Desalination Project: at Encina
- 18a Seawater Desalination Site Option for Phases II & III: at San Onofre Nuclear Generating Station
- 18b Seawater Desalination Site Option for Phases II & III: at Encina Power Station
- 18c Seawater Desalination Site Option for Phases II & III: at South Bay Power Plant
- 18d Seawater Desalination Site Option for Phases II & III: at Encina Water Pollution Control Facility
- 18e Seawater Desalination Site Option for Phases II & III: at South Bay Ocean Outfall Site

Legend

- | | |
|-----------------|----------------------------------|
| Site Locations | Farmland of Local Importance |
| Airport | Farmland of Statewide Importance |
| County Boundary | Grazing Land |
| Interstate | Other Land |
| State Route | Prime Farmland |
| System Pipeline | Unique Farmland |
| Aqueduct | Urban & Built Up Land |
| Lake/Reservoir | |

Source: Farmland data provided by the California Department of Conservation's Division of Land Resource Protection Farmland Mapping and Monitoring Program.

**SAN DIEGO COUNTY WATER AUTHORITY
MASTER PLAN PEIR**

FIGURE 16-1
FARMLANDS

ANALYSIS AREA: SAN DIEGO COUNTY, CALIFORNIA

Date: 07/22/03

File: FARMLANDS.MXD

Prepared By: JG

Farmland Category	Farmland Category
Urban and Built-up Land	This is used for residential, industrial, commercial, construction, institutional, and public administrative purposes; railroad yards; cemeteries; airports; golf courses; sanitary landfills; sewage treatment plants; water control structures and other development purposes.
Other Land	Other Land is that which is not included in any of the other mapping categories. The following types of land are generally included: low density rural development; brush, timber and other lands not suitable for livestock grazing; government lands not available for agricultural use; roads systems for freeway interchanges; vacant and nonagricultural land larger than 40 acres in size and surrounded on all sides by urban development; confined livestock facilities of 10 or more acres; strip mines and borrow and gravel pits; a variety of other rural land uses.
Water	Water areas with an extent of at least 40 acres.

Source: CDC 2003.

Commodity	Gross Value (Thousands)	Total Value of Commodity in California (Thousands)	Percent of County to State Commodity Production
Flowers, Indoor Flowers and Foliage	306,854	768,087	40
Nursery, Trees and Shrubs	198,543	2,395,646	8
Nursery, Bedding Plants	165,465	2,395,646	7
Avocados	138,624	300,880	46
Flowers, Cut	88,393	768,087	12
Eggs	48,721	207,297	24
Flowers, Poinsettia	42,658	N/A	N/A
Tomatoes	30,578	203,251	15
Oranges, Valencia	27,161	N/A	N/A
Herbs	21,171	N/A	N/A

Source: CDFA 2002.

16.2 REGULATORY SETTING

16.2.1 Federal

16.2.1.1 Farmland Protection Policy Act, Important Farmlands Inventory

Under the Farmland Protection Policy Act (FPPA), the Important Farmlands Inventory (IFI) system is used by the USDA NRCS to classify and map lands that have agricultural value. This system divides farmland into classes based on soil type and the productive capability of the land.

These classes are similar to the CDC's Farmland Mapping and Monitoring Program and include Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Other (USGS 2003).

If categories of important farmlands, which include those defined in the FPPA, CEQA and local policies, are identified in the project study area, both direct and indirect effects of the project on the farms and farm support services within the project area shall be evaluated. The applicants must identify and take into account the adverse effects of their projects on the preservation of farmlands from conversion to other uses. They must consider alternative actions, as appropriate, that could lessen the adverse impacts. They must also ensure that their programs, to the extent possible, are compatible with State, local government and private programs and policies to protect farmlands. The goal of this policy is to ensure that projects which contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses will be minimized. Adverse effects shall be avoided or mitigated to the extent possible.

16.2.2 State

16.2.2.1 Williamson Act

The California Land Conservation Act of 1965 is commonly referred to as the Williamson Act. The California Legislature passed the Williamson Act to preserve agriculture and open space land by discouraging premature or unnecessary conversion to urban uses. Local governments enter into voluntary contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return for this designation, landowners receive reduced property tax assessments based upon farming and open space uses rather than potential market value. Currently more than 16 million acres of the State's farm and ranch land are currently protected under the Williamson Act. Approximately 2.77 percent of the total acreage in San Diego County is covered under the Williamson Act (CDC 2003).

