CHAPTER 4
Cumulative Impacts

4.1 Introduction

CEQA Analysis Requirements

CEQA requires that an EIR assess the cumulative impacts of a project with respect to past, current, and probable future projects within the region. *CEQA Guidelines* (Section 15355) define cumulative effects as "two or more individual effects that, when considered together, are considerable or which compound or increase other environmental impacts. The cumulative impact from several projects result from the incremental impacts of the proposed project when added to other closely related, and reasonably foreseeable, future projects." Pertinent guidance for cumulative impact analysis is given in Section 15130 of the *CEQA Guidelines*:

- An EIR shall discuss cumulative impacts of a project when the project's incremental effect is "cumulatively considerable", (i.e., the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of current projects, and the effects of probable future projects, (including those outside the control of the lead agency, if necessary).
- An EIR should not discuss impacts that do not result in part from the project evaluated in the EIR.
- A project's contribution is less than cumulatively considerable, and thus not significant, if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.
- The discussion of impact severity and likelihood of occurrence need not be as detailed as for effects attributable to the project alone.

The analysis of cumulative effects in this PEIR focuses on the effects of concurrent construction and operation of the proposed project with other spatially and temporally proximate projects as described below. As such, this cumulative analysis relies on a list of related projects that have the potential to contribute to cumulative impacts in the project area.

4.2 Related Projects

Geographic Scope

Cumulative impacts are assessed for related projects within a similar geographic area. This geographic area may vary, depending upon the issue area discussed and the geographic extent of

the potential impact. For example the geographic area associated with construction noise impacts is limited to areas directly adjacent to construction sites, whereas the geographic area that is affected by construction-related air emissions may include the larger air basin. Construction impacts associated with increased noise, dust, erosion, and access limitations tend to be localized but could be exacerbated if other development or improvement projects are occurring within the same or adjacent locations as the proposed project.

Geographically, the proposed project is located in the Antelope Valley in northern Los Angeles County and southeastern Kern County. For the purposes of this analysis, we considered projects within the service area of LACWWD40 and all partner agencies when evaluating potential cumulative impacts due to construction and operation of the proposed project. These projects are listed in **Table 4-1**.

Project Timing

In addition to the geographic scope, cumulative impacts also take into consideration the timing of related projects relative to the proposed project. The implementation schedule is particularly important for construction-related impacts; for a group of projects to generate cumulative construction impacts, they must be temporally as well as spatially proximate. The related projects described below may or may not occur simultaneously with the proposed project. However, this analysis assumes these projects would be implemented concurrently with construction of the Regional Recycled Water Project, between 2009 and 2015.

Type of Projects Considered

As described in **Chapter 3** of this EIR, the impacts associated with implementation of the proposed project include both short-term, temporary construction-related impacts and long-term impacts related to project operation.

Cumulative Construction Impacts

Cumulative effects could result when considering the effects of the proposed project in combination with the effects of other construction projects in the area. For this analysis, other past, present, and reasonably-foreseeable future construction projects in the area have been identified. Table 4-1 lists the major capital improvement projects and water resources management projects (including recycled water projects) in the project vicinity that is included in the analysis of cumulative construction-related impacts. In addition, the analysis of cumulative construction impacts assumes that throughout the Antelope Valley, planned future development projects will be on-going simultaneously with the proposed project, including major residential construction, small-scale construction project, and project that have not yet been identified.

