CITY OF RIVERSIDE
Arts & Innovation

2015 Urban Water Management Plan

Public Utilities Board

June 27, 2016

Background

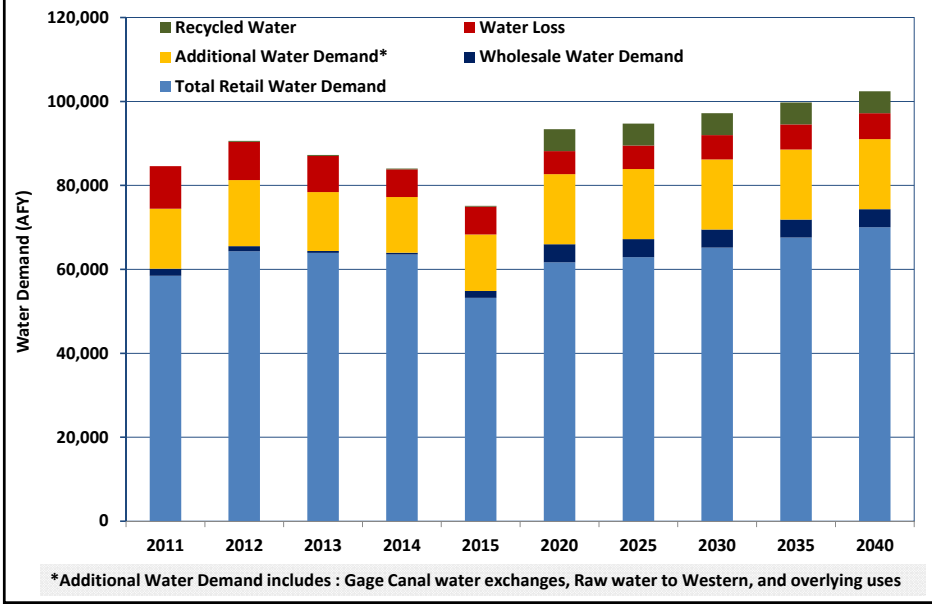
Urban Water Management Plans are required by the State:

1. Completed/updated every 5 years
2. Pre-requisite for certain loans and grants
3. Foundational documents for new development
4. Support long-term and drought planning
   a. 25 year horizon

Elements

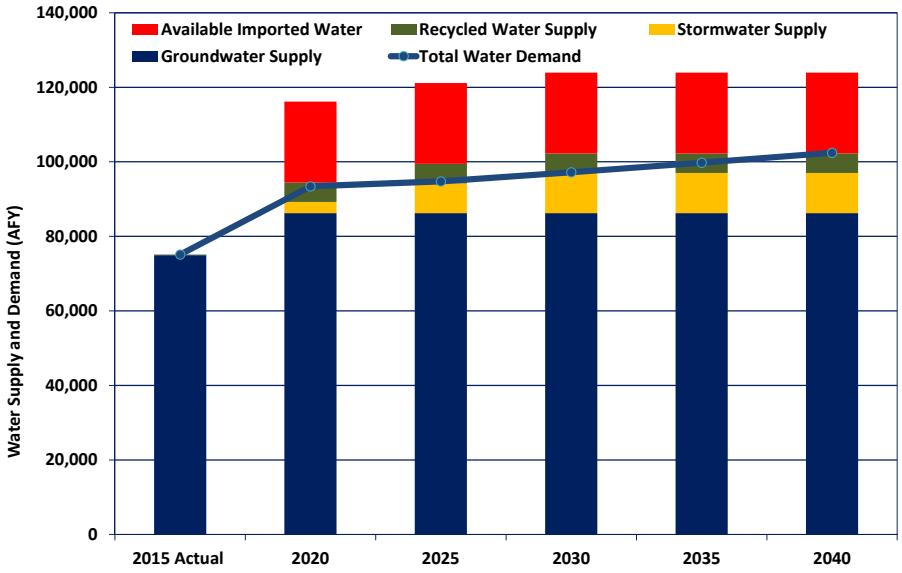
- Supply vs. Demand
- SBX7-7 Compliance
  - 20% reduction X 2020
- Source reliability
- Water Shortage contingencies
- Demand Management Measures (DMM)

Demands: Actual and Projected



*Additional Water Demand includes : Gage Canal water exchanges, Raw water to Western, and overlying uses

