

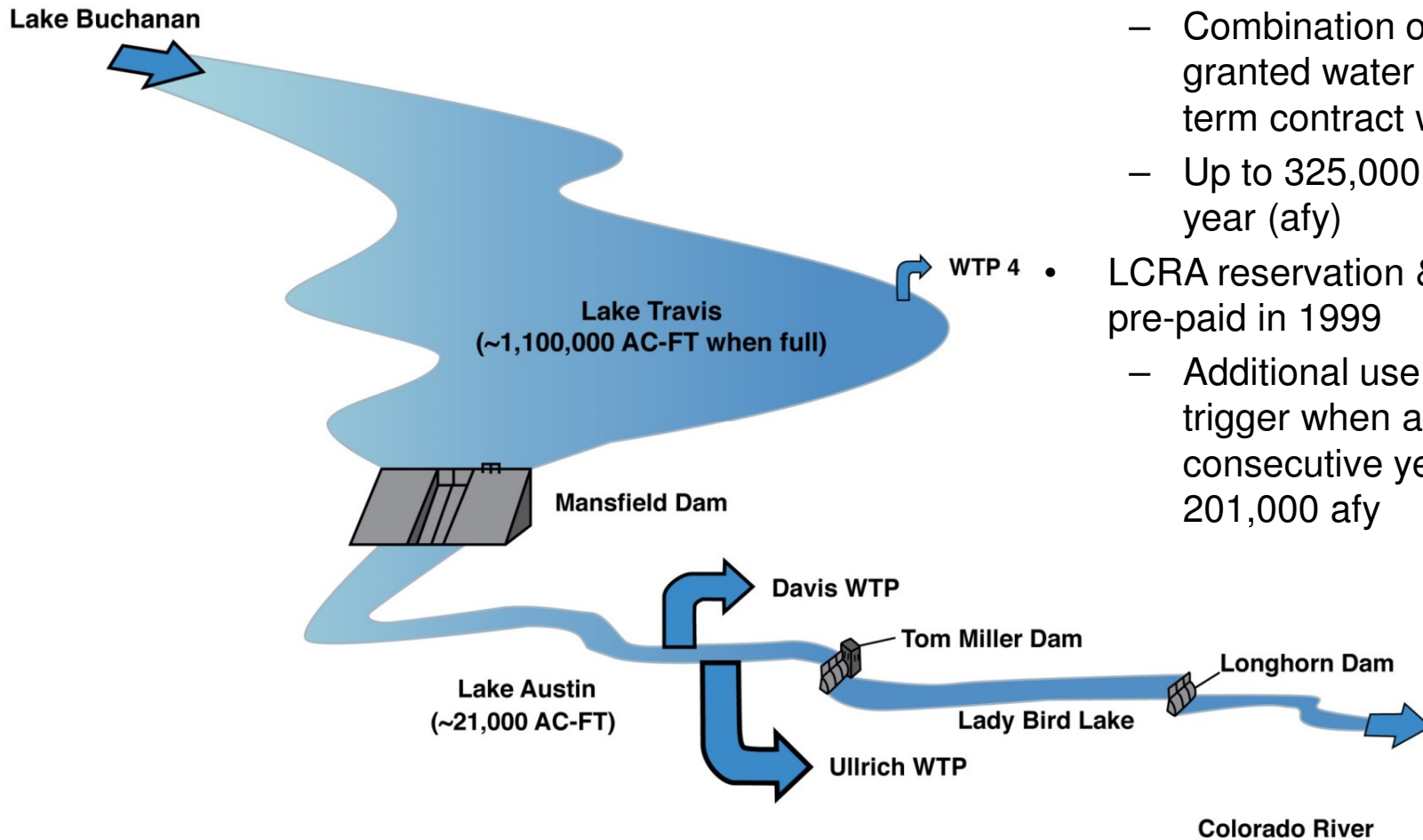


Austin Water Resource Management Sunset Valley City Council Meeting

February 21, 2017



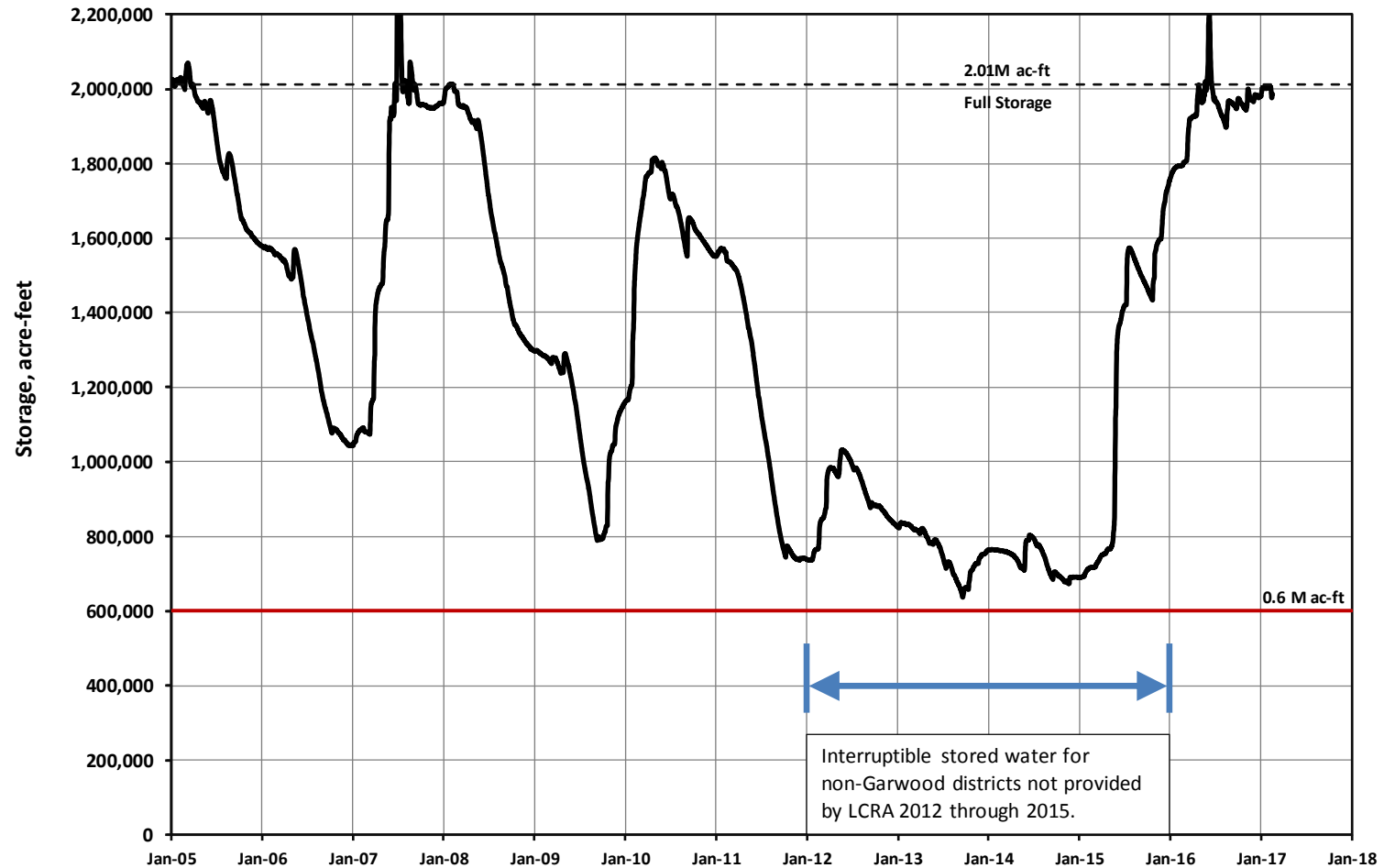
Austin Water Supply



- Colorado River:
 - Combination of State-granted water rights & long-term contract with LCRA
 - Up to 325,000 acre-feet per year (afy)
- LCRA reservation & use fees pre-paid in 1999
 - Additional use payments trigger when average for 2 consecutive years exceeds 201,000 afy

Combined Storage of Lakes Buchanan and Travis

