



Water Conservation Program Update 4th Quarter FY2013

Resource Management Commission

November 19, 2013

Mark Jordan

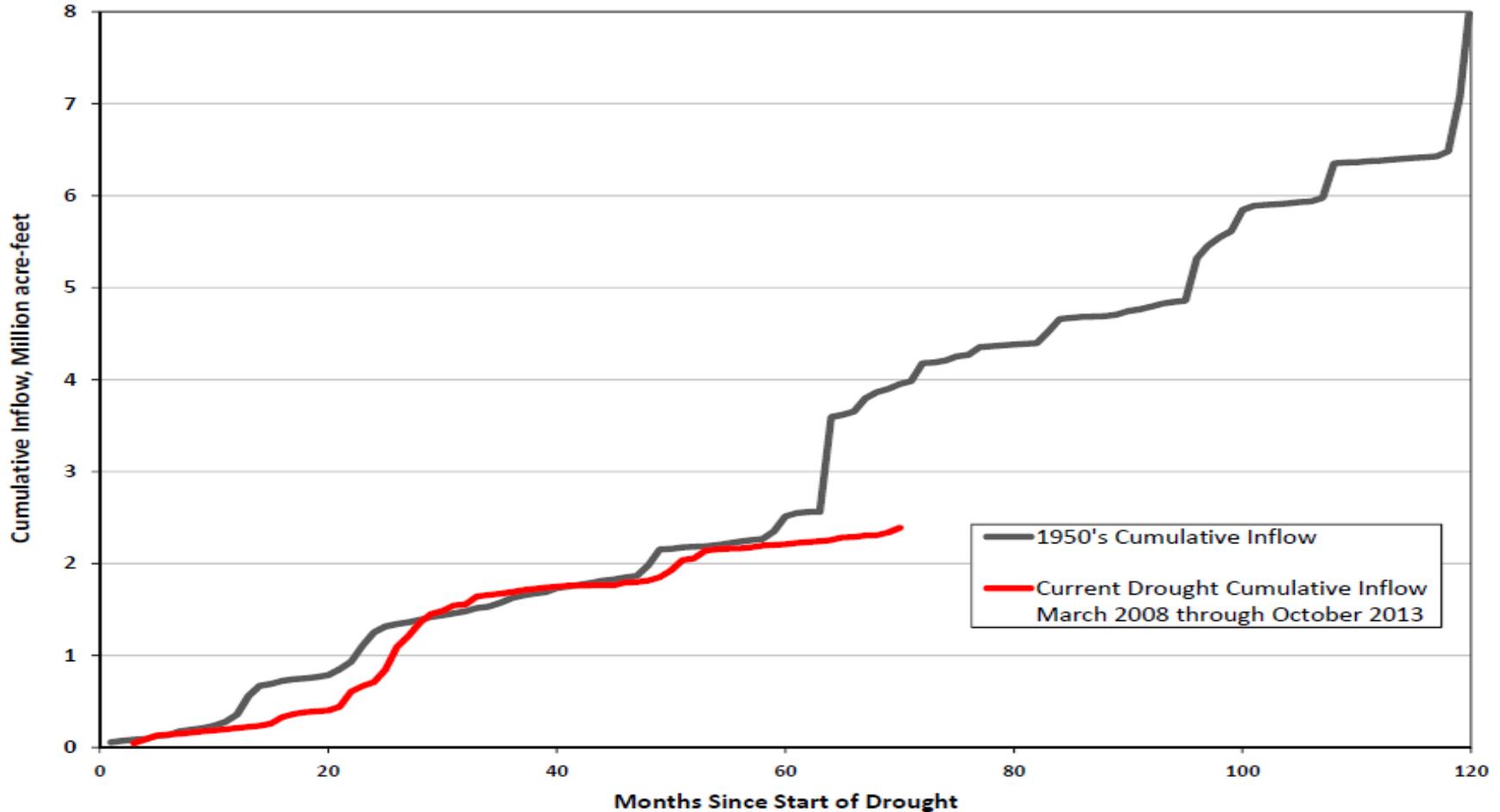
Water Conservation Program Coordinator

Drought Update



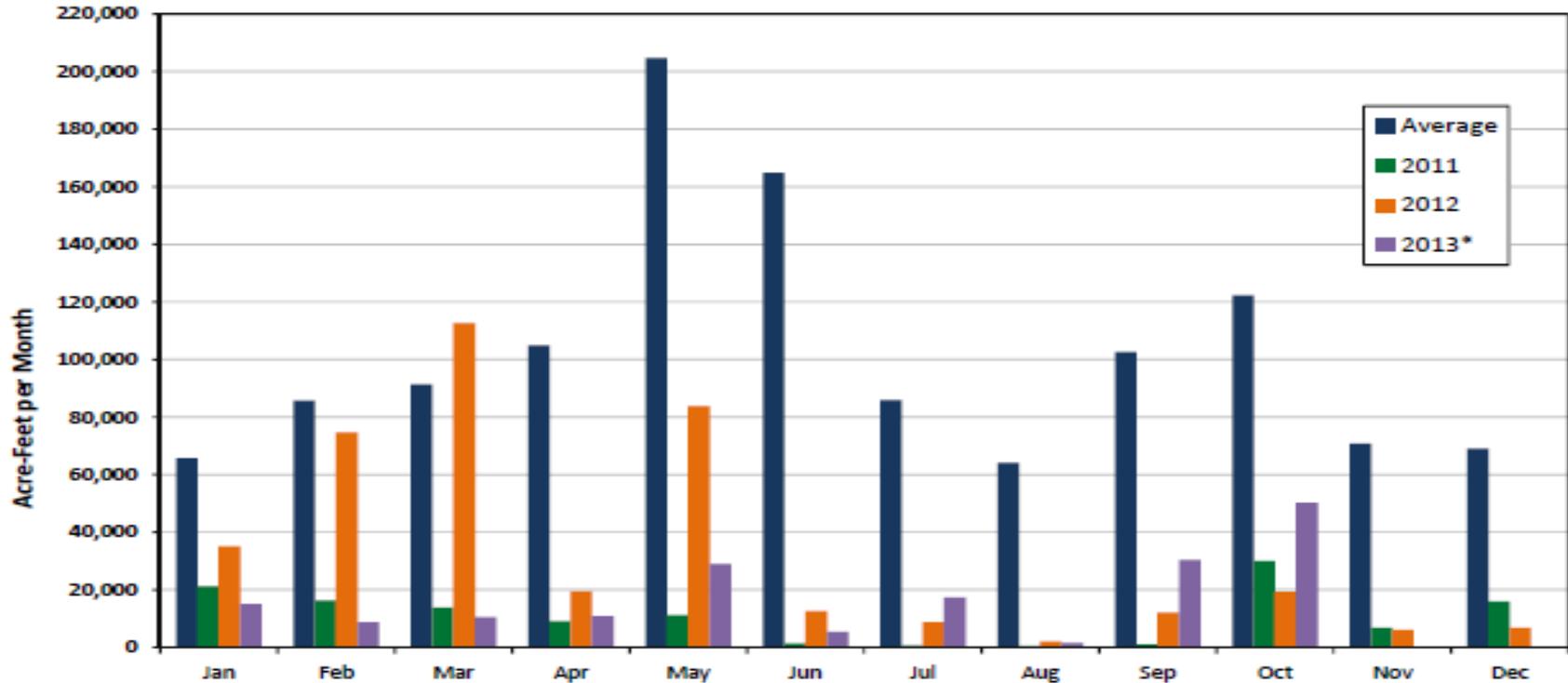
2013 inflows tracking DOR

Cumulative Inflow to Lakes Buchanan and Travis



Low inflows last three years

Inflows to Lakes Buchanan and Travis



Calendar Year Totals, ac-ft	
Average:	1,244,582
2011:	127,802
2012:	393,163

Jan. - Oct. Totals, ac-ft	
Average:	1,091,949
2011:	104,958
2012:	380,267
2013:	179,171

Monthly averages correspond to the historical period of record, 1942 through present.

*Inflow data for 2013 are preliminary and subject to revision.

10 Lowest Annual Inflows on Record

Rank	Year	Annual Total (in acre-feet)
1	2011	127,802
2	2008	284,462
3	2006	285,229
4	1963	392,589
5	2012	393,426
6	1983	433,312
7	1999	448,162
8	2009	499,732
9	1950	501,926
10	1967	503,572
Average	1942 – 2012	1,244,586

