



City of Austin
Water Reclamation
Program

City of Austin Water Reclamation Initiative

Water Reclamation in Austin ***Environmental Board Meeting***

November 17, 2010

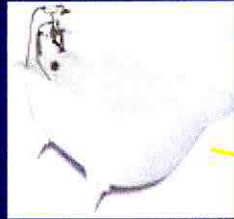


What is Reclaimed Water ?

- Highly treated wastewater effluent
- Quality – akin to river water
- Demand management tool
- Major uses
 - Irrigation
 - Cooling
 - Manufacturing
 - Toilet flushing



How it Works

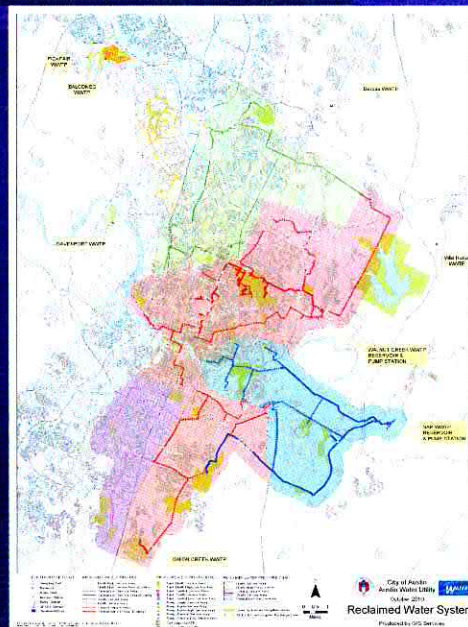


The Current System

Miles of trans. main – 30
 Customers – 32
 Annual use – 1.1 billion
 gallons (FY10)

How much water is that?

1,630 olympic-sized
 swimming pools
 27.5 million car washes
 687 million toilet flushes



Reclaimed Water Customers

Existing (32)

- Clay/Kizer Golf Course
- Sand Hill Energy Center
- Hornsby Bend
- First Tee
- Morris Williams GC
- Onion Creek GC
- Lost Creek GC
- Balcones CC
- Frost Bank
- Home Depot

Planned (270)

- University of Texas
- Saint Paul's Church
- Hancock Golf Course
- Bartholomew Park
- Mueller Parks
- East Avenue
- Capital Complex
- Downtown
- Guerrero Park
- ACC Riverside

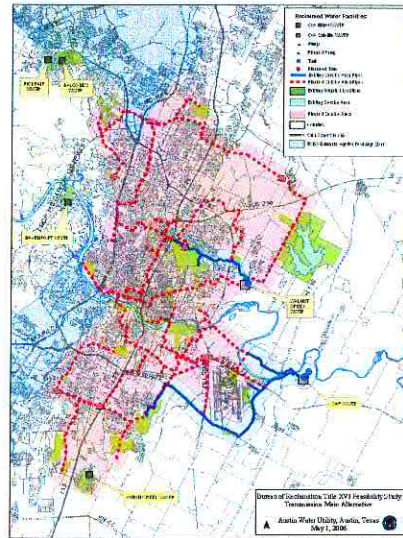


Plans and Opportunities

Miles of trans. main – 130
Annual use – 5.48 billion
gallons

How much water is that?

- 8,150 olympic-sized swimming pools
- 109 million car washes
- 3.42 billion toilet flushes



Benchmarks

- Israel – reclaims 70% of wastewater
- Spain – reclaims 12% of wastewater
- US – reclaims 5-6%, eventually 30-40%
- San Antonio – reclaims 4% of wastewater
- Austin – reclaims 4% of wastewater

Benchmarks (cont.)

Austin

1st customer: 1974
No cross-connections
Capacity: 29,183 af/yr
Driver: deferred plant construction
Rate: \$1.13/kgal
Cost: \$180 million
Time frame: 27 yrs
Length: 30→130 miles

San Antonio

1st customer: 1999
1 cross-connection
Capacity: 35,000 af/yr
Driver: limited raw water supply
Rate: \$0.23-1.00/kgal
Cost: \$125 million
Time frame: 5 yrs
Length: 75→110 miles

Current Construction

- Guerrero Park 1&2 – 3,500'
- ABIA Main – 8,100
- UT Main – 22,000'
- 51st Street Tank
- \$5 million/year



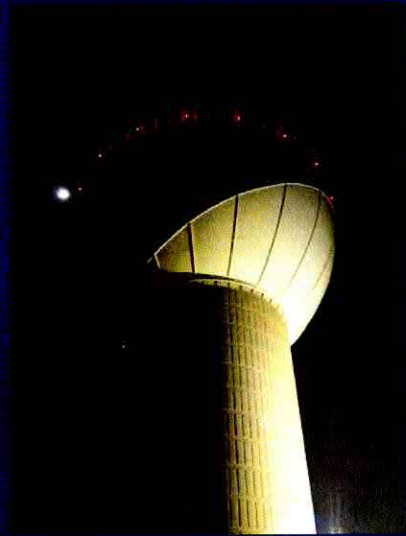
Preliminary Construction

- Walnut Creek Tank/Pump Station
- Smith Road Extension – 10,000
- Main to Montopolis – 13,500'
- BAE Systems – 6,500'



51st Street Tank

- Environmental considerations
 - Photovoltaics
 - Rainwater harvesting
 - Green concrete
- Aesthetics
- 1st of 7



Bulk Water Station

- For water hauling trucks
 - Road construction
 - Dust control
 - Irrigation



Downtown/Toilet Flushing

- Growing buildings –
> growing water use
- 60-80% of office building use is for toilet flushing
- New potable mains or new reclaimed mains ???



THANK YOU

Q&A



