IRWD’s State Mandated Reduction

Southern California Water Dialogue

July 22, 2015
Presentation Overview

• IRWD’s Mandated Reduction Target
• Challenges Faced
  – Significant Growth
  – Extensive Recycled Water Distribution System
• Investments in Reliability
  – Extraordinary Supply
  – Indirect Potable Reuse
• June 2015 Reporting
• How IRWD Will Meet its Goal
IRWD’s Mandated Reduction

• 16% reduction in potable production from 2013 baseline
• Based on average residential GPCD of 91 for July – September 2014
• Total reduction required = 7,565 acre-feet
• Assumes summer provides greatest opportunity to achieve savings from outdoor potable use
• Assumes the non-residential sector has similar or greater outdoor potable savings opportunities as residential sector
Challenges Faced

• Significant Growth
  – 7% Growth Rate; one of most rapidly growing areas
  – Key to maintaining strong economy
  – No adjustment for growth in potable production

• Extensive Recycled Water Distribution System
  – Majority of non-residential and multi-family outdoor use served by recycled water
    (Only 3 medians in Irvine served by potable irrigation)
  – Limited opportunity for IRWD to achieve savings reduction from discretionary potable outdoor use
Investments in Reliability – No Credits Given

• Extraordinary Supply
  – IRWD’s water banking program
  – Water is stored to provide additional reliability in drought or system disruption

• Indirect Potable Reuse
  – Orange County made significant investments in the Ground Water Replenishment System (GWRS)
  – June 2015 GWRS supplied 34% of local groundwater production countywide
    • GWRS provided 21% of IRWD’s potable production
June 2015 - Potable Water Production

No adjustment made to account for IRWD’s 7% growth from June 2013 to June 2015. With adjustment, savings for June reduction in potable production would be 18%.

IRWD POTABLE WATER PRODUCTION
2013 BASELINE VS. PRODUCTION TARGET VS. ACTUAL PRODUCTION

SAVINGS ACHIEVED: 745 AF
SAVINGS REMAINING: 6,820 AF

June 2015 (Actual) 12% Reduction
June 2015 (Goal) 16% Reduction

RUNNING TOTALS FOR BASELINE, TARGET & ACTUAL PRODUCTION (ACRE-FEET)

<table>
<thead>
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<th>2013 Baseline</th>
<th>2015 Production Target</th>
<th>2015 Actual Production</th>
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<tr>
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<td>6,085</td>
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<tr>
<td>Jun</td>
<td>6,085</td>
<td>5,112</td>
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Residential Gallons Per Capita per Day and ET

22% reduction in residential per capita comparing June 2013 with June 2015.

IRWD MONTHLY RESIDENTIAL-GPCD & ET

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<tr>
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<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
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<td>Dec</td>
<td>2.88</td>
<td>3.64</td>
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MONTHLY ET (INCHES)

0.00  | 1.00  | 2.00  | 3.00  | 4.00  | 5.00  | 6.00  | 7.00  | 8.00  |
0      | 10    | 20    | 30    | 40    | 50    | 60    | 70    | 80    |
0      | 100   | 200   | 300   | 400   | 500   | 600   | 700   | 800   |
How IRWD Will Meet its Target

Rate Changes:

• Reduced outdoor allocations for potable water by 30%
• Based on drought tolerant plants and drip
  (ET Adjustment factor reduced: 0.9 to 0.6)
• Potential second step rate increase in October 2015
• Stage 2 Drought Declaration
How IRWD Will Meet its Target

Key Conservation Initiatives:

• “Brown is the New Green”
• Reduce Outdoor Watering by 50%
• Drought Response Center
• Increased Conservation Incentives
• Targeted efficiency program to commercial customers
How IRWD Will Meet its Target

District-wide Initiatives:
• Drought team
• Operational changes
• Expansion of recycled water uses
• Targeted coordination with largest users (e.g., cities and key customers)
Meeting the Goal

Working Together to Achieve the Goal

IRWD Drinking Water Savings
(Through June 2015)

Goal must be met by February 2016

Savings Through June 2015

7565 Acre-Feet*

745 Acre-Feet

Savings Achieved

100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%

*One acre-foot = 325,851 gallons
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