

Town of Discovery Bay Community Services District

2015 Urban Water Management Plan Overview

June 21, 2017





Provide an overview of the 2015 UWMP.

• Present information required for a Public Hearing pursuant to CWC 10608.26.

• Adopt the 2015 UWMP as prepared or modified after the hearing.



Presentation Topics

I. 2015 UWMP Overview
II. Water Use – Historic, Baseline and Targets
III. Demand Management Measures
IV. Next Steps



2015 UWMP Overview

What is an Urban Water Management Plan?

- State-mandated water supply planning document (UWMP Act)
- Required every 5 years. (State issues guidelines every 5 years)
- Urban water suppliers: >3000 connections, or >3000 ac-ft/yr
- Gives the State a consistent format in which to assess water supply and demands statewide
- As of 2010, UWMP's are the vehicle for the State to implement the Water Conservation Bill of 2009 (SBX7-7) – 20x2020
- Compliance with UWMP Act is required in order to be eligible for State funding (loans or grants).

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2015 UWMP Overview

- TODB approved a 2010 UWMP in 2016
- The 2010 UWMP established baseline water use and targets to meet the goals of SBX7-7 20x2020
- The 2010 UWMP defined Demand Management Measures
- 2015 UWMP is an update to the 2010 UWMP
- A new requirement in 2015 UWMP was to conduct a Water Loss Audit.
- 2015 UWMP had much less stringent requirements for Demand Management Measures

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2015 UWMP Overview

Contents of the 2015 UWMP

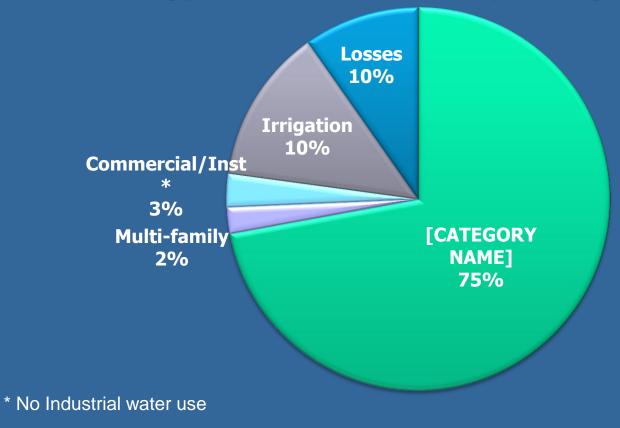
- 1. Introduction and Overview
- 2. Plan Preparation *coordination activities*
- 3. System Description *supplies, service area, climate, population*
- 4. System Water Use demands by sector, water losses, future savings
- 5. SB X7-7 Baselines and Targets GPCD 2010, 2015 and 2020
- 6. System Supplies *notably groundwater basin conditions and management*
- 7. Water Supply Reliability Assessment *reliability in dry year conditions*
- 8. Water Shortage Contingency Planning *plan for hypothetical shortages*
- 9. Demand Management Measures *description of conservation strategies*

10. Plan Adoption, Submittal, and Implementation – *purpose today...*

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Water Use – By Sector

Typical Annual Consumption by Sector





Water Use – Historic Annual

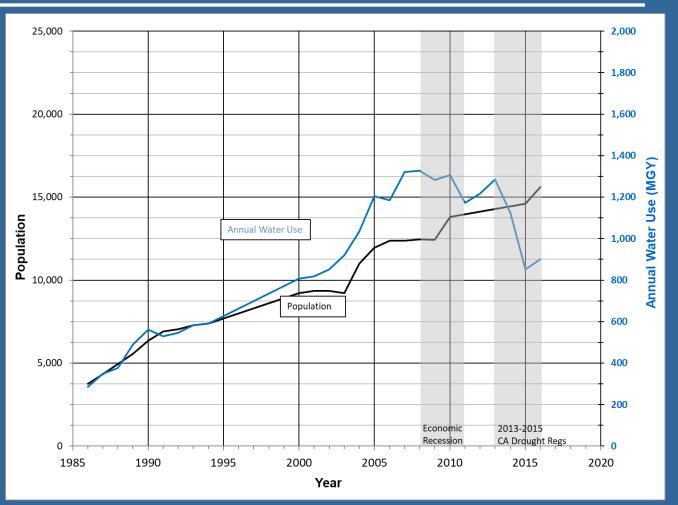
Annual Production

2000 = 808 MGY

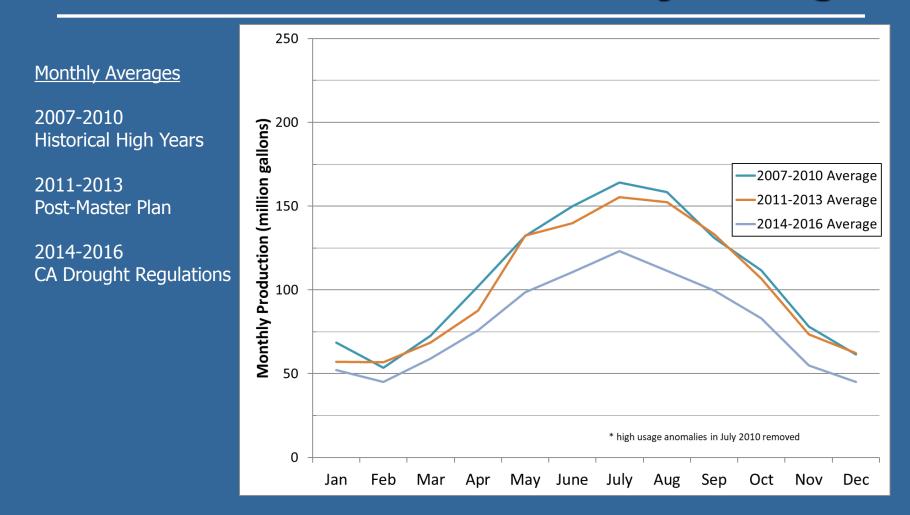
2010 = 1306 MGY 2011 = 1173 MGY 2012 = 1218 MGY 2013 = 1286 MGY 2014 = 1129 MGY * 2015 = 852 MGY * 2016 = 901 MGY **