As of 10/31/13
inflows for 2013
at **179,171 AF.**



*2013 likely to
be 2nd lowest
inflow year.*

From YNN,
10/31/13

24-hr Rainfall

10:30 AM

0.00
MASON

0.00
LLANO

0.02
BURNET

1.35
LEANDER

0.33
FLORENCE

1.51
THORNDALE

0.05
MARBLE
FALLS

2.09
CEDAR
PARK

7.38
ROUND
ROCK

4.44
TAYLOR

0.05
FREDERICKSBURG

2.02
LAGO V.

4.96
MANOR

2.93
ELGIN

4.58
GIDDING

3.14
GIDDING

0.09
J.CITY

3.40
DRIPPING
SPRINGS

9.35
MANCHACA

4.58
BASTROP

4.24
SMITHVILLE

0.63
BLANCO

9.69
BUDA

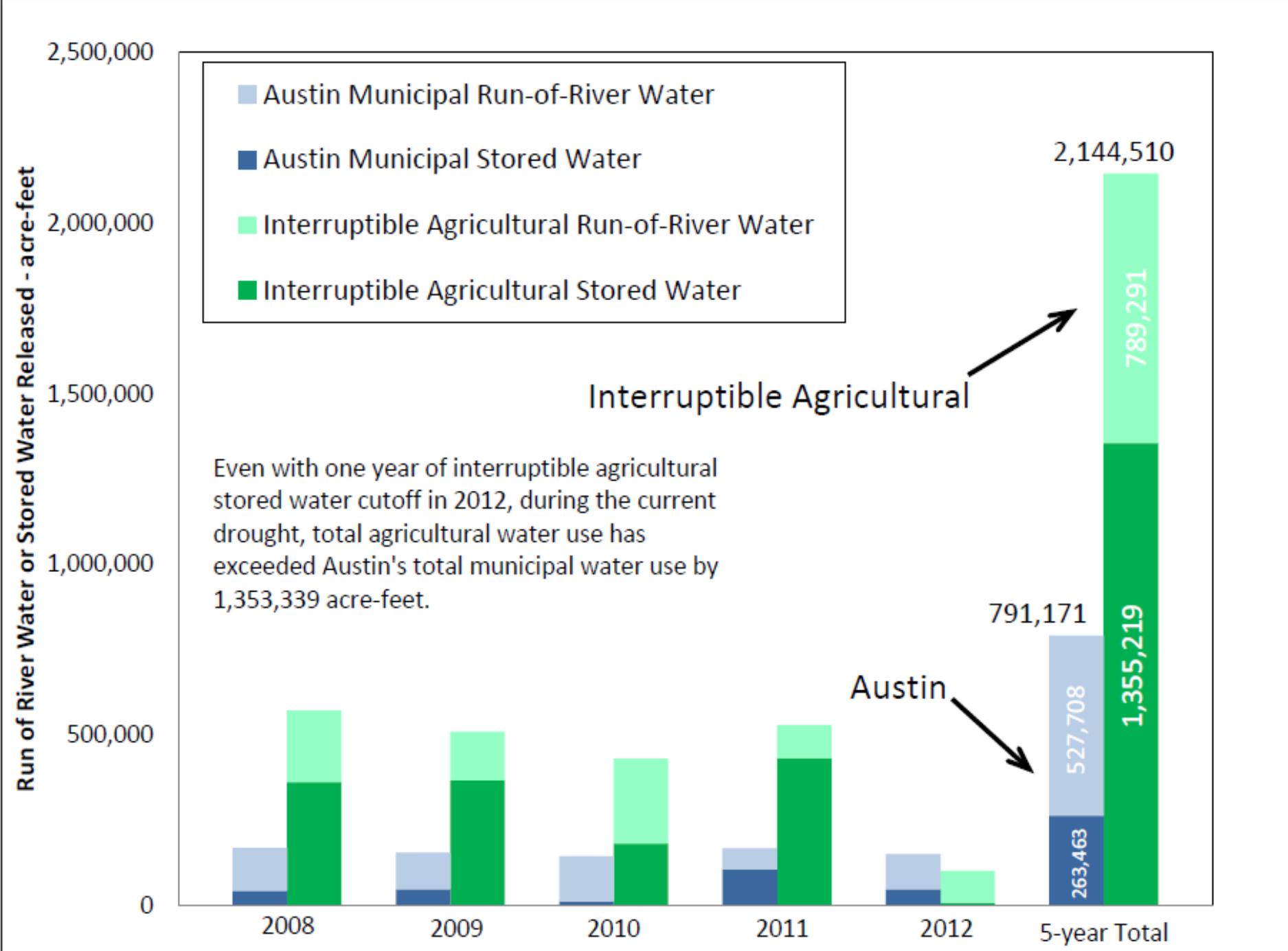
1.65
SAN
MARCOS

3.64
LOCKHART

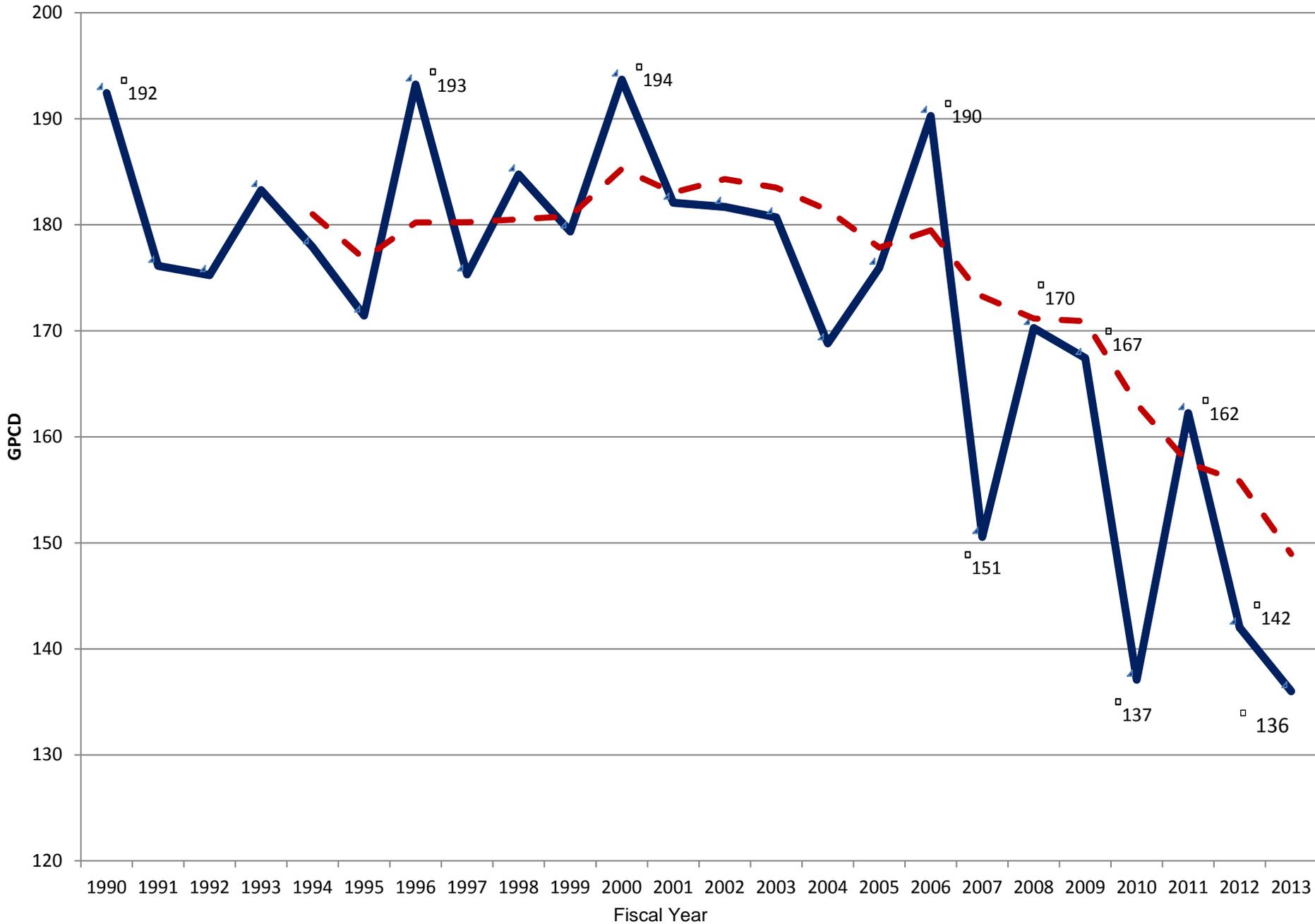
5.16
ROSANKY

1.85
LA GRAN

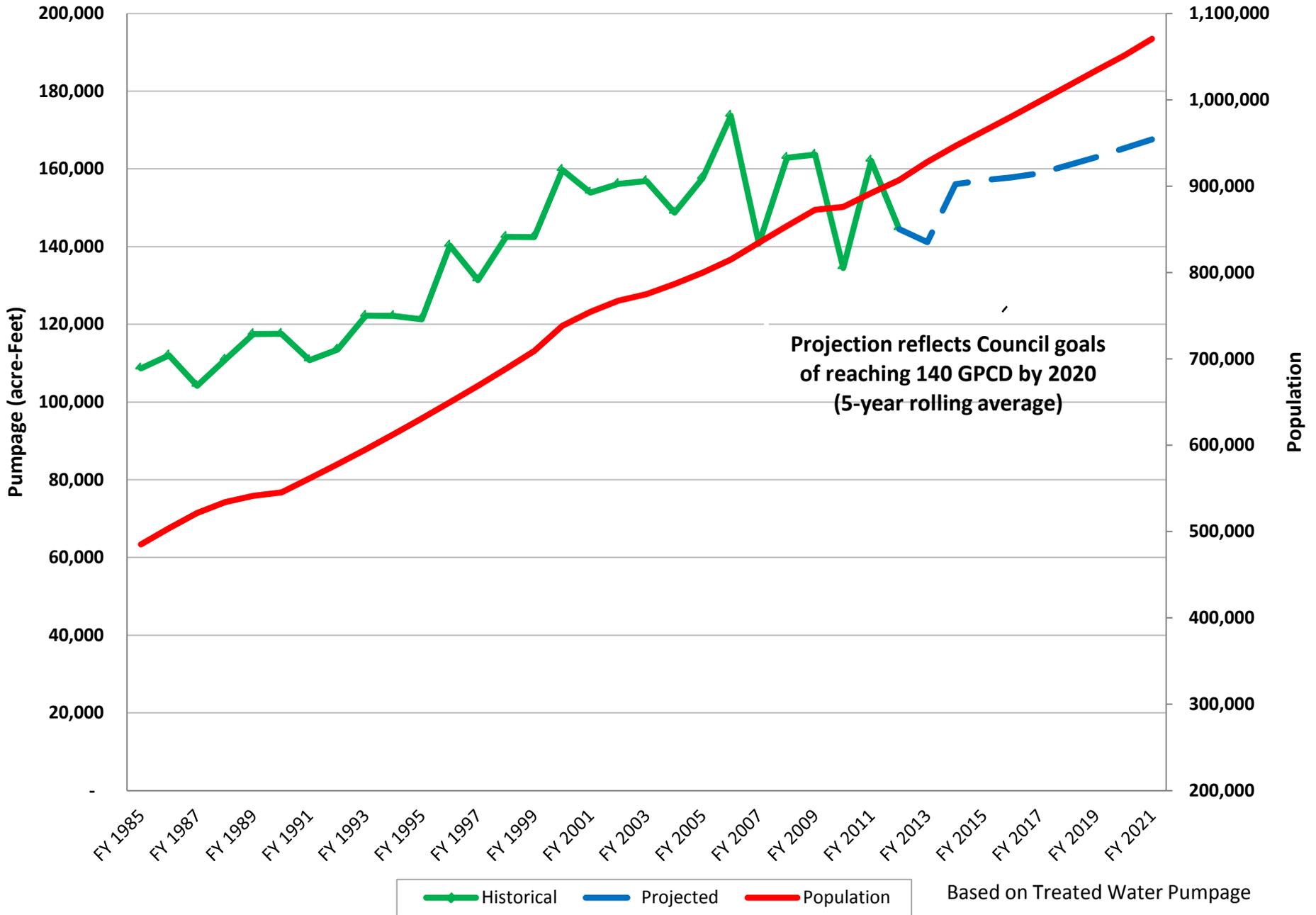
Some reports courtesy LCRA



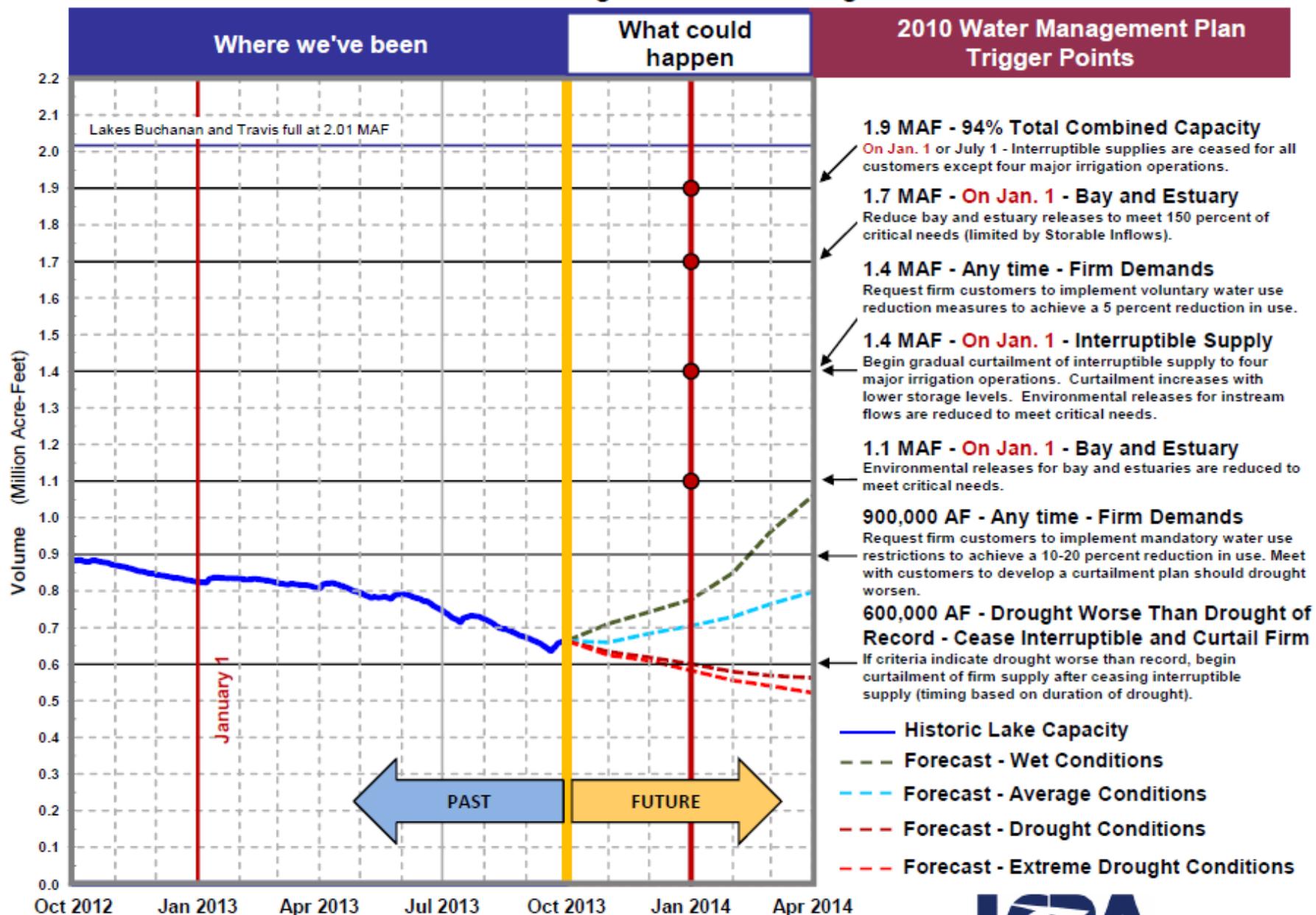
Austin Conservation History - GPCD Progress by Fiscal Year



City of Austin Total Annual Pumpage and Population



Highland Lakes Storage *



Note: MAF equals One Million Acre-Feet
One Acre-Foot (AF) equals 325,851 gallons.

Date: October 1, 2013



* Projections take into account emergency drought relief measures affirmed by TCEQ on February 13, 2013.

