

2010 Water System Comprehensive Plan Update

Overview & Highlights

July 8 & 26, 2011



Purpose & Content

- Guide Water Utility Planning
 - System & Capacity Review
 - CFP Proposal
 - Rates Assessment
- Water Use Efficiency
- System & Storage Analysis
- CFP & Rate Consideration
- Appendices (Policies, WHPA, SMA, WQ Plans, Etc)



Plan Development & Approval

- Development: May 2009 – July 2010
- Public Review: June – August 2010
- DOH Review: December 2010
- Local Gov't Consistency Review: April 2011
- Comment/Plan Revision: May 2011
- DOH approval (tentative): June 2011
- Council Adoption: July/August 2011

- Next Update: 2015-2016



Plan Assumptions

- Sources of Data
 - TRPC demographics
 - Historic production/consumption information
- Aggressive Demand Forecast
 - 2.4 Peaking Factor (Maximum Day Demand) (*1.7, Avg.*)
 - Assumes 10% growth for largest consumer
 - Assumes add'l 1.01 MGD for new industrial consumers
 - No water conservation activities
 - *~110,000 gpd (~40 MG annually by 2015)*

Conservative (i.e., High) Scenario

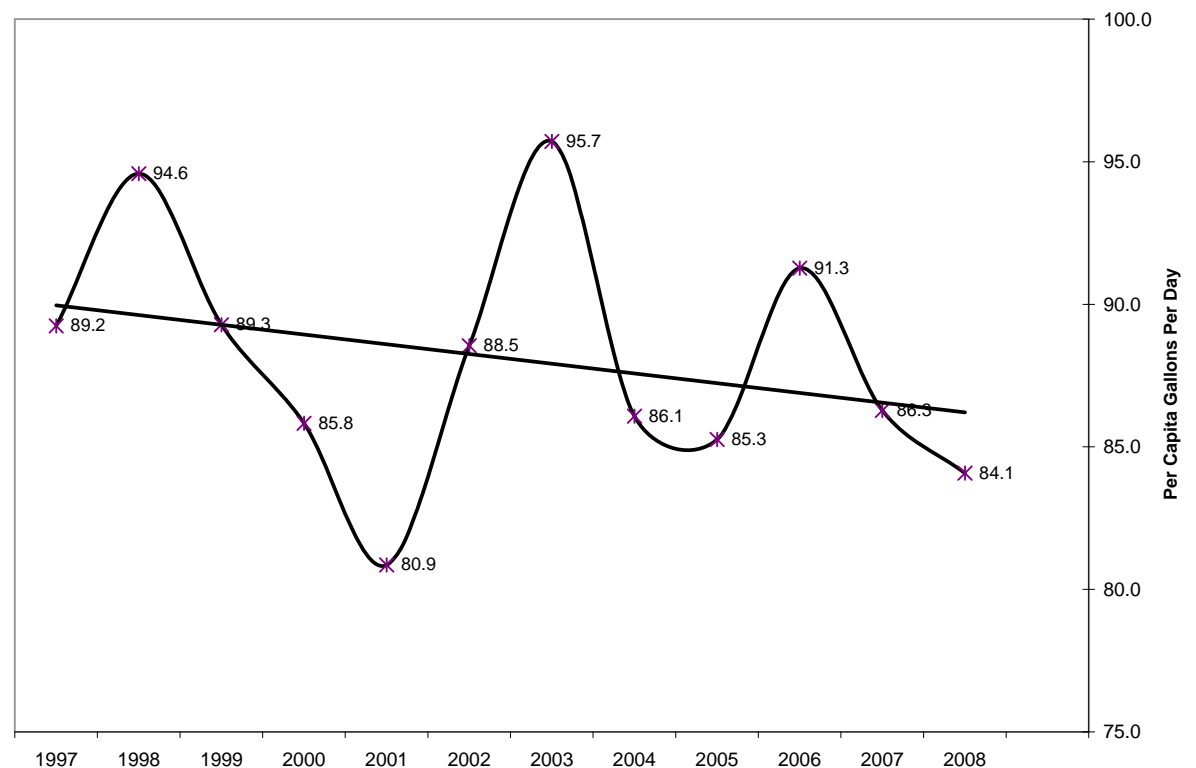




Water Use Efficiency

- 6 BMPs Required
 - 14 BMPs implemented (6/LOTT, 8/COT)
 - Rates, Outreach, Audits, Kits, Rebates, Retrofits, etc)
- Conservation Goals
 - By 2012: 77,380 gpd (indoor only)
 - By 2015: 110,280 gpd (indoor + 1% outdoor)
- What We Have Achieved
 - Since 2008: 256,000/gpd !
- Trend is variable, but declining

Annual Water Consumption Per Capita, 1997-2008



System Analysis: Source Capacity

	Existing (gpd)	2015 (gpd)	2029 (gpd)
Maximum Day Demand	7,570,000	10,690,000	16,500,000
Total Existing Sources	7,884,000	7,884,000	7,884,000
+ Future Sources	0	4,531,680	10,617,120
Surplus / (Deficiency)	314,000	1,725,680	2,001,120
- Largest Source	(2,445,040)	(1,033,360)	(1,204,320)

DOH Comment: Draft indicated existing deficiency.
2010: Well 24 online; eliminated deficiency.



System Analysis: Storage Capacity