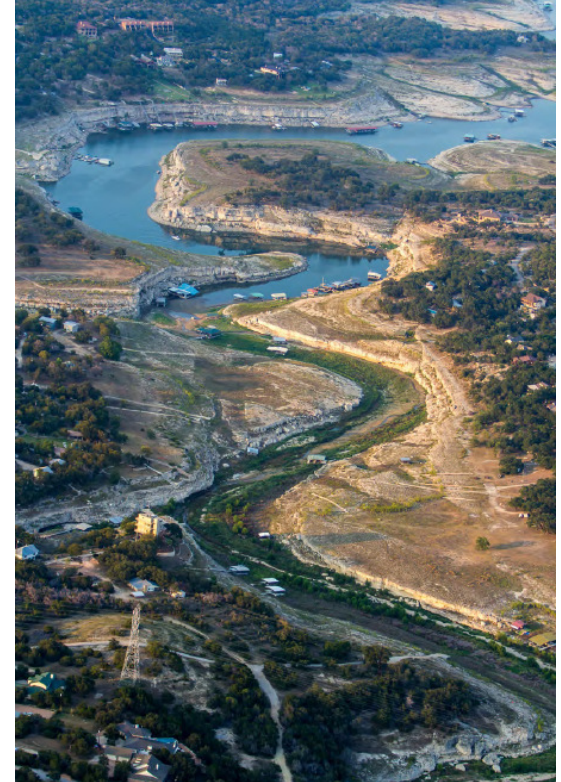
January 1, 2005 through February 17, 2017



- 100% full in May 2016

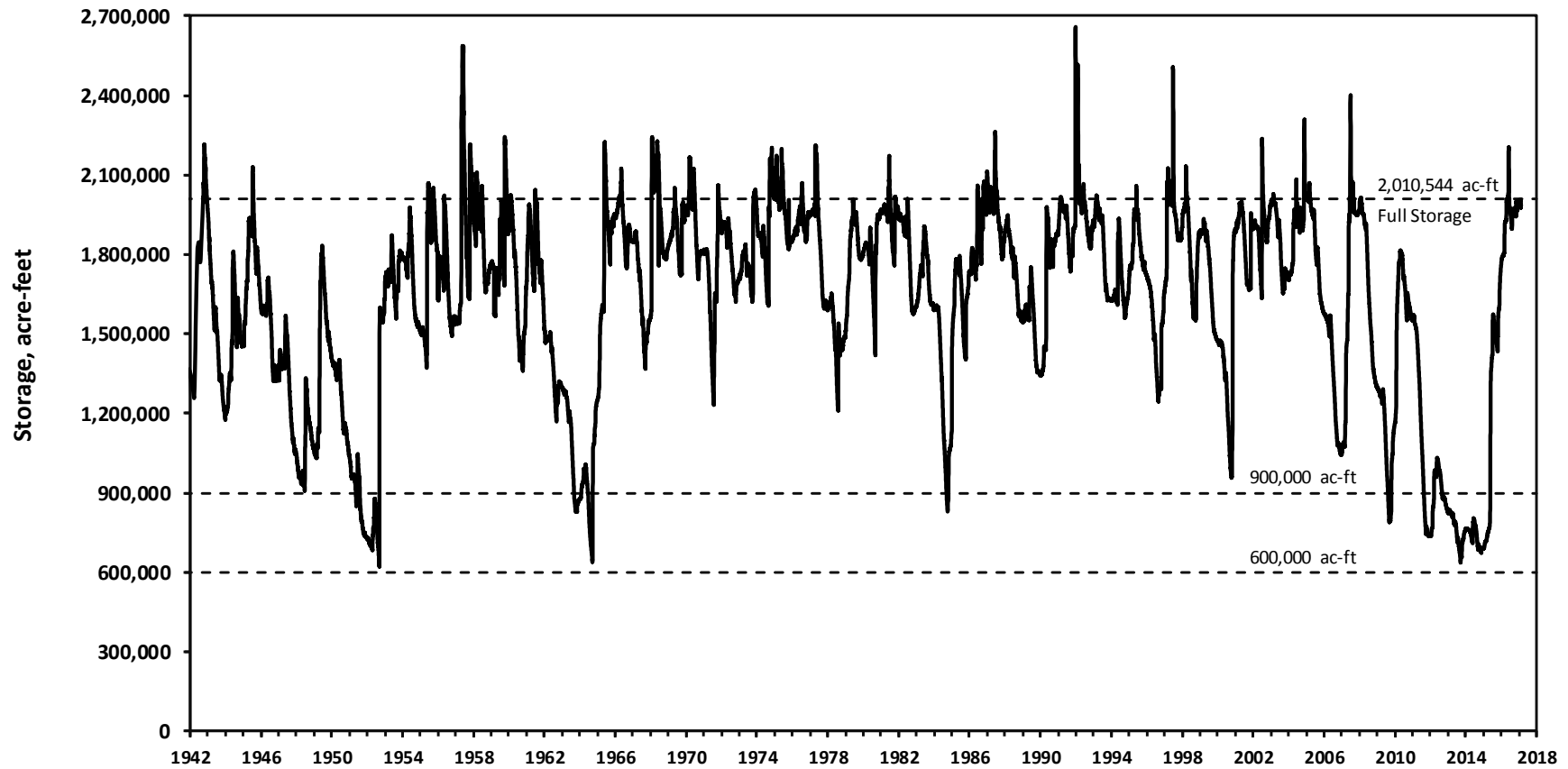
Recent Drought

- 2011 the lowest amount of water flowing into the Highland Lakes since they were built
- In a February 2015 press release LCRA announced that:
...“the Highland Lakes are now in a new ‘critical period’ marking the driest conditions on record, eclipsing the 1947-57 drought that until now was the worst on record for this region.”