TABLE 4-1
ANTELOPE VALLEY RELATED PROJECTS

Project Name	Project Type	Project Sponsor	Project Implementation
Water Supply Projects			
Littlerock Dam Sediment Removal Project	Reservoir expansion, flood control	Palmdale Water District	2008-2011
Upper Amargosa Creek Recharge, Flood Control & Habitat Restoration	Groundwater recharge	City of Palmdale	2008-2011
Recycled Water Projects			
LWRP 2020 Facilities Plan	Recycled water application	LACSD No. 14	In progress
PWRP 2025 Facilities Plan	Recycled water application	LACSD No. 20	In progress
City of Lancaster Division Street Recycled Water Project	Recycled water application	City of Lancaster	In progress
City of Lancaster Groundwater Recharge Project	Groundwater recharge	City of Lancaster	2009-2011
Rosamond Recycled Water Project	Recycled water pipeline, Recycled water application	RCSD	2009-2011
PWD Groundwater Recharge Reuse Projects	Groundwater recharge	Palmdale Water District	2010-2015
Wastewater Projects			
LWRP 2020 Facilities Plan	Treatment plant expansion	LACSD No. 14	In progress
PWRP 2025 Facilities Plan	Treatment plant expansion	LACSD No. 20	In progress
RWWTP Expansion	Treatment plant expansion	RCSD	In progress
Roadway Projects			
SR 138 Corridor Improvement Projects	Roadway widening	Caltrans District 7	Present-2010
Division St (Avenues G/H)	Roadway reconstruction	LA County DPW	2008-2009
Avenue E (25th St W/Sierra Hwy)	Roadway resurfacing	LA County DPW	2008-2009
Avenue P (30th St E to 50th St E)	Roadway resurfacing	LA County DPW	2010-2015
Avenue P (240th St E)	Roadway resurfacing/widening	LA County DPW	2010-2015
40th St West	Roadway widening	LA County DPW	2010-2015
Avenue B (90th St W to 30th St W)	Roadway paving	LA County DPW	2010-2015
10 Year Capital Improvement Program	Roadway widening and improvements	City of Lancaster	2008-2015
10 Year Capital Improvement Program	Roadway widening and improvements	City of Palmdale	2008-2015
Flood Control/Drainage Projects			
Quartz Hill Storm Drain	Flood control, storm water	LA County DPW	2008
Sierra Highway Drainage Improvements	Storm water	City of Lancaster	2014-2015
Division Street Storm Drain (Avenue J to Avenue K)	Storm water	City of Lancaster	2013-2015
Avenue K Storm Drain (Division St to 5th St E)	Storm water	City of Lancaster	2014-2015
Energy Projects			
Palmdale Hybrid Power Plant	New power plant	City of Palmdale	2009-2011
Tehachapi Renewable Transmission Project	New transmission line	CPUC and US Forest Service	2009-2013

SOURCES:
Caltrans, District 7 Projects, http://www.dot.ca.gov/dist07/travel/projects/, accessed January 29, 2008.
Caltrans, District 6 Project Factsheets, http://www.dot.ca.gov/dist6/factsheets/index.htm, accessed January 29, 2008.
LACSD District No. 14, LWRP 2020 Facilities Plan, Final EIR, May 2004.
County of Los Angeles, Department of Public Works, Watershed Management Division, Engineer's Report, Quartz Hill Storm Drain, August 2005.
City of Lancaster, Capital Improvement Program FY2007/08 and Projected FY 2008/09 through 2016/17.
City of Palmdale, Department of Public Works, Program Management Division, 2007 Ten-Year Capital Improvement Plan, approved June 10, 2007.
County of Los Angeles, Department of Public Works, Programs Development Division, Engineer's Report, Road Programs, February 2008.

Cumulative Operational Impacts

Cumulative effects could result when considering the effects of the proposed project in combination with the effects of operating other recycled water projects and groundwater recharge projects in the Antelope Valley. These projects are listed in Table 4-1 and are summarized below.

4.3 Description of Select Related Projects

LWRP 2020 Facilities Plan

As described in Chapter 1, LACSD No. 14 plans to expand the LWRP to increase total treatment capacity and to provide disinfected tertiary-treated recycled water. The capacity of the LWRP will be increased to 18 mgd by 2010, providing tertiary treatment for all incoming wastewater (LACSD, 2004). To manage the increased effluent production, LACSD No. 14 will acquire 750 acres of land for additional storage reservoirs and 4,650 acres of land for agricultural reuse, whereby recycled water produced at the LWRP is used for agricultural irrigation.

PWRP 2025 Facilities Plan

As described in Chapter 1, LACSD No. 20 plans to expand the PWRP to increase total treatment capacity and to increase the production of tertiary-treated recycled water. The PWRP will be upgraded to 12 mgd of disinfected tertiary treatment by 2011 (LACSD, 2005). Currently, LACSD No. 20 uses recycled water for agricultural reuse, irrigating crops at a 2,680-acre effluent management site located on property leased from LAWA. Recycled water is applied at agronomic rates in order to protect groundwater. To manage the increased effluent production as a result of the PWRP expansion, LACSD No. 20 would acquire an additional 5,140 acres of land for storage reservoirs and for implementing agricultural reuse. This land is located to the north and east of the current effluent management site, bounded approximately by Avenue L, Avenue M, 60th Street East, and 150th Street East. LACSD No. 20 has committed to diverting recycled water from its agricultural operations to serve emerging municipal, industrial and groundwater charge end uses in the region as they become operational.

