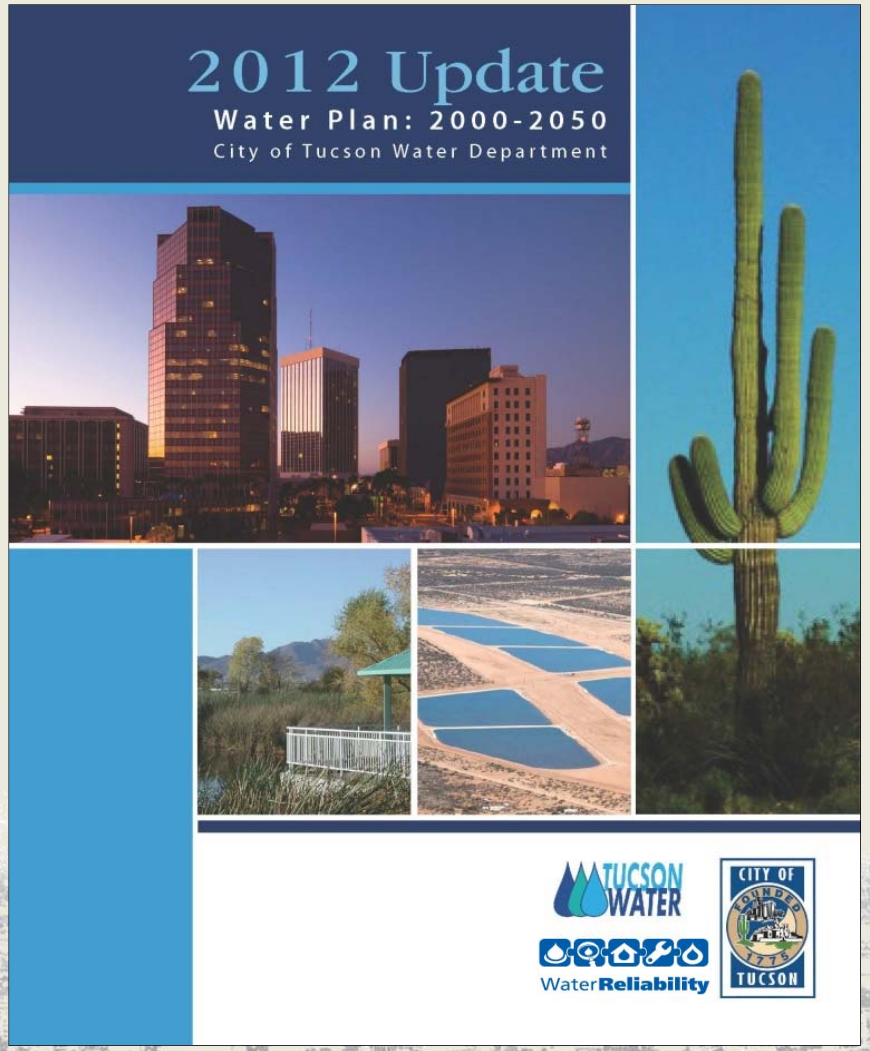
Long Range Plan Update



Presented By:

Joe Olsen, Planning Administrator

Wally Wilson, Chief Hydrologist

Presented to

the Citizen's Water Advisory Council

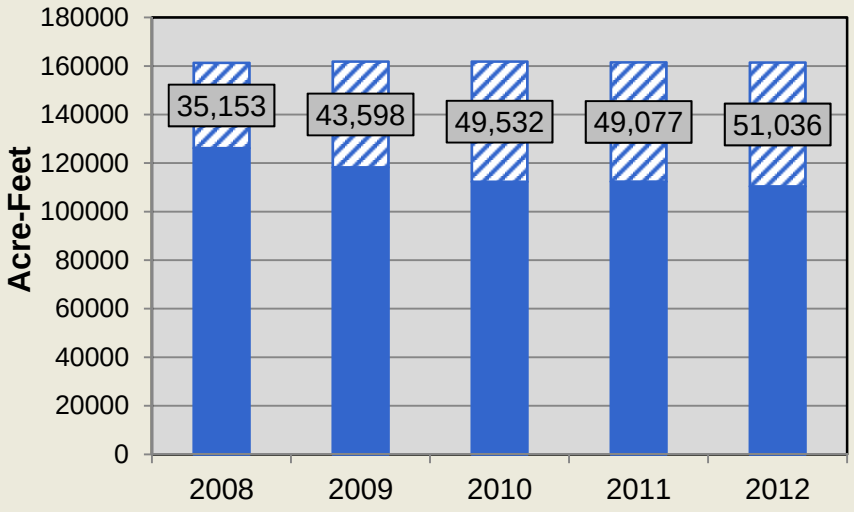
June 19, 2013

Overview

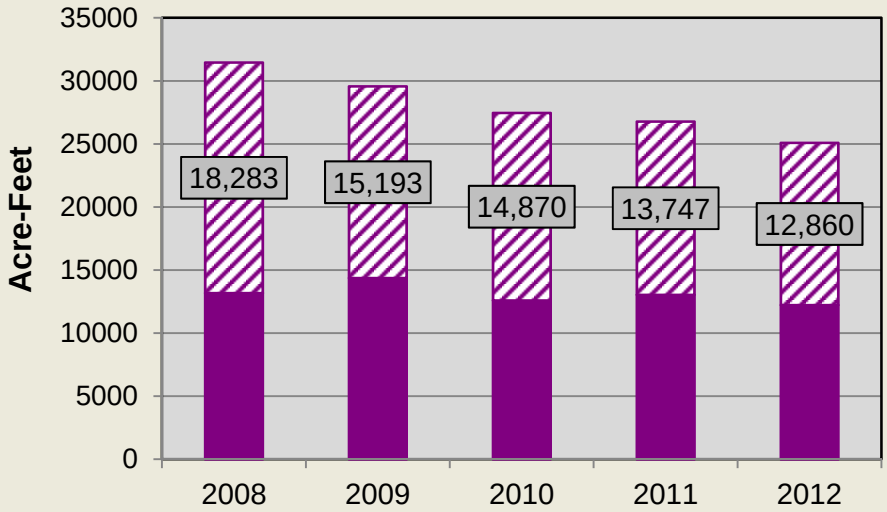
- Projecting a range of GPCD based on historic and financial plan near term projections
- Projecting Shortage based on USBOR and CAP analysis
- Projecting renewable supplies are physically and legally available to meet a range of demands to 2050

Checkbook Balance

Tucson's Available Renewable Potable Supply



Tucson's Available Effluent Supply



Available Renewable Potable Supply (Checkbook Balance)

Annual Potable Usage & Reserved Demand

Available Effluent Supply (Checkbook Balance)