	Existing	2015	2029
Operational Storage Volume Surplus/(Deficiency) (gal)	2,258,319	2,512,519	2,180,419
Operational + Fire Flow + Standby Surplus/(Deficiency) (gal)	1,244,659	(115,932)	(2,284,534)

Long-Term: Planning for a New 2.5 MG Reservoir



Resource Analysis

- Groundwater – Primary Source
- System Reliability
 - Water Shortage Response Planning
 - Plan Design Criteria (largest source out)
 - Interties
- Water Conservation
- Reclaimed Water
 - Mitigation / Irrigation / Commercial & Industrial Use
- Aquifer Storage/Recharge
- Wellhead Protection
 - Ordinance Protection, Monitoring & Inspection



Water Rights – Long Term

	Water Right Quantity		Existing Surplus / Deficit		20-Year Surplus / Deficit	
	Qi	Qa	Qi	Qa	Qi	Qa
Existing Water Rights	10,106	7,400	4,631	3,857	(1,352)	(312)
<i>Pending Apps</i>	4,296	5,675				
Total Rights & Apps	14,402	13,075	9,427	9,544	2,944	5,363

Qi: Instantaneous Demand (gallons per minute)

Qa: Annual Quantity (acre-feet)



Capital Improvements

- Purpose
 - Address Deficiencies & Recurring / Annual needs
 - Address Growth Needs
- 6 Year CIP: ~\$24.3 M
 - Water Rights Acquisition/Mitigation
 - Brewery Source Development
 - SW Wellfield Property Acquisition
- 7-20 Year CIP: ~\$68.0 M
 - SW and NE Wellfield Development
 - 2.5 MG Storage Reservoir
 - Annual Main Replacement
- Recommendations , not Requirements



Financing

- Operating, Capital, Taxes & Reserve Levels
- Key Assumptions
 - System Growth (3.5%/yr)
 - Capital Projects: 6-Year CIP, \$24.3 Million
 - New Revenue Bonds within 6-Year CIP
- Rate Increases
 - Fund CIP and Reserve Levels, as recommended
 - Subject to change, based on CFP process
 - Potential Rate Increase Needs
 - 2010 – 2015: 15%, 7.5%, 5%...



Next Steps

- July 26 Work Session
- Resolution R2010-015
 - Council Approves (August 2?)
 - Formal DOH Approval
- Continue implementation of the plan.
 - (2015 – next planning cycle)



Questions & Discussion