City of Lancaster Groundwater Recharge Project

The City of Lancaster has completed a Groundwater Recharge Feasibility Study (2007) for its Groundwater Recharge (GWR) Project. The GWR Project would be implemented in two phases. The first phase is a small-scale Pilot Project that would test the feasibility of a large-scale project.

The location for Groundwater Recharge Using Recycled Water (GRW-RW) Pilot Project is a 5-acre stormwater basin located within an existing 100-acre parcel of storm water basins owned by the City of Lancaster near 60th Street West and Avenue F (RMC, 2007). The GRW-RW Pilot Project would recharge up to 2,500 acre-feet annually, for two to five years. The recharge water would include up to 500 afy of recycled water from the LWRP and up to 2,000 afy of storm water blended with treated imported water. The GRW-RW Pilot Project includes monitoring of

groundwater down gradient of the recharge basin and monitoring of soils beneath the recharge site to comply with CDPH Draft Groundwater Regulations (Title 22). No extraction is planned.

The second phase of the GWR Project is a large-scale project that would recharge approximately 50,000 afy, of which 10,000 afy would be recycled water (RMC, 2007). The actual blend ratio would be determined based on DPH Title 22 requirements. The GWR Project would include extraction facilities, to extract up to 48,000 afy of recharged water from a new well field. Potential locations for project facilities, including recharge basins and extraction wells, have been identified in western Lancaster but are still subject to change.

Rosamond Recycled Water Project

RCSD is planning to expand its existing recycled water system to bring recycled water to various end users for landscape irrigation, groundwater recharge, power plant cooling water, and agricultural reuse. The expansion will occur in three phases during 2009 and 2010.

RCSD is currently constructing a 0.5 million gallons per day tertiary treatment plant adjacent to its existing evaporation ponds. Phase 1 will expand the existing Patterson Road/Gaskell Road recycled water pipeline west to 60th Street West along Gaskell Road. The pipeline will provide recycled water north on 40th Street West to Rosamond Community Park, the new Tropico Regional Park, and Tropico Hill.

Phase 2 will expand the Phase 1 recycled water pipeline further west along Gaskell Road to 140th Street West to water banking spreading fields. The same pipeline will extend north past Rosamond Boulevard to a new solar powered 850 MW power plant where the recycled water will be used as a coolant. It will also provide water for agricultural reuse.

Phase 3 will expand the existing recycled water pipeline that currently terminates on the west side of the SR-14, about 1.5 miles north of Rosamond Boulevard and will convey recycled water north to the existing tank site on Dawn Road, about one mile west of SR-14. End users will be street medians and RCSD park areas.

City of Palmdale Amargosa Project

The City of Palmdale is planning the Upper Amargosa Creek Recharge, Flood Control and Habitat Restoration Project (Amargosa Project) to enhance the region's long-term water supply reliability (RWMG, 2007). The Amargosa Project is a groundwater recharge project that would recharge imported raw water (i.e. SWP water) and local surface water runoff (i.e. storm water runoff) through a system of eight recharge basin along Amargosa Creek. The Amargosa Project does not include recycled water. The proposed location for the Amargosa Project is along and north of Elizabeth Lake Road, the Amargosa Creek crossing of the California Aqueduct, and 20th Street West in Palmdale. The Amargosa Project is expected to function as a groundwater banking project, recharging water primarily in wet years.

PWD Groundwater Recharge Reuse Projects

Palmdale Water District is planning to implement GRRPs in its service area, as described in the *Recycled Water Groundwater Recharge Feasibility Study* (Wildermuth, 2007). PWD has identified three locations that are suitable for groundwater recharge using recycled water: Upper Littlerock Creek, Lower Littlerock Creek, and Lower Amargosa Creek. In the near term, PWD plans to recharge between 10,000 and 15,000 afy at each site. The *Feasibility Study* assumes that the recharge water would be a 4:1 blend of diluent water to recycled water, resulting in a recycled water demand ranging between 2,000 and 3,000 afy at each site.

