



## Charles Meyer Desalination Plant

Presentation to the Central Coast Regional  
Water Quality Control Board

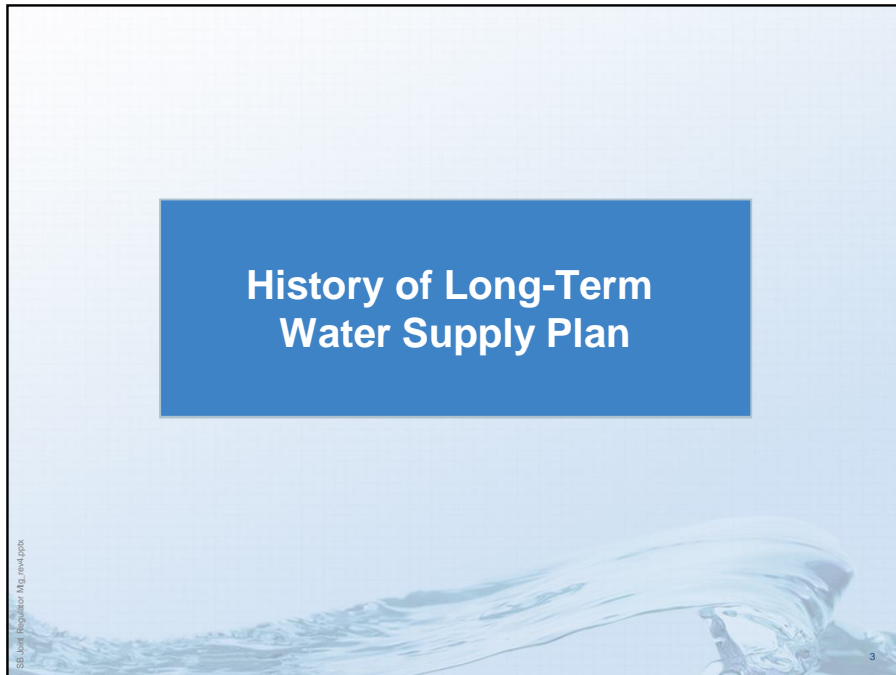
January 29, 2015

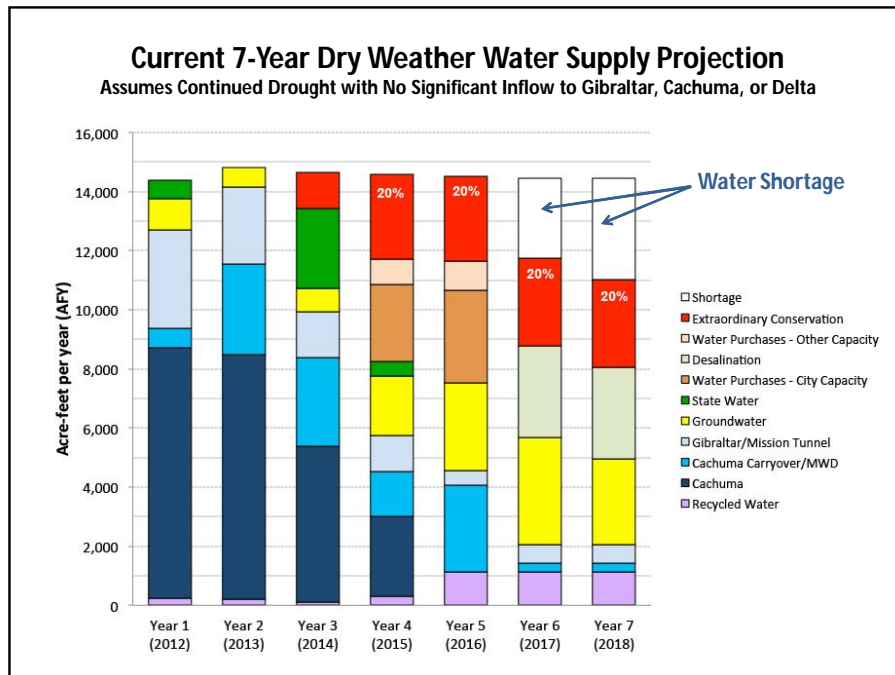
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### Introduction

- The City supports the recommended action
- Action addresses the unique circumstances of the City's existing desalination facility and evolving state policy
- Action is consistent with the Governor's drought declaration

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### Summary of City's Annual Expenses to Maintain Permanent Facilities for Future Use

Year	Annual Maintenance Cost	Annual Electrical Cost	Annual Water/Sewer Cost	Yearly Total Cost
1997	\$49,235	\$52,688	\$899	\$102,822
1998	\$120,256	\$31,142	\$810	\$152,208
1999	\$30,153	\$77,042	\$810	\$108,005
2000	\$8,000	\$86,819	\$827	\$95,646
2001	\$86,257	\$88,421	\$876	\$175,554
2002	\$80,696	\$90,558	\$876	\$172,130
2003	\$83,243	\$63,605	\$904	\$147,752
2004	\$43,756	\$63,605	\$941	\$108,302
2005	\$34,197	\$65,547	\$1,400	\$101,144
2006	\$117,632	\$65,544	\$1,450	\$184,626
2007	\$75,677	\$65,544	\$1,557	\$142,778
2008	\$70,755	\$65,544	\$1,565	\$137,864
2009	\$83,841	\$65,544	\$1,631	\$151,016
2010	\$60,193	\$68,964	\$1,690	\$130,847
2011	\$51,622	\$68,964	\$1,675	\$122,261
2012	\$66,039	\$67,200	\$1,736	\$134,975
2013	\$62,383	\$67,200	\$1,830	\$131,413
<b>TOTAL</b>				<b>\$2,299,343</b>

## City has maintained its NPDES Permit that was based upon previous studies



The Discharger owns a seawater desalination facility, which is currently not in operation. The Discharger has requested the continued coverage of the potential discharge of desalination brine from the Facility in the event that the desalination facility is operated again. When operational, the desalination facility discharges desalination brine at one of five flow rates (3.9, 4.1, 9.4, and 12.5 MGD).

