

EXHIBIT 14-F

David Berger

From: Baird, Dewey [Dewey.Baird@monterey.army.mil]
Sent: Thursday, April 05, 2007 10:16 AM
To: David Berger
Cc: Martis, Pamela L (COL) GC; von Ness, Pamela M. (Deputy Garrison Commander); Truscott, Wesley L.; Willison, James (Dir DPW); Barcinas, Tony; Guidi, Robert
Subject: FW: Water Needs Assessment Report

Sir: As discussed earlier this week and to meet your immediate data request, I again reference the 2005 letter addressed to the District and City of Monterey in which the Presidio identified 60.87 AFY water requirement through FY11. 60.87 AFY is based on an assumption that demolition could result in an estimated earned 12.65 AFY water credits, thus reducing the net requirement to 48.22 AFY.

In Feb 2006 Presidio of Monterey's Water Needs Assessment (see enclosed excerpts from the report) updated the POM water requirement to a net 53.41AFY after deducting the three "in hand permits" (Dental Clinic and two General Instruction Buildings) and potential gained credits from demolition of 50 apartment buildings. The 2006 Water Needs Assessment was based on best information available in late 2005 and early 2006. The Presidio of Monterey's Mission requirements have since increased substantially, therefore the water requirements may and probably will increase to an unknown level. I was encouraged by your comment that overall community water requirement estimates contained in your technical document account for small variances such as our increase of 5 AFY from 2005 to 2006.

As you know we are evaluating options to meet our requirements by participating in several collaborative water supply solutions groups and installing a great deal of water conserving fixtures and promoting a very strict conservation policy. Increased population and per capita water use have been in inverse relationship to one another but the major anticipated student population increase may flatten this curve.

You specifically requested to know if the Presidio's Master Plan is available for review. A draft Master Plan should be available in the May/June timeframe. It does not contain an EIS. Our intent is to award an EIS contract in the June/July timeframe which would start the public review period in the August/Sept/Oct period. It is anticipated that water availability for the projected future development will be a major public issue of concern. The Presidio of Monterey will work with your staff to provide water requirements, as developed, which will be a higher figure than previously provided.

In response to whether the Presidio of Monterey will be commenting on the technical "Future Water Needs of the Monterey Peninsula" document, the answer must be no. The Presidio of Monterey can only address its own requirements and can not comment on the validity or methodology used by our neighbors in developing their respective water needs or the cumulative forecasted total water requirement for the Cal-Am service area.

Dewey J. Baird
USAG, Presidio of Monterey
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**FINAL
WATER NEEDS ASSESSMENT REPORT**

**PRESIDIO OF MONTEREY / ORD MILITARY
COMMUNITY**
Monterey, California

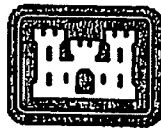
PREPARED FOR:

**INSTALLATION MANAGEMENT AGENCY
SOUTHWEST REGION OFFICE
FORT SAM HOUSTON, TEXAS**



UNDER CONTRACT TO

U.S. ARMY CORPS OF ENGINEERS, TULSA DISTRICT



CONTRACT NO. W912BV-04-D-2008

PREPARED BY:



FEBRUARY 2006

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3.0 WATER NEEDS

3.1 COMMUNITY PROFILE

When the draft Real Property Master Plan (April 2005) was prepared, approximately 4,465 Active Military were stationed at the Presidio of Monterey, and the site supported a total of 32,300 customers as indicated in Table 3-1. An update to the 2005 draft Master Plan was recently produced (December 2005); however, the update was not available to Malcolm Pirnie for inclusion in this report.

**Table 3-1
Population Supported by Presidio of Monterey**

Active Military on POM	4,465
Active Military not on POM	3,586
Family Members of Active Military	6,427
Reserve Component	661
Family Members of Reserved Component	1,018
Retirees and Family Members	14,218
Civilian and Employees on POM	1,925
TOTAL	32,300

Facilities located at the Presidio of Monterey and Ord Military Community are provided in Table 3-2. Buildings at the two locations combined measure 4,617,701 square feet.

