

3K. Utility: Water

This section provides an analysis of potential impacts on water demand and supply associated with implementation of the proposed project.

3K.1 Environmental Setting

Domestic water is supplied to the site by the City of Los Angeles, Department of Water and Power. Water supply in the City of Los Angeles and the State of California, State of California continues to be a challenge as a result of increased population, and a number of water supply issues:

In May 2007, LADWP shut down a North Hollywood drinking water well due to contamination of the San Fernando Valley aquifer. Thus, for the first time, Los Angeles will be unable to draw its full allotment of groundwater, which traditionally has been a primary source of the City's water supply. On August 31, 2007, a U.S. District Court judge ordered state and federal water project managers to reduce the amount of water pumped from the Sacramento-San Joaquin River Delta to protect the threatened delta smelt. As the Delta provides a primary source of supplemental water that the City purchases from MWD, this ruling's ultimate impact on the City's water supplies is yet unknown.

See **Appendix G** for a detailed discussion of MWD and LADWP plans and programs to secure future water supplies.

June 4, 2008 the Governor of the State of California declared a state-wide drought, issued an Executive Order and directed the Department of Water Resources and other entities to take immediate action to address the situation.

The Executive Order directs the Department of Water Resources (DWR) to:

- Facilitate water transfers to respond to emergency shortages across the state.
- Work with local water districts and agencies to improve local coordination.
- Help local water districts and agencies improve water efficiency and conservation.
- Coordinate with other state and federal agencies and departments to assist water suppliers, identify risks to water supply and help farmers suffering losses.
- Expedite existing grant programs to help local water districts and agencies conserve.

The Executive Order also encourages local water districts and agencies to promote water conservation. They are encouraged to work cooperatively on the regional and state level to take aggressive, immediate action to reduce water consumption locally and regionally for the remainder of 2008 and prepare for potential worsening water conditions in 2009. As part of the Executive Order, DWR will work with local agencies to conduct an aggressive water conservation and outreach campaign.

The City of Los Angeles, Department of Water and Power has developed a number of measures to be included in new construction (see Mitigation Measure 3F.2).

3K.2 Regulatory Background

See Section 3F.2 for a discussion of the regulatory background concerning hydrology and water discharge.

State

Assembly Bill 221 prohibits a city or county from approving a residential subdivision of more than 500 units unless a city council or a board of supervisors receives written verification from the area's water service provider that sufficient water supply is available for the development. It excludes proposed residential projects in urban areas that are designed for very low and low-income households.

Senate Bill 610 requires a city or county to evaluate whether total project water supplies will meet the projected water demand for certain development projects that are otherwise subject to CEQA review, such projects as: (a) a residential development of more than 500 dwelling units; (b) a shopping center or business employing more than 1,000 persons or having more than 500,000 square feet of floor space; (c) a commercial office building employing more than 1,000 persons or having more than 250,000 square feet; (d) a hotel or motel with more than 500 rooms; (e) an industrial or manufacturing establishment housing more than 1,000 persons or having more than 650,000 square feet or 40 acres; (f) a mixed use project containing any of the foregoing; or (g) any other project that would have a water demand at least equal to a 500 dwelling unit project.

3K.3 Impacts and Mitigation Measures

Methodology

Project impacts to water demand were evaluated based on the demand calculated based on standard City of Los Angeles rates based on wastewater generation.

Significance Criteria

The criteria used to determine the significance of an impact are based on Appendix G of the CEQA Guidelines. Several criteria were eliminated from further consideration in the Initial Study Checklist (see Appendix B) and will not be discussed here. For this analysis, the proposed project could result in significant impacts if it would:

- Substantially increase water demand such that existing entitlements and resources are insufficient and/or cause the construction of new or expanded water conveyance and/or treatment facilities.

Project Impacts

The proposed Master Plan could increase development on the Occidental College campus by up to 550,250 sf. The number of students would not increase over currently permitted levels,

however the number of resident faculty and staff could increase by about 35 units. This EIR analyzes an increase in students from the number present when the NOP was published (1,750) to the number permitted on campus (2,000), an increase of 250 students. Although the project is anticipated to add more than 500,000 sf of space, it is not one of the uses required to obtain a Water Supply Assessment. Because the student body is not anticipated to substantially increase as a result of the project, water consumption is not anticipated to increase substantially. City of Los Angeles guidelines show a sewage generation factor of 18 gallons per university student and 75 gallons per student in a dormitory¹; water consumption is estimated to be 18% greater for residential uses and 28% greater for non-residential uses. Therefore 250 new students could require up to 5,760 gallons per day plus 22,125 gallons per day assuming they all remain in dormitories on campus, for a total of up to 27,885 gallons per day. Approximately 35 multi family housing units could be developed for faculty staff on BOS 1, 2, 3 and 5; these units could result in demand for approximately 7,434 gallons per day² for a total additional water demand of 35,319 gallons per day. The calculation for water demand are summarized as follows:

**Table 3K-1
Project Water Demand**

Students day time	$250 \times 23 \text{ gals/student} = 5,760 \text{ gallons/day}$
Students in dormitory	$250 \times 88.5 \text{ gals/dormitory resident} = 22,125 \text{ gallons/day}$
Multi Family Residential	$35 \text{ residential units} \times 212.4 \text{ gals/day} = 7,434 \text{ gallons/day}$

This additional water demand is far less than the demand of 500 new residential units and thus a water supply assessment is not required.

Mitigation Measures

Measure 3K.1: Occidental College shall implement water conservation measures in new development that shall include but not be limited to the following:

- Installation of high-efficiency toilets (1.28 gallons per flush or less, includes dual flush.
- High-efficiency urinals (0.5 gallons per flush includes waterless)
- Restroom faucet flow rate of 1.5 gallons per minute or less
- Public restroom self-closing faucets
- Showerhead flow rate of 2 gallons per minute or less
- Limit of one showerhead per shower stall
- High efficiency clothes washers (water factor of 6.0 or less)
- High efficiency dishwashers (Energy Star rated)

¹ Los Angeles Thresholds Guide, City of Los Angeles, Draft 2006

² Assuming townhouses with two bedrooms and wastewater generation of 180 gallons per day. See footnote 2 above

- Domestic water heating system located in close proximity to point(s) of use, as feasible; use of tankless and on-demand water heaters as feasible
- Cooling towers must be operated at a minimum of 5.5 cycles of concentration
- Install on-site water recycling as feasible
- Use of recycled water (if available) for appropriate end uses (irrigation, cooling towers, sanitary)
- Single pass cooling shall be prohibited (e.g. any vacuum pumps or ice machines)
- Irrigation shall include;
 - ✓ Weather-based irrigation controller with rain shutoff
 - ✓ Flow sensor and master valve shutoff (for large landscaped areas)
 - ✓ Matched precipitation (flow) rates for sprinkler heads
 - ✓ Drip/microspray/subsurface irrigation where appropriate
 - ✓ Minimum irrigation system distribution uniformity of 75%
 - ✓ Proper hydro-zoning, turf minimization and use of native/drought tolerant plant materials
 - ✓ Use of landscape contouring to minimize precipitation runoff

3K.4 Cumulative Impacts

The project would incrementally add to water demand in the City of Los Angeles. However water demand is not anticipated to be substantial and the project would comply with all water conservation measures.

3F.5 Significance after Mitigation

Less than significant.