16.2.2.2 California Environmental Quality Act

CEQA requires that project proponents assess potential agricultural impacts. Consideration of conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use, is one of several criteria that can be used to assess whether a project could have significant environmental impacts under the provisions of CEQA. With few exceptions, CEQA requires the mitigation of impacts to less than significant levels.

16.2.3 Local

Many of the cities that could be affected by the project facilities do not have specific ordinances or policies related to agricultural resources or farmland. Exceptions include San Diego County, and San Marcos (City of San Marcos 1997). The policies of these local jurisdictions generally relate to the General Plan Conservation and/or Open Space Element and the identification and preservation of agricultural resources through various objectives and policies. Generally the objectives and policies encourage the continuance of agricultural uses wherever appropriate and economically feasible, especially in areas not yet subject to urbanization.

16.3 IMPACTS AND MITIGATION

16.3.1 Standards of Significance

The criteria used to determine the significance of impacts on agricultural resources are based on Appendix G of the CEQA Guidelines and a compilation of other State and local guidelines. The Proposed Project would result in a significant impact if it resulted in:

- Conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, or Grazing Land as shown on the maps prepared pursuant to the FPPA and the Farmland Mapping and Monitoring Program of the California Department of Conservation to non-agricultural use;
- Conflict with a Williamson Act contract;
- Changes in the existing environment, which due to their location or nature, could individually or cumulatively result in substantial loss of farmland to non-agricultural use;
- An adverse affect on the quantity or quality of water used for agricultural production;
- Substantially impair the productivity of adjacent agricultural areas; or
- Result in the introduction of or a substantial increase in pests and/or disease in nearby agricultural areas.

16.3.2 Impacts and Mitigation Measures

This section identifies the potentially significant adverse program-level impacts and required mitigation measures for the Proposed Project. **Table 16-4** presented at the end of this section identifies the potential program-level impacts of each of the Proposed Project facilities. This program-level analysis is not intended to describe or address the impacts in detail; detailed evaluations of the impacts of specific projects will be conducted as part of a site-specific CEQA review.

Unless otherwise noted, all identified impacts are considered to be potentially significant adverse impacts. Corresponding mitigation measures, unless otherwise noted, are expected to be sufficient to reduce impacts to a less than significant level.

Agricultural Resources Impact 1: *Conversion of Farmland of Local Importance and Grazing Land as shown on the maps prepared pursuant to the FPPA and the Farmland Mapping and Monitoring Program of the CDC to non-agricultural use could occur.*

Construction of the Proposed Project facilities could result in loss of Farmland of Local Importance or Grazing Land. Proposed facilities would be sited near existing facilities, where practicable, and, therefore, in previously disturbed areas. Some disturbance and/or loss of agricultural land could occur, however, in areas where facilities would be built on previously undisturbed land. In order to mitigate the potential significant adverse impact, the following mitigation measures are recommended.

Agricultural Resources Mitigation Measure 1:

- a) Avoidance of construction on agricultural land where feasible;
- b) If possible, schedule construction during periods of non-production; and
- c) Compensate land owner for loss of land and/or production.

16.4 EFFECTS NOT FOUND TO BE SIGNIFICANT

The Proposed Project could conflict with a Williamson Act contract.

Lands that are covered under the Williamson Act are updated on an annual basis. If the land owner chooses to file a “notice of non-renewal” the land is removed from the coverage under the Act. Land that is currently covered under the Williamson Act in the vicinity of Proposed Project areas may not be covered by the time a facility is actually built. A land owner could choose to remove the land from coverage to allow construction of a proposed facility, therefore, this effect is found not to be significant.

Proposed Project facility construction and operation would cause changes in the existing environment, which due to their location or nature, could individually or cumulatively result in substantial loss of farmland to non-agricultural use.

Most of the Proposed Project facilities would be sited on or near existing facilities and, therefore, on previously disturbed land. Land would be converted back to its former state to the extent feasible after construction activities are completed. Therefore, any conversion of agricultural land is not anticipated to be a significant impact.

