IV. ENVIRONMENTAL IMPACT ANALYSIS

E.2. WATER RESOURCES: WATER SUPPLY

1. ENVIRONMENTAL CONDITIONS

a. Physical Setting

(1) Water Supply

The Los Angeles Department of Water and Power (LADWP) owns, operates, and maintains all water facilities within the City of Los Angeles and is responsible for ensuring that the delivered water meets all applicable state quality standards. The shopping center is located within the City, and as such, LADWP is responsible for delivering water to the project site. The shopping center's existing water demand is approximately 100,860 gallons per day (gpd) of water, or approximately 113 acre-feet of water per year (AFY).

LADWP supplies water to its customers from four main sources: (1) the Mono Basin and Owens Valley, located on the east side of the Sierra Nevada Mountains delivered via the Los Angeles Aqueduct (LAA); (2) local groundwater basins, including the San Fernando, Sylmar, Eagle Rock, Central Coast, and West Coast basins; (3) purchases of State Water Project (SWP) and Colorado River water from the Metropolitan Water District (MWD); and (4) water recycling.

On average, LADWP receives 20% of its annual water supply from MWD during normal years, and as much as 39% during dry years.[1] In 1993, MWD commenced its Integrated Resources Plan (IRP) process, which is designed to reduce MWD's dependency on imported water during droughts or other shortages. The IRP includes a variety of projects and programs, including: (1) providing financial incentives for local projects and conservation; (2) increased surface storage in Diamond Valley Lake and SWP reservoirs; (3) groundwater storage programs in the Central Valley, Imperial Valley and Coachella Valley; (4) short- and long-term water transfers; and (5) local groundwater storage programs with participating member agencies. As part of its IRP update, MWD is planning for the development of a 500,000 acre-foot supply which will provide sufficient water to its member agencies even during critically dry events from now until at least 2025. MWD, along with LADWP and other member agencies, also established a Water Surplus and Drought Management Plan to ensure MWD's ability to meet its member agencies' future water needs.

In addition to purchases from MWD, the City of Los Angeles intends to enhance its water supplies through continued conservation measures and increased use of recycled water. LADWP is committed to expanding its recycled water program and has several projects that provide recycled water for landscape irrigation and commercial use, including the 6.5-acre Japanese Garden located at the Sepulveda Dam Recreation Area. The City also uses recycled water in Griffith Park to irrigate two golf courses and a seven-mile stretch of open space along the Golden

[1] Page 6-4. Los Angeles Department of Water and Power. 2005. *2005 Urban Water Management Plan*. 19 May 2008 <http://www.ladwp.com/ladwp/cms/ladwp007157.pdf>.

State Freeway. In addition, LADWP is evaluating the potential for using recycled water for recharging groundwater supplies.

Consistent with the Urban Water Management Planning Act (see Regulatory and Policy Setting discussion below), LADWP maintains an Urban Water Management Plan (UWMP) (the LA-UWMP) which includes estimates of past, current, and projected potable and recycled water use, identifies conservation and reclamation measures currently in place, describes alternative conservation measures, and provides an urban water shortage contingency plan.

LADWP also encourages water conservation through multiple measures, including a tiered pricing system, weather sensitive irrigation controllers, low flow toilets and water saving showerheads, as well as a rebate program encouraging residential customers to purchase high efficiency clothes washers. Moreover, there are a number of City ordinances in place mandating water conservation (*e.g.*, requiring the installation of low-flow showerheads and toilets for all properties; requiring water-efficient landscaping for all new construction; prohibiting hose washing of paved surfaces; imposing watering restrictions on turf that exceeds three acres).[2]

As a result of LADWP's multiple supply sources and continued water management planning, the LA-UWMP concluded that LADWP will have adequate water supplies to serve City needs through the year 2030, during normal, single-dry, and multiple-dry years, taking into account projected population growth and various established and expected land uses based on current zoning. The LA-UWMP indicates that LADWP is planning for future population growth in its service area, similar to the manner in which the City's General Plan forecasts population growth in planning for future growth and development throughout the City. Both the General Plan and the LA-UWMP's growth projections are based on population forecasts provided by the Southern California Association of Governments (SCAG).

