



2019 Water Conservation & Drought Contingency and Emergency Water Management Plan Update

April 16, 2019



Background

- Required by Texas Commission on Environmental Quality (TCEQ) through Texas Administrative Code (Title 30)
- Required by the Texas Water Development Board (TWDB)
- Required by contract as a wholesale water customer of Fort Worth

- Must be consistent with City of Fort Worth plan
- Must be updated every 5 years (Texas Administrative Code)
 - Due to TCEQ and TWDB by May 1, 2019
- Must be Regionally Coordinated
- Must include opportunity for Public Comment
- Must be Formally Adopted

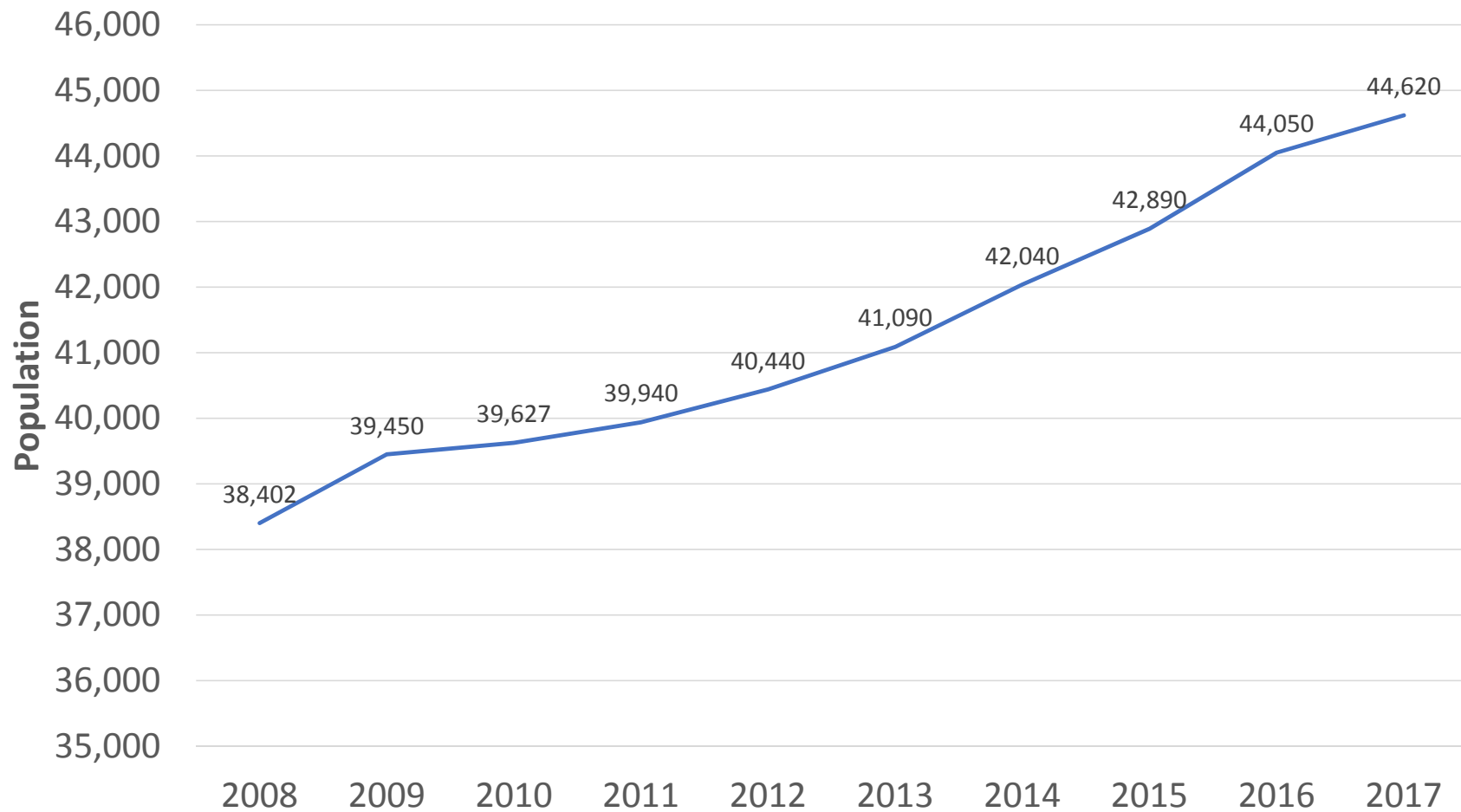
Water Conservation Plan Goals

- Reduce Consumption
- Reduce loss
- Increase efficiency
- Extend Supplies