**Table 3-2
2005 Facility Inventory
Presidio of Monterey and Ord Military Community**

Facility Type	Each
Family Housing Units	1,675
General Instruction Buildings (466 Classrooms)	33
Barracks	19
Dining Facilities	2
Physical Fitness Center	1
Medical and Dental Clinic	1
Library / Learning Center	1 / 1
Post Exchange / Commissary / Troop Store	2 / 1 / 1
Recreation Center / Community Center	1 / 1

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Facility Type	Each
Child Development Center	1
Movie Theaters	2
Total Square Feet of Buildings	4,617,701

3.2 WATER CONSUMPTION PROJECTIONS - ANALYSIS

Military planning documents for the Presidio of Monterey and Ord Military Community were reviewed for the purpose of estimating future water use requirements. In addition to the planning documents, data provided in the form of supplemental information (letters, memoranda, invoice system data) were used to estimate current and future water consumption.

3.2.1 Water Consumption Estimation Method

For commercial, industrial and government projects, a method from Monterey Peninsula Water Management District (MPWMD) was used to estimate water consumption at the Presidio of Monterey and Ord Military Community. Group I, Group II, and Group III indicate low to moderate use, high use and miscellaneous use facilities. To determine water demand or credit, facility area is multiplied by the MPWMD Water Use Factors provided in Table 3-3.

**Table 3-3
Water Use Factors
Monterey Peninsula Water Management District**

Facility Type		MPWMD Water Use Factor
Group 1 - Low to Moderate Use		
Auto Uses	General Medical	0.00007 AF/sf*
	General Retail	
Chiropractic	Office	
Church	Manicure/Pedicure	
Family Grocery	Gym	
Florist	Warehouse	
Fast Photograph	Storage	

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Facility Type	MPWMD Water Use Factor	
Group 2 - High Use		
Bakery Candy Store Coffee House Convenience Store Deli Dry Cleaner	0.0002 AF/sf	
Intensive Medical Pizza Photographic Sandwich Shop Supermarket Veterinary		
Group 3 - Miscellaneous Uses		
Bar		0.02 AF/seat (capacity counted)
Beauty Shop		0.0567 AF/station
Car Wash		Call MPWMD
Child Care	0.0072 AF/child	
Dental	Call MPWMD	
Dorm	0.04 AF/room	
Gas Station	0.0913 AF/pump	
Landscaping	Call MPWMD	
Laundromat	0.2 AF/machine	
Luxury Hotels	0.21 AF/room	
Meeting Halls	0.00053	
Motel/Hotel/Bed and Breakfast	0.1 AF/room	
Plant Nursery	0.00009 SF/sf total land	
Residential Care	Call MPWMD	
Restaurant	0.02 AF/seat (capacity counted)	
Restaurant (24-hour and fast food)	0.038 AF/seat (capacity counted)	
Self-Storage	0.00001	
Spa	0.05 AF/spa	
Swimming Pool	0.02 AF/100 sf surface area	
Theater	0.0012 AF/seat	

* AF/sf = acre-feet / square foot of facility.

3.2.2 Year 2005 Water Consumption

Water consumption at the Presidio of Monterey was reported to be 198.6 AF for year 2005 (Table 2-1) that included the demand at the Defense Language Institute Foreign Language Center (DLIFLC) and supporting facilities. The total water consumption at Ord Military Community for 2005 was approximately 869 AF (Section 2.3).

Ord Military Community housing is managed through Clark-Pinnacle and the U.S. Army Residential Communities Initiative (RCI). Total year 2005 residential water consumption was approximately 763.5 acre-feet per year (AFY) using a Marina Coast Water District

stated factor of 0.5 AFY per single family housing unit in developments with a density less than 5 units per acre.

