



# Water Conservation Program Update 4<sup>th</sup> Quarter FY2012

## Resource Management Commission

November 13, 2012

Mark Jordan

Water Conservation Program Coordinator

# Overview:

- Conservation incentive programs
- Enforcement
- Public education/outreach events
- Reclaimed water use and system expansion
- Weather and water supply forecasts
- Looking ahead

# Incentive Programs

- Represents small percentage of overall strategies
- Will continue to change in response to:
  - phase outs (e.g., saturation studies, “free ridership” surveys, code requirements)
  - new programs
  - new information, data and research on savings
- Some changes to RMC report items anticipated

# Incentive Program 4<sup>th</sup> Qtr Activities



- Most activity in Residential Clothes Washer Rebates, Irrigation Audits, Aerator/Showerhead Distribution and Rain Harvesting System Rebates
- Granted 200 requests for 6 month extension to Lawn Remodel Rebate applicants due to Stage 2
- Re-tooled suspended Lawn Conversion Program into new WaterWise Landscape Program in September
- Re-tooled Irrigation System Upgrade Rebate; now only available to residential customers in response to new code requirements
- Re-tooled Hotel WaterWise program in response to new code requirements.

# Improve Program Transparency

- More than 30 digests developed in FY12 covering over 50 strategies
  - Contain water savings and cost estimates for each strategy based on current planning documents
  - Include assumptions and source references
  - Provide schedule for review/verification
  - Continually being updated and improved

# Digest

<b>Unit:</b>	1 washer	1 washer
<b>Peak Savings:</b>	15 GPD	90 GPD
<b>Average Savings:</b>	15 GPD	90 GPD
<b>Est. Unit Costs:</b>	Variable - \$50(current) to \$100 (former) water rebate. Additional electric or gas rebates may apply	Variable - \$150 water rebate. Additional electric or gas rebates may apply
<b>\$/1000 gal saved over expected lifetime:</b>	\$1.46	\$0.55
<b>Assumptions:</b>	40 gal/load standard, 25/gal HE, 1 load per day	15 GP load, 6 loads/ day
<b>References:</b>	<a href="http://www.twdb.state.tx.us/conservation/municipal">http://www.twdb.state.tx.us/conservation/municipal</a> <a href="http://www.allianceforwaterefficiency.org/laundromats">http://www.allianceforwaterefficiency.org/laundromats</a>	

Clothes Washers & Commercial Laundry Facilities (Code)				Confidence Level: 4
Description:	Provide financial incentives for HE washer replacements; require new models to meet higher federal efficiency standards			
Start Date:	SF: FY1997. MF: FY1999. ICI: FY2004	End Date:	SF: end of FY2012 (projected)	
Referenced in:	2007 WCTF IN-6 (ICI); 140 Plan (SF/MF)			
	Single-Family (includes MF residential)	Multifamily (common areas)	Commercial	
Unit:	1 washer	1 washer	1 washer	
Savings:	15 GPD	90 GPD	90 GPD	
	15 GPD	90 GPD	90 GPD	
Est. Unit Costs:	Variable - \$50(current) to \$100 (former) water rebate. Additional electric or gas rebates may apply	Variable - \$150 per water rebate. Additional electric or gas rebates may apply	Variable - \$150 per water rebate. Additional electric or gas rebates may apply	
\$/1000 gal saved over expected lifetime:	\$1.46	\$0.55	\$0.55	
Assumptions:	40 gal/load standard, 25/gal HE, 1 load per day	15 GP load, 6 loads/ day	15 GP load, 6 loads/ day	
References:	<a href="http://www.twdb.state.tx.us/conservation/municipal/plans/doc/WCITFBMPGuide.pdf">http://www.twdb.state.tx.us/conservation/municipal/plans/doc/WCITFBMPGuide.pdf</a> <a href="http://www.allianceforwaterefficiency.org/laundromats.aspx">http://www.allianceforwaterefficiency.org/laundromats.aspx</a>			
Expected Life:	10 years	Marketing:	Bill stuffers, newspaper ads, direct mail	
Staff Allocation:	1.3 FTEs	Cost Driver:	Average cost of water	
Notes:	15 GPD savings is conservative; TWDB BMPs estimate 41g/load conventional and 11-25g/load HE. Alliance for Water Efficiency recommends using 6 loads/day for commercial machines. Survey of Austin coin-operated Laundromats confirms 3-6 loads per day. 20% market penetration by year 2.			
Review Frequency:	4 years for ICI rebates			
Last Revised:	March 21, 2012			