* CA 2014-2015 Emergency Drought Reductions

** TODB 20% Voluntary Reductions were enacted



Water Use – Historic Monthly Averages



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UWMP Baseline and Targets

BASELINE CALCULATION

SB X7-7 Table 5: Gallons Per Capita Per Day (GPCD)						
Baseline Year		Service Area Population	Annual Gross Water Use	Daily Per Capita Water Use (GPCD)		
10 to 15 Year Baseline GPCD						
Year 1	2001	9,594	818	234		
Year 2	2002	9,594	851	243		
Year 3	2003	9,447	921	267		
Year 4	2004	11,125	1,035	255		
Year 5	2005	12,034	1,204	274		
Year 6	2006	13,106	1,185	248		
Year 7	2007	13,110	1,322	276		
Year 8	2008	13,164	1,328	276		
Year 9	2009	13,155	1,282	267		
Year 10	2010	13,352	1,306	268		
10-15 Ye	261					



UWMP Baseline and Targets

2020 WATER USE TARGET

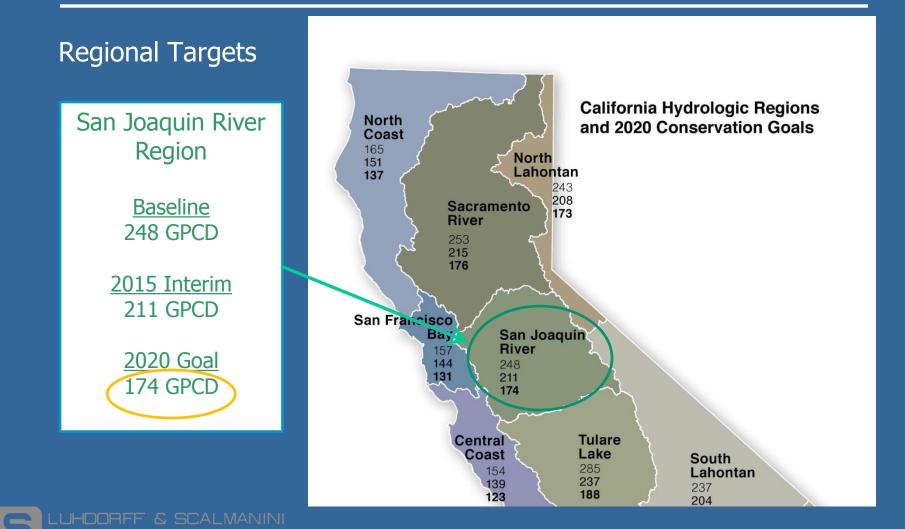
- Method 1: 20% reduction of Baseline Daily Per Capita Water Use
- Method 2: Efficiency Standards
- Method 3: Hydrologic Region
- Method 4: Savings by Sector

Due to lower regional targets, and predominant residential uses in the TODB, Method 1 was selected as the most appropriate.

Table 5-1 Baselines and Targets Summary					
Baseline Period	Baseline GPCD	2015 Interim GPCD	2020 Target GPCD		
2001 - 2010	261	235	209		



UWMP Baseline and Targets

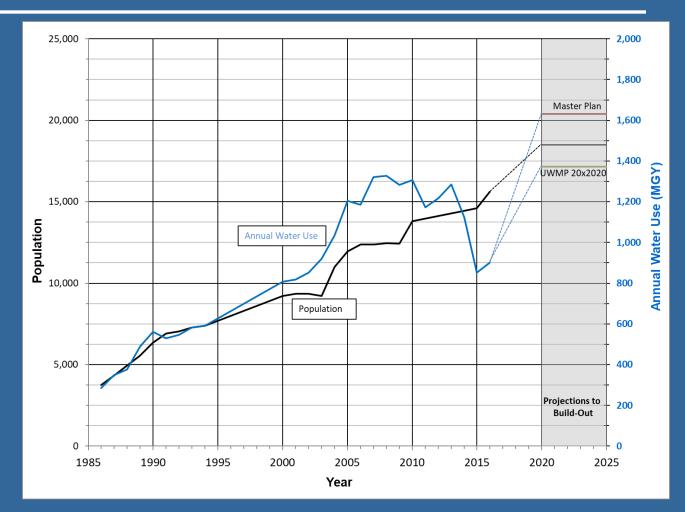


Water Use – Projected Annual

Water Master Plan Build-Out: 1,630 MGY

Build-Out Projections

UWMP 20x2020: 1,370 MGY





Demand Management Measures

Differences between 2010 and 2015 UWMPs

2010 UWMP:

- Required detailed consideration of 14 specific DMM categories defined under the UWMP Act.
- DMMs that are not planned to be implemented must be supported by a cost-to-benefit analysis.

2015 UWMP:

- Streamline DMM discussion to 6 general categories.
- Describe current practices, discuss implementation over past 5 years, and describe planned future implementation.
- Less stringent requirements than the 2010 UWMP.



Demand Management Measures

2015 UWMP DMM Categories:

- Water Waste Prevention Ordinances
- Metering
- Conservation Pricing
- Public education and outreach
- Programs to assess and manage distribution system losses
- Water conservation program coordination and staffing support
- Other



Next Steps

- Public Hearing (today)
- Board Adoption (following Public Hearing)
- Submit the adopted 2015 UWMP to DWR, Contra Costa County and California State Library