In addition to residential water use, the OMA that includes Garrison support activities at Ord Military Community used a total of 40.7 AF in year 2005. The Federal Building that houses the Defense, Finance and Accounting Services (DFAS), Federal Bureau of Investigation, and DLIFLC Language Instruction Facilities used 62.26 AF. The U.S. Army Reserve Center used 2.62 AF. As a result of residential, OMA, DFAS and DLIFLC water consumption, the total demand in year 2005 was approximately 869 AF.

3.2.3 Projected Presidio of Monterey Water Consumption

Recent papers indicate that the Presidio of Monterey will undergo significant growth over the next several years. The need to provide more academic space at the Presidio is being fueled by an increase in students that occurred from fiscal year 2001 to fiscal year 2005. Within the last four years the number of students has increased from 2,500 to 3,600. In addition, an initiative to provide classes with a smaller student-to-teacher ratio has created a need for 75 percent more academic space before the end of the 2010 fiscal year. Current estimates for new faculty hires raise the total number of faculty from 1,100 to 2,000 to support this initiative.

As indicated in Table 3-4 water consumption will increase by a total of approximately 53.41 AFY due to construction projects at the Presidio of Monterey that include a variety of new facilities including general instructional buildings, barrack complexes, a chapel, a joint service training center, and battalion headquarters. These facilities are currently planned to be constructed at the Presidio of Monterey.

Construction projects that already have water permits include a new dental clinic (FY 2005), a Middle East School general instructional building (FY 2008) and an Asian School general instructional building (FY 2009). The general instructional building (FY

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2010) water permit will be obtained by water credits generated by the demolition of the NCO Apartments in FY 2009.

The existing Barracks Complex Phase I (D-1), Barracks Complex Phase II (D-2), Barracks Complex Phase III (D-3), and Barracks Complex Phase IV (D-4) will be demolished providing a water credit totaling 32.72 AFY. Combining the total demolition credit with the total construction demand results in a total water demand of 32.80 AFY (Table 3-4). When existing barracks are demolished, water consumption could initially decrease, but eventually there will be a one-to-one replacement after construction of the new barracks. For the purpose of projecting water use, each phase is replaced the same year demolition occurs. Projects labeled as Long Range (LR) do not yet have designated construction years (not in current Future Years Defense Program (FYDP)). However, years were assigned to projects labeled as long range to conduct water use projections.

**Table 3-4
Water Requirements for Future Construction and Demolition Projects
Presidio of Monterey**

No.	Fiscal Year	Year Assigned for Water Use Projection ¹	Building Type	Square Feet or Multiplier	MPWMD Water Use Factor (AF / Square-ft)	Estimated Water Requirement (AFY)
New Construction						
C-1	2005	2006	Dental Clinic ²	11,001	0.0002 AF/sf/yr	0 (2.20) ⁴
C-2	2008	2008	General Instructional Building (Middle East School) ³	100,000	0.00007 AF/sf/yr	0 (7.00) ⁴
C-3	2009	2009	General Instructional Building (Asian School) ³	53,000	0.00007 AF/sf/yr	0 (3.71) ⁴
C-4	2010	2010 ³	General Instructional Building VI	110,000	0.00007 AF/sf/yr	0 (7.70) ⁴
C-5	LR ⁵	2013	Barracks Complex Phase I	124,160	160 rm x 0.04 AF/rm	6.40