Annual Effluent Usage

Basis for Shortage Projection

Colorado River Basin Supply and Demand Study

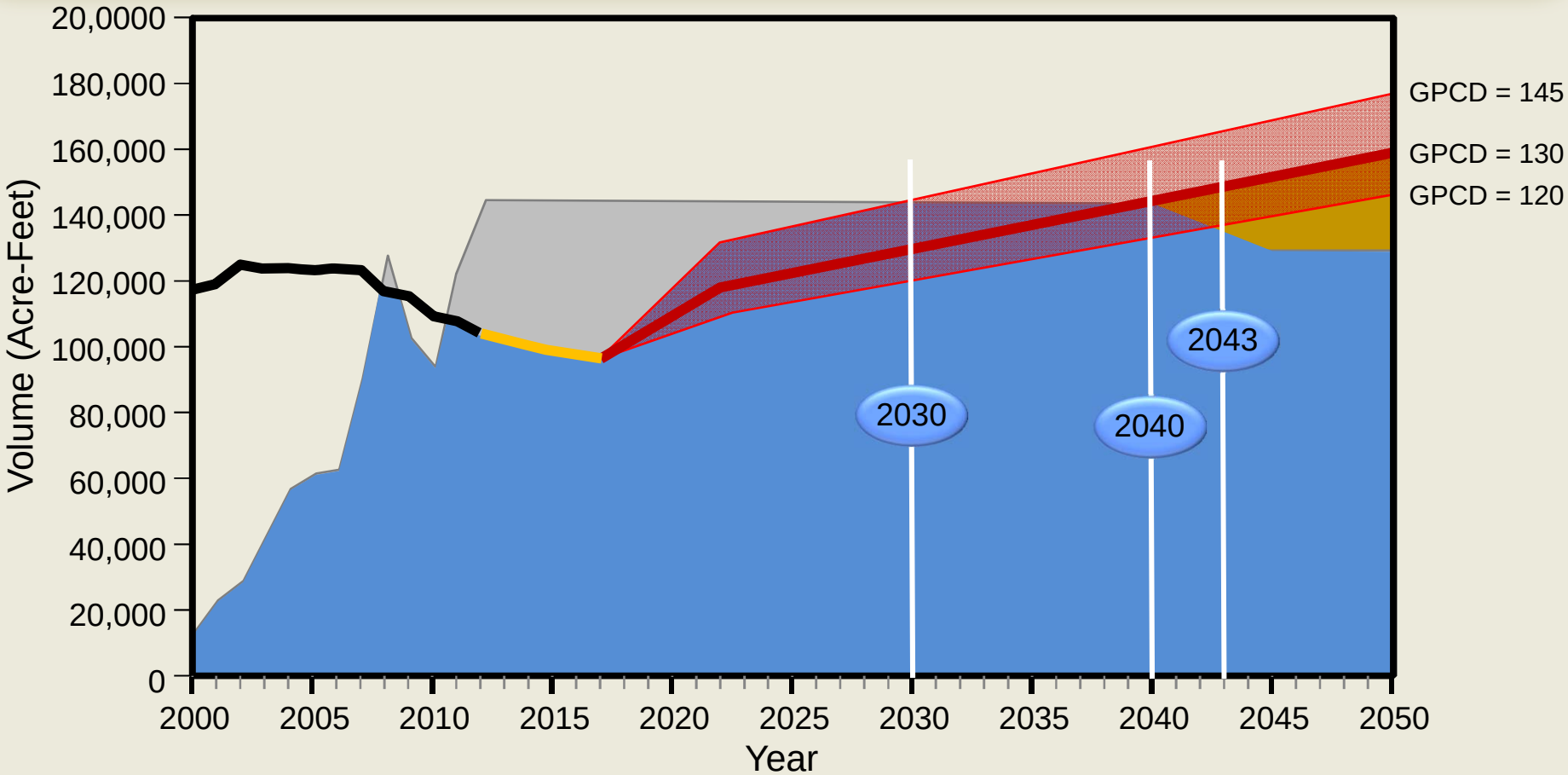
- Over 2000 combinations of climate and demand management projections
- 43% and 59% chance of shortage exceeding 1.5 mAF any 5 years after 2027 and 2040, respectively

CAP

- "A declared shortage on the Colorado River could occur as soon as 2016, but the impact would fall exclusively to users of excess CAP water (e.g., the AWBA, and the 400 kAF Agricultural Settlement Pool)".
- "Shortages affecting the M&I priority supply (including COT's subcontract) are not anticipated until at least the 2030s, and will be mitigated through the recovery of water stored by the AWBA".