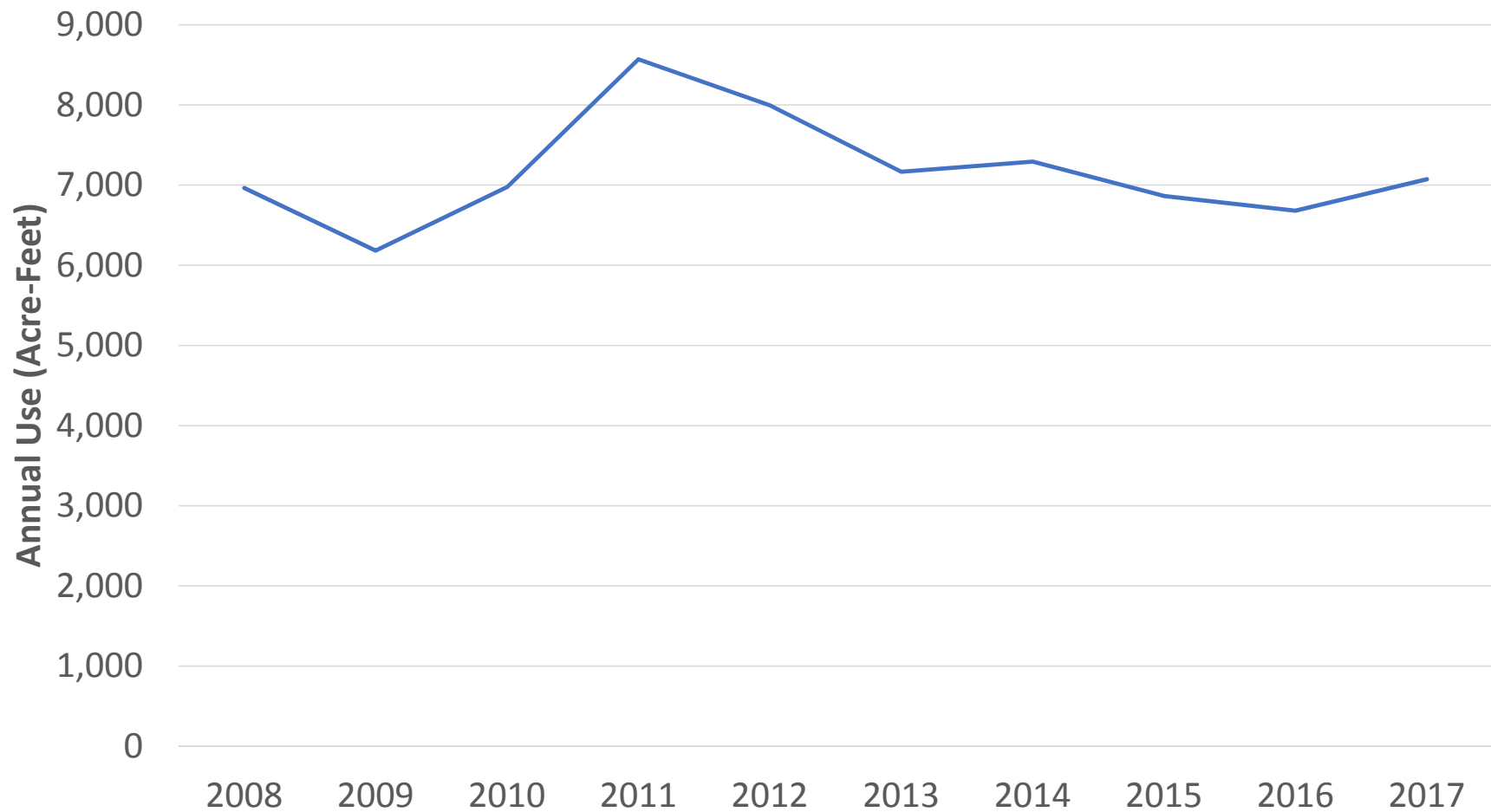
Water Conservation Plan Content

- System Profile
- Water Purchase/Usage/Loss Summaries
- 5 & 10 Year Goals
- Progress Tracking
- Information on metering, leak detection, and water loss
- Letter to Regional Water Planning Group
- Public Input
- Proof of adoption

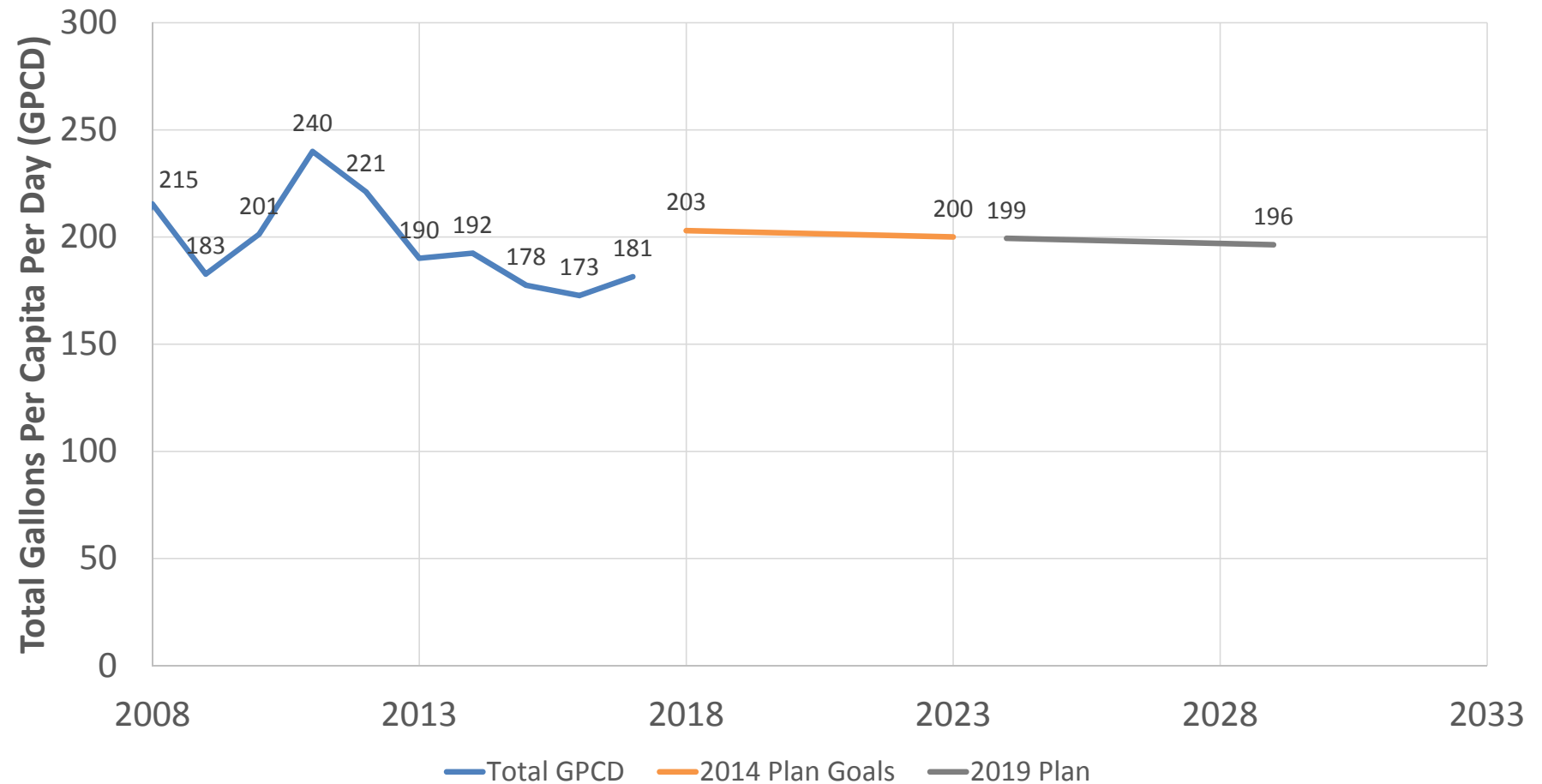
Water Conservation Plan - Utility Profile