4.4 Impacts and Mitigation Measures

Project Construction

Construction of the proposed project is expected to occur in phases between 2009 and 2015. The construction schedule for the proposed facilities would depend on funding and emerging demand by end users. For the purposes of this analysis, the related projects identified in Table 4-1 are all presumed to be implemented concurrently within the 2009 to 2015 timeframe. These related projects, which include capital improvement and development projects in the Antelope Valley, may contribute to certain types of cumulative construction impacts to air quality, biological resources, noise, water quality and traffic, as described below. There would be no cumulative impacts to aesthetics; cultural resources; geology and soils; hazards and hazardous materials; land use and agriculture; or utilities and service systems. Due to the nature of these resources as geographically confined and/or distinct, any impacts to these resources can be mitigated for individual projects and collectively do not compound to create cumulatively considerable impacts.

Impact 4-1: Concurrent construction of several projects in the Antelope Valley could result in cumulative short-term impacts to air quality and water quality. Less than Significant with Mitigation.

Air Quality

Construction of the proposed project together with the identified cumulative projects located in the Antelope Valley would contribute additional emissions to existing conditions in the Antelope Valley air basin. The Antelope Valley is located primarily in Los Angeles County, which is in non-attainment for ozone, PM_{10} and $PM_{2.5}$ (see Chapter 3.2, Air Quality). The contribution of additional pollutants to an already impaired air basin could be considered a significant impact. Construction of the proposed project would result in emissions that exceed the significance thresholds established by the Antelope Valley Air Quality Management District (AVAQMD) and the Kern County Air Pollution Control District (KCAPCD) (see Chapter 3.2, Air Quality). As described in Chapter 3.2, Air Quality, LACWWD40 in coordination with its partner agencies would be required to implement Mitigation Measures 3.2-1a through 3.2-1f, in accordance with the AVAQMD Air Quality Management Plan (AQMP) and Air Quality Attainment Plan

(AQAP), to reduce emissions related to construction of pipelines, storage reservoirs, and pump stations to less than significant levels. These mitigation measures include control measures, such as a fugitive dust program, established by the AVAQMD and KCAPCD for reduction of emissions related to construction activities. The AQMP identifies construction activities as factors contributing to overall emissions sources; however, the AQMP does not conclude that individual construction projects would delay the attainment of air quality standards for the basin. Therefore, the proposed project would not have a cumulatively considerable impact on air quality.

Hydrology and Water Quality

Concurrent construction of the proposed project with the identified cumulative projects located in the Antelope Valley and Antelope Valley watershed (Table 4-1) could result in temporary impacts to hydrology and water quality in the project area. Concurrent construction activities could result in increased erosion and subsequent sedimentation, with impacts to local drainages and/or storm drain capacity. Additionally, surface water quality could be affected by construction activities that result in the release of fuels or other hazardous materials to stream channels or storm drains, or discharge from excavation dewatering activities. Other projects in the watershed that could impact hydrology and water quality during construction activities include the recycled water projects, wastewater treatment plant expansion projects, proposed groundwater recharge projects (construction of recharge basins and appurtenant structures), and other proposed developments in the region, including roadway widenings.

As described in Chapter 3.7, Hydrology and Water Quality, the LACWWD40 in coordination with its partner agencies would develop and implement BMPs to minimize erosion and sedimentation and obtain a construction dewatering permit from the Lahontan RWQCB (see Mitigation Measure 3.7-3). The BMPs would reduce the impact of construction of the proposed project to surface water and groundwater quality to less than significant levels. As such, the contribution of the proposed project to short-term hydrology and water quality impacts is not cumulatively considerable.

Mitigation Measures

Implementation of Mitigation Measures 3.2-1a through 3.2-1f, 3.7-2, and 3.7-3.

Significance after Mitigation: Less than significant.

Impact 4-2: Concurrent construction of several projects in the Antelope Valley could result in cumulative short-term impacts to noise. Significant and Unavoidable.

Construction of the proposed project, together with the identified related projects in the Antelope Valley (Table 4-1), could generate noise and vibration that would affect existing ambient noise conditions in the region. Construction noise and vibration would be localized, affecting areas in

the immediate vicinity of the construction sites. Some of the identified related projects could be constructed simultaneously in areas proximate to, or overlapping geographically with, the proposed project. In particular, construction of some capital improvement projects, such as roadway projects or flood control (storm drain) projects, could occur simultaneously and within the same streets as the proposed recycled water pipeline installation. This could result in a cumulative impact to local ambient noise conditions.