# Strategies covered by digests

- HET Toilet Programs
- Clothes Washers and Commercial Laundry Facilities (Code)
- Pressure Reduction Valves (Indoor)
- Pressure Reduction Valves (Outdoor)
- Rainwater Harvesting System Rebate (non-pressurized)
- Rainwater Harvesting System Rebate (pressurized)
- Free Showerhead Distribution
- Free Kitchen Aerator Distribution
- Free Bathroom Aerator Distribution
- Submeter Installation (Code)
- Winter Leak Detection
- Rate Increase and Residential 5<sup>th</sup> Tier Rate
- Commercial Car Wash Facilities (Code)
- Lawn Conversion Rebate Program
- Enhanced Irrigation Audit Program (Code)
- Irrigation System Permits (Code)
- Watering Restriction Ordinance (Code)
- Hose Timer Rebate Program
- Swimming Pool Covers
- Tree Gators
- WaterWise Landscape Option
- Residential Landscape Ordinance (Soil Depth)
- Mandatory Retrofit of ICI Cooling Towers (Code)
- Plumbing Code Ordinance Amendments
- Annual Irrigation Analysis (Code)
- Commercial Process Rebate Program
- Pre-Rinse Spray Valve
- Reclaimed Water
- Reducing Water Loss
- A/C Condensate
- Administrative Enforcement
- Commercial Stormwater Landscape Ordinance

# Water Savings Study Planning Criteria

Confidence Level	Description	Review Frequency (Based on currency and reliability of estimate, existing or planned study schedules, and contribution of measure towards meeting overall conservation goal)
1 Low	Rough estimate due to non-existent, outdated or conflicting sources.	1 year
2 Moderate Low	Estimate based on studies that do not address measure fully.	2 years
3 Moderate	Estimate based on national studies that may not reflect local or regional differences.	3 years
4 Moderate High	Estimate based on recent national or state studies which account for regional differences.	4 years
5 High	Estimate based on recent national, state, regional or local studies that match measure and takes into account any local or regional differences.	5 years