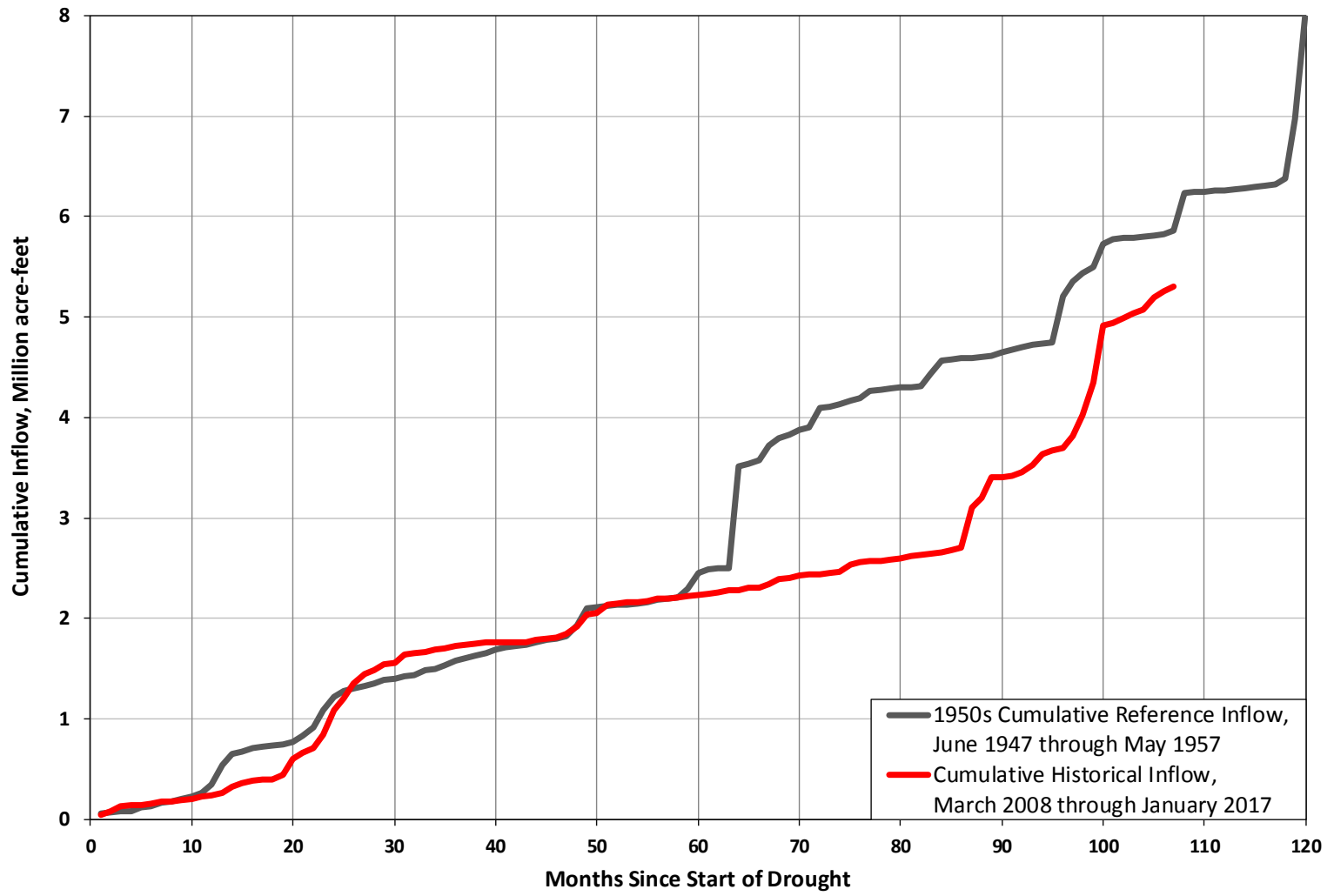


Combined Storage of Lakes Buchanan and Travis

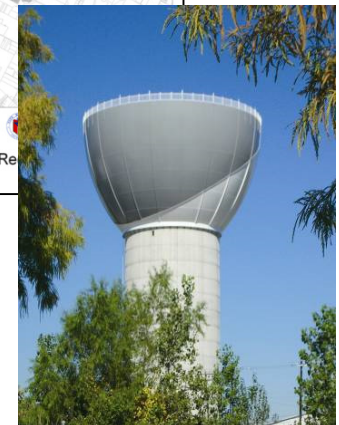
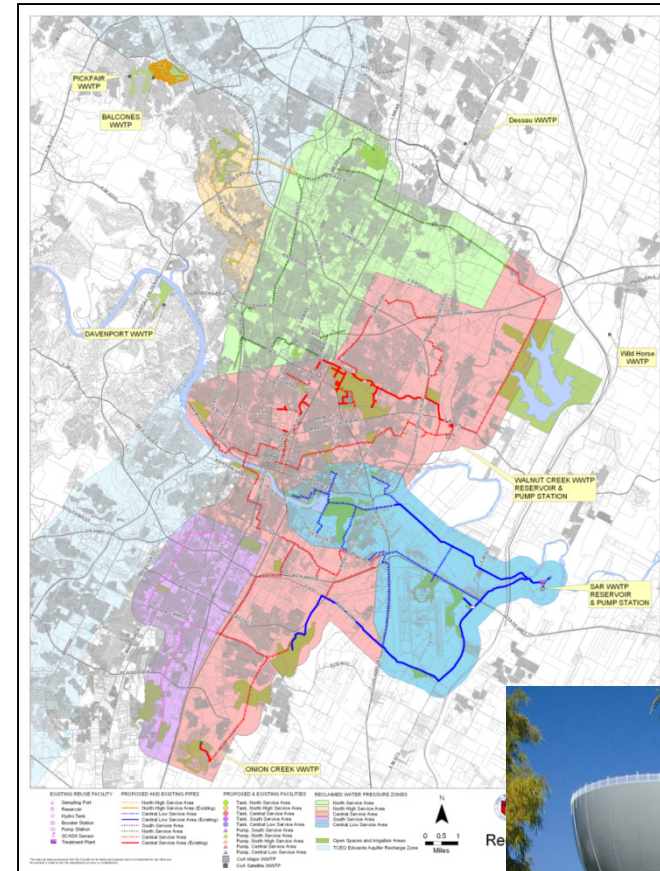
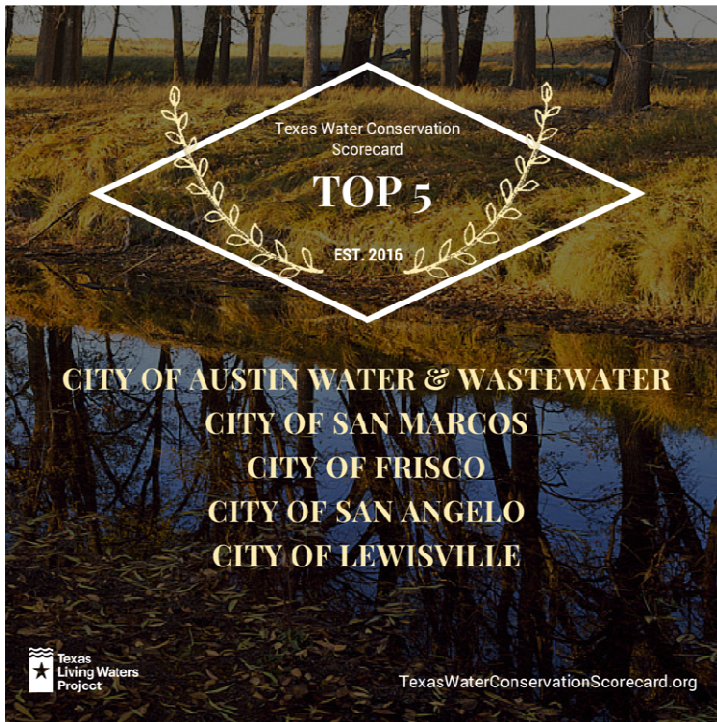
January 31, 1942 through February 17, 2016