As described in Chapter 3.9, Noise, daytime construction noise is exempt from maximum noise thresholds identified in local noise ordinances. Therefore, noise associated with daytime construction activities would not violate noise ordinances. For the proposed project, implementation of Mitigation Measures 3.9-1a, 3.9-1b and 3.9-2 would ensure construction activities are restricted to daytime hours and would require other measures to reduce the effects of construction noise and vibration on sensitive receptors. Nonetheless, noise associated with construction of the proposed pipelines and pump stations could exceed 100 dBA during the day within 50 feet of residences and is considered a significant and unavoidable impact of the project. Notably, any project that would individually have a significant noise impact could also have a significant cumulative noise impact when considered together with other related projects in the immediate vicinity. Therefore, simultaneous construction of the proposed project and other proximate capital improvement projects would result in significant cumulative noise impacts.

Mitigation Measures

Implementation of Mitigation Measures 3.9-1a, 3.9-1b, and 3.9-2.

Significance after Mitigation: Significant and Unavoidable.

Impact 4-3: Concurrent construction of several projects in the Antelope Valley could result in cumulative short-term impacts to traffic. Less than Significant with Mitigation.

Construction of the proposed project, together with the identified related projects in the Antelope Valley (Table 4-1), could affect traffic and circulation in the region. The effects of construction activities on traffic are due to an increase in the number of vehicles on local roadways (due to delivery of materials and worker commutes) and physical constraints on roadways if lane or street closures are required. Some of the identified related projects could be constructed simultaneously in areas proximate to, or overlapping geographically with, the proposed project. As with noise impacts, construction of some capital improvement projects, such as roadway projects or flood control (storm drain projects), could occur simultaneously and within the same streets as the proposed recycled water pipeline installation. This could result in a cumulative impact to traffic, particularly since these projects would involve construction activities within roadways and rights-of-way.

As described in Chapter 3.11, Transportation and Traffic, LACWWD40 in coordination with its partner agencies would be required to implement a Traffic Control/Traffic Management Plan

(Mitigation Measure 3.11-1a) to reduce construction-related effects of the proposed project to less than significant levels. The Traffic Control/Traffic Management Plan should also take into consideration the effects other construction activities occurring simultaneously in the same geographic area. Mitigation Measure 4-3 requires LACWWD40 to coordinate construction of the proposed project with other agencies in the Antelope Valley to ensure cumulative impacts to traffic and circulation are reduced to less than significant levels.

Mitigation Measures

> **Mitigation Measure 4-3:** The implementing agencies, shall communicate and coordinate project construction activities with other municipalities (e.g., Palmdale, Lancaster, and Rosamond CSD) and agencies (e.g., Caltrans, LA County DPW) in the Antelope Valley. Phasing of project construction shall be coordinated to minimize cumulative impacts to traffic and circulation.

Significance after Mitigation: Less than significant.

Impact 4-4: Concurrent construction of several projects in the Antelope Valley could result in cumulative short-term impacts to biological resources. Less than Significant.

Construction of the proposed project, together with the identified related projects in the Antelope Valley (Table 4-1), would reduce the amount of existing open space and vacant land that may contain valuable habitat. The Los Angeles County General Plan identifies Significant Ecological Areas (SEAs) to protect habitat values and prevent the cumulative reduction of habitat in the region. Although the proposed pipelines would terminate near SEAs in two locations (see Figure 3.3-2) they would be located within roadways and would not affect open space in these areas. The proposed project would have no impact on open space habitat.

Construction of the proposed reservoirs and pump stations would convert vacant land to public facilities. The effected undeveloped parcels primarily are located near the urban centers of the valley and are not located within a County-designated SEA. This conversion of vacant land to public facilities is not considered to be a significant direct impact with implementation of mitigation measures identified in Chapter 3.3 Biological Resources. Although the project would contribute to a reduction in undeveloped, vacant land, the acreage would not be considerable, and the land use conversion would be consistent with regional plans. Therefore the proposed project would not result in a cumulatively significant impact to biological resources.

Mitigation Measures

> Implementation of Mitigation Measures 3.3-1a-f, 3.3-2a-g, 3.3-3a-e, 3.3-4a-c and 3.3-6.

Significance after Mitigation: Less than Significant.

Project Operation

Operation of the proposed project involves the beneficial use of disinfected tertiary-treated effluent for a variety of end uses. When considered together with other recycled water projects listed in Table 4-1, operation of the proposed project would not result in cumulatively considerable impacts to the resources evaluated in Chapter 3 of this PEIR.