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No.	Fiscal Year	Year Assigned for Water Use Projection ¹	Building Type	Square Feet or Multiplier	MPWMD Water Use Factor (AF / Square-ft)	Estimated Water Requirement (AFY)
	LR	2013	Company Operations Facility	14,300	0.00007 AF/sf/yr	1.00
	LR	2013	Dining Facility	14,278	450 seats x 0.02/seat	9.00
C-6	LR	2015	Barracks Complex Phase II	139,680	180 rm x 0.04 AF/rm	7.20
	LR	2015	Company Operations Building	14,278	0.00007 AF/sf/yr	1.00
	LR	2015	Battalion Headquarters Building	12,013	0.00007 AF/sf/yr	0.84
C-7	LR	2013	General Instructional Building	75,000	0.00007 AF/sf/yr	5.25
C-8	LR	2014	Joint Service Training Center	35,000	0.00007 AF/sf/yr	2.45
C-9	LR	2013	Chapel	17,500	0.00007 AF/sf/yr	1.23
C-11	LR	2014	General Instructional Building	75,000	0.00007 AF/sf/yr	5.25
C-12	LR	2015	General Instructional Building	75,000	0.00007 AF/sf/yr	5.25
C-13	LR	2017	Barracks Complex Phase III	124,160	180 rm x 0.04 AF/rm	6.40
	LR	2017	Company Operations Building	14,278	0.00007 AF/sf/yr	1.00
C-14	LR	2016	General Instructional Building X	75,000	0.00007 AF/sf/yr	5.25
C-15	LR	2019	Barracks Complex Phase IV	155,000	200 rm x 0.04 AF/rm	8.0
Total for New Construction						65.52
Barracks to be Demolished						

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No.	Fiscal Year	Year Assigned for Water Use Projection ¹	Building Type	Square Feet or Multiplier	MPWMD Water Use Factor (AF / Square-ft)	Estimated Water Requirement (AFY)
D-1	LR	2013	Barracks Complex Phase I	-83,698	0.04 AF/rm/yr	-9.52
D-2	LR	2015	Barracks Complex Phase II	-82,593	0.04 AF/rm/yr	-8
D-3	LR	2017	Barracks Complex Phase III	-75,891	0.04 AF/rm/yr	-7.2
D-4	LR	2019	Barracks Complex Phase IV	-82,593	0.04 AF/rm/yr	-8
Total for Barracks to be Demolished						-32.72
Total for New Construction - Demolition = Estimated Water Credit						32.80
Total for Permitted Construction						20.61
Total New Water Consumption at Build Out						53.41

¹Construction years were assigned to each project for the purpose of projecting future water use, as the projects are not in current Future Years Defense Program (FYDP).

²The new dental clinic, Middle East instructional building and the Asian instructional building are permitted projects.

³Water permit will be obtained through demolition of the NCO Apartments.

⁴These projects are credited to the current water consumption.

⁵LR=Long Range.

As indicated in Table 3-5, construction designated as long range at the Presidio of Monterey will be completed in and beyond year 2013. At that time, the Presidio will have a total water demand of approximately 252 AFY after the 2019 build out year.

**Table 3-5
Future Water Requirements at the
Presidio of Monterey in AFY**

Year	2010	2013	2014	2015	2016	2017	2019
New Construction		22.88	7.70	14.29	5.25	7.40	8.0
Demolition		-9.52	0	-8.00	0	-7.20	-8.0
2005 Water Consumption + Permitted Construction	219.21						
Total Water Consumption	219.21	232.57	240.27	246.56	251.81	252.01	252.01

Table 3-5 provided a basis to create a 50 year projection. As indicated in the 50 year projection on Figure 3-1, a conservative contingency factor of 0.4 percent applied after build out creates a linear projection from the trend line resulting from new construction projects. The water consumption for year 2020 would be approximately 253 AFY and would increase to approximately 263 AF by year 2030.

3.2.4 Projected Ord Military Community Water Consumption

The Residential Communities Initiative (RCI) will provide housing for anticipated growth at Ord Military Community. As part of the initiative, Army Family Housing (AFH) that currently uses approximately 763.5 AFY will be replaced. New housing projects, a recreation center and a swimming pool will increase demand by approximately 357.5 AFY. The total demand imposed on Ord Military Community by RCI is, therefore, approximately 1,120 AFY as indicated in Table 3-6. Construction years were assigned to the Seaside Kidney Trade, Kidney Replacement Units, Southern Fitch Market Rate Units, Upper Stillwell Workforce Housing, the recreation center and the recreation center pool based on the current construction scheduled for RCI.