Weather outlook



- Fall rains delay possibility of Stage 3
- Temperatures and rainfall trending towards normal this fall and early winter
- Possibility of weak El Nino beginning late winter, early spring

Stage 2 remains in place



- Combined storage currently at 727,000 AF (36%)
- Stage 2 (1 day per week watering) in effect since September 4, 2012
- Expected to remain in place for next several months
- Stage 3 trigger possible next Spring if dry conditions

Stage 3



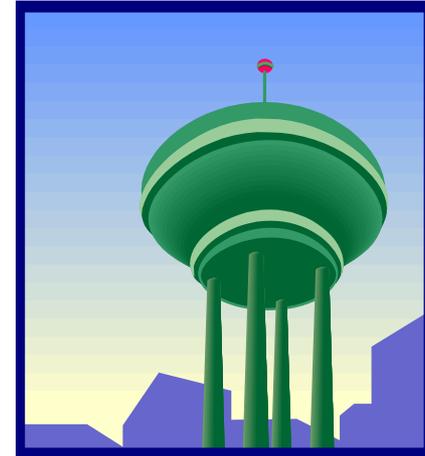
- Combined storage at 600,000 AF (28%)
- 1 day per week watering with reduced hours
- Reduced hours for patio misters, splash pads
- Filling of spas prohibited
- Other measures as necessary

AWU Drought Response

- Strategy 1: Austin Demand-Side Management
 - Required 20% Pro-rata curtailment at 600K acre/feet of combined storage
 - Potential for additional water restrictions and measures beyond Stage 3
- Strategy 2: Work regionally to protect Colorado River Basin Firm Water Interests
 - Continue to support Emergency Orders that adequately curtail interruptible water use
 - Support long term revisions to LCRA's WMP to reduce firm water risks

AWU Drought Response (con't)

- Strategy 3: Investigate, evaluate and prioritize demands that can be met with alternative water sources:
 - Groundwater
 - Reclaimed water
 - Other sources



Drought Communication Plan

Marketing/Advertising

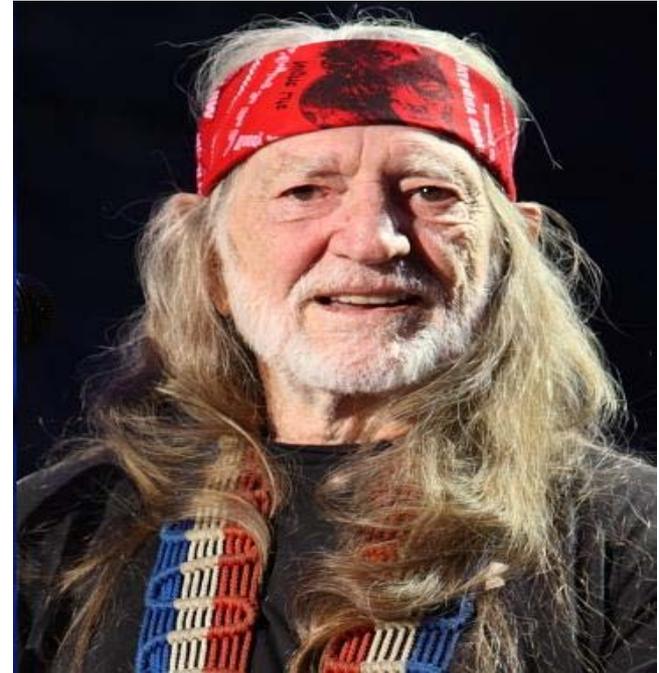
- Direct Mailer
- Austin Water Conservation Drought website
- Willie Nelson radio and TV ads
- Other advertising: Print, buses. . .
- Business & Restaurant outreach

Media Relations

- Meet with Media Managers
- Social Media

Public Involvement/Education

- Continue providing information about the drought and the possible move to Stage 3 through various community and business outlets
- City of Austin employee education: Drought and water conservation information to all employees. Emails to the workforce, City Source, internal departmental newsletters.



- <http://www.youtube.com/watch?v=vtdqyDeMwVc>

LCRA seeking emergency relief 3rd straight year

- If combined storage below 1.1 MAF March 1:
 - Curtail irrigation (previously at 850,000 MAF)
 - Require firm customers 1 X week watering
- Reduce spring releases for Blue Sucker
- Encourage no outdoor watering Nov - Feb

Drought Outlook

- Current drought is on a path to be worse than the 1950s drought of record
- Spring of 2014 key decision-making point
- Next Council Update – First Quarter 2014
- Utility planning for regular Board & Commission updates

FY13 4th Qtr Highlights

- Administrative penalty program initiated July 15 replacing citations (30 fines to-date)
- ICI Audit Rebate Pilot Rollout and July 17 Workshop
- 1st Annual ICI Conservation Workshop September 25
- 2nd Commercial e-newsletter published
- AISD Conservation Partnership

FY13 4th Qtr Highlights (con't)



- Commercial audit rebate pilot registration deadline extended December 16, 2013
- 5 papers presented at national/international conferences
 - AE/AWU Efficiency Partnerships
 - ICI Benchmarking
 - AWE Planning Tool Case Study
 - Watering day scheduling
 - Drought response

Looking Ahead – FY14 1st Qtr



- Consultant report on city codes and auxiliary water issues nearing completion
- Mandatory Irrigation Audits for Commercial/MF properties due 2014
- FY2013 Annual Report to RMC in January

Looking Ahead – FY14

- City facility efficiency audit contract
- Funding program for innovative water conservation projects
- Cooling tower initiative
- Additional potential drought measures

Programs under review

- Commercial WashWise
- Hotel WaterWise Partner
- Alternative Compliance Pilot
- Consolidated Auxiliary Water Rebate Program
- Septic Tank Conversion
- Program reporting





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Conservation Outreach FY2013 To Date



- FY 2013 Activities To Date
 - Events/Booths: 6,654
 - Public Presentations: 4,005
 - School Presentations: 20,510 (students)

July

- ICI Audit Rebate Workshop
- Irrigation Inspector Training

August

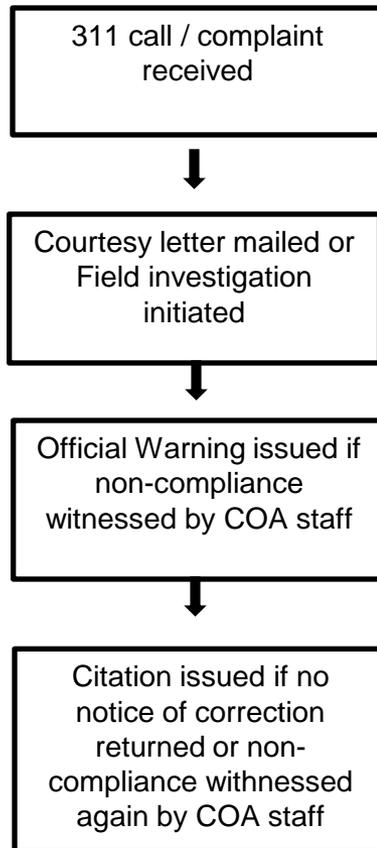
- TCEQ PDW Conference
- Green Business Leader Awards

September

- AHLA Trade Show
- AAFAME Trade Show
- Town Lake Garden Club
- AAA Tradeshow
- ICI Technical Workshop