WaterReliability

Potable Water Use - Projection to 2050 with Shortage



Combination of Renewable and Finite Water Supplies

Banked Colorado River Water

Colorado River Water

Potable Demand @130 GPCD

Actual Demand

Demand Based in Financial Projection

GPCD Range 120 to 145

* The population data was provided to TW by United States Census Bureau

WaterReliability

Other Water Resources

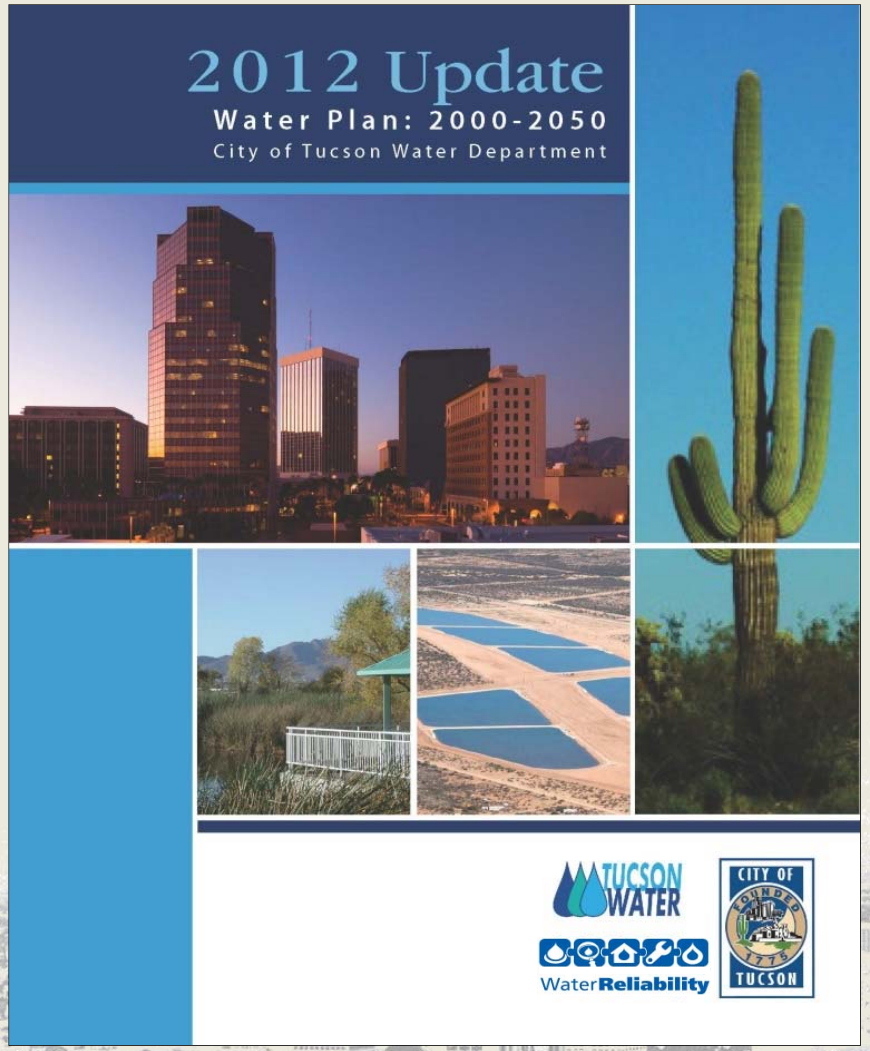
AWBA stored in Clearwater	FINITE	~170,000 AF
CAGRD upon order	RENEWABLE	12,500 AF/y
Recycled Water	RENEWABLE	locally controlled
Groundwater	FINITE	~3.2 MAF

WaterReliability

Key Points

- Tucson has the renewable and finite water resources reliably available to meet all demands to 2050
- Shortage projections and GPCD values are “snap shot” in time
- Recommendations
  - Continue full use of CAP Allocation including capital programs to increase reliability, redundancy and resilience
  - Continue efficiency and conservation efforts that will increase our long term reliability
  - Begin outreach and demonstration of advance treatment for recycled water
  - Continue updating the Long Range Plan

WaterReliability



Long Range Plan Update

Questions

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