Austin Water Utility

WTP4 City Council Briefing

July 23, 2009

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Director

If Conservation is Working, Why Build WTP4?

- Treatment capacity is a factor of both existing use and future growth. AWU service area population expected to expand significantly in the future.
- Climate Protection - WTP4 is a critical element in reducing green house gas emissions and achieving Climate Protection Plan goals
- WTP4 improves supply and operational diversity and reliability
  - Lake Travis deepest, highest volume, best water quality
  - Treatment Plant 4 Misnomer: Only two operating plants; both on Lake Austin; Both aging
  - In addition to treatment works, project has key transmission mains
- Economic Considerations
  - Highly favorable construction bidding environment will result in significant construction cost savings.
  - Creation of 1,000s of local jobs

Utility Service Area Growth Projections

Projected Population Growth

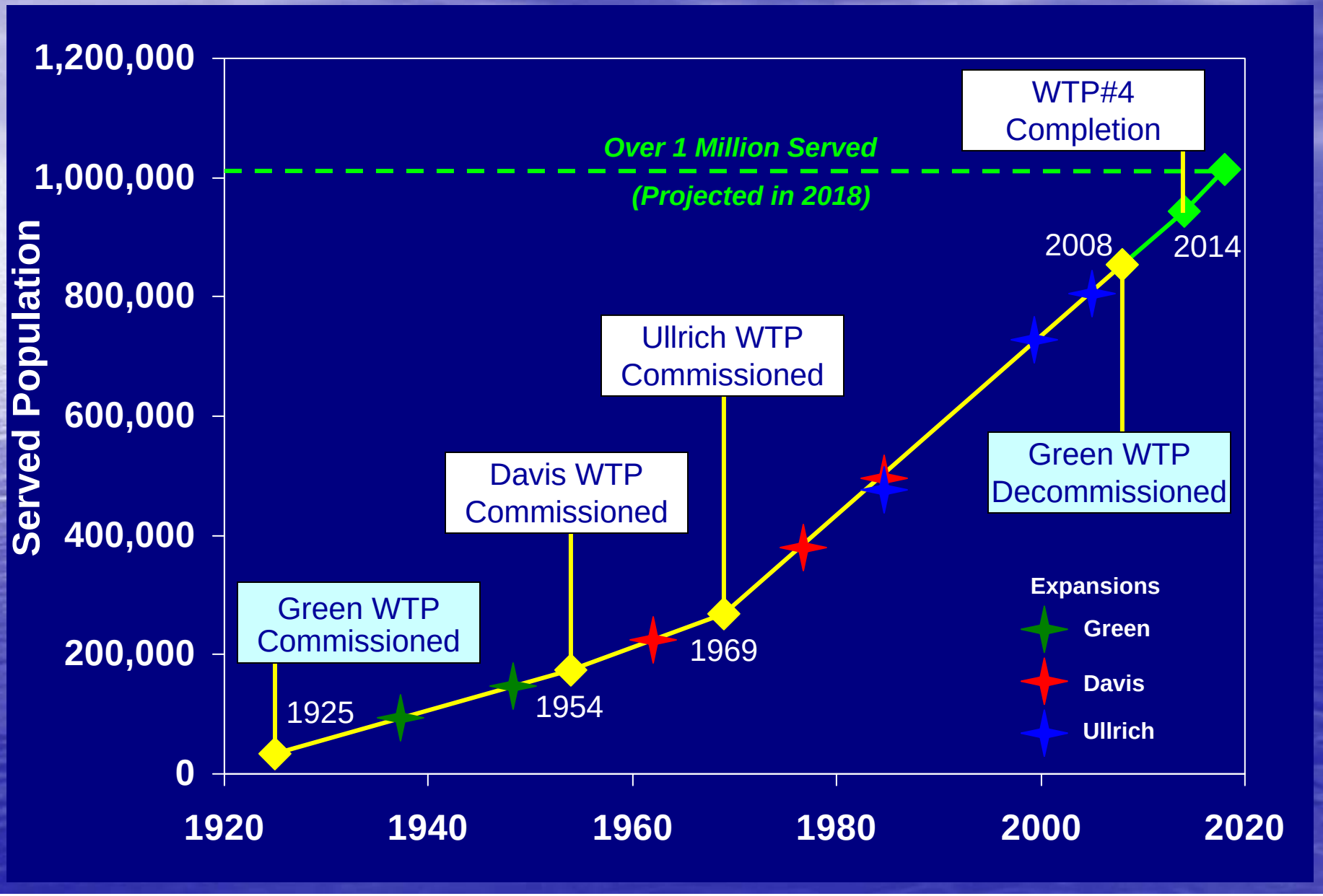
	AWU Served Area	Annualized Growth Rate	AWU Served Area	Annualized Growth Rate
2009	862,342		862,342	
2014	943,920	1.8%	961,466	2.2%
2020	1,050,991	1.8%	1,095,568	2.2%
2030	1,257,107	1.8%	1,361,910	2.2%

