

City of Austin  
Water Reclamation  
Program

# City of Austin Water Reclamation Initiative

## ***Water Reclamation in Austin*** ***Commercial Water Conservation***

September 25, 2013

# ***What is Reclaimed Water ?***

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



# What is Reclaimed Water ?



# ***Why Reclaimed Water ?***



# Rate Comparison

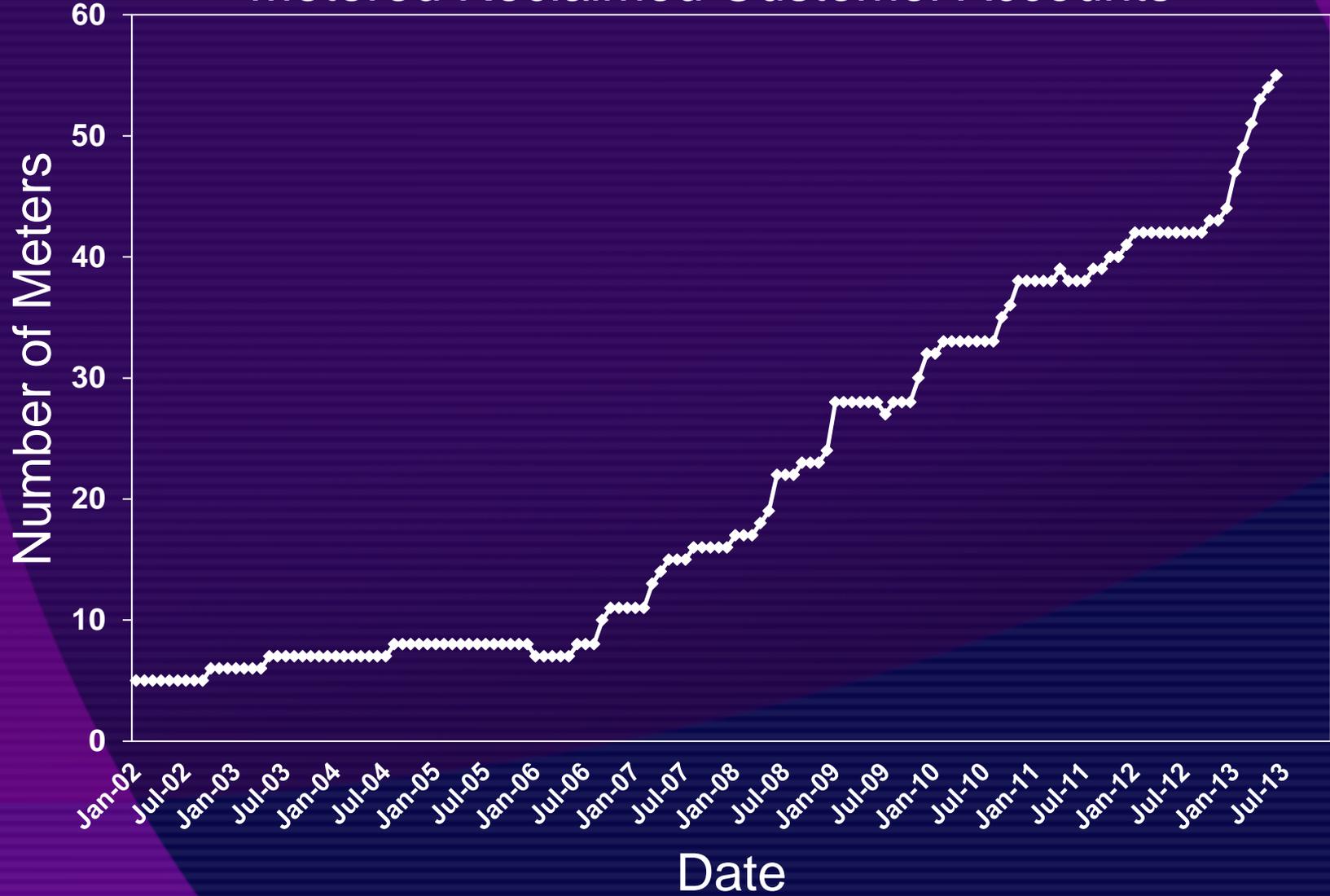
Rate Class	Off-Peak Rate (per kgal)	Summer Rate (per kgal)
Single Family	\$1.25 to \$12.25	
Multifamily	\$3.99	\$4.40
Commercial	\$4.73	\$5.22
Large Volume	\$3.83	\$5.22
Reclaimed	\$1.50	\$1.50