The amount of water that MWD will be able to supply to Southern California in the near future is uncertain given the recent federal court decision case *Natural Resources Defense Council, et al. vs. Kempthorne, et al.* (*NRDC*). In Spring 2007, various environmental groups sought to halt the operation of water pumps in the Sacramento-San Joaquin River Delta (the Delta) to protect the Delta smelt and other endangered fish species living in the Delta. In May 2007, a federal court invalidated the Biological Opinion issued by the U.S. Fish & Wildlife Service, which had held that the Delta smelt were in "no jeopardy" from operational changes of the State Water Project in the Delta. On May 31, 2007, the California Department of Water Resources (DWR) voluntarily shut down the State Water Project's pumps for 17 days in an effort to protect the Delta smelt. In an August 2007 oral decision, the same federal court agreed to institute interim protective measures that restrict water operations in the Delta, including reducing the amount of water being pumped out of the Delta between the end of December and June. In December 2007, the federal court issued an interim remedial order, requiring the U.S. Fish & Wildlife Service to revise its Biological Opinion by September 15, 2008 and conditioning Delta operations on various requirements. LADWP estimates that MWD may receive 20 to 30 percent less water

[2] Chapter XII (The Water Conservation Plan of the City of Los Angeles). Los Angeles, City of. 2007 (as amended). *Official City of Los Angeles Municipal Code, Sixth Edition* (LAMC). Cincinnati, OH: American Legal Publishing Corp. 6 June 2008 <http://www.amlegal.com/nxt/gateway.dll?f=templates&fn=default.htm&vid=amlegal:lamc_ca>.

from the State Water Project as a result of this interim remedial order. However, this remedial order sunsets in September 2008, at which time a new Biological Opinion will govern operations of the Delta. At this time, it is not known how the future Biological Opinion will impact MWD's ability to supply water to Southern California. The federal court's written decision will likely not be issued until November 2007 and permanent measures are expected to be implemented in August 2008, therefore, the full extent of NRDC's impact on MWD's ability to supply water to Southern California is still uncertain. LADWP indicates that MWD obtains approximately 1.2 million AF of water from the State Water Project. With this recent oral decision by the federal court, the amount of water MWD receives from the State Water Project is anticipated to be decreased by approximately 15 to 30 percent.

At present, both the California state government and MWD are evaluating Delta operations and options to address Delta smelt impacts and other environmental concerns. The Governor's Delta Vision Process and the Bay-Delta Conservation Plan are both focused on finding and implementing long-term solutions for the Delta. MWD is also actively engaged in improving Delta water operations. In May 2007, MWD's Board adopted a Delta Action Plan as a framework to address water supply risks in the Delta both for the near- and long-term. The near- and mid-term actions outlined in the Delta Action Plan are intended to implement measures to reduce fishery and earth-quake related risks, such as aggressive monitoring, ecosystem restoration, local water supply projects, and emergency preparedness and response plans.

In response to recent developments in the Delta, MWD is also engaged in identifying solutions that, when combined with the rest of its supply portfolio, will ensure a reliable long-term water supply for its member agencies. In the near-term, MWD will continue to rely on the plans and policies outlined in its Regional Urban Water Management Plan (RUWMP) and Integrated Water Resources Plan to address water supply shortages and interruptions (including potential shut downs of State Water Project pumps) to meet water demands. Campaigns for voluntary conservation, curtailment of replenishment water and agricultural water delivery are some of the actions outlined in the RUWMP. If necessary, reduction in municipal and industrial water use and mandatory water allocation could be implemented.

(2) Groundwater

Existing groundwater conditions in the project area are described in Section E.2: Water Resources: Hydrology and Water Quality. Local groundwater encountered in the immediate project site vicinity is not used as a water supply source.

b. Regulatory and Policy Setting

(1) California Urban Water Management Planning Act

The Urban Water Management Planning Act (Water Code § 10610 et. seq.) (the UWMP Act), requires all urban water purveyors of a certain size to prepare Urban Water Management Plans (UWMPs) that evaluate the purveyor's water supplies and demands for a 20-year period (Water Code Section 10620). Among other requirements, the UWMP Act requires purveyors to identify existing water supplies and demands; project future supplies and demands for the next 20 years;

assess such supplies and demands during dry years; describe all water supply projects and programs that may be undertaken by the purveyor, and formulate a water shortage contingency plan (Water Code Section 10631). The UWMP Act requires that UWMPs be updated every five years. UWMPs provide valuable information that can be used in the land use planning process and enable cities to gauge the availability of water supplies to support development projects within their boundaries.

In 1995, the California legislature passed and Governor Wilson signed into law Senate Bill (SB) 901 (Costa) which is codified as Part 2.10 (§ 10910 et seq.) of the California Water Code. This statute provides that environmental impact reports for certain development projects must meet address the availability of water for a project.