Water Shortage Contingencies



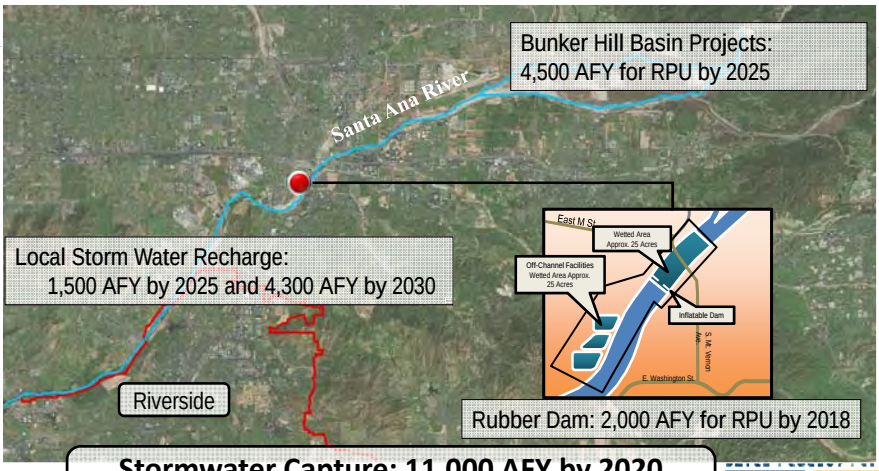
Includes up to 21,000 AF of imported water

Projected Supply Gap 28,000 AF

1. Utility 2.0
   a. Stormwater Capture – 16,000 AF
   b. Recycled Water – 4,000 AF
   c. Conservation – 10,000 AF

2. 2015 Urban Water Management Plan
   a. Stormwater Capture – 11,000 AF
   b. Recycled Water – 5,200 AF
   c. Conservation – 12,000 AF

Planned Water Supply Projects: Storm Water Capture



Stormwater Capture: 11,000 AFY by 2020
Utility 2.0 was (16,000 AF)

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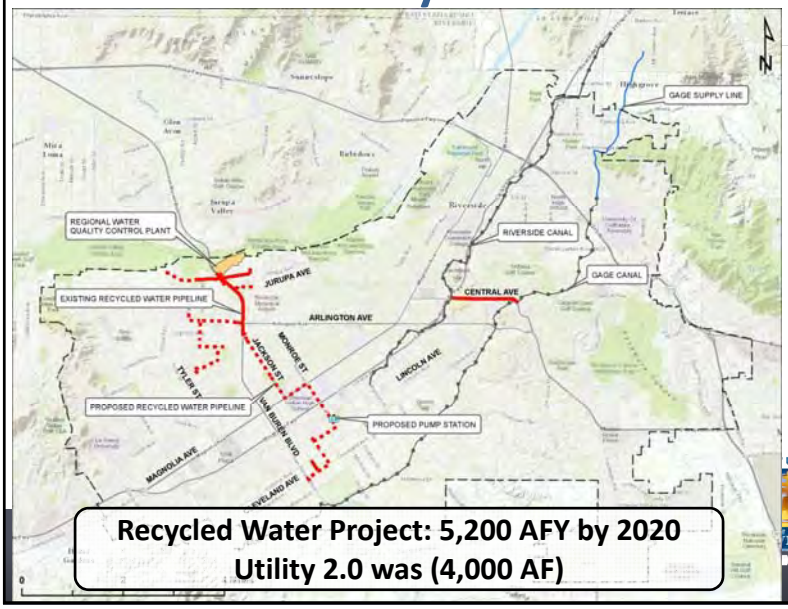
Planned Water Supply Projects: Recycled Water



Recycled Water Project: 5,200 AFY by 2020
Utility 2.0 was (4,000 AF)

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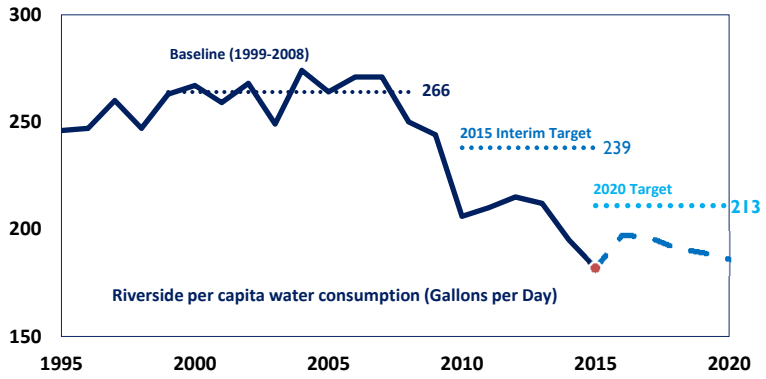
Water Conservation SBX7-7

(Water Conservation Act, 2009)