According to an American Water Works Association study, only 25% of reclaimed water systems cover their operating costs.



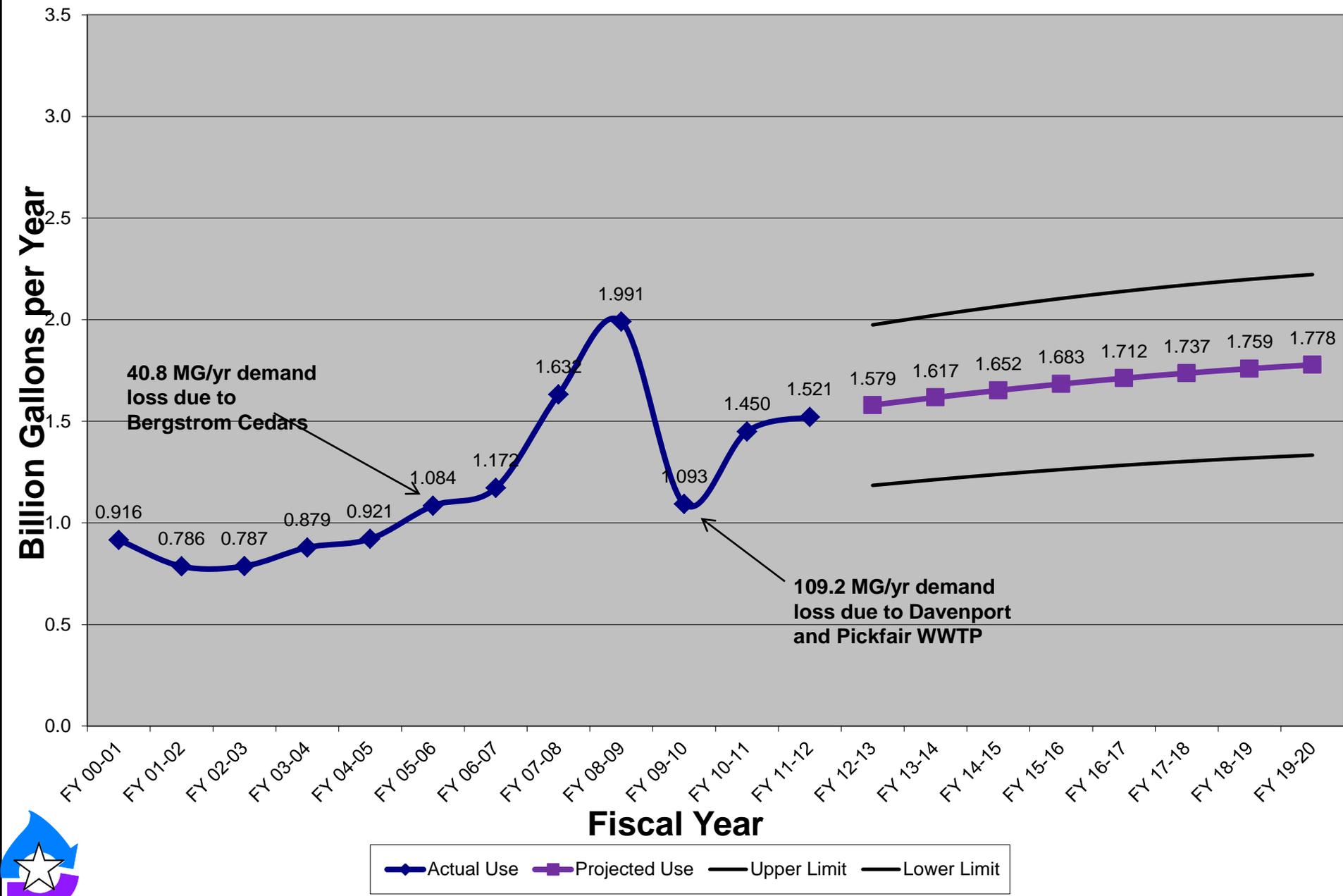
# Reclaimed Growth

## Metered Reclaimed Customer Accounts



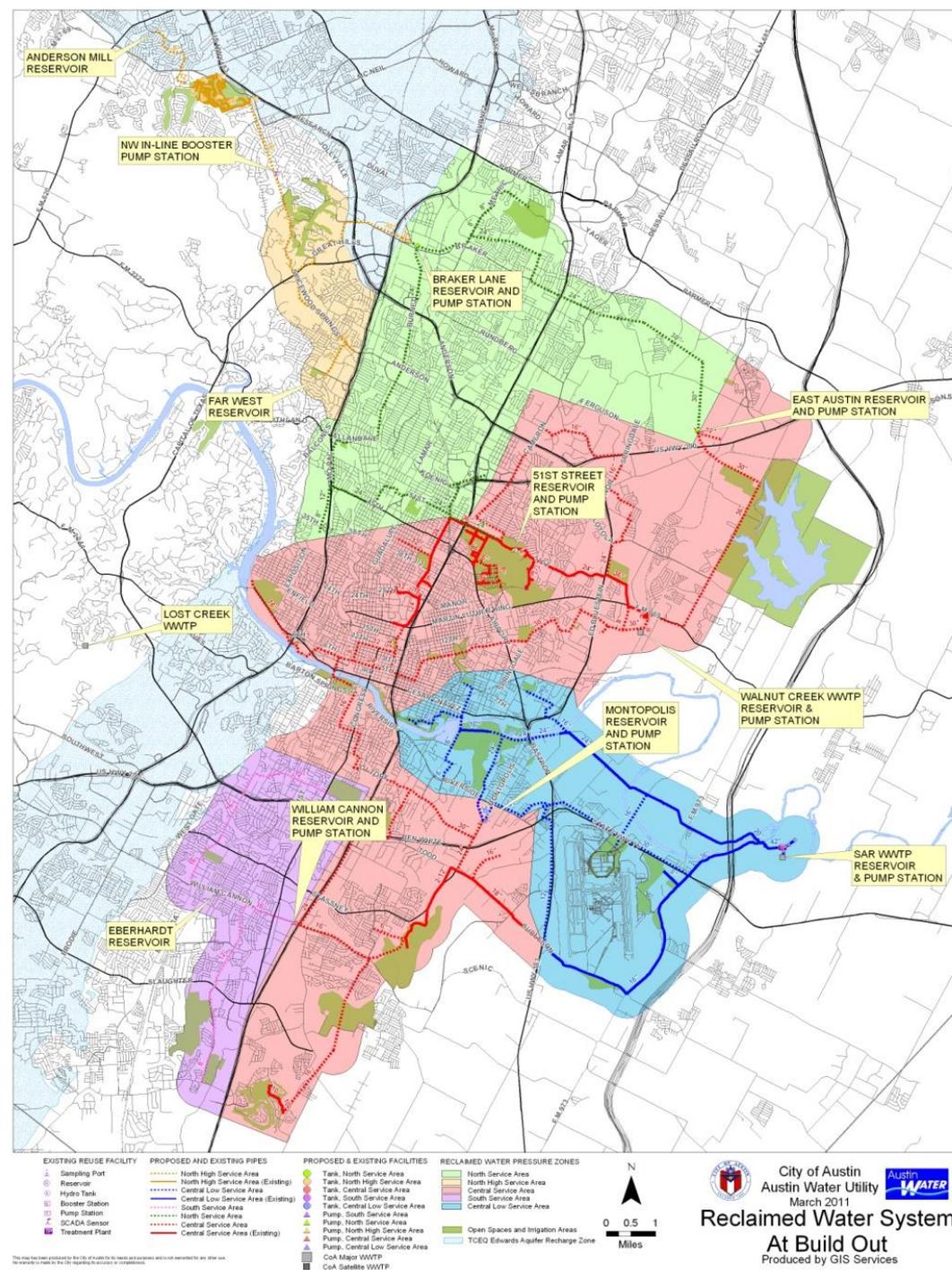
# Reclaimed Water Use By Fiscal Year

(as of October 2012)



# Completing the Core

- Loops system through downtown
- Improved reliability
- Economies of scale
- Infrastructure:
  - 1 Tank
  - 1 Pump station
  - 19.5 Miles of main
  - 86 More customers



# ***Current Construction Projects***

- Walnut Creek Tank/Pump Station
- Montopolis Tank and Pump Station
- Smith Road Extension
- Junction 420 Main
- Capitol Complex
- Seaholm Mains
  