Additional legislation was enacted as of January 2002 that placed further requirements upon water purveyors. SB 610 (Costa) amended Part 2.10 of the Water Code regarding water supply availability. These amendments require generally that retail water providers demonstrate that sufficient and reliable sources are available in order for local agencies to evaluate large-scale developments and complete the environmental review process. SB 221 (Kuehl) amended the Subdivision Map Act, requiring that a public water system must provide written verification of sufficient water supply prior to approval of a new subdivision of property of more than 500 dwelling units prior to approval of a tentative or parcel map.[3]

In particular, SB 610 requires cities and counties to request specific information regarding water supplies from the public water systems that would serve any project that is subject to CEQA and is defined as a "project" in Water Code Section 10912, and to include this information in environmental review documents prepared pursuant to CEQA.[4] Projects meeting the following criteria must prepare a Water Supply Assessment:

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- A proposed hotel or motel, or both, having more than 500 rooms;
- A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;

[3] The Proposed Project does not include any residential dwelling units, and no approvals of a tentative tract map or parcel map are required. Accordingly, SB 221 does not apply to the Project.

[4] The Proposed Project does not fall within the purview of SB 610 because the Project involves a 280,000 square foot expansion of an existing shopping mall and would not generate an additional 1,000 full-time employees. The proposed expansion Project would need to be 500,000 square feet or more or employ more than 1,000 persons in order to fall within the California Water Code's definition of "project." Cal. Water Code § 10912(a)(2).

- A mixed-use project that includes one or more of the projects specified above; or

- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

(2) City of Los Angeles Urban Water Management Plan

The UWMPA (see discussion above) requires every municipal water supplier who serves more than 3,000 customers or provides more than 3,000 AFY of water to prepare, and update every 5 years, an UWMP. Complying with that statute, LADWP's UWMP (the LA-UWMP) includes estimates of past, current, and projected potable and recycled water use, identifies conservation and reclamation measures currently in place, describes alternative conservation measures, and provides an urban water shortage contingency plan. LADWP updates its Urban Water Management Plan (LA-UWMP) every five years to account for changing conditions. This LA-UWMP projects water supply and distribution needs based on anticipated growth in population, housing, and employment and identifies water supply strategies to meet this demand. LADWP currently expects to have adequate water supplies for all anticipated development in the City. The LA-UWMP is available at http://www.ladwp.com/ladwp/cms/ladwp007157.pdf, or by contacting the Department of City Planning at Planning@lacity.org.

LADWP also addresses climate change in the LA-UWMP. LADWP is currently conducting studies and monitoring research on the potential impacts of climate change on its water supply. However, LADWP has concluded that, at present, there is still general uncertainty within the scientific community regarding the potential impacts of global warming on the City's water supply. Similarly, the California Department of Water resources has concluded that many uncertainties remain regarding the expected degree of climate change on water supplies.[5] Because of this uncertainty, the City has determined that the potential impact of climate change on water supply is too speculative to conduct a quantitative evaluation of climate change impacts. Therefore, pursuant to CEQA Guideline Section 15145, this EIR does not, and is not required to provide further discussion of impacts related to water supply in the context of climate change.

2. THRESHOLDS OF SIGNIFICANCE

Unless otherwise indicated, the thresholds of significance identified in this section and used to determine the proposed project environmental effects are based on direction from the Los Angeles CEQA Thresholds Guide (as adopted 2006).

[5] Roos, Maurice. 2005 (December).. *Accounting for Climate Change*, California Water Plan Update 2005, Volume 4. California Department of Water Resources. 2005. 6 June 2008 <http://www.waterplan.water.ca.gov/docs/cwpu2005/vol4/vol4-globalclimate-accountingforclimatechange.pdf >.

Water Supply

The determination of significance shall be made on a case-by-case basis, considering the following factors:

- The total estimated water demand for the project;
- Whether sufficient capacity exists in the water infrastructure that would serve the project, taking into account the anticipated conditions at project buildout;
- The amount by which the project would cause the projected growth in population, housing or employment for the Community Plan area to be exceeded in the year of the project completion; and
- The degree to which scheduled water infrastructure improvements or project design features would reduce or offset service impacts.

Groundwater Level

A project would normally have a significant impact on groundwater level if it would:

- Change potable water levels sufficiently to:
  - Reduce the ability of a water utility to use the groundwater basin for public water supplies, conjunctive use purposes, storage of imported water, summer/winter peaking, or to respond to emergencies and drought;
  - Reduce yields of adjacent wells or well fields (public or private); or
  - Adversely change the rate or direction of flow of groundwater; or
- Result in demonstrable and sustained reduction of groundwater recharge capacity.