New population to be served in the next:

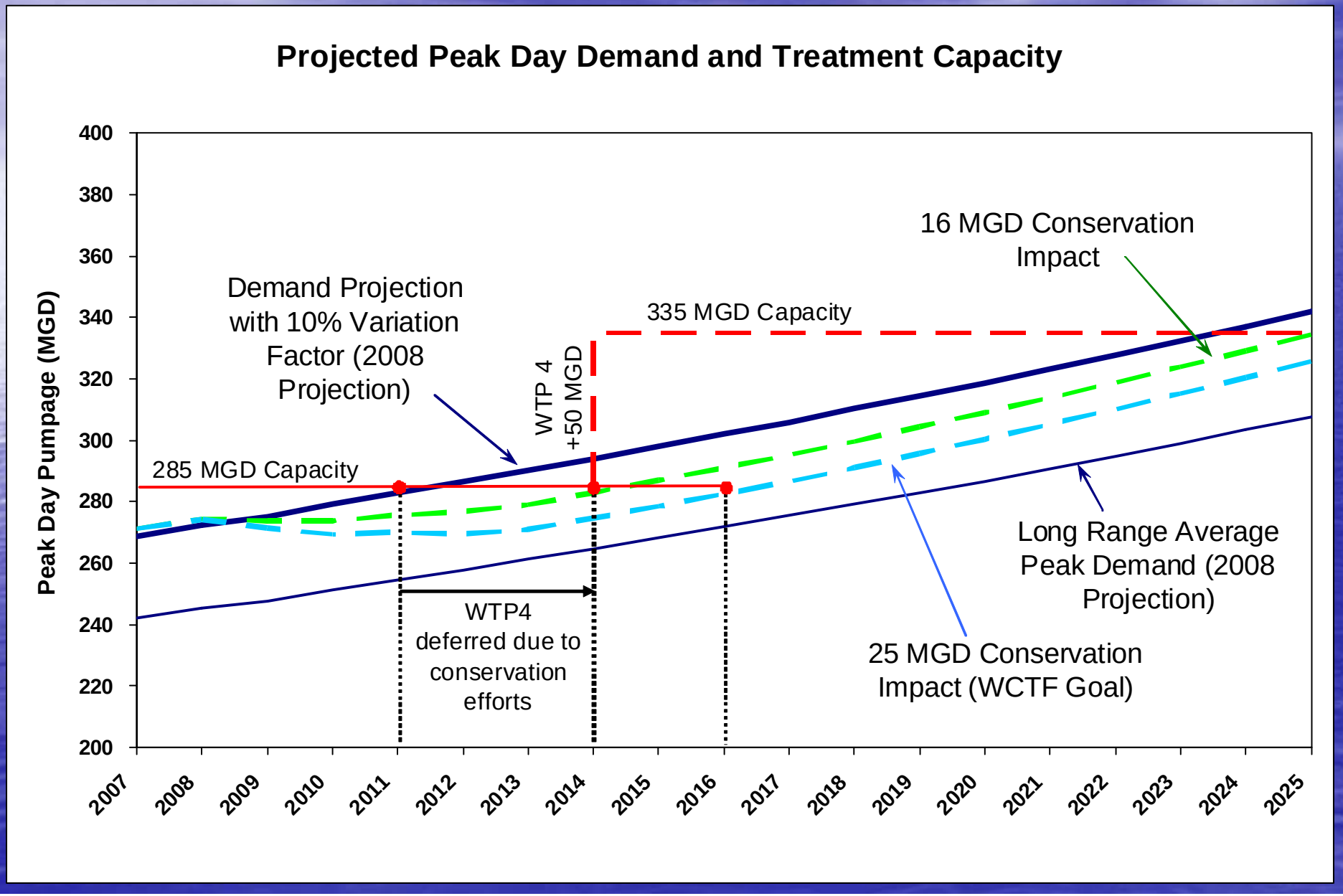
	@ **1.8%**	@ **2.2%**
5-years:	82,000	99,000
10-years:	189,000	233,000
20-years:	395,000	500,000