Water Conservation Code Enforcement

Enforcement Process



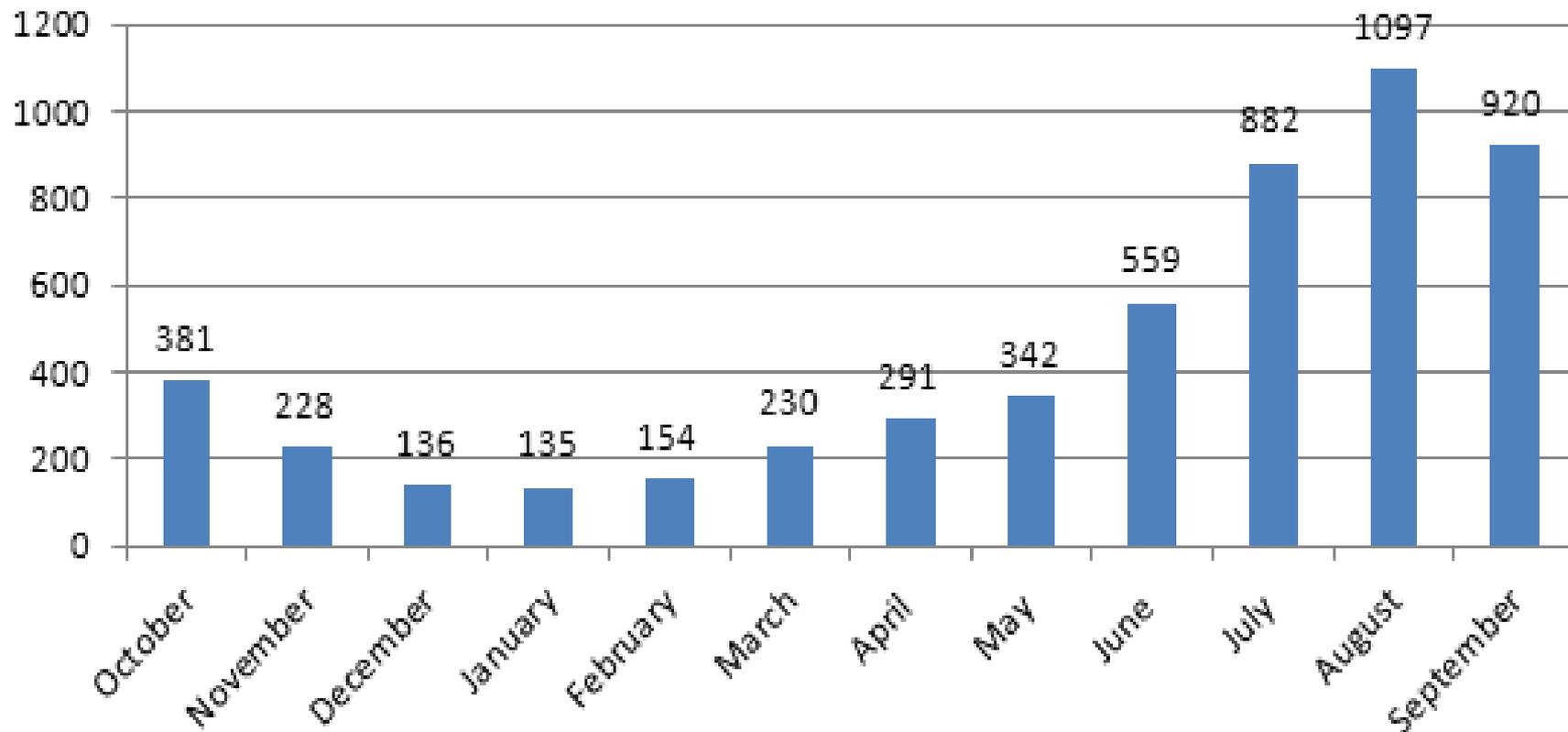
FY 13 Enforcement Activity

- 5355 “311” Calls
- 3303 Courtesy Letters/Postcards
- 2884 Official Warnings/NOVs
- 496 Citations Issued
 - 234 Residential Citations
 - 194 Commercial
 - 68 MF