Impact 4-5: The proposed project and related projects could result in cumulative long-term impacts to groundwater resources. Less than Significant with Mitigation.

The proposed project would result in an increase in the volume of recycled water used for landscape and agricultural irrigation throughout the Antelope Valley. The City of Lancaster and the Town of Rosamond each are implementing recycled water use projects in the region. The recycled water pipeline component of the proposed project would be designed to deliver approximately 17,491 afy of recycled water (at buildout) to M&I users in Los Angeles County and 1,119 afy of recycled water to M&I users in Kern County. In addition, 2,600 afy of recycled water would be used as cooling water at the planned Palmdale Hybrid Power Plant as described in Chapter 2. Additional demand for recycled water is anticipated for agricultural applications and groundwater recharge projects. If recycled water is over-applied by landscape and agricultural irrigation end users, recycled water could percolate into the underlying Antelope Valley Groundwater Basin (see Chapter 3.7, Hydrology and Water Quality). Over-application resulting in excessive percolation could increase levels of TDS, nitrogen, and other nutrients in the groundwater.

Nutrients in the recycled water applied to landscapes are taken up by vegetation, reducing the need for fertilizer applications. The proposed project thus would allow for reduced fertilizer use among M&I and agricultural end users. Implementation of Mitigation Measure 3.7-5 would reduce potential impacts to groundwater quality to less than significant levels by requiring M&I and agricultural end users to apply water and fertilizer to landscapes at agronomic rates, which is compatible with good farming practices on land. The mechanism for implementing these practices is a Reclaimed Water User Agreement, which would be made between the implementing agency and each recycled water end user.

The use of recycled water for groundwater recharge by the proposed project and concurrent groundwater recharge projects may cumulatively affect groundwater quality in the Antelope Valley Groundwater Basin. Although the recycled water will be subject to Title 22 requirements, the existing groundwater quality in the underlying basin after recharge could be affected. Implementation of a pilot project, such as the City of Lancaster's GRW-RW Pilot Project, that includes monitoring would be a necessary first step to ensure that the project would not result in significant direct water quality impacts. Mitigation measures to reduce impacts to water quality in the groundwater basin could feasibly include blending requirements or advanced treatment processes. Mitigation requirements would be project specific and additional environmental documentation would be required prior to implementation of a GRRP. The implementation of proposed Mitigation Measures 3.7-9a through 3.7-9c are the minimum requirements for future potential GRRPs in the project area, including those proposed by the cities of Lancaster and

Palmdale and PWD (as identified in Table 4-1). The recycled water would be required to meet the level of treatment determined by CDPH to sufficiently protect public health. Therefore, the long-term cumulative impact of the proposed project on groundwater resources would not be considerable.

Mitigation Measures

Implementation of Mitigation Measures 3.7-5a, 3.7-5b, and 3.7-9a through 3.7-9c.

Significance after Mitigation: Less than significant.

Air Quality

As already described in Chapter 3.2, operation of the proposed project would not have a cumulatively-considerable, incremental effect on greenhouse gas emissions. (See Impact 3.2-5 on page 3.2-17 in Chapter 3.2, Air Quality). The proposed project would provide the primary backbone system for distribution of recycled water to local users in the Antelope Valley that otherwise would use potable water if the proposed project is not implemented. The use of recycled water instead of potable water would use less energy in the long term, relative to alternative water sources such as imported water. The imported water would be delivered through the SWP, which consumes a substantial amount of energy to convey water to southern California from the Sacramento-San Joaquin River Delta in northern California. A recent study by West Basin Municipal Water District has shown that the energy required to import SWP water is over six times the energy requirement for Title 22 recycled water when considering kilowatt-hours per acre-foot (West Basin, 2007). In addition, the same study indicates that Title 22 recycled water produces 338 tons of CO_2 for every 1,000 af of water produced, while the SWP produces 2,250 tons of CO_2 for every 1,000 af of water imported (West Basin, 2007; USEPA, 1995).[1] Based on this analysis, the proposed project would reduce the relative amount of GHG emissions produced for every acre-foot of water provided by the proposed project and would be considered to be inherently energy efficient. Therefore, the proposed project would result in a cumulative net reduction of future GHG emissions relative to future GHG emissions without the project. The effects of the proposed project to greenhouse gas emissions would not be cumulatively considerable.

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[1] Conversion factor: kWh/1333.333 = tons CO_2. (USEPA, 1995)