Construction activities associated with the Proposed Project could adversely affect the quantity or quality of water used for agricultural production.

Construction activities could have a brief effect on the availability of water for agricultural uses in some areas, but this is not likely. If water service interruption were to occur it would be of very short duration and would not cause a significant adverse impact to water used for agricultural production.

Construction and operation activities associated with the Proposed Project could impair the productivity of the adjacent agricultural areas.

Fugitive dust from construction activity could float into nearby agricultural fields. If this occurs, it is expected to be temporary and not expected to cause a significant impact to the productivity of adjacent agricultural land.

Activities associated with the Proposed Project could result in the introduction of/or a substantial increase in pests and/or disease in nearby agricultural areas.

Ground disturbance during digging, trenching, and removing vegetation could provide an opportunity for non-native pest plants and/or noxious weeds to take root near the Proposed

Project facilities. Most of these disturbances would be within facility boundaries and not within agricultural land areas. If agricultural land is disturbed during construction, it will be returned to its former state as much as practicable after construction is complete. Therefore, introduction of pests and/or disease is not expected to be a significant impact.

Table 16-4		
Potential Program-Level Agricultural Resources		
Impacts of Proposed Project Facilities		
#	Project	Impact
		1^a
Expand Internal System Capacity		
<i>Flow Regulatory Storage</i>		
1	Hubbard Hill FRS	X
2	Slaughterhouse Terminal Reservoir	
3	North County Distribution Pipeline FRS	
4	Mission Trails FRS II	
	➤ Mission Trails Tunnel Pipeline and Vent Demolition	
<i>Projects to Increase Regional Untreated Water Conveyance Capacity</i>		
5	Restore Untreated Water Delivery in La Mesa-Sweetwater Extension	
6	Second Crossover Pipeline	X
7	San Diego 24/25/26 FCF	
8	San Diego 12 FCF Expansion	
9	Lower Otay Pump Station	
10	Convert Pipeline 3 to Untreated Water from Crossover to Miramar	
Additional Water Treatment Capacity		
<i>Projects to Supplement Treated-Water Aqueducts</i>		
11	Padre Dam Pump Station Expansion	
12	Pipeline from Otay FCF 14 to Regulatory Reservoir	
13	Poway Pump Station and Treated Water Connection	
14	Escondido-Vista WTP Connection	
	a) Escondido-Vista Pipeline Conversion	
	b) Escondido-Vista Pump Station	
	c) Escondido-Dixon Pipeline	X
<i>Projects to Expand Regional Water Treatment Capacity</i>		
Options for Expanding Regional Treatment Capacity		
15a	Olivenhain WTP – 50 mgd Expansion	
15b	Weese WTP – 50 mgd Expansion	
15c	Red Mountain WTP – new 50 mgd plant	
15d	Diversion Structure WTP – new 100 mgd plant	X
Additional Seasonal/Carryover Storage		
16	Additional San Vicente Dam Raise Beyond ESP	X
New Conveyance and Supply		
17	Phase I – Seawater Desalination: Project at Encina (50 mgd)	
	➤ Desalination Plant	
	➤ Desalinated Water Conveyance Facilities	
18	Expand Existing or Site New Seawater Desalination Plant*	
	Phase II – Seawater Desalination: Expand Capacity up to 100 mgd	
	Phase III – Seawater Desalination: Expand Capacity up to 150 mgd	
Seawater Desalination Site Options for Phases II and III:		
	a) San Onofre – at San Onofre Nuclear Generating Station	
	b) Carlsbad – at Encina Power Station	
	c) South Bay – at South Bay Power Plant	
	d) Encina Water Pollution Control Facility	
	e) South Bay Ocean Outfall Site	

Table 16-4 (continued)
Potential Program-Level Agricultural Resources
Impacts of Proposed Project Facilities

- * The ultimate level of seawater desalination development in the region would depend largely upon actual regional population growth, economics, availability of other high quality water sources, as well as an evaluation of the performance of the Encina seawater desalination facility, should it be approved and constructed.
- ^a Conversion of Farmland of Local Importance and Grazing Land as shown on the maps prepared pursuant to the FPPA and the Farmland Mapping and Monitoring Program of the CDC to non-agricultural use could occur.