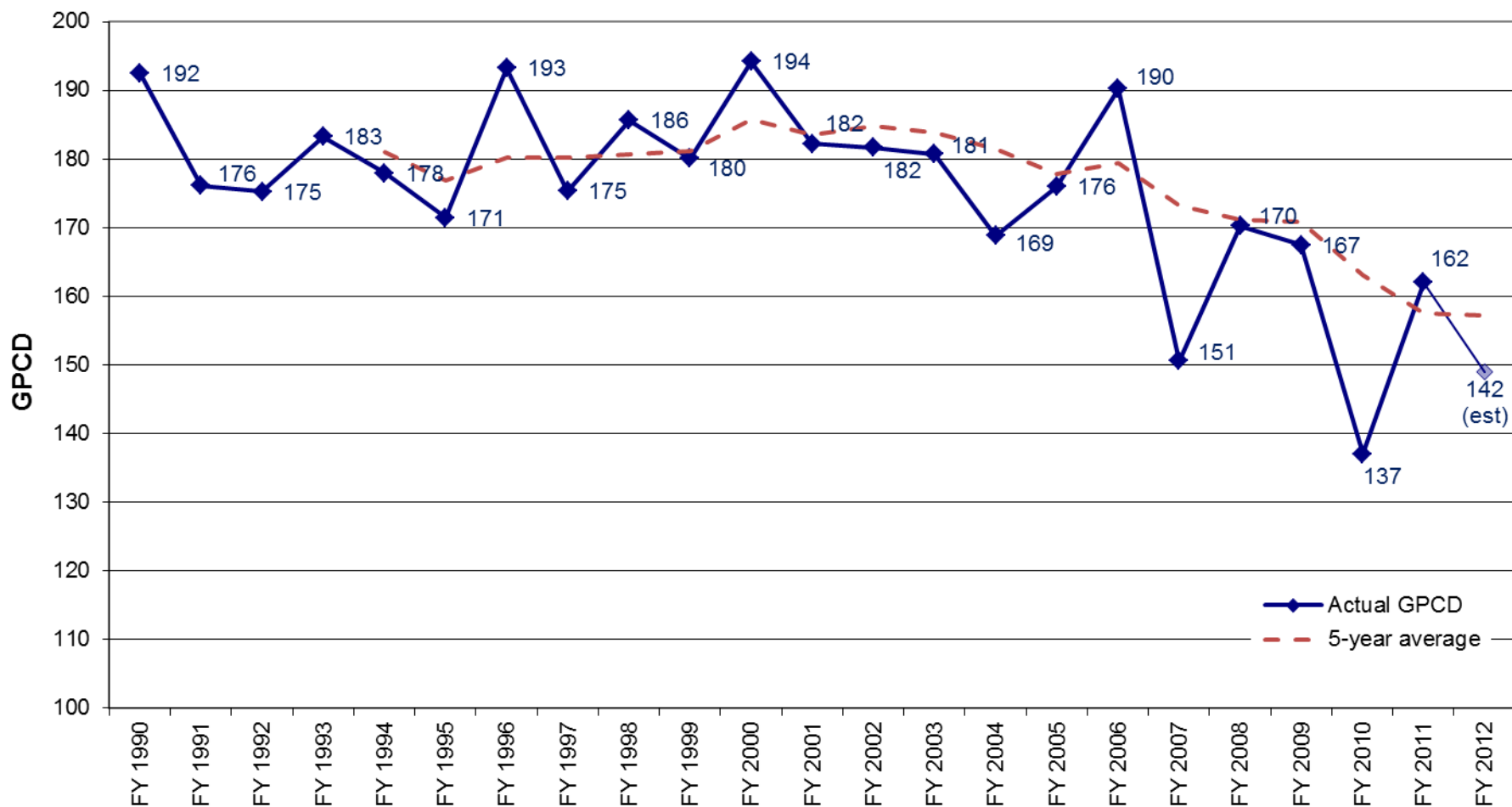
# FY13 Digest Review Schedule



- Mandatory watering schedules
- Irrigation system audits
- Clothes washer rebates
- Rate structure redesign
- Water loss prevention
- Reclaimed water use
- Pilot program evaluations

# Decreasing Trend in GPCD

GPCD from 1990 to 2012



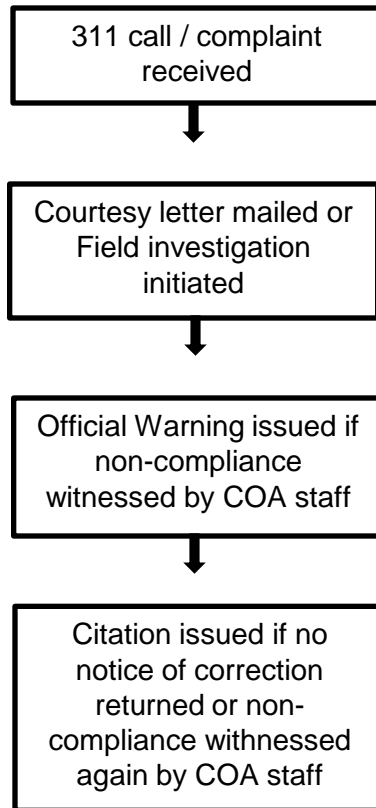
# Stage 2 Reinststituted



- Stage 2 (1 X week watering) in effect from September 6, 2011 to July 16, 2012
- Reinststituted Stage 2 with new hours September 4, 2012
- Total water use in FY 2012 est. 142 GPCD (162 GPCD in FY 2011)