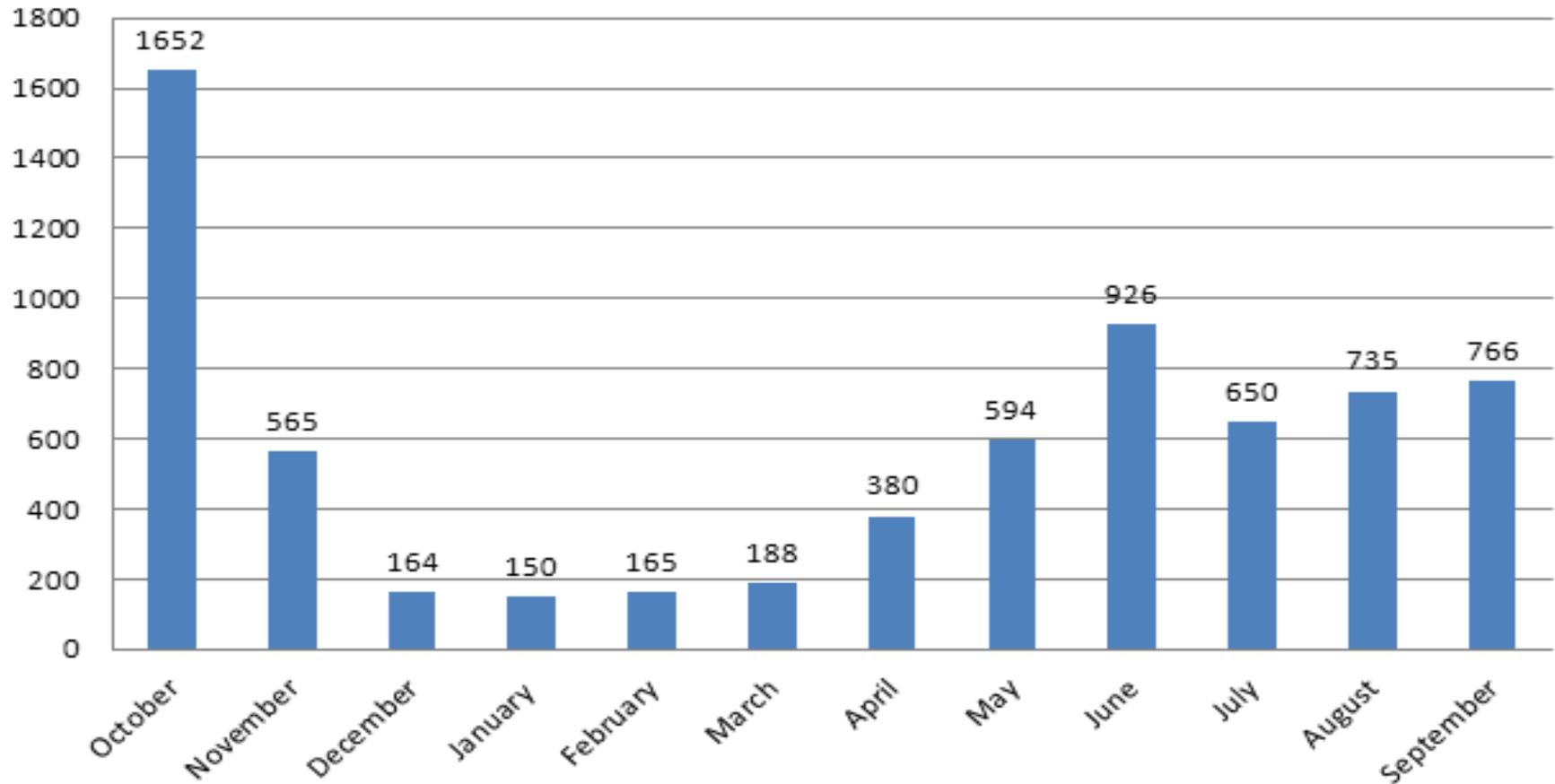
FY 2013 “311” Reports

311 Reports, FY 12-13, Monthly Totals



FY 2012 “311” Reports

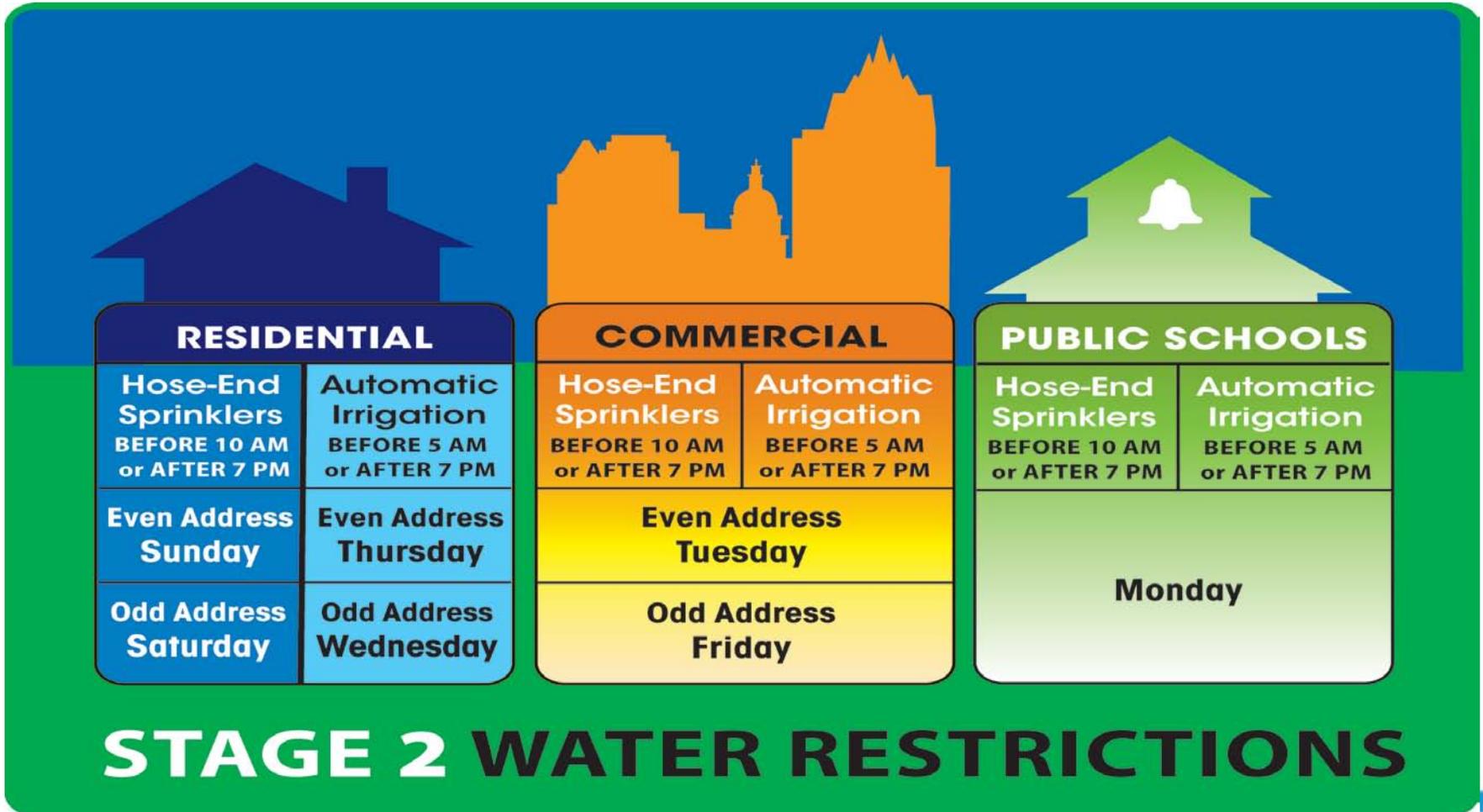
311 reports, FY 11-12, Monthly Totals



Administrative enforcement

- Processed as a civil matter
- Provides option to go directly to municipal court
- Penalties determined by fee schedule
- Applied to water bill
- NOV sent prior to assessment of fine