Note: 2009 COA growth projected at 3.13%

Austin Water Treatment Plant Milestones

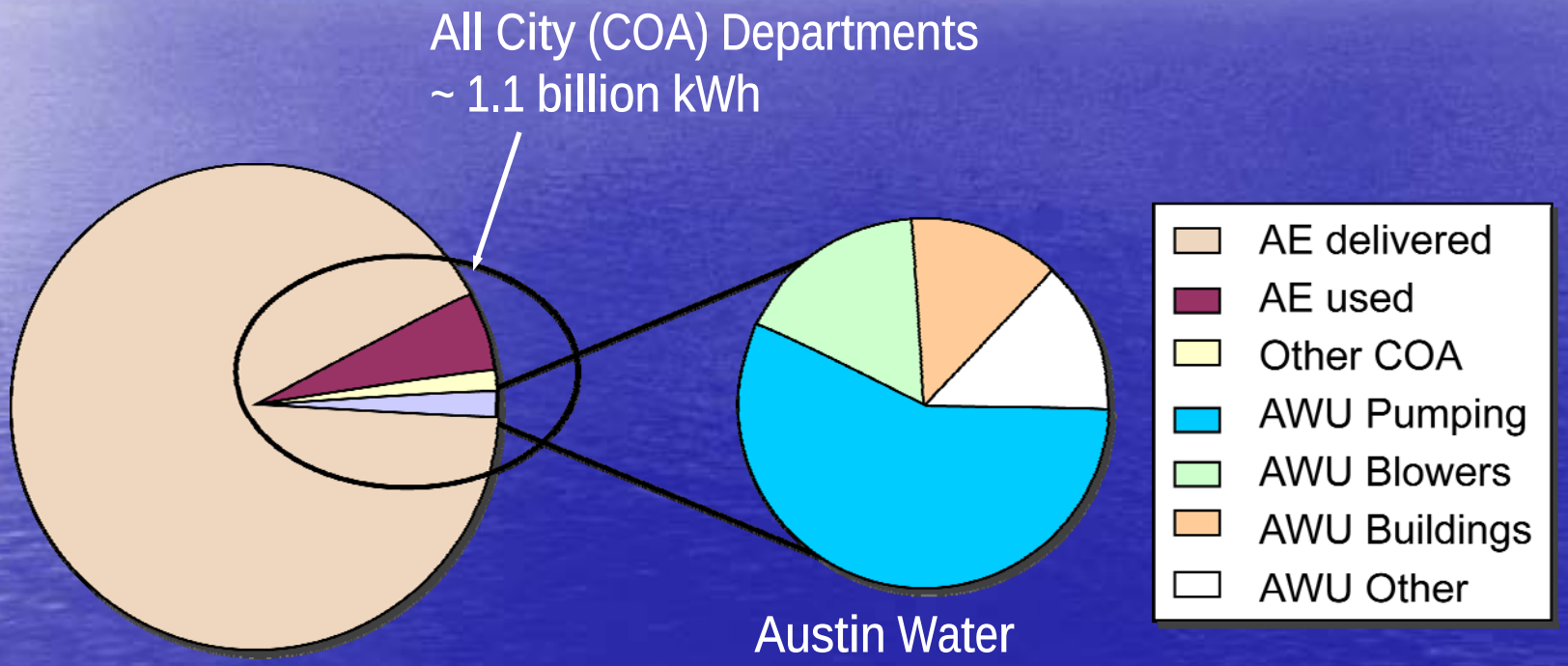


Demand

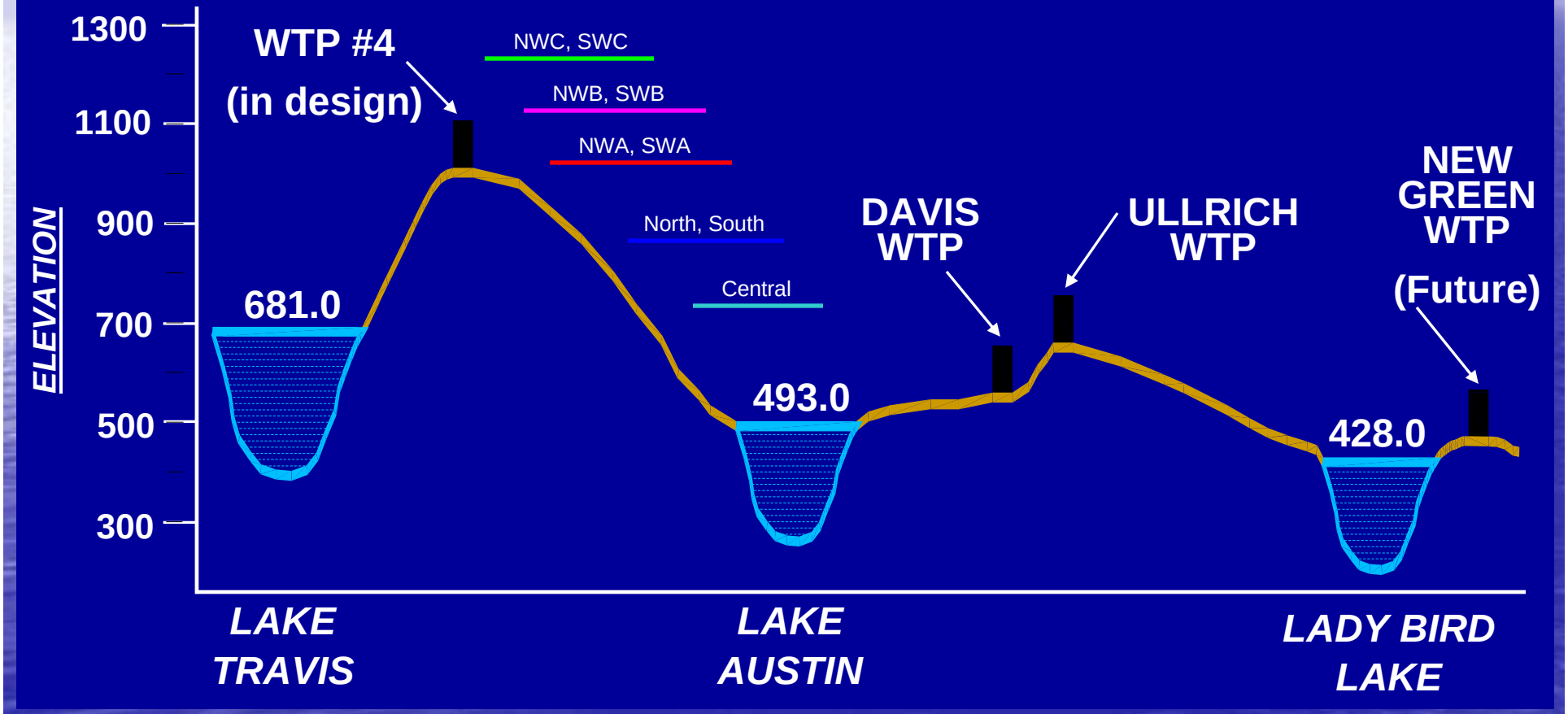

Projected Peak Day Demand and Treatment Capacity
Peak Day Pumpage (MGD)
400
380
360
340
320
300
280
260
240
220
200
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Demand Projection with 10% Variation Factor (2008 Projection)
