

Southern California Edison and the City of Avalon Additional Desalination Plant

July 7, 2015



Objective

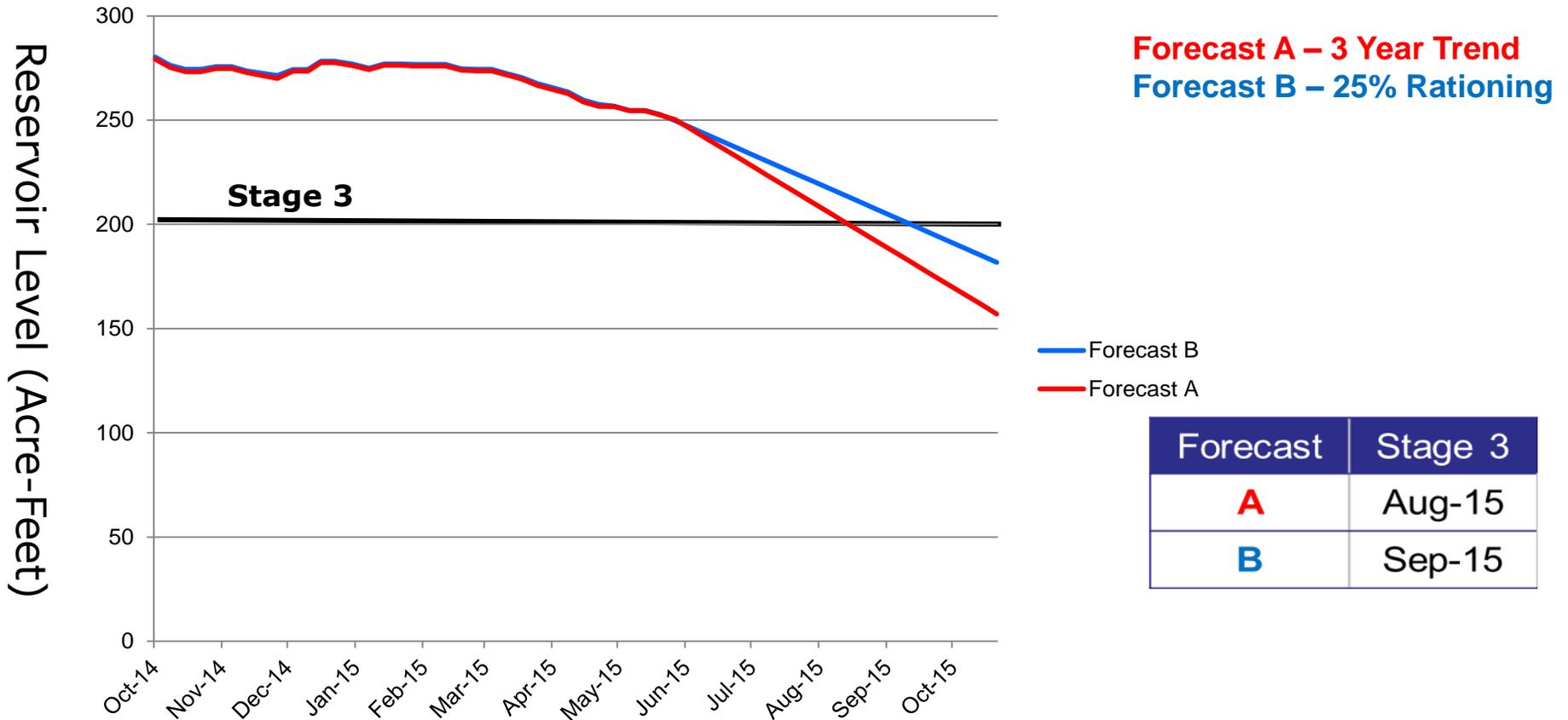
- ❖ Present additional desalination system project
- ❖ City Council Vote on \$500,000 contribution

Agenda

- ❖ Stage 3 Forecast
- ❖ Existing Desalination Plant at PBGS
- ❖ Additional Desalination Plant
 - Schedule
 - Cost and Rate Impacts
- ❖ Project Funding Opportunities and LA County Support

Stage 3 Forecast

Middle Ranch Reservoir Level is at 243 Acre Feet as of 7/1/15



Based on 3 year monthly average water sales with little or no rainfall.