# Water Conservation Code Enforcement

## Enforcement Process



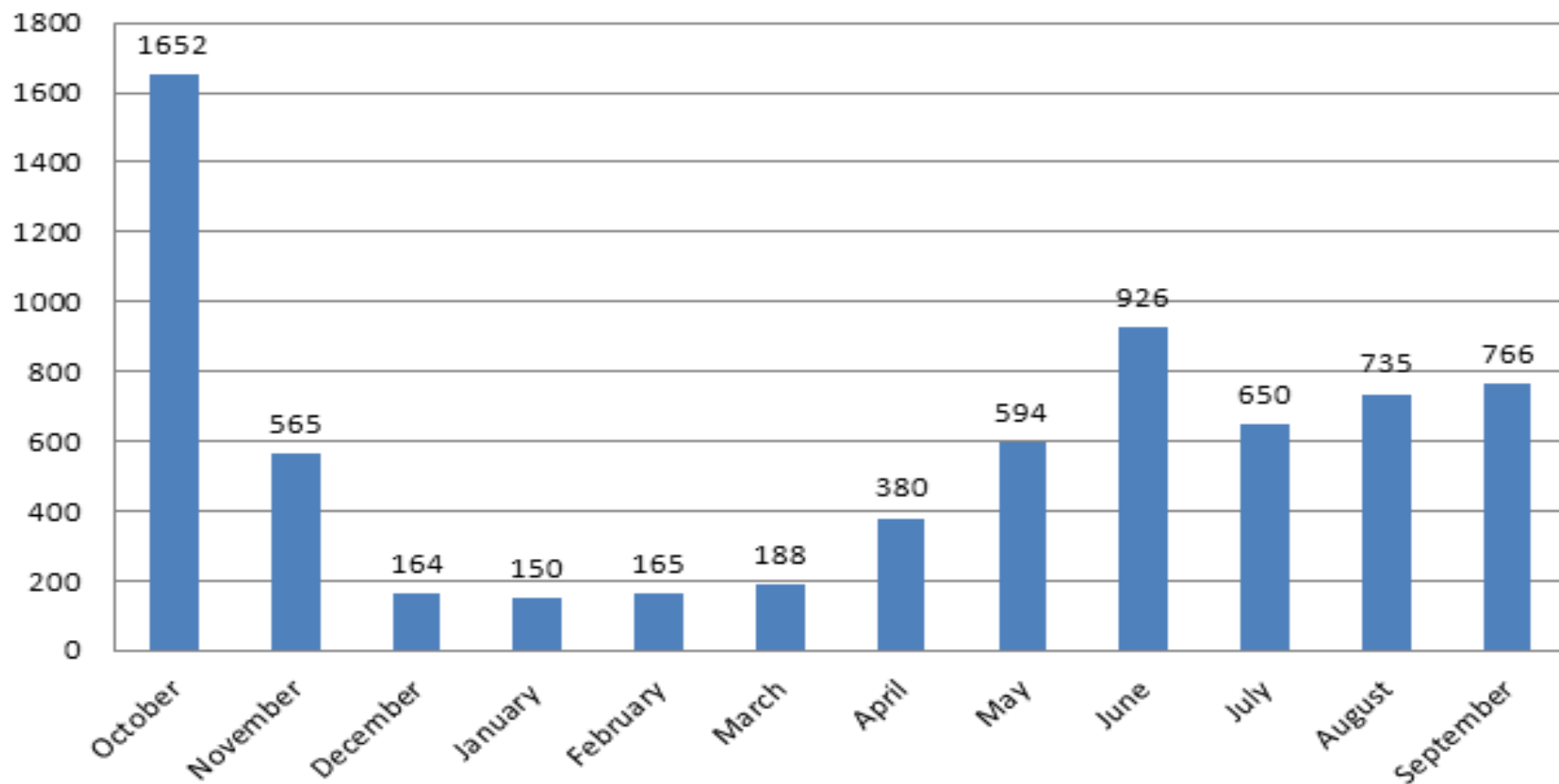
## FY 12 Enforcement Activity

- 6935 “311” Calls
- 3678 Courtesy Letters/Postcards
- 1137 Official Warnings/NOVs
- 471 Citations Issued
  - 250 Residential Citations
  - 221 Commercial / MF Citations