- Morris Williams PSV
- FM 973



# ***Pending Construction Projects***

- Burleson Road Pressure Conversion
- Onion Creek Phase 1
- Cemetery Main



# ***Potential Customers***

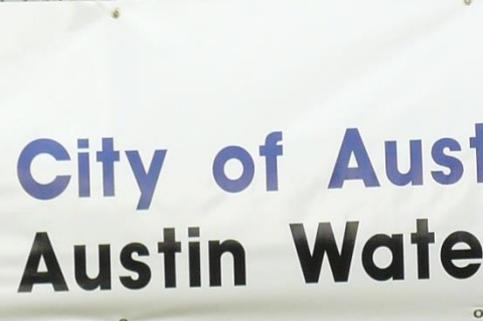
- **Angelica**
- Unifirst
- Whole Foods Warehouses
- Govalle Park
- Animal Shelter
- East Side Memorial HS
- APAC
- Waterloo Park
- Waller Creek Center
- Sheraton
- **Capitol Studios**
- Auditorium Shores
- Medical Center Bldgs
- State Capitol Grounds
- Governor's Mansion
- TX Workforce Com.
- Travis County
- Wooldridge Square
- Republic Square
- Seaholm
- **Central Library**
- Green Redevelopment
- IBC Bank Plaza
- Great Streets



# ***Irrigation Considerations***

- Purple sprinkler heads
- Purple valve boxes