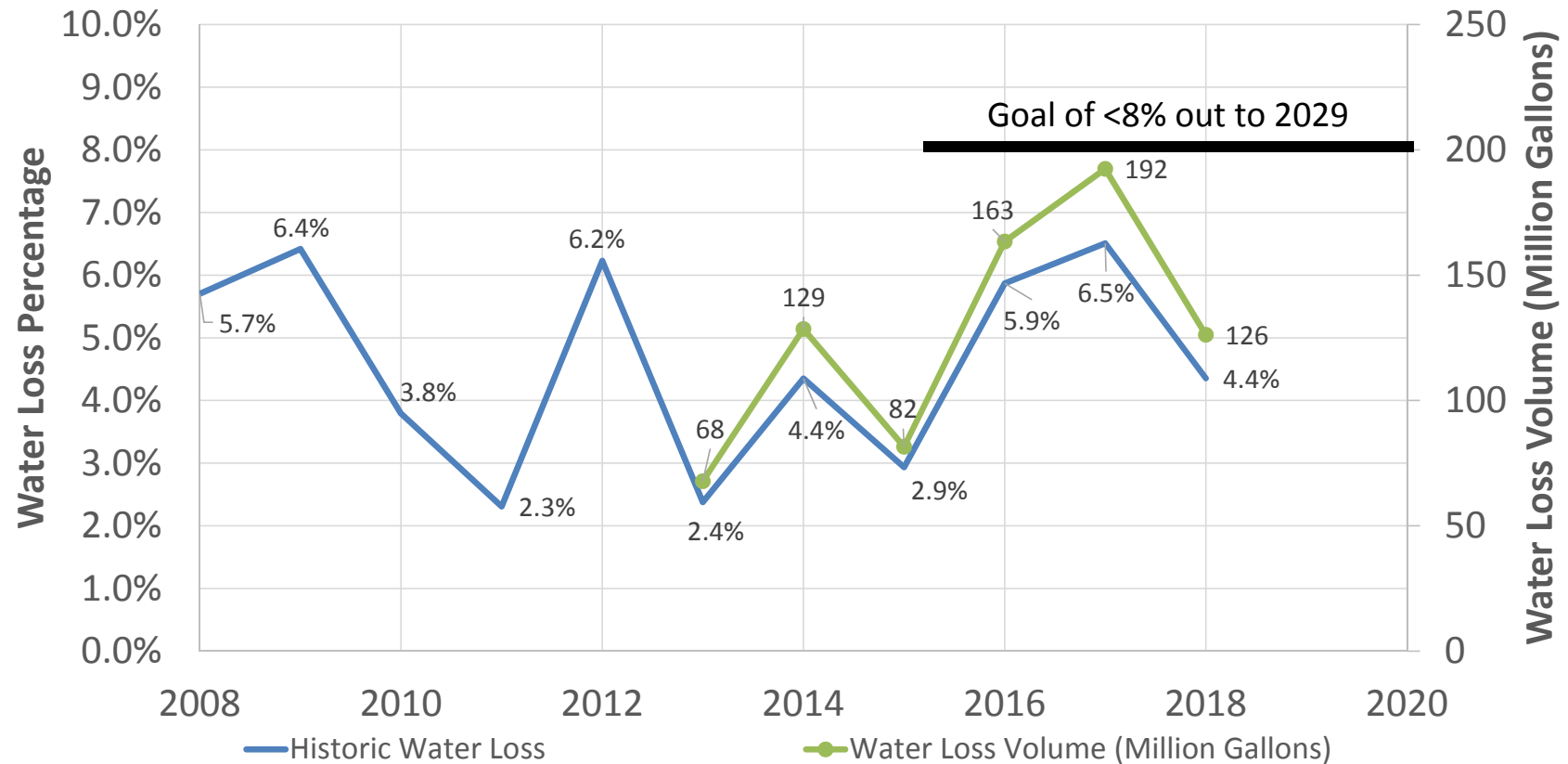
Water Conservation Plan - Utility Profile