Cumulative Inflow to Lakes Buchanan and Travis



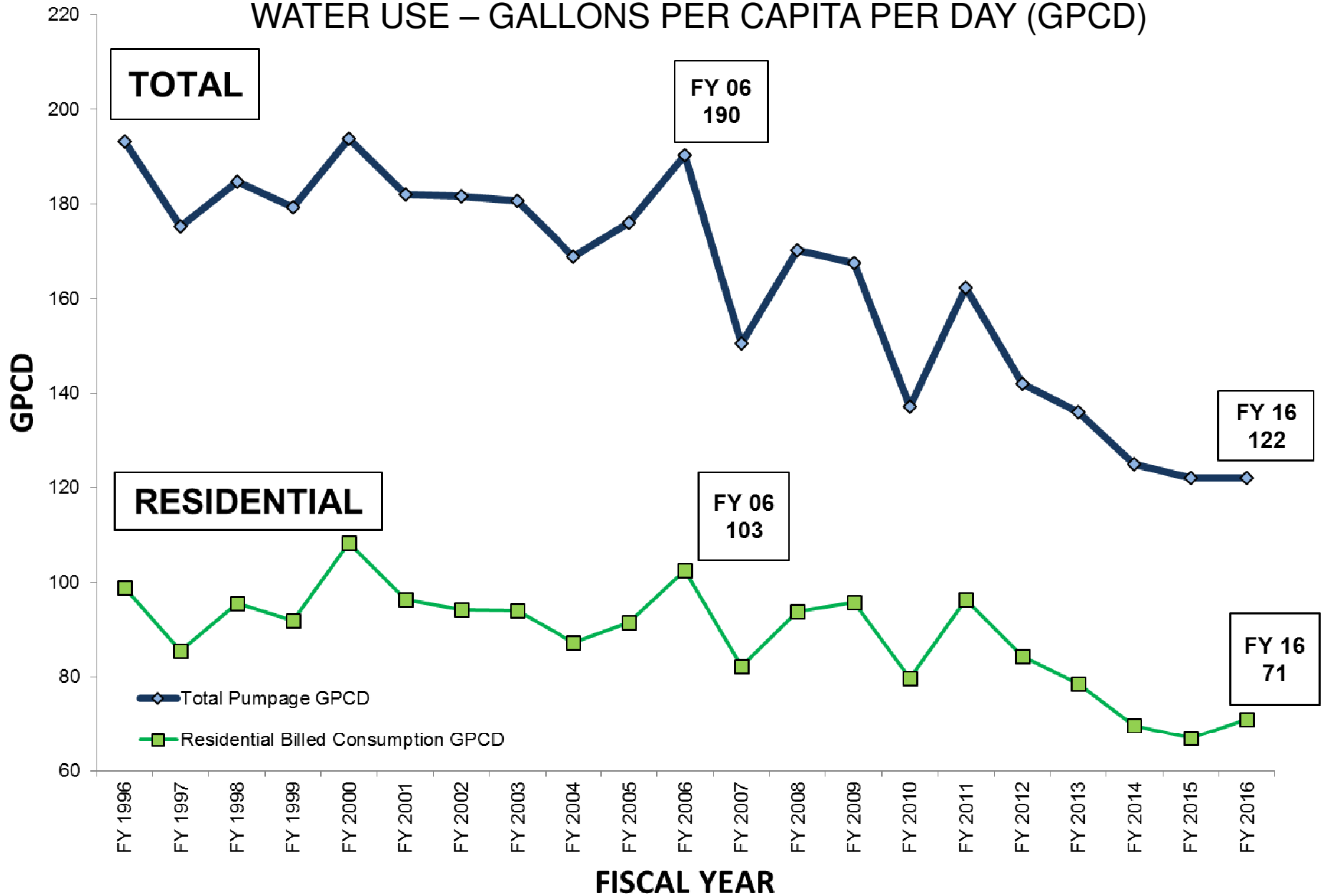
Austin is Texas' Top Water Conservation Scoring Utility