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2010 NPDES Permit

If you have any questions, please call Peter von Lengen at 805/549-3688 or Burton Chadwick at 805/542-4786.

Sincerely,  
  
Peter von Lengen  
Executive Officer

Attachments: WDR Order No. R3-2010-0011 with Standard Provisions, MRP & Fact Sheet

cc: (with electronic attachments)  
David Smith, U.S. EPA Region IX (Smith.david@epa.gov)  
DWWCB - CWC, NPDES, Wastewater@waterboards.ca.gov and dmy@waterboards.ca.gov  
Jae Kim, Tehra Tech (jae.kim@tehratech.com)

cc: (without attachment) City of Santa Barbara El Estero WWTP IPL (Please file IPL copy with original letter)

© NPDES/NPDES Facilities/Santa Barbara Coastal National Permit 2010/10-2011 adopted to date

California Environmental Protection Agency  
P Received Paper

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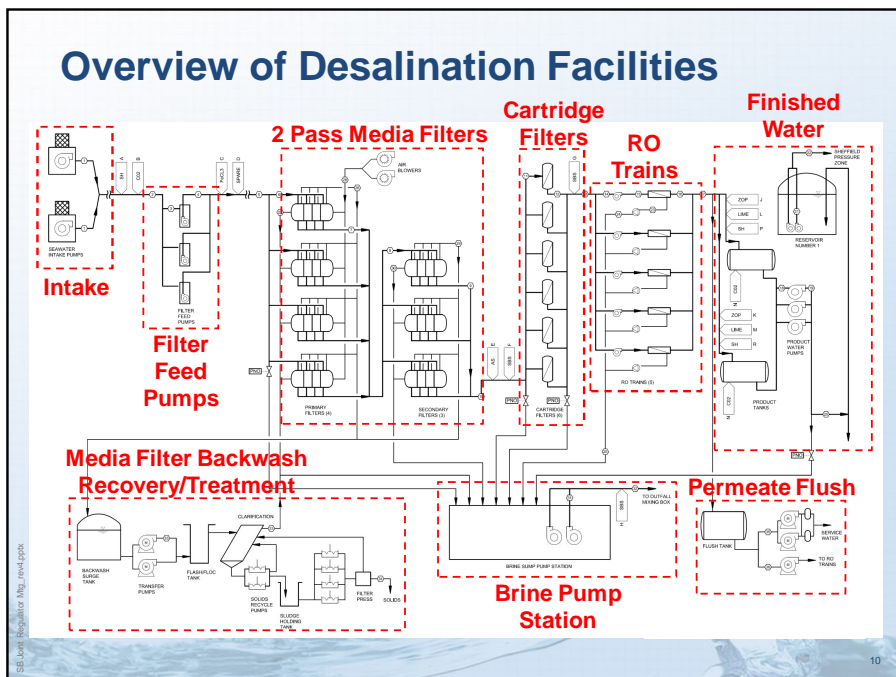
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## The City's Schedule Is Based Upon Water Supply Projections and Is Consistent with the 2011 LTWSP

- **March 2015**                      **Design/Build/Operate Proposals Due**
- **June 2015**                        **Award Contract**
- **Summer 2016**                  **Begin Production**

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## Desalination is Part of the City's Long-Term Water Supply Planning

- 1988-1990 - City conducts desal studies – including:
  - **Alternative Intakes**
  - **Alternative Technologies**
  - **Alternative Plant Capacities**
  - **Alternative Site Locations**
- 1991 – RWQCB Issued Order for Desal Plant – WDR Order 91-83 NPDES CA0049671
  - renewed in 1992, 1999 and 2004
- 1992 – Desal Plant begins operation – March through June
- 1996 – Council directed staff to place Desal Plant in long-term standby mode
- 2010 – City renews NPDES permit for El Estero WWTP and Desal Plant
- 2011 – City adopted GP and LTWSP which included desalination as drought supply

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## Subsurface Intake Study Findings

- Beach Wells were found infeasible:
  - *Between 100 and 200 wells would be required (3,500 AFY capacity)*
- Infiltration Galleries were found infeasible:
  - *Found to be four times more costly than shallow wells*
  - *Unconventional technology*

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## Impingement and Entrainment effects were evaluated

- Studied in both the 1991 and 1994 EIRs:
  - Evidence in 1991 and 1994 EIRs supports the Section 13142.5(b) findings
- Coastal Commission Findings:
  - No listed species or sensitive habitats affected
  - No Impingement due to low through-screen velocity
  - Operation Consistent with Coastal Act Policies relating to protection of marine organisms

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## Comments from the Mayor

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