16 MGD Conservation Impact
335 MGD Capacity
WTP 4 +50 MGD
285 MGD Capacity
Long Range Average Peak Demand (2008 Projection)
WTP4 deferred due to conservation efforts
25 MGD Conservation Impact (WCTF Goal)

Climate Protection & WTP4

Austin Energy kWh Delivered, 2008



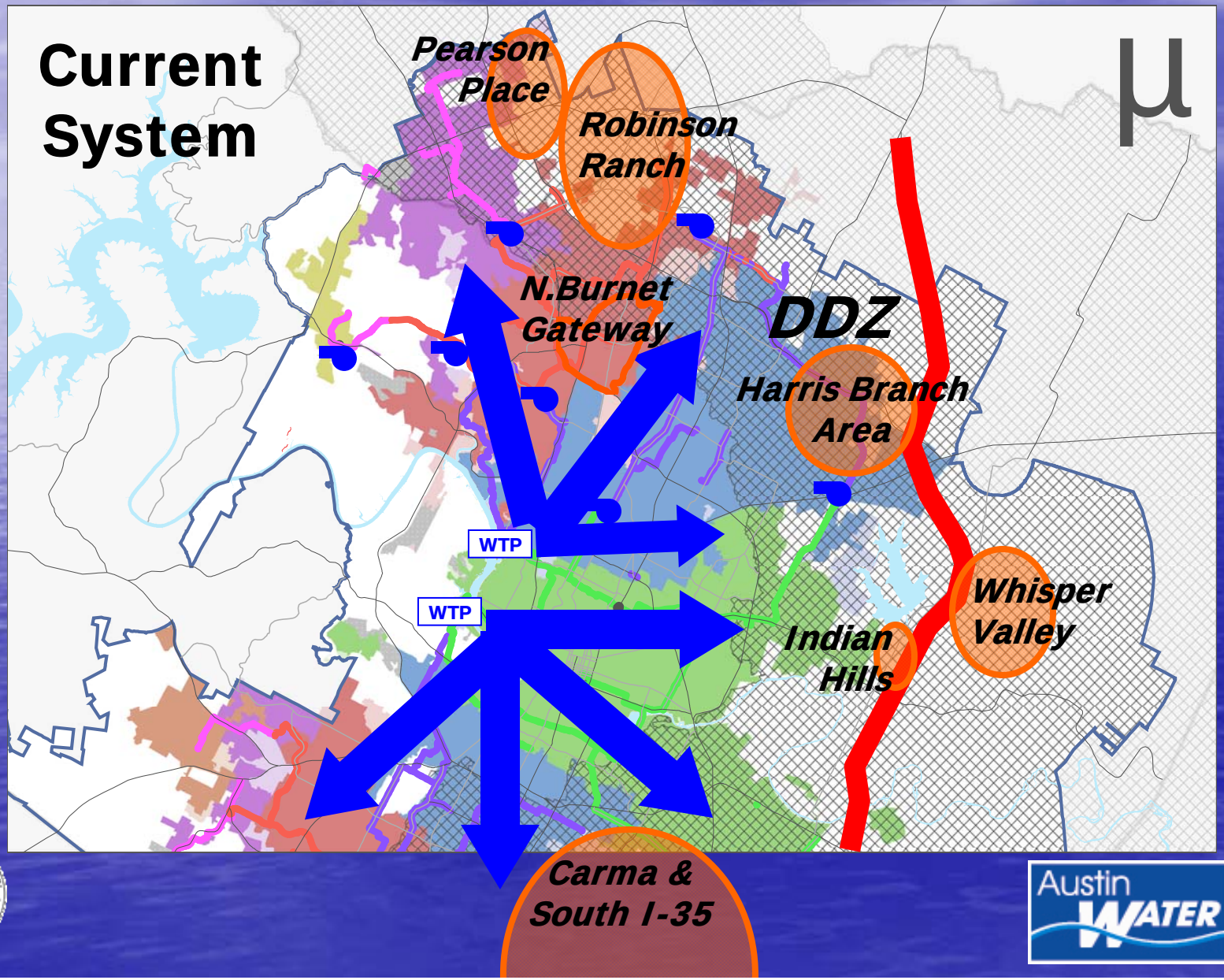
Lake Travis is the Highest Elevation, Local Source of Raw Water