In addition, the following criteria, taken from the Initial Study checklist in Appendix G of the State CEQA Guidelines, were used to determine the significance of potential impacts related to water services. A project typically would result in a significant impact to water services if it would either:

1. Not have sufficient water supplies available to serve the project from existing entitlements and resources, and would require new and expanded entitlements; or
2. Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

3. ENVIRONMENTAL IMPACTS

a. Relevant Project Characteristics

The Proposed Project includes expansion of the shopping center with the addition of approximately 280,000 gross leasable square feet (GLSF) of retail and restaurant uses and associated parking facilities. Employment related uses of the Proposed Project will add approximately 788 new employees.

The analysis assumes that the following Project Design Features are supported by the Proposed Project:

The Proposed Project will incorporate a series of measures that will reduce water consumption and resulting waste water. These include implementation of "smart irrigation" systems that are customized to accommodate specific plant area and control water based on information from weather forecasts. Compliance with the City Xeroscape requirements to reduce water demand. The project will also include water conservation through installation of efficient plumbing fixtures including low flow and dual flush toilets, waterless urinals, and on touch faucets with short "on" cycles and efficiency aerators.

The analysis assumes that the Proposed Project will be constructed and operated in accordance with all applicable codes, regulations and standard practices, including the following:

- Title 20 and Title 24 of the California Code of Regulations establish various conservation standards, including standard that relate to water conservation and the protection of water resources. The Proposed Project will be consistent with State requirements for water conservation standards.

b. Project Impacts

Based on the IS, potential impacts for a number of environmental issues were determined to be less than significant. The scope of the following analysis focuses only on those impacts that were determined through the NOP and IS process to have a potential significant environmental effect. Issues related to Water Supply that were determined to be less than significant, and are not addressed further, include: groundwater as a water supply and water treatment facilities. An explanation supporting this conclusion is provided in Section VI: Other Environmental Considerations: A-Effects Not Found To Be Significant.

(1) Water Supply

(a) Water Demand

A project would have a significant environmental impact if sufficient water supplies were not available to serve the project from existing entitlements and resources, or if new or expanded entitlements were needed.

According to the LA-UWMP, water demand City-wide in 2005 was approximately 661,000 acre-feet per year.[5] The proposed City-wide supply for 2012 is expected to be approximately 683,000 acre feet annually. The Proposed Project will result in approximately 1,544,015 gross square feet including approximately 1,075,223 GLSF of retail, approximately 28,000 GLSF of sit-down restaurants, and approximately 43,777 GLSF the Gourmet Dining Terrace. The existing shopping center's water demand is approximately 100,860 gpd of water.[6] The total Proposed Project will result in the use of approximately 160,655 gpd of water, an increase of approximately 59,795 gpd of water use[7], assuming the same water usage factors for the Proposed Project. In addition, while the Proposed Project also will use water to control fugitive dust during construction, that amount is negligible.

The increase in water demand from the Proposed Project of approximately 0.18 acre-feet daily would result in an increased water demand of approximately 65.7 AFY (assuming a worst case scenario of operation 365 days annually)[8]. Based on LADWP's projected City-wide water demand, the City's total water needs were approximately 661,000 acre-feet in 2005. This demand will increase to 683,000 AFY in 2010 and to 776,000 AFY in 2030. The LA-UWMP concludes that LADWP will be able to meet the increasing demand through 2030 to accommodate anticipated growth.

Further, the projected water demands in the LA-UWMP already take into account existing and projected land uses, including expansion of commercial uses such as the Proposed Project, which would be accommodated by the LADWP through the year 2030, as set forth in the LA-UWMP.[9] The project site currently is designated under the General Plan and Community Plan as "Community Commercial". Implementation of the Proposed Project would not cause the Community Plan area to exceed the projected growth in population, housing, or employment for the year of Project occupancy or buildout.[10] Moreover, the LA-UWMP states that it will have sufficient water supplies to serve approximately 126,000 AFY to commercial uses by 2012 and 140,000 AFY to expanded commercial uses by the year 2030. Since the projected water supply is based on the growth projections of the City's General Plan which are used in the LA-UWMP and the Proposed Project is consistent with the General Plan and Community Plan designation, the Proposed Project will fit within the water demand projections.

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[5] Los Angeles Department of Water and Power. 2005. *2005 Urban Water Management Plan*. 19 May 2008 <http://www.ladwp.com/ladwp/cms/ladwp007157.pdf>.

[6] Assumes approximately 110% of wastewater generation. Based on the City of Los Angeles Wastewater Program Management, Sewer Facilities Charge Guide and Generation Rates, August 1988. This Guide provides the following generation rates for the Project: 100 gpd per 1,000 square feet of retail/shopping center space, 300 gpd per 1,000 square feet of take-out restaurant space, 50 gpd per seat of fixed seat restaurant space. Assumes approximately a worst-case scenario of 35 square feet per seat.