# FY 2012 “311” Reports

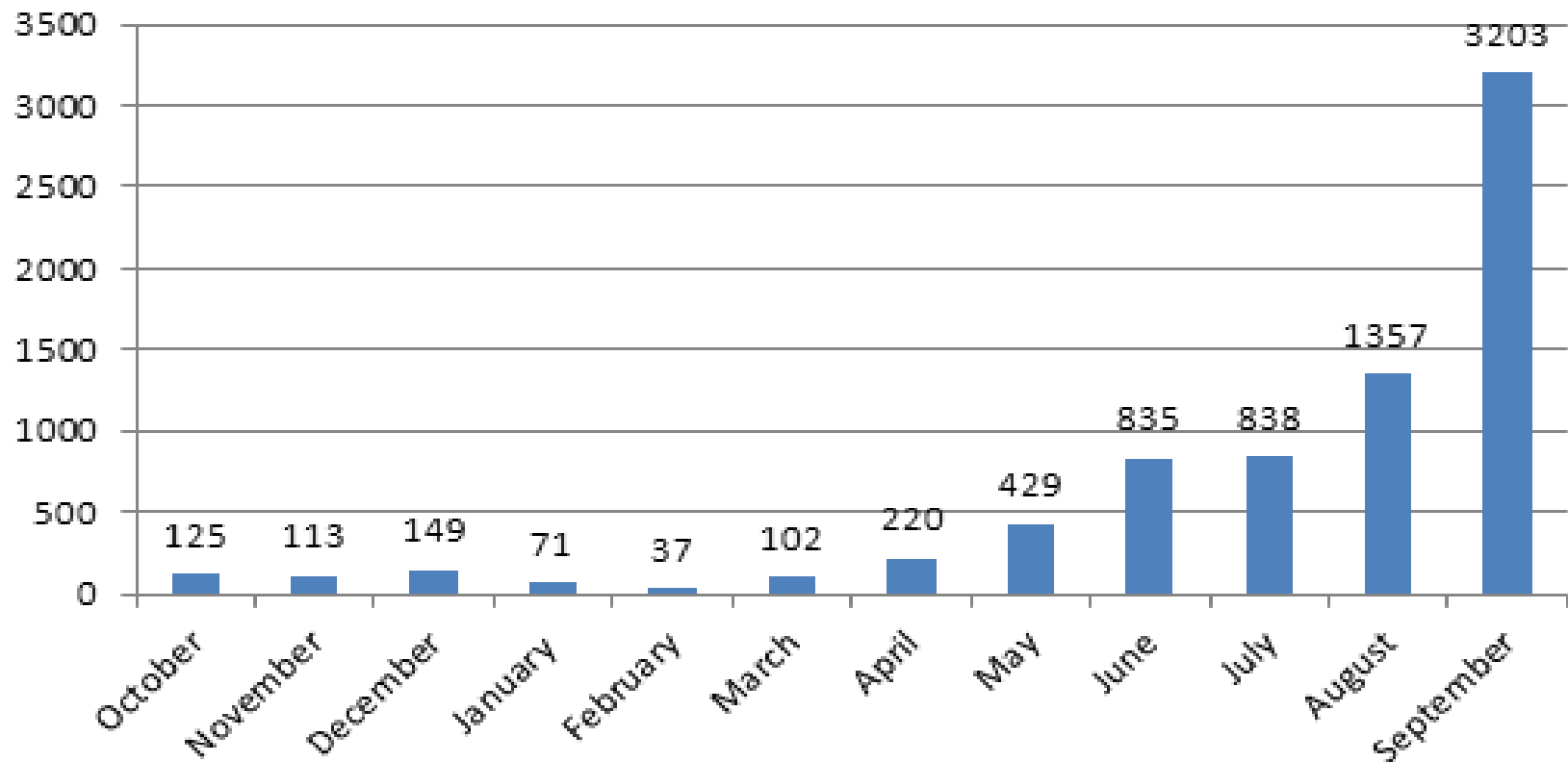
311 reports, FY 11-12, Monthly Totals