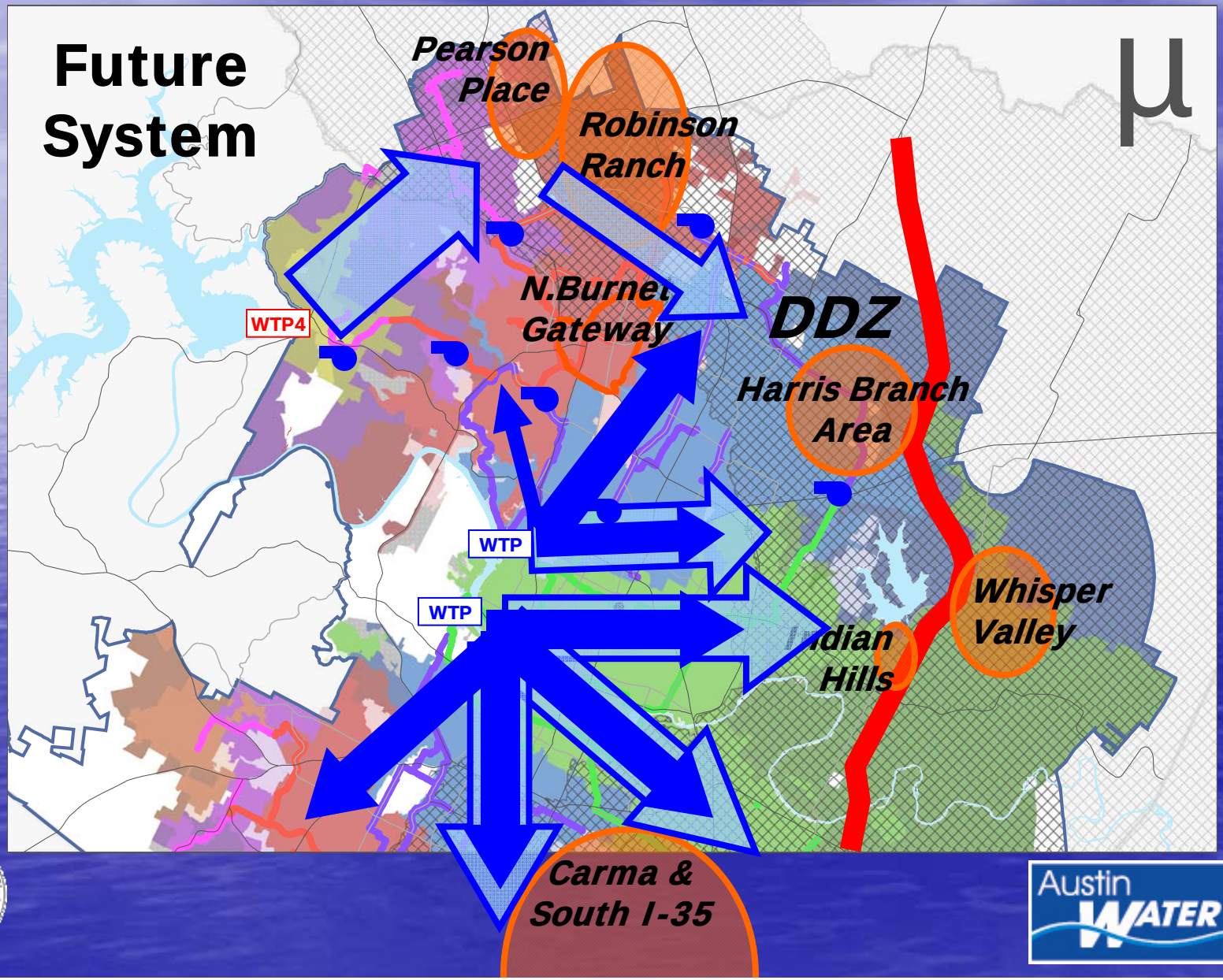
Climate Protection & WTP4

- Year 1: WTP4 Green House Gas Reductions (production at 31.5 MGD)
  - Emissions reduced by 10,000 metric tons
  - Green house gas reductions equivalent to 8 billion gallons of conservation savings, or approximately
    - 25 gallons per capita per day or 2,500 gallons per household per month
    - Equivalent to 2000 cars driving 12,500 miles per year
- Green house gas reductions to accelerate in the future
  - WTP4 at 40 MGD = 15,000 metric tons
- WTP4 project has a large transmission system component (1/3 of the project) that is critical to serving Desired Development Zone (DDZ) growth in harmony with the City's Climate Protection Plan

