

**CITY OF SAN BERNARDINO  
MUNICIPAL WATER DEPARTMENT  
INTEROFFICE MEMORANDUM**

**TO:** Valerie C. Ross, Director  
Development Services Department, Planning Division

**FROM:** Matthew H. Litchfield

**SUBJECT:** THE UNIVERSITY HILLS WATER SUPPLY ASSESSMENT IMPACT  
FROM THE REVISED UNIVERSITY HILLS SPECIFIC PLAN, SAN  
BERNARDINO, CALIFORNIA (EPN 2007-007)

**DATE:** January 22, 2008

**COPIES:** Tennie Lundy (w/attach), Terri Rahhal (w/o attach)

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The San Bernardino Municipal Water Department (SBMWD) originally generated a Water Supply Assessment, May 24, 2007, in response to the University Hills Specific Plan which included 940 units. The SBMWD recently received a new request to review the revised water demand calculations for the revised University Hills Specific Plan. This revised University Hills Specific Plan now includes 980 units.

Based on the supplied revised water demand calculations, the Maximum Day Demand does not increase with the additional 40 units. Therefore, the revised University Hills Specific Plan is consistent with the original Water Supply Assessment, and should not require a new or additional Water Supply Assessment.

Please contact me at (909) 384-5107 for further information or assistance.



Matthew H. Litchfield, P.E.  
Director, Water Utility

MHL:TRB:swd  
Attach.

# **Water Supply Assessment: University Hills**

## **Background**

Senate Bills 610 and 221 amended state law, effective January 1, 2002, to improve the linkage between certain land use decisions made by cities and counties and water supply availability. Both statutes require detailed information regarding supply availability and reliability with respect to certain developments to be included in the administrative record to serve as evidentiary basis for an approval action by the city or county on such projects.

Under SB 610, water supply assessments must be furnished to local governments for inclusion in any environmental documentation for certain types of projects, as defined in Water Code §10912(a) and subject to the California Environmental Quality Act (CEQA).

A fundamental source document for compliance with SB 610 is the Urban Water Management Plan (UWMP). If the UWMP is properly prepared, it can be used by the water supplier to meet the standards set forth in SB 610.

The San Bernardino Municipal Water Department (SBMWD) is the water supplier that is responsible for preparing water supply assessments for the City of San Bernardino (City). The Board of Water Commissioners of the SBMWD approved the 2005 update of the UWMP in December 2005, and is the primary source document for this water supply assessment.

On March 28, 2007 a letter was received by the SBMWD requesting that the Department prepare a Water Supply Assessment pursuant to the provisions of the Water Code §10910 et seq. for the University Hills (see Appendix A). The project's applicant, Inland Communities Corporation, submitted an application for the University Hills Specific Plan (formerly known as the Paradise Hills Specific Plan "PHSP") to the City of San Bernardino's Development Services Department – Planning Division.

## **Project Description**

The University Hills Specific Plan (UHSP) consists of 404.2 total acres and is located north of California State University (CSU), in the City of San Bernardino, California. The Development is accessible from freeway I-215 and is generally bounded by the San Bernardino National Forest to the north, CSU/Northpark Boulevard to the south, "G" Street to the east, and Devil Canyon to the west. 18.7 percent or 75.6 acres of the total land area is devoted to residential uses. A total of 940 units are proposed, which if spread around the entire site, is a gross density of 2.33 dwelling units per acre and a net density of 12.43 units per acre. A conceptual site plan is included in Appendix B.

The planned development is consistent with the City's University District Specific Plan land uses. The combined water demand of 412 gallons per minute for the project was estimated using a water coefficient for each component of each separate land use multiplied by the

700 → 681

corresponding area. The total demand of 700 gallons per minute was calculated by using a peaking factor of 1.7 applied for the maximum day demand. Total estimated water demand is therefore 700 gallons per minute (or 1,129 acre-feet per year). Appendix C summarizes the water demand estimate for the University Hills.

### **Water Demand Projections**

According to Water Code §10910(c)(2), if the projected water demand associated with the proposed project was accounted for in the most recently adopted UWMP, the water supplier may use the demand projections from the UWMP in preparing the water supply assessment.

The water demand projections developed for SBMWD’s 2005 UWMP were based on ultimate build-out conditions reflected in the City’s 2001 General Plan. The demand projections were based on residential, commercial, industrial and public land uses and representative water use factors. Although the City recently updated its General Plan (2005), the changes did not significantly alter the land use designations used by the water demand model enough to change the water demand projections included in the 2005 UWMP.

Because the SBMWD used ultimate build-out conditions from the City’s General Plan as the basis for water demand projections for the UWMP, the water demands of any proposed project that is consistent with the General Plan (and more specifically the land use districts or zoning) would be included in the total water demand projections of the UWMP.

The University Hill’s parcels of land are shown in Figure 1, which also shows the land use districts for the City. The project’s parcels all fall within the major land use district in the City’s University District Specific Plan referred to as:

- RL (Residential Low) – This land use district is intended for single family detached residences in a low density setting per the San Bernardino Development Code 19.04.
- RS (Residential Suburban) – This land use district is intended for single family detached residences in a low density suburban setting per the San Bernardino Development Code 19.04.
- OS (Open Space) – Permanent open space for landscaping, hillsides, and passive recreation.
- PFC (Public Flood Control) – Flood control facilities. Unique to the University District, recreational uses that can be periodically inundated, such as golf courses, nature parks, nurseries, botanical gardens, and recreational trails, are permitted in the Devil’s Canyon flood control basin. Development Standards will be determined with guidance from the San Bernardino Development Code Chapter 19.10 but on a case-by-case basis. New uses will only be permitted if it can accommodate periodic inundation and does not significantly impact habitat and wildlife.



**San Bernardino Municipal Water Department (SBMWD)  
University Hills Development  
Tank Sizes per Pressure Zone**

Items	1720 Zone	1880 Zone	2040 Zone
Maximum Day Demand (gpm)	0	626	55
Emergency Storage (gallons) <sup>1</sup>	-	901,180	79,850
Operational Storage (gallons) <sup>2</sup>	-	225,300	19,960
Fire Storage (gallons) <sup>3</sup>	-	360,000	360,000
Total Storage Required (gallons)	-	1,486,480	459,810
Total Storage Required (MG)	-	1.49	0.46
Tank Size Recommended (MG) <sup>4</sup>	1.00	1.50	0.50

626  
55  
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681 gpm total

681 ← 700  
↑           ↑  
revised   original  
T.B.

**Notes:**

1. Emergency Storage equivalent to one full day of Maximum Day Demand
2. Operational Storage equivalent to 25% of one full day of Maximum Day Demand.
3. Fire Storage equivalent to 1,500 gpm for 4-hour duration.
4. Storage Facilities for 1720 Zone as per direction of SBMWD.