# Increase in response to Stage 2

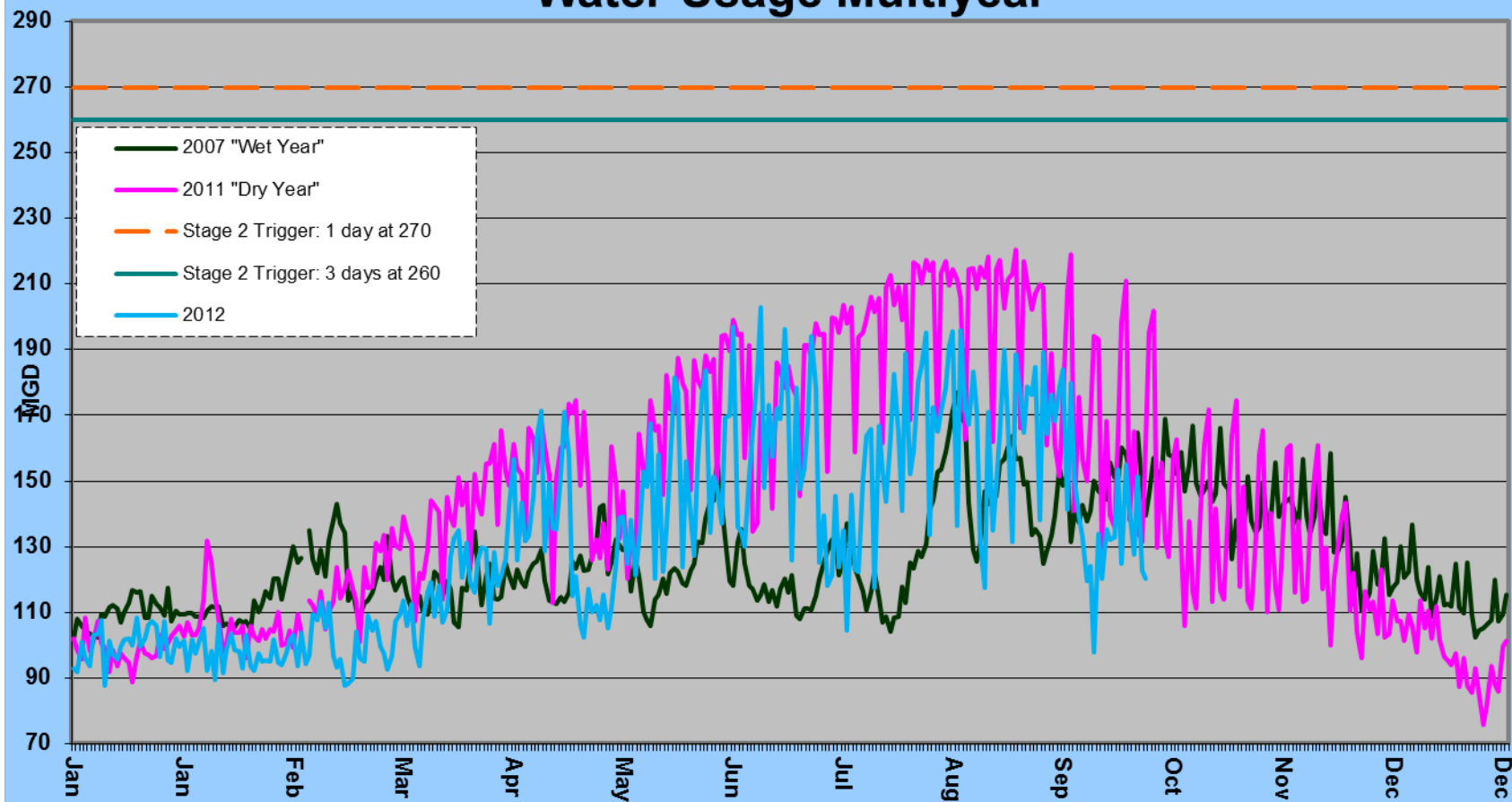
## 311 Reports, FY 10-11, Monthly Totals