WTP Overview

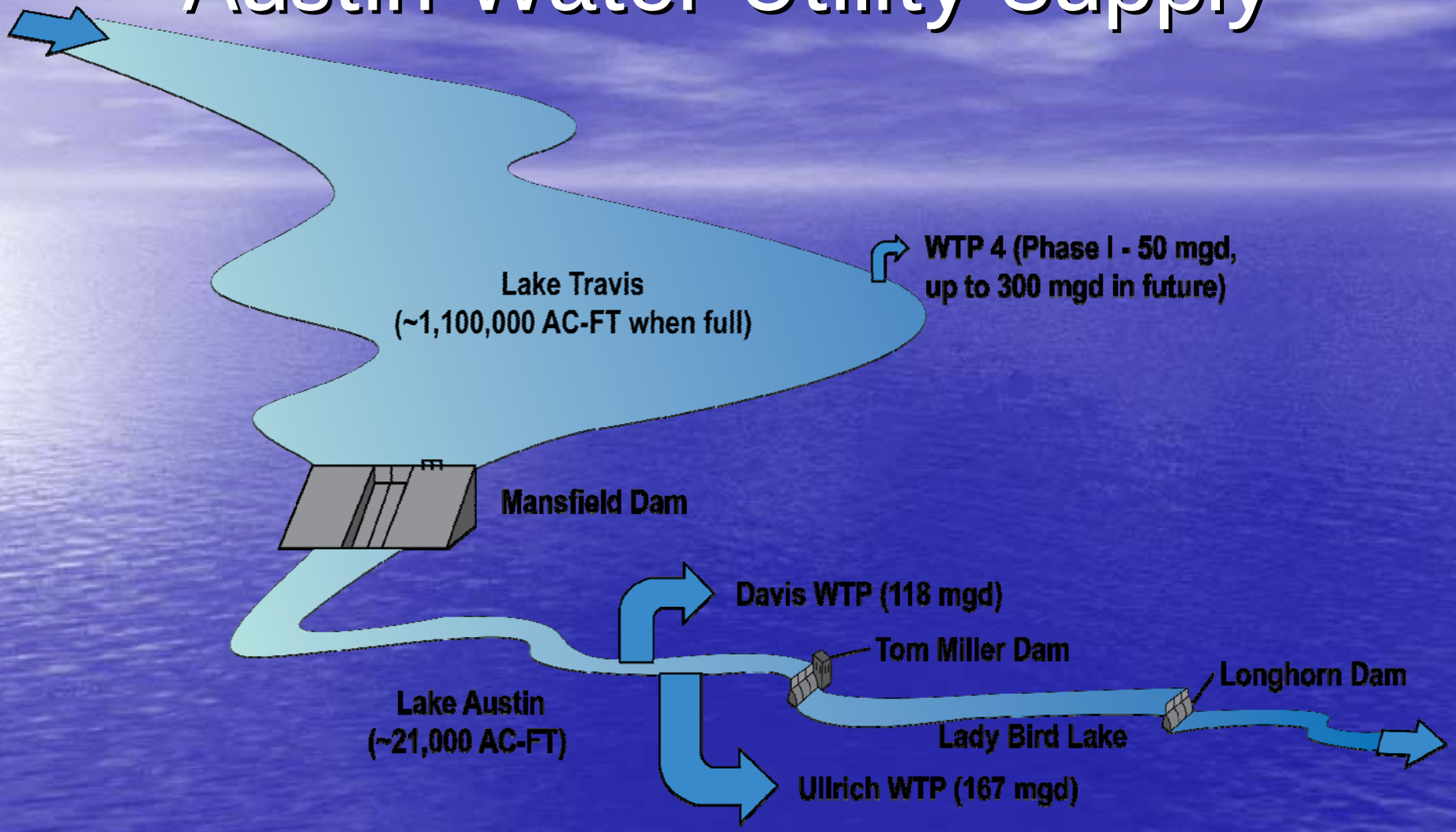


WTP 4 as Planned...