- Purple pipe
- Signs
- 10' Separation
- Sleeves





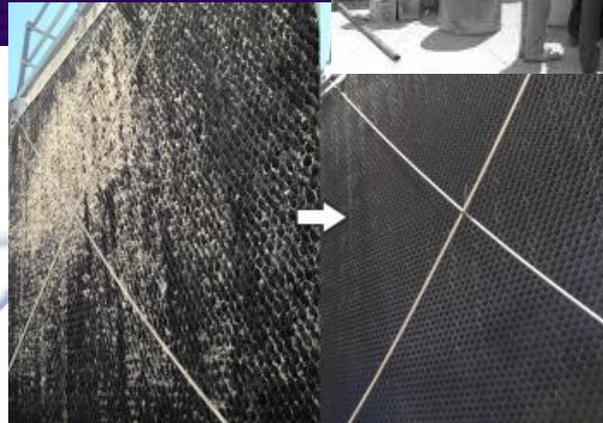
# Cooling Tower Pilot Project

- Economics of using reclaimed water
  - Make up water costs
  - Blow down water costs
  - Chemical costs
- Confirming control of:
  - Scale
  - Microbes
  - Corrosion



# Cooling Tower Pilot Project (cont.)

- Lessons Learned
  - Foaming
  - Equipment / Training
  - Scale removal
  - White rust ???
  - pH ???



# ***Future – 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 ???



# ***Bulk Water Station***

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



# Auxiliary Water Codes Coordination

## Metered Reclaimed Customer Accounts



***THANK YOU***

***Q&A***