Stage 2

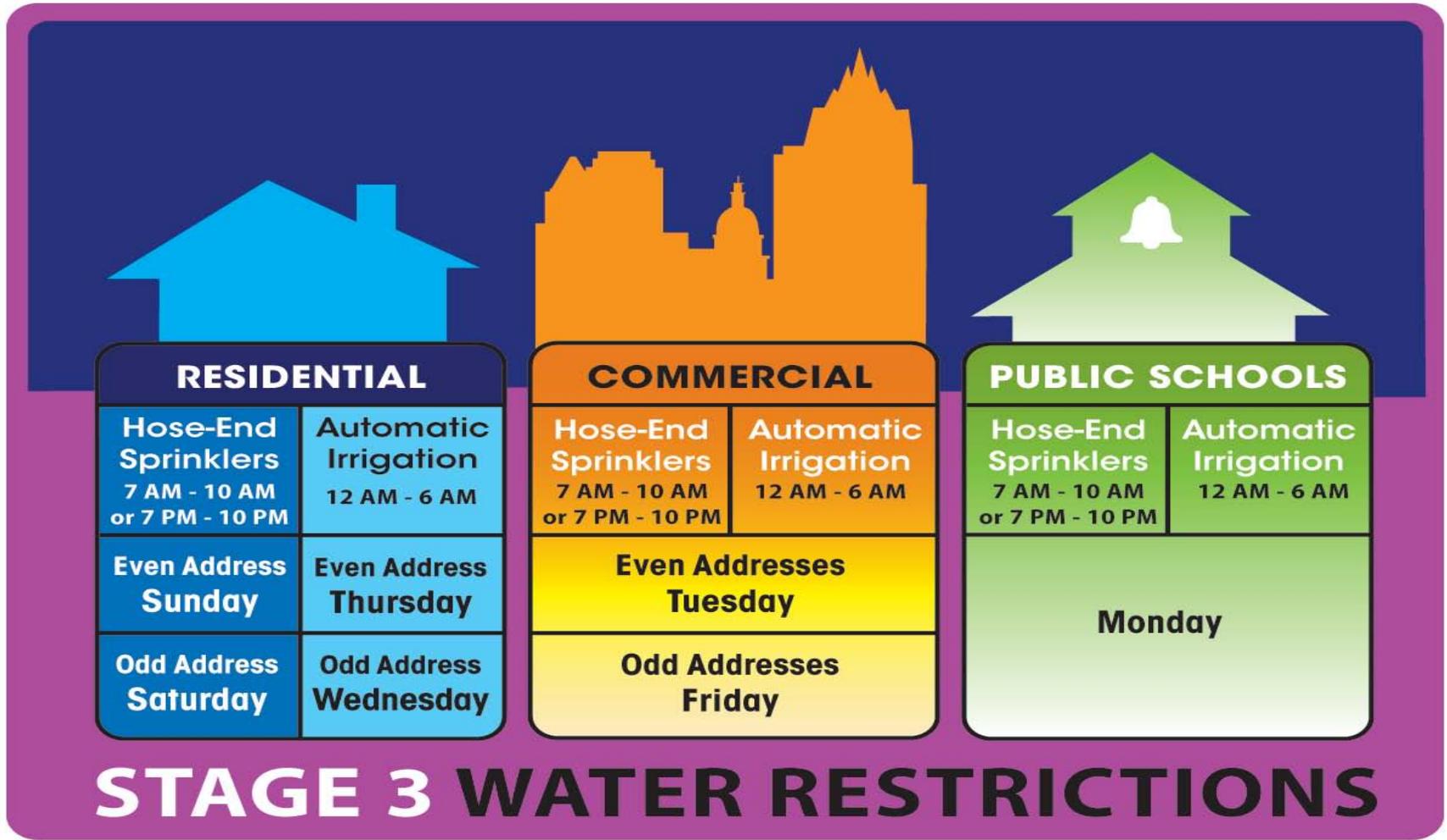


The graphic features a blue background with a green base. At the top, there are three silhouettes: a dark blue house on the left, an orange city skyline in the center, and a light green schoolhouse on the right. Below each silhouette is a colored box containing water restriction rules. The Residential box is dark blue, Commercial is orange, and Public Schools is light green. The Residential and Commercial boxes are divided into two columns for Hose-End Sprinklers and Automatic Irrigation, with specific time and address restrictions. The Public Schools box has a single Monday restriction. At the bottom, the text 'STAGE 2 WATER RESTRICTIONS' is written in large, bold, white letters on a green background.

RESIDENTIAL		COMMERCIAL		PUBLIC SCHOOLS	
Hose-End Sprinklers BEFORE 10 AM or AFTER 7 PM	Automatic Irrigation BEFORE 5 AM or AFTER 7 PM	Hose-End Sprinklers BEFORE 10 AM or AFTER 7 PM	Automatic Irrigation BEFORE 5 AM or AFTER 7 PM	Hose-End Sprinklers BEFORE 10 AM or AFTER 7 PM	Automatic Irrigation BEFORE 5 AM or AFTER 7 PM
Even Address Sunday	Even Address Thursday	Even Address Tuesday		Monday	
Odd Address Saturday	Odd Address Wednesday	Odd Address Friday			

STAGE 2 WATER RESTRICTIONS

Stage 3



The graphic is titled "STAGE 3 WATER RESTRICTIONS" and is set against a dark blue background with a purple border. It features three columns representing different sectors: Residential (blue house icon), Commercial (orange city skyline icon), and Public Schools (green schoolhouse icon). Each column contains a table of restrictions for hose-end sprinklers and automatic irrigation, along with specific days for even and odd addresses. The Residential and Commercial sections have two columns for these activities, while Public Schools has one. The Residential and Commercial sections also have a table for even and odd address restrictions, while Public Schools has a single entry for Monday.

RESIDENTIAL		COMMERCIAL		PUBLIC SCHOOLS	
Hose-End Sprinklers 7 AM - 10 AM or 7 PM - 10 PM	Automatic Irrigation 12 AM - 6 AM	Hose-End Sprinklers 7 AM - 10 AM or 7 PM - 10 PM	Automatic Irrigation 12 AM - 6 AM	Hose-End Sprinklers 7 AM - 10 AM or 7 PM - 10 PM	Automatic Irrigation 12 AM - 6 AM
Even Address Sunday	Even Address Thursday	Even Addresses Tuesday		Monday	
Odd Address Saturday	Odd Address Wednesday	Odd Addresses Friday			

STAGE 3 WATER RESTRICTIONS

Annual Reclaimed Water Use



- FY13: 1.47 BG (4.04% of total wastewater treated; 59 customers)
- FY12: 1.52 BG (4.34% of total wastewater treated; 43 customers)
- FY11: 1.45 BG (4.65% of total wastewater treated; 40 customers)
- FY10: 1.09 BG (3.01% of total wastewater treated during wet year with very low demand; 36 customers)

FY13 Reclaimed Water Projects

- Under construction:
 - Walnut Tank Assembly & Repair
 - 2nd Street/Central Library Main
 - BAE Systems Main (completed in FY13)
 - Smith Road Ext. (contract awarded)
- Under design:
 - Montopolis Tank
 - FM 973
 - Capitol Complex Main
 - Main to Junction 420 (downtown)
- Cooling Tower Pilot Project in Progress



Reclaimed Projects FY 13

- Main to Capitol (includes serving Waller Creek Center)
- Filling Stations at Hornsby and Callahans
- New Connections:
 - UT chilling tower Hornsby Bulk Water
 - BAE cooling towers Hergotz Bulk Water
 - Senate Hills HOA Guerrero Park
 - Krieg Field Kim Ln Rain Gardens
 - Whole Foods Hancock Golf