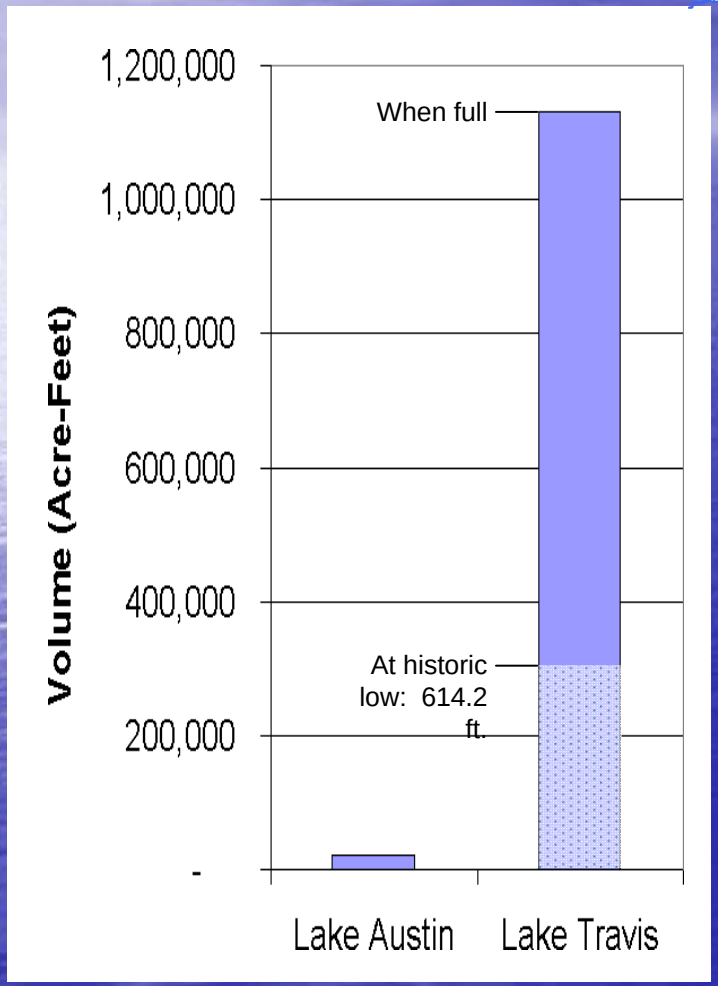


Risk Management
Water Supply Diversity, & Operational Reliability Considerations

Austin Water Utility Supply



Lake Volume Comparison



Lake Travis

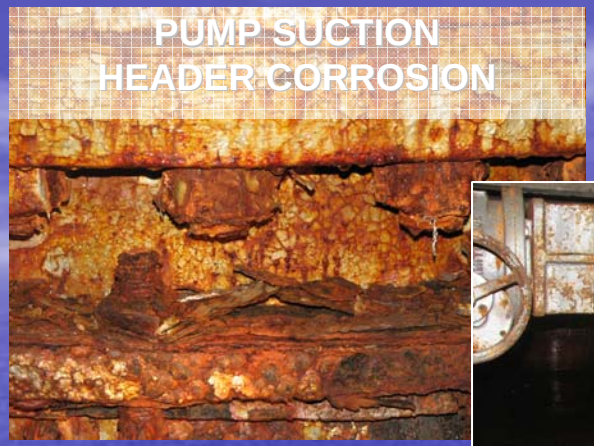
Elevation when full: 681 feet msl
Volume when full: 1,131,650 acre-feet

Lake Austin

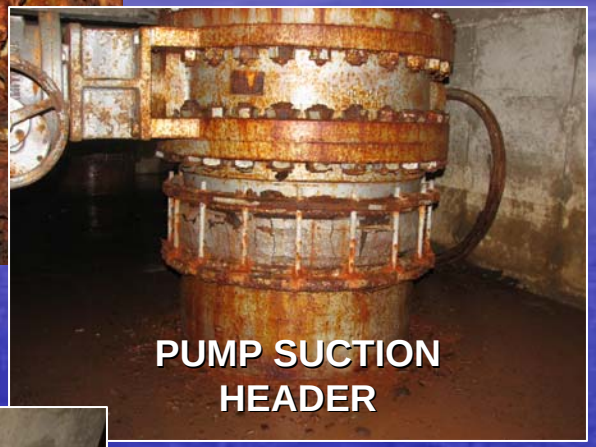
Elevation when full: 492.8 feet msl
Volume when full: 21,725 acre-feet

Davis Water Treatment Plant

- Davis Constructed in 1954
- Aging infrastructure at Davis in need of rehab to maintain reliability
- Davis design decisions linked to WTP4 strategy (Medium Service Pumping Example)



PUMP SUCTION HEADER CORROSION



PUMP SUCTION HEADER

MSPS EFFLUENT VALVES (SEVERELY LEAKING)

Ullrich Water Treatment Plant

- Ulrich constructed in 1967
- Aging Infrastructure Issues
- Example: Clarifier #8 Structural Failure

Financial Considerations

Highly Competitive Bidding Environment

McGraw-Hill CONSTRUCTION ENR

- Engineer News Record (ENR) June 24, 2009 Article
  - Owners benefit as ultra-competitive bids drive public-works offers below estimates

Highly Competitive Bidding Environment (Awarded Since June 2008)

Number of Projects Bid	23
Total Engineer's Estimate (All Projects)	$89,313,000
Total Bid Amount (All Projects)	$64,212,000
Variance (Money Saved)	$25,101,000
	28%

