



Submitted by staff
at 2/23/2011 meeting.
Item 1.

January 14, 2011

Steven A. Quimby
Installation Planner
Naval Support Activity, Monterey Naval Postgraduate School
511 Gardners Road, Bldg. 426, Rm. 10A
Monterey, CA 93943-5035

SUBJECT: Seawater Desalination Potential on Navy Property
Information on Potential Project at Former Monterey Treatment Plant Site

Dear Mr. Quimby:

As we discussed during our September 17, 2010 meeting, I have prepared preliminary information on potential seawater desalination project facilities that could be located at the former Monterey wastewater treatment plant site.

Enclosed are the following:

- Summary of historical investigations by Monterey Peninsula Water Management District at the Naval Postgraduate School and at the site of the Former Monterey Treatment Plant
- Site plan for potential seawater desalination project facilities at the former Monterey treatment plant site (preliminary draft)

The facilities shown on the site plan would support a project with a treated potable water production capacity of from 3 to 5 million gallons per day. Ancillary facilities include pipelines, one or more pump stations, and a 500,000-gallon storage tank. All pipelines and the pump station would be installed underground. Above-ground facilities would be the plant building and the storage tank. Access for operation and maintenance is proposed along the existing road leading to the site from Del Monte Avenue. The method of seawater intake and brine discharge would be via subsea pipelines extending offshore from the site with risers into the ocean column.

Once you have reviewed this information, we would like to meet with you to address any questions you may have and the process for pursuing a project at this site. Please contact me by phone at 658-5620 or by e-mail at andy@mpwmd.dst.ca.us.

Sincerely,

A handwritten signature in black ink that reads "Andrew M. Bell".

Andrew M. Bell
District Engineer

Enclosures (as noted above)

cc: Darby Fuerst, MPWMD General Manager

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**Prior MPWMD Water Supply Investigations
Naval Postgraduate School and Site of Former Monterey Treatment Plant**

A set of investigations of potential sources of water on U.S. Navy property for a desalination project was conducted in 1990 for MPWMD by Stall, Gardner & Dunne, Inc. (SGD). The report by SGD on these investigations is as follows:

Hydrogeologic Investigation, Monterey Coastal Basin, Monterey County, California
(September 1990)

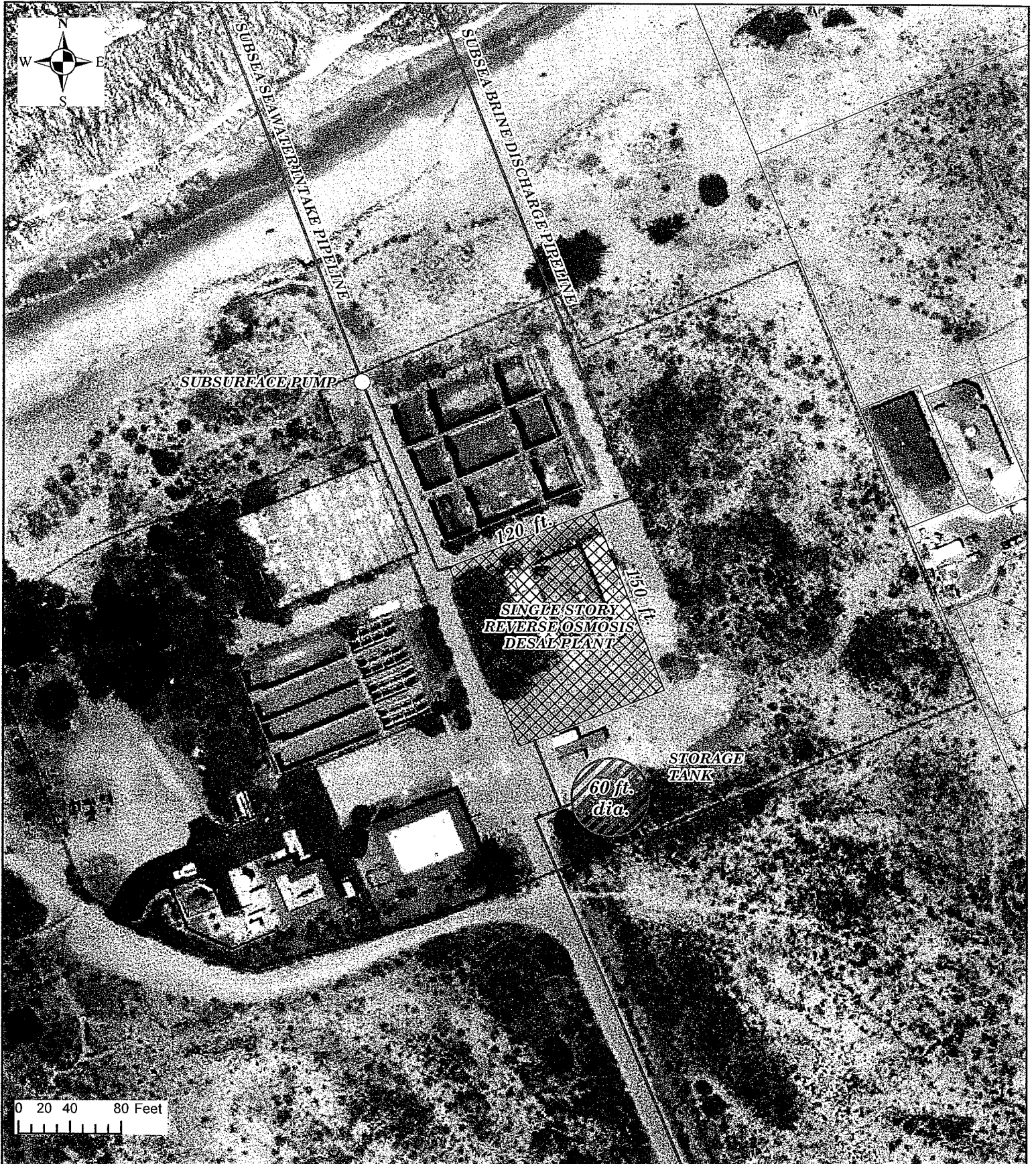
The investigation assessed the availability of non-potable groundwater resources on U.S. Navy property in the City of Monterey for use as desalination source water. The study focused on two source areas: (1) brackish groundwater from Monterey Shale in the southeastern part of the Naval Postgraduate School (NPS) grounds, and (2) saline groundwater from the shallow dune sand aquifer at the site of the former City of Monterey wastewater treatment plant, across Del Monte Avenue from the NPS. The investigation included the drilling, construction, and testing of two six-inch diameter test production wells and associated monitoring wells. Aquifer testing indicated relatively low transmissivity¹ values for the Monterey Shale, ranging from 250 to 500 gallons per day per foot of drawdown (gpd/ft). The study concluded that a well completed in Monterey Shale may be capable of a sustained production rate of approximately 20 gallons per minute (gpm) with total dissolved solids concentrations averaging 1,800 milligrams per liter (mg/l). It was estimated that a well completed in the shallow dune sand aquifer may be capable of a sustained production rate of 100 gpm with a TDS concentration ranging from 1,600 to 4,200 mg/l.

¹ Transmissivity is a measure of how easily water moves through an aquifer

Portions of the above text are from the following document:

SGD (Staal, Gardner & Dunne, Inc.), Engineering Analysis, Development of Non-Potable Irrigation Water Systems, prepared for the City of Monterey (August 1999)

Potential Seawater Desalination Project Former Monterey Treatment Plant Site



MPWMD January 2011
A. Bell

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