Existing Desalination Plant at PBGS

- ❖ Fed by two salt water wells located approximately one mile south of PBGS.
- ❖ Wells currently operating at maximum capacity.
- ❖ Plant capable of producing approximately 200,000 gallons of drinking water per day.



Additional Desalination System Project

- ❖ Treats brine discharge from the existing desalination system.
- ❖ Could produce up to approximately 150,000 gallons per day of additional drinking water.
- ❖ Installation on or before September 11 could delay the onset of Stage 3 water rationing.
- ❖ If persistent drought conditions continue, Stage 3 Water Rationing may be unavoidable.
 - Both systems operating together will not support peak summer demand.
- ❖ Useful life estimated to be 20 years



Current Progress and Schedule

Schedule delays in red text, if this motion is not passed on July 7th

Contracting

- Awarded contract for preliminary engineering and site investigation (June 10)
- Procure RO Unit (expected July 8)
- Award construction contract (expected July 8)

Permitting

- Received Division of Drinking Water approval of project concept (June 23)
- Received letter from LACRWQCB confirming that an NDPES permit is not needed (June 29)
- Receive California Coastal Commission Immaterial Permit (expected July 10)
- Receive Division of Drinking Water permit (expected September 11)

Engineering

- Completed 30% design (June 25th)
- Complete engineering (expected August 14)

Installation

- Complete Site Prep and Installation of Support Equipment (expected August 14)
- Receive RO Unit from Singapore (expected August 14)
- Complete Installation of RO Unit (expected August 29)
- Complete RO Startup and Commission (September 4)

Cost and Rate Impacts

- ❖ Project capital cost estimated at approximately \$2.6 million
- ❖ Operating and Maintenance annual costs estimated at approximately \$500,000, assuming maximum production throughout the year
 - Operation of new desalination unit in lieu of existing desalination unit during low demand periods could save approximately \$20,000 per month
 - Will require additional permitting after new plant is in operation
- ❖ On a stand-alone basis not factoring in other incremental cost pressures, with a capital cost of \$2.1M (net of City's \$500,000 contribution) and annual O&M of \$500,000, the new desalination unit would increase water rates by approximately 20%
 - Average monthly residential customer bills would increase by approximately \$20
 - Average monthly commercial customer bills would increase by approximately \$115

Cost and Rate Impacts – to the Local Economy

- ❖ Should Catalina Island enter Stage 3 water rationing
 - ❖ Additional 17% water use reduction from current levels.
 - ❖ Businesses may need to “reduce inventory” to meet 50% reduction
 - ❖ Estimates of 10% revenue loss to City
 - ❖ Reduced:
 - ❖ TOT
 - ❖ Wharfage Fees
 - ❖ Admission Tax
 - ❖ Harbor Use Tax

Drought Relief Funding Opportunities

- Potential for part of the project to be funded through grants. However, most grants are awarded to projects in preliminary planning stages. Limited precedent set for projects to receive funding after installation.
- LA County considering letter of support for the project.

Table 1. Grant Funding Opportunities

Funding Program	Funding Agency	Amount of Funding	Percent Appropriation	Status of Program
Proposition 1	Department of Water Resources (DWR)- State Water Resources Control Board (SWRCB)	\$2,145,000,000	25% to 35%	Draft Guidelines-Final Guidelines, Summer of 2015
Interim Emergency Drinking Water & Drought-Related Projects	State Water Resources Control Board (SWRCB)	\$19,000,000	Currently under development	Approved guidelines on May 19, 2015
Water Energy Technology (WET) program. Governor’s Executive Order B-29-15:	California Energy Commission (CEC), Department of Water Resources (DWR), State Water Resources Control Board (SWRCB)	Currently under development	Currently under development	LAUNCHING SUMMER 2015. The program kick-off is expected summer 2015.
WaterSmart: Drought Resiliency Project Grants for Fiscal Year 2015-Funding Opportunity Announcement No. R15AS00046	U.S. Department of the Interior Policy and Administration Bureau of Reclamation	Approximately \$2 to \$3 Million	50% or more of project costs-Up to \$300,000 per applicant.	Application due date: June 25, 2015, 4:00 p.m. Mountain Standard Time (MST)

Questions