Water Conservation Plan GPCD Goals



Water Conservation Plan - Water Losses



Water Conservation Plan Goals

Description	Units	2008-2017 Average	2024 Goal	2029 Goal
Total GPCD ^a	GPCD	197	199	196
Residential GPCD ^b	GPCD	156	160	158
Water Loss GPCD ^c	GPCD	9	16	16
Water Loss Percentage ^d	%	5%	<8%	<8%

- a. Total GPCD = (Total Gallons in System ÷ Permanent Population) ÷ 365
- b. Residential GPCD = (Gallons Used for Residential Use ÷ Residential Population) ÷ 365
- c. Water Loss GPCD = (Total Water Loss ÷ Permanent Population) ÷ 365
- d. Water Loss Percentage = (Total Water Loss ÷ Total Gallons in System) X 100; or (Water Loss GPCD ÷ Total GPCD) X 100

Water Conservation Plan

Best Management Practices

- 10 a.m. – 6 p.m. no irrigation
- Year round no more than twice per week watering schedule

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
No Outdoor Watering	Non-Residential	Residential (0,2,4,6,8)	Residential (1,3,5,7,9)	Non-Residential	Residential (0,2,4,6,8)	Residential (1,3,5,7,9)

- Prohibit wasting water
- Rain and freeze sensors on new irrigation systems
- Active leak detection and repair program
- Benefits of Automated Meter Infrastructure (AMI)
- Public education
- TRWD weather stations



Drought Contingency Plan Goals

- Minimize the Adverse Affects of a Water Shortage
- Establish Short Term Emergency Water Saving Goals
- Maintain Water Supplies for Domestic, Sanitary and Fire Needs
- Preserve Public Health, Welfare and Safety

Drought Contingency Plan Content

- Public Notification Plan
- Water Restriction Implementation/Termination Criteria
- Reduction Goals
- Restriction Requirements
- Enforcement
- Public Input
- Proof of adoption

Drought Contingency Plan

- Minimal changes to current plan, existing plan was consistent with City of Fort Worth

Stage	CFW Trigger	COK Trigger	Reduction Goal	Irrigation Measure
Stage 1	Reservoir @ 75%	90% for 3 Days	5%	2 x per week
Stage 2	Reservoir @ 60%	95% for 3 Days	10%	1 x per week
Stage 3	Reservoir @ 45%	98% for 1 Day	20%	No outdoor Irrigation

Comments Received / Proposed Plan Edits

- Include the City Council in the notification process of Emergency Response Stage changes
- Update the Water Loss Graph to reflect 2018 figures
- Clarify Water Loss Goals to be less than 8% for 2024 & 2029
- Update the plan text to reflect the actual ordinance adoption date
- Create a one page summary of plans for easier public consumption

Ordinance Content

- Plan Adoption
- Administrative Fees for Violations
- Service Turn-Off/Locking Device and Appeal Process
- Restatement of Irrigation Schedule & Exemptions
- Requirement for Properly Working Rain and Freeze Sensors
- Allowable Variances
- Annual Meter Testing by the City
- Violation Penalty @ \$500/Day (max)

Next Steps

- Conclude the Public Comment Period
- Update the Plans per the Comments Received
- Adopt Ordinance to Reference the Updated Plans
- Letters to Appropriate Agencies Confirming Update