Conservation projection – 12,000 AF

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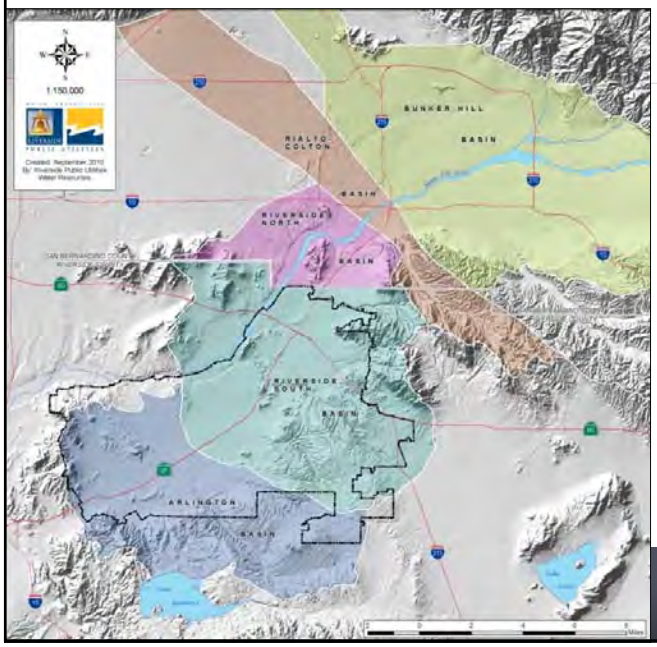
Water Supply Reliability



Extraction/Export Rights

Bunker Hill
- 55,263 AFY Export

Colton
- 2,728 AFY Export

Riverside North
- 10,902 AFY Export

Riverside South
- 16,880 AFY Extraction

85,774 AFY Total

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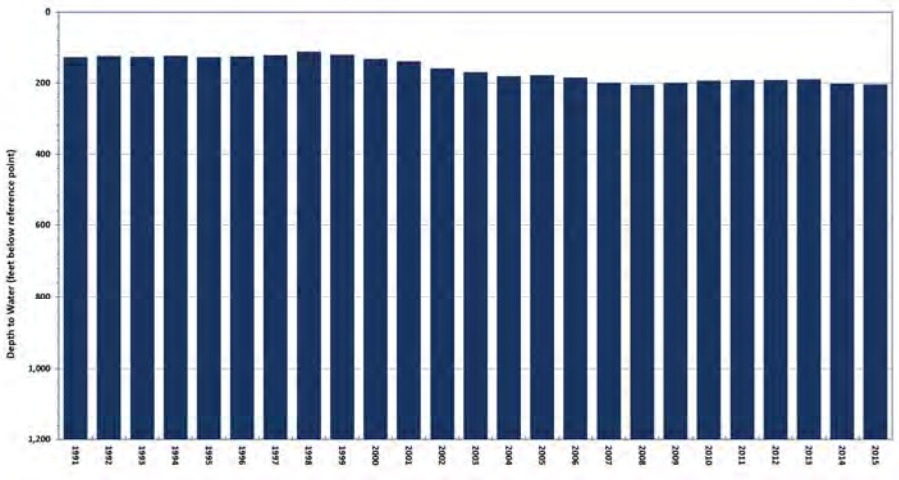
Source Reliability

Bunker Hill Basin Annual Groundwater Levels



Source Reliability

1. Water supplies are reliable for single and multiple year dry periods
2. Reliability increases with groundwater recharge projects

Demand Management Measures

DMM	Status
1. Water waste prevention ordinances	
2. Metering	
3. Conservation pricing	
4. Public education and outreach	
5. Real water loss management programs and systems	
6. Water conservation program and staffing support	
7. Other Demand Management Measures	

2015 UWMP Conclusions

RPU's identified supplies exceed the expected demands through 2040 provided that it:

1. Continues conservation efforts
2. Implements long-range planning and developing new supplies

2015 UWMP Conclusions

3. RPU meets customer demands in a cost-effective and environmentally responsible manner
4. RPU effectively manages water resources by proactive planning and projects implementation
5. Utility 2.0 to be modified slightly based on changed conditions

Recommendation

Recommend that the Board of Public Utilities:

1. Conduct a public hearing for review of the 2015 Urban Water Management Plan
2. Recommend that the City Council adopt the 2015 Urban Water Management Plan.

Water Conservation SBX7-7

(Water Conservation Act, 2009)
Baseline Calculation

- DWR Population Tool to re-calculate:
  1. service area population
  2. baseline per-capita use
  3. compliance targets GPCD
- Baseline Periods: RPU chose a 10 years period from 1999-2008

Baseline Year	Service Area Population	Annual Gross Water Use	(GPCD)
1999	247,753	72,610	262
2000	249,744	74,465	266
2001	252,935	73,314	259
2002	256,166	78,137	272
2003	259,439	73,805	254
2004	262,754	82,085	279
2005	266,111	80,114	269
2006	269,511	82,734	274
2007	272,954	83,562	273
2008	276,441	78,237	253
10 Year Average Baseline GPCD			266