WTP4 Cost Estimates

- Current total estimate is $508M, assuming completion in 2014; adjusted for inflation
- Current bid environment could save between $23M and $45M, assuming 5%-10% reduction in bids
- Cost for deferral at 4% to 6% inflation rate
  - 1 year = $18M to $53M
  - 2 years = $37M to $87M
  - 5 years = $103M to $201M

Rate Impact

- Estimated impact to average residential customer is between $3.20 and 4.00 per month or $38.40 to $48.00 per year; equivalent to 12% to 15% over multiple years as construction costs are realized

AWU Superior Bond Ratings

Austin Water Utility History of Bond Ratings Bond Issuances	Standard & Poors
AWU Separate Lien Bond Ratings	
Refunding Bonds, Series 2009	AA
Variable Rate Bonds, Series 2008	A+
Refunding Bonds, Series 2007	A+
Refunding Bonds, Series 2006A	A+
Refunding Bonds, Series 2006	A
Refunding Bonds, Series 2005A	A
Refunding Bonds, Series 2005	A
Refunding Bonds, Series 2004A	A
Refunding Bonds, Series 2004	A
Refunding Bonds, Series 2003	A-
Refunding Bonds, Series 2002A	A-
Refunding Bonds, Series 2001C	A-
Refunding Bonds, Series 2001B	A-
Refunding Bonds, Series 2001A	A-
Refunding Bonds, Series 2000	A-
Denotes ratings upgrade	

Estimate of Job Creation

- WTP4 Projection:
  - $350M/$92,000 = **3,804** job-years throughout the life of the project
  - 2,435 direct/indirect jobs
  - 1,369 induced effects
  - WTP4 construction will be packaged to optimized local MBE/WBE and small business to participate on the project

- Assumptions:
  - $92,000 of government spending creates 1 job-year
  - 64% represent direct/indirect jobs
  - 36% represent induced jobs
- Source:
  - Executive Office of the President Council of Economic Advisers – Estimates of Job Creation from the ARRA (May 2009)

Environmental Commissioning & Sustainability

Environmental Commissioning

- *"A dedicated team responsible for constantly auditing the environmental performance goals of the project from planning, design, construction and through operation."*

- EC Implementation:
  - Confirm environmental goals are being achieved in all phases of the project
  - Adaptive management to respond to changing conditions, conflicts or enhanced protection
  - Document and disseminate information on new safeguards
  - Ensure that safeguards are implemented and functioning

WTP 4 Sustainability Elements

- LEED Certification
  - Achieve Silver Certification for the following structures:
    - Administration/Operations Building
    - Maintenance Building

Administration Building

WTP 4 Sustainability Elements

- Rainwater Harvesting
- Photovoltaic (Current 50-MGD Phase and Accommodation for Future Opportunity)
- High-Voltage Power Supply to Major Pumping Units – Increased Power Efficiencies
- New Technology Increasing Treatment Chemical Efficiencies
- Making Use of Process Raw Water for Cooling in the HVAC Systems
- Maximization of Natural Lighting in Process Buildings – Reducing Power Consumption

WTP4 Overall Alignment

City Council Directives

- June 2006
  - Move forward with constructing WTP 4
- August 2007
  - Delay construction (to 2014) to explore alternate sites
- December 2007
  - Approval to purchase Bullick Hollow site and back-up site
- March 2008
  - Approved Carollo contract (final design & initial construction)
  - Backup site purchase contract #1
- May 2008
  - Approved WTP 4 Site Development Ordinance
- June 2008
  - Backup site purchase contract #2
- September 2008
  - Execute engineering contract for 84” Jollyville TM
- October 2008
  - Execute preliminary engineering contract for 48” Forest Ridge TM
- December 2008
  - Approved construction contract for WTP 4 Property Fencing
- January 2009
  - Council approval of alternative delivery method
- February 2009
  - Approved negotiation of a Travis County interlocal agreement for Bullick Hollow Road improvements

WTP4 Overall Alignment

- Over $69 million of investment and 10 City Council actions since 2006 to align site, design and permitting activities to build WTP4
- Financial considerations (bonding, bidding environment) optimized
- WTP4 job creation well timed with need for economic recovery
- WTP4 green house gas reductions, coupled with leading conservation programs and environmental sustainability, complimentary of climate project plan goals
- Demonstrated capability to successfully execute large, complex capital improve projects (ACWP Program)
- Commitment to conservation leadership and program expansion unwavering; wide-spread benefits recognized

Next Steps

- Upcoming Requests for Council Action:
  - August 6, 2009
    - Approve Construction Manager at Risk
      - Preconstruction Services only
    - Approval of the Comanche Canyon PUD Amendment
    - Approval of the Bullick Hollow Road Improvements Construction Contract
  - October 2009
    - Approval of the Raw Water Mass Excavation and Stormwater Facilities Construction Contract
  - November 2009
    - Approval of the WTP Clearing and Stormwater Construction Contract
  - 2010
    - Various Construction Packages including pre-ordering of equipment, piping and early out bid packages (TBD as part of the Preconstruction Phase of the CM@R)
    - Spring: potential for first construction related package

Questions?