[7] Assumes approximately 110% of wastewater generation. Based on the City of Los Angeles Wastewater Program Management, Sewer Facilities Charge Guide and Generation Rates, August, 1988. This Guide provides the following generation rates for the Project: 100 gpd per 1,000 square feet of retail/shopping center space, 300 gpd per 1,000 square feet of take-out restaurant space, 50 gpd per seat of fixed seat restaurant space. Assumes approximately a worst-case scenario of 35 square feet per seat. Assumes one half of the total gross leasable square footage for sit-down restaurants to exclude foyers, waiting areas, hallways, and storage areas.

[8] Because construction sequencing does not result in incremental operational expansion of the center and construction water demand will be less than operational water demand, a construction water demand analysis was not performed.

[9] Exhibit 6C. Los Angeles Department of Water and Power. 2005. *2005 Urban Water Management Plan*. 19 May 2008 <http://www.ladwp.com/ladwp/cms/ladwp007157.pdf>.

[10] Section M.1.C. Los Angeles, City of. 2006 (May). *L.A. CEQA Thresholds Guide*. Los Angeles, CA: Author. 6 June 2008 <http://www.lacity.org/ead/EADWeb-AQD/thresholdsguide.htm>.

Finally, the LA-UWMP analyzes water supply during both normal and dry years and concludes LADWP will have sufficient water supplies to serve the water needs of its service area, which would include the project site, during normal and drought conditions. The Proposed Project would not cause an increase in water usage beyond the projections in the LA- UWMP.

Because the LA-UWMP anticipates potential development in the project area and demonstrates that sufficient water supplies are available, the Proposed Project will result in a less than significant impact to water supply. No mitigation measures are required.

Water Supply Assessment - As discussed above, SB 610 requires specific information regarding water supplies for projects meeting the criteria defined in Water Code Section 10912. Projects meeting the criteria must prepare a Water Supply Assessment (WSA) and provide such information as part of the CEQA process. Relevant to the Proposed Project, a WSA would be required if the proposed shopping center would employ more than 1,000 persons or have more than 500,000 square feet of floor space. The Proposed Project would result in the net addition of approximately 280,000 GLSF of commercial floor area and approximately 790 new employees. Because the Proposed Project will not exceed the above criteria, a WSA is not required.

(b) Water Delivery

A project would have a significant environmental impact if the project would require or result in the construction of new water treatment facilities or expansion of existing facilities, or expansion of the existing distribution system.

The existing shopping center relies on existing LADWP water delivery facilities. The Proposed Project will use the existing water delivery infrastructure that adequately serves the project area. Accordingly, no new water delivery facilities would be required as a result of the Proposed Project. No significant impacts to the environment would result, and no mitigation measures are required.

(2) Consistency with Applicable Plans and Policies

Consistency with applicable plans and policies, including land use and design policies which indirectly address water resources and supply, is discussed in detail in Section IV: Environmental Impact Analysis: F-Land Use, Planning and Urban Decay, of this EIR.

(3) Cumulative Impacts

With respect to potential cumulative impacts to water provision, the identified related projects (Section III: General Description of the Environmental Setting: B-Related Projects) could result in an increase in water demand of approximately 184,000 gpd which, based on a most-conservative estimate of a seven-day-a-week operation, could result in approximately 206 AFY of additional water demand. According to the LA-UWMP, water demand City-wide in 2005 was

approximately 661,000 AFY.[11] The proposed City-wide demand for 2010 is expected to be approximately 683,000 AFY and 776,000 AFY in 2030, and the LA-UWMP concludes that LADWP will have sufficient supply to meet anticipated demand through the year 2030. Moreover, as the anticipated related projects are already planned for in the City's General Plan and the LA-UWMP, these related projects' additional demand of 206 AFY will result in a less than significant impact. Consequently, the Proposed Project will result in a less than significant cumulative impact to water supply and infrastructure, and as such, no mitigation measures are required.

4. MITIGATION PROGRAM

No mitigation measures are required. Compliance with Title 20 (Public Utilities and Energy) and Title 24 (Building Standards Code) of the California Code of Regulations is already a required standard condition under applicable regulations and will ensure that the Proposed Project incorporates standard water conservation practices.

5. SIGNIFICANT PROJECT IMPACTS AFTER MITIGATION

The Proposed Project will not result in significant impacts to water supply or water delivery infrastructure. No mitigation measures are required as impacts related to water supply are already less than significant.

[11] Los Angeles Department of Water and Power. 2005. *2005 Urban Water Management Plan*. 19 May 2008 <http://www.ladwp.com/ladwp/cms/ladwp007157.pdf>.