# Use indicates compliance, with watering restrictions

## Water Usage Multiyear



# Conservation Outreach FY2012 To Date



- FY 2012 Activities (FY 2011)

- Events/Booths: 10,262  
(19,881)
- Public Presentations: 1,958  
(2,898)
- School Presentations: 22,289  
(19,718)

## July

- SSHA TX Hill Country Chapter
- Austin Energy Customer Care Staff Training

## August

- AISD Back to School Bash
- Foundation Communities Saving Green Program
- Code Workshop for Licensed Irrigators

## September

- Austin Hotel & Lodging Green Trade Show
- Austin Woman Magazine 10<sup>th</sup> Anniversary

# Reclaimed Water Use



- Annual Use
  - FY12: 1.52 BG (4.34% of total wastewater treated)
  - FY11: 1.45 BG (4.65% of total wastewater treated)
  - FY10: 1.09 BG (3.01% of total wastewater treated during wet year with very low demand)



# FY12 Reclaimed Water Projects

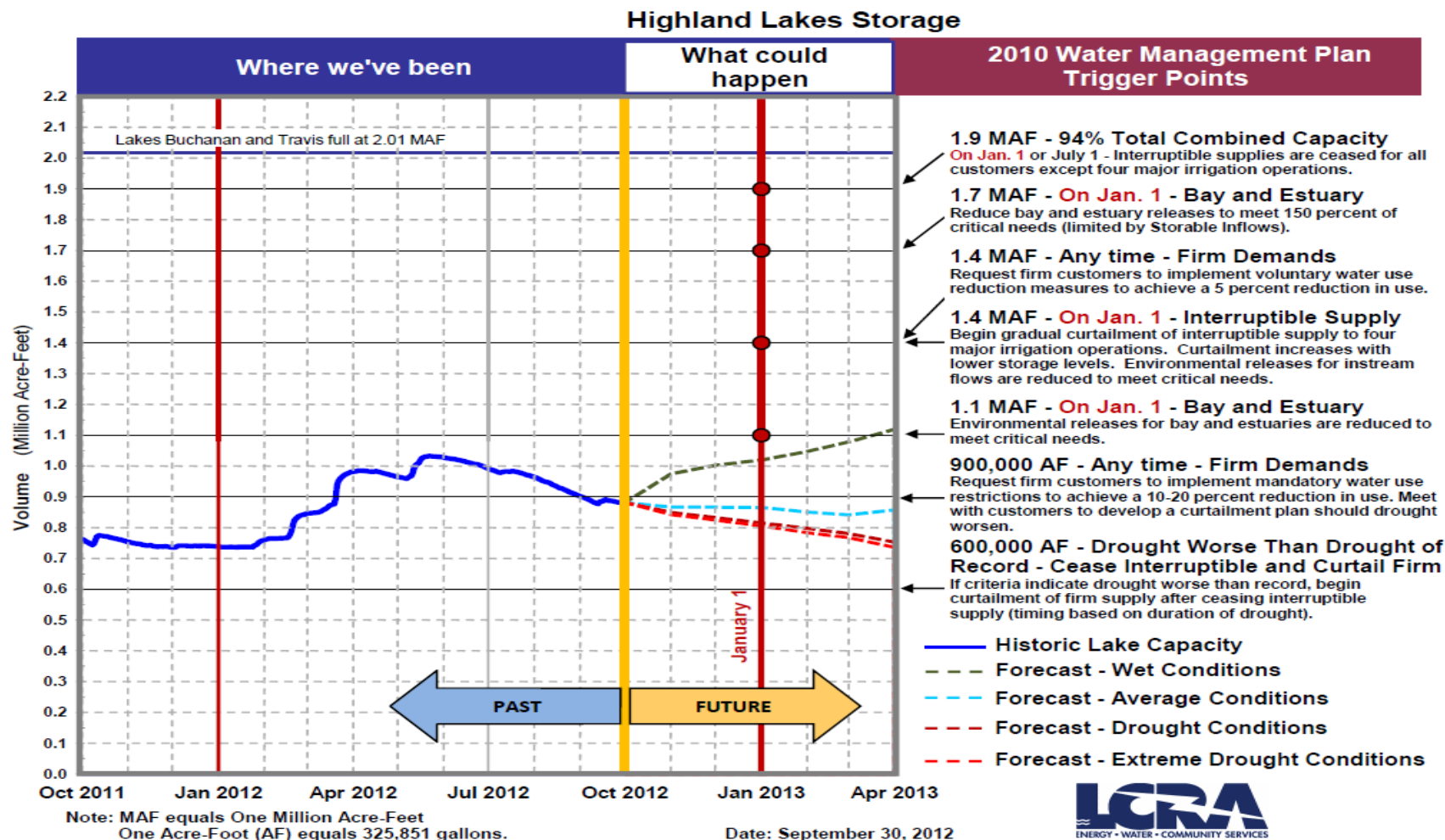
- Under construction:
  - Montopolis Main;
  - Guerrero Park Main Phase II;
  - BAE Systems Main
  - Hancock Golf Course Irrigation System
- Under design:
  - 2<sup>nd</sup> Street/Central Library Main
  - Smith Road Extension
- Nearing Connection:
  - Hornsby Bend Admin Building Irrigation
  - Krieg Fields
- Hornsby Fill Station and PARD Tree Irrigation Trucks Available
- Consultant Selected for Auxiliary Water Code Study



# New Reclaimed Water Use Projects for FY 13

- Main to Capitol (includes serving Waller Creek Center)
- Pump Station and Tank at Montopolis
- Design Bid for Smith Road Extension

# Highland Lakes Storage





# Weather Outlook

- The development of El Nino has stalled; rainfall is now forecast to be near normal to slightly above normal.
- A weak EL Nino may still develop over the next month but it would only last into January or February.
- The chance of tropical rain in Texas is waning as the hurricane season winds down.
- We can still expect cooler than average weather this winter

# Looking Ahead

- Stage 2 likely to continue based on forecast
- RMC/AWU Workgroup presentation to Council December 13
- Follow-up Rulemaking to Code Revisions – expected adoption January 2013
- FY2012 end-of year report to RMC in January

# Looking ahead (con't)

- Public comment on unified conservation goals and plan January - March
- Graywater Work Group – technical guidance document, criteria manual, and staff support program by March 2013
- Consultant report on city codes and auxiliary water issues expected September



**Mark Jordan**

**Water Conservation Program Coordinator**

**(512) 974-3901**

[mark.jordan@austintexas.gov](mailto:mark.jordan@austintexas.gov)

[www.waterwiseaustin.org](http://www.waterwiseaustin.org)