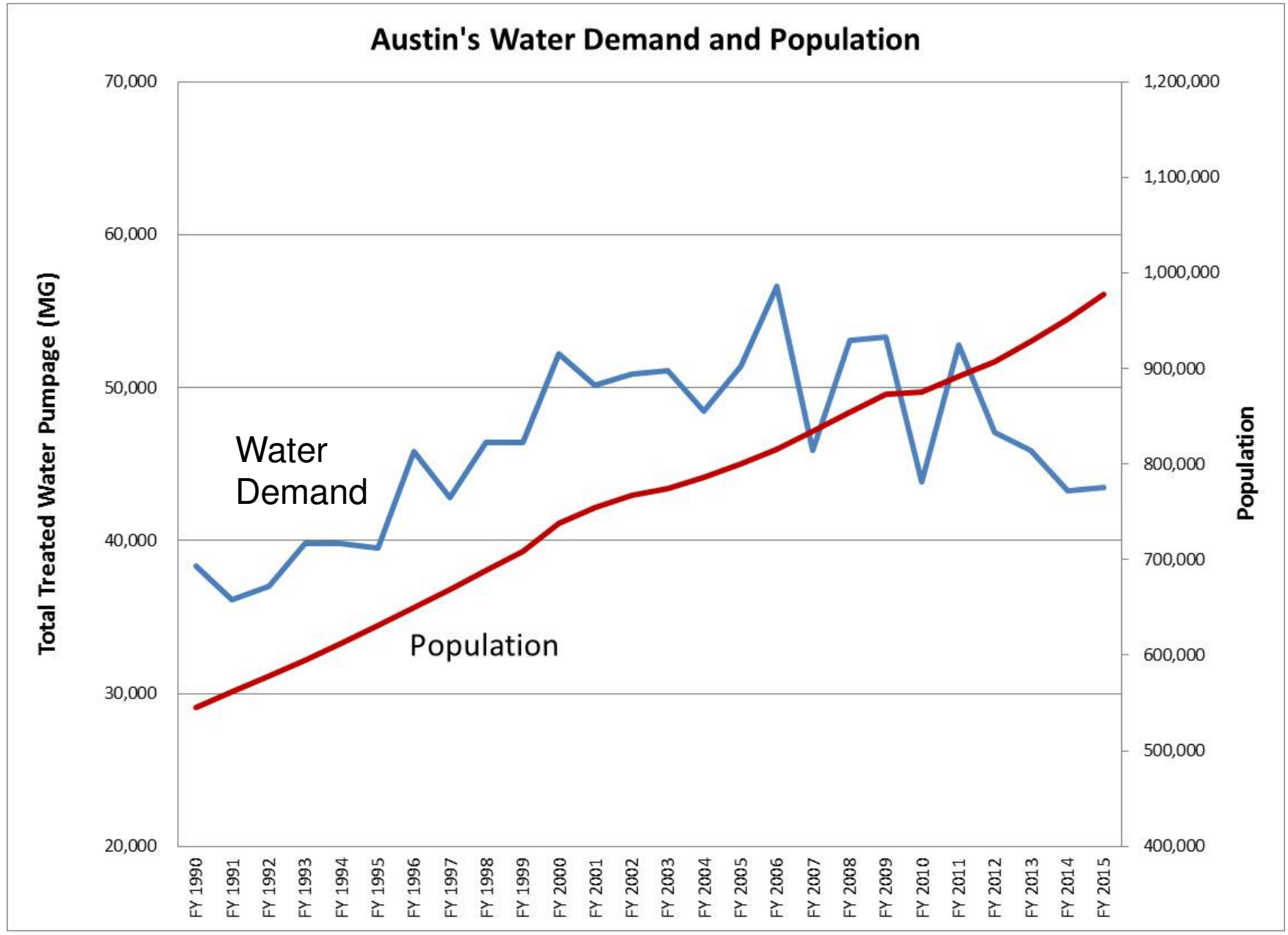


Texas Living Waters Project:
 Partnership of the Sierra Club Lone Star Chapter, National Wildlife Federation, and Galveston Bay Foundation

Reclaimed Water Master Plan

WATER USE – GALLONS PER CAPITA PER DAY (GPCD)





Updates on Drought Response

- On-going water conservation programs
 - Outdoor watering schedules updated in May 2016
 - Permanent automatic irrigation systems limited to one-day per week schedule
 - Hose-end watering limited to two-days per week schedule
- Reclaimed water program continues to expand infrastructure system and customer base
- Drought Contingency Plans
 - Staged drought restrictions include combined storage triggers
 - Updated to reflect new conservation stage watering schedules
 - Stage 3 triggered at combined storage < 600k AF

Updates on Drought Response

- New LCRA Water Management Plan (WMP) approved by TCEQ in November 2015
 - Governs LCRA's operation of the Lakes Travis and Buchanan
 - Updated plan better protects the water supply for firm customers, like Austin, and allows LCRA to more quickly adapt its operations as drought conditions change
- 2014 Task Force Strategy Implementation
 - Short-term demand and supply side management strategies
 - Proposed code and rules changes
 - Feasibility and engineering analyses
 - Integrated Water Resource Plan (IWRP)

Water Forward

Integrated Water Resource Plan (IWRP)

- Austin Water is leading the development of a 100 year water plan that reflects our community's values
- Goal: Ensure a diversified, sustainable, and resilient water future, with strong emphasis on water conservation
- Planning for Uncertainty and Change
 - Incorporates planning for drought and climate change

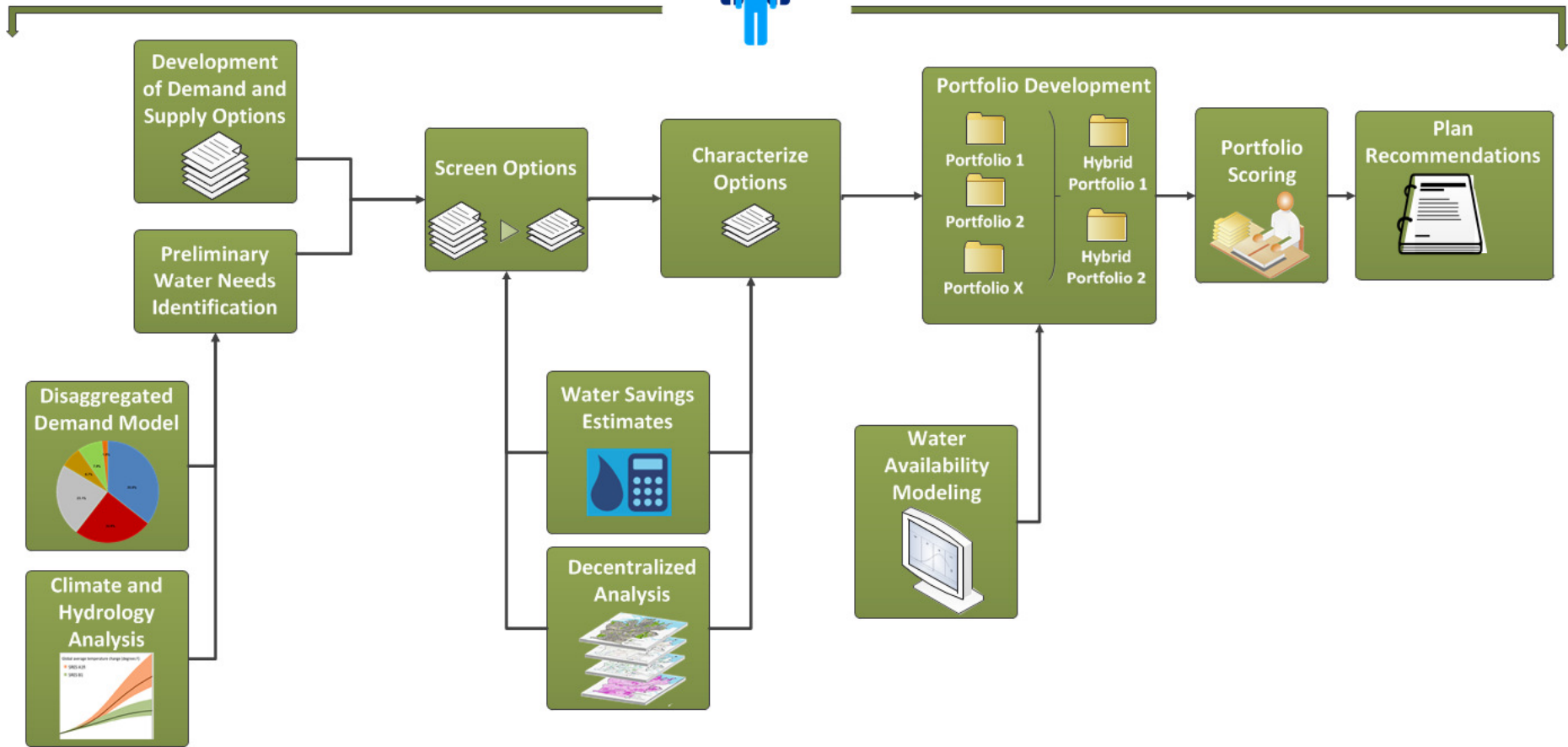
Water Forward

Integrated Water Resource Plan (IWRP)

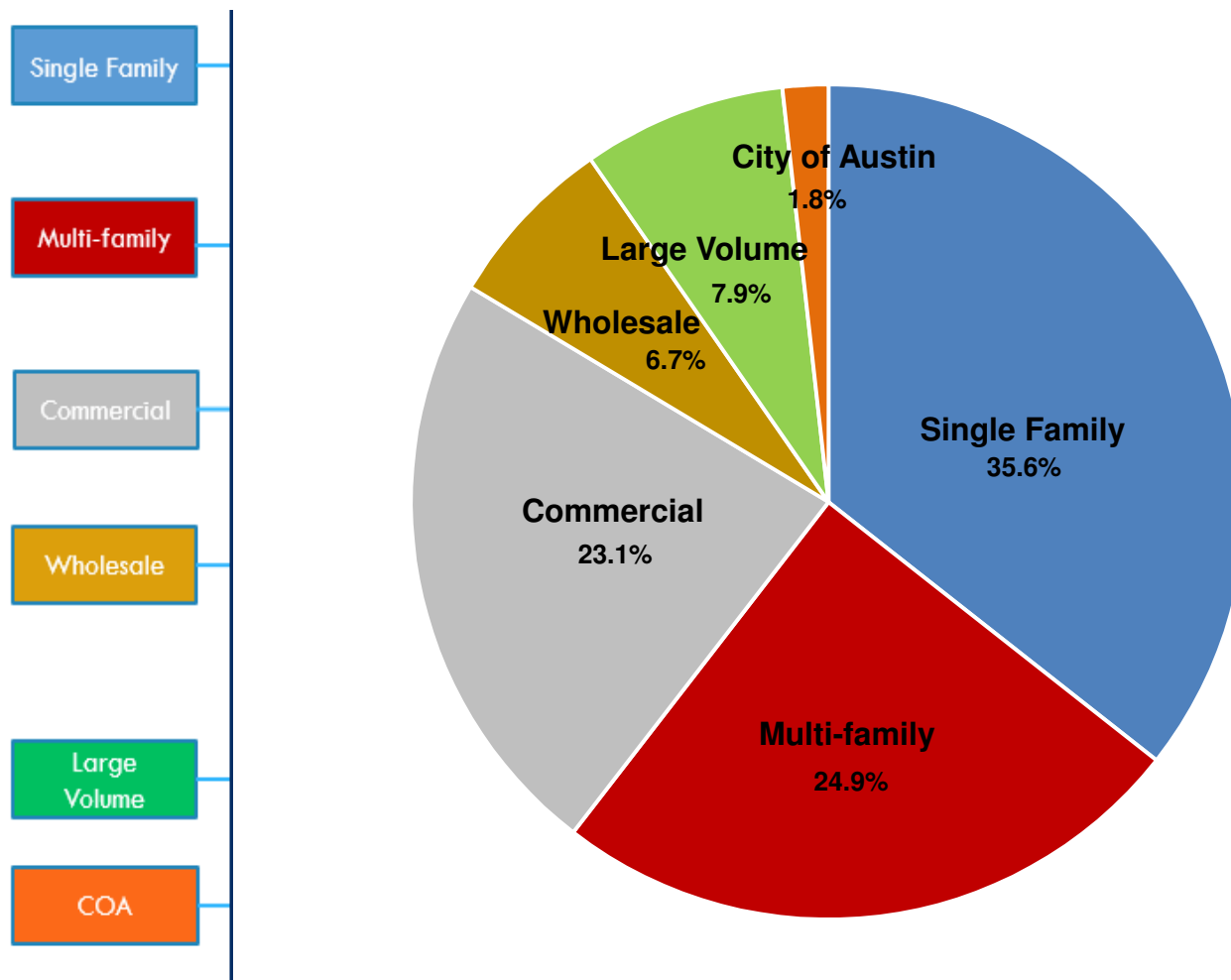
- Austin City Council-appointed Task Force meets monthly
- Interdepartmental coordination and coordination with the community to make sure plan is implementable
- Plan projected to be completed in 2018 with planned updates on a five year cycle

Plan Development Process

Public and Stakeholder Input

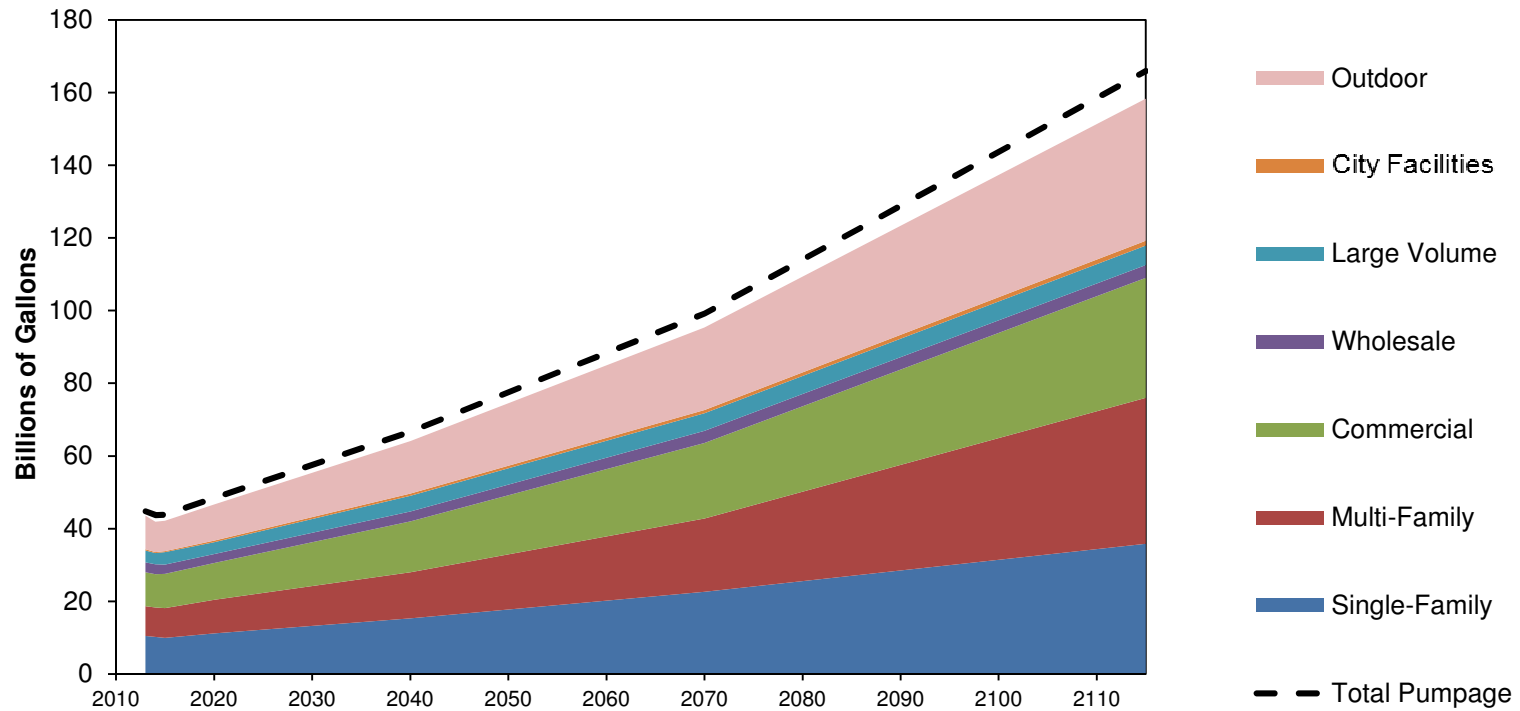


Breakdown of Consumption by Sector

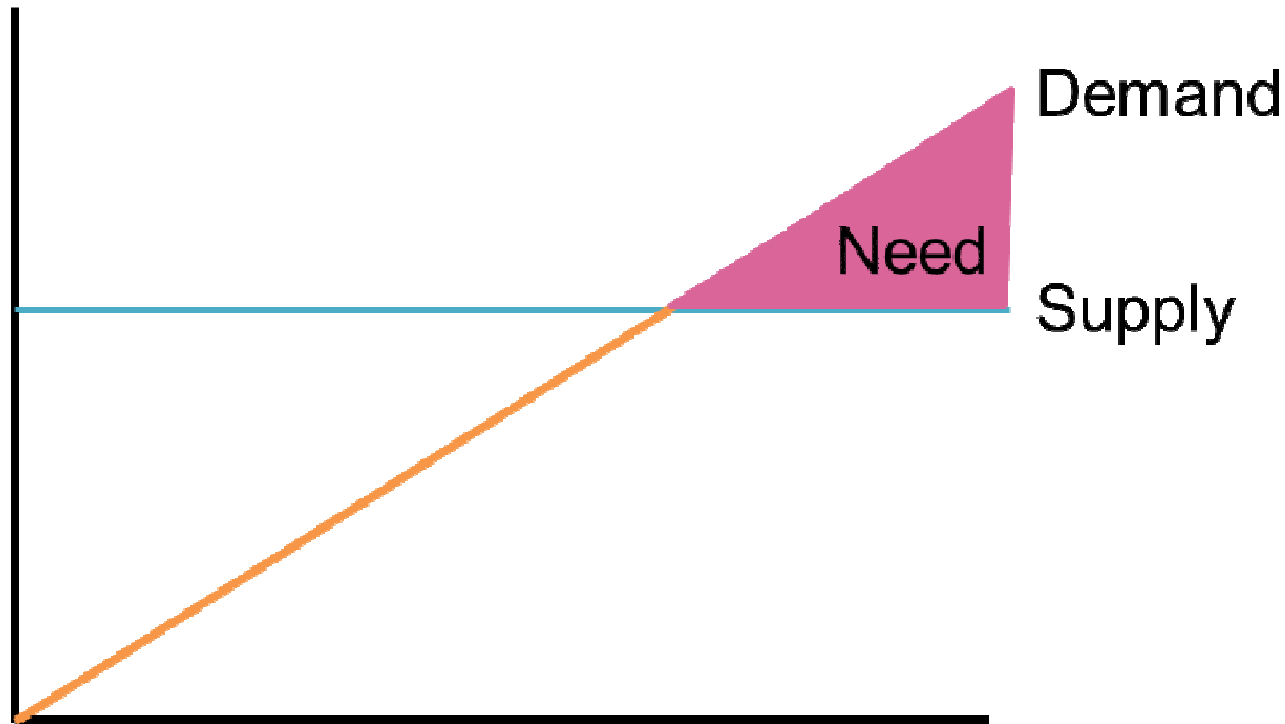


Baseline Demand Projections - Consumption

City-Wide Consumption Projections



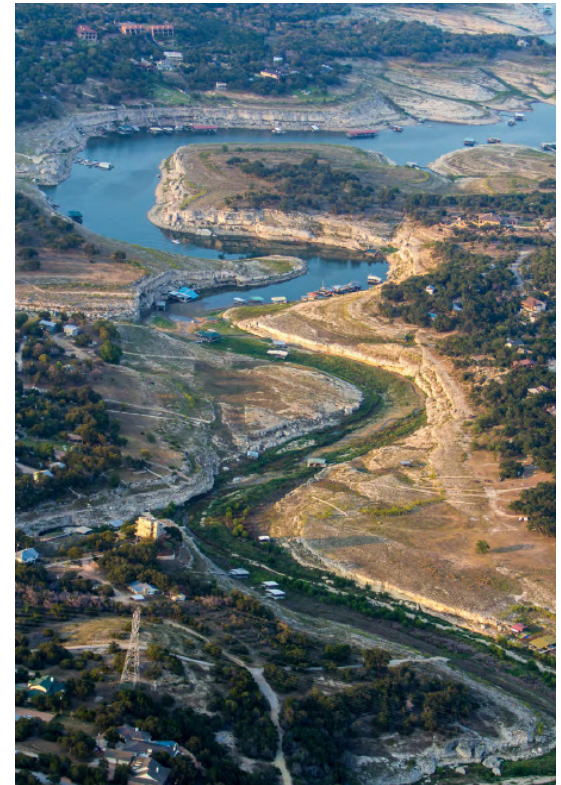
Traditional Water Planning



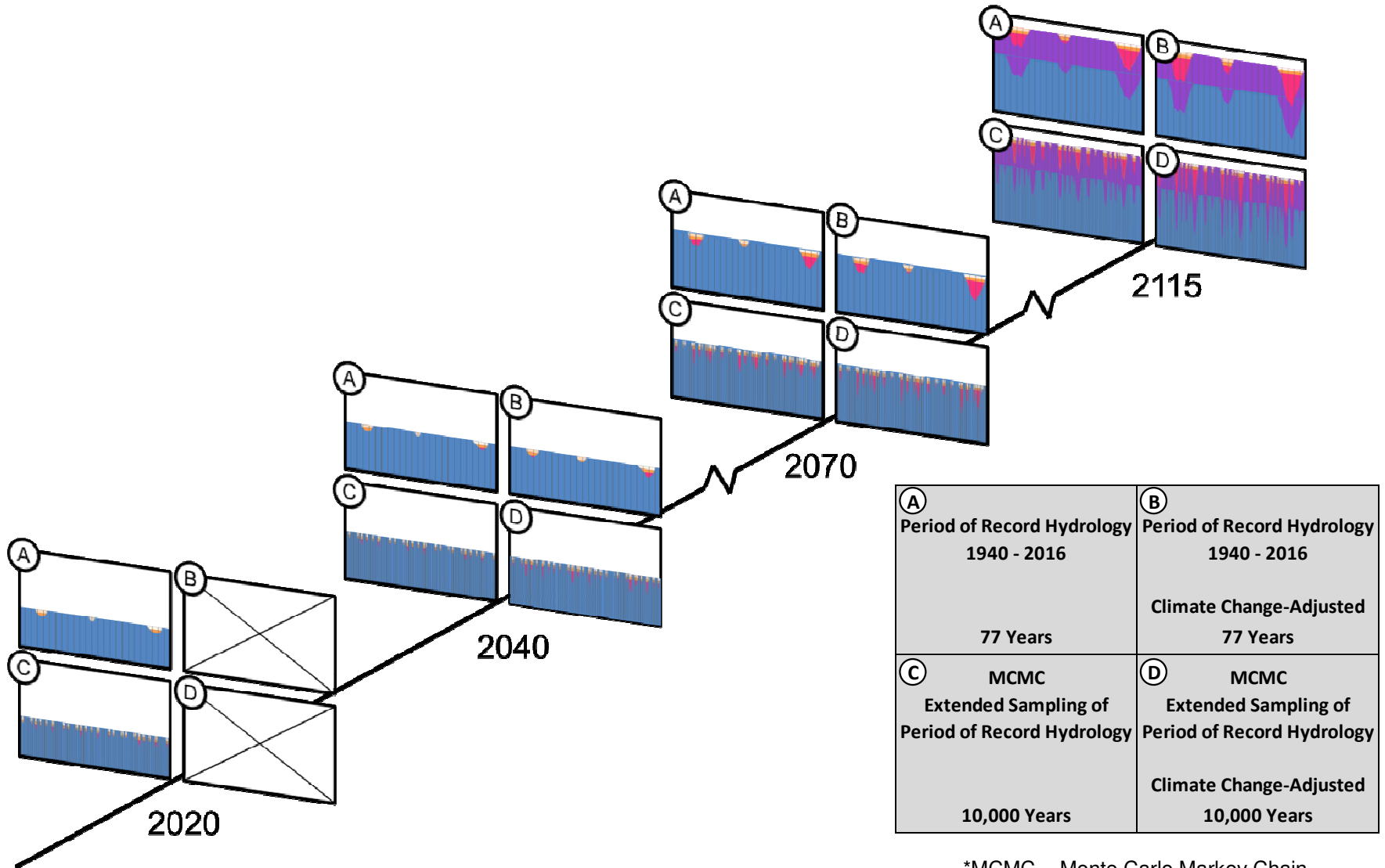
- Unlike traditional water planning, the IWRP is a dynamic process
- Not just planning for one number, but for a range of possible future conditions

Planning for Droughts Worse than the Recent Drought

- In the past, the worst drought in the region occurred during the 1950s
- The most recent drought from 2007-2016 eclipsed the 1950s drought
 - Inflows in the worst year in the recent drought were 2.5 times lower than in the worst year of the 1950s drought
- Our modeling shows that droughts worse than the 2007-2016 drought are possible



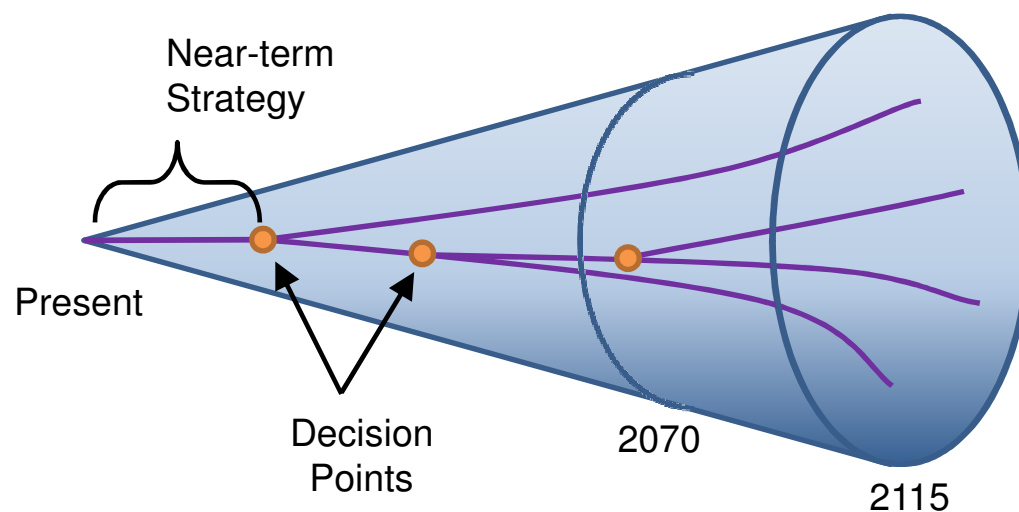
Water Forward Planning For Change and Uncertainties



*MCMC = Monte Carlo Markov Chain

Some Key Points About Austin's Integrated Water Resource Plan

- We're implementing an adaptive management approach
- This process is about incremental changes we can make to get closer to our desired future
- The plan is anticipated to be updated on a five year cycle to allow new data to inform planning assumptions
- Future updates to the plan will allow us to build on the work we do today and learn from our actions



Looking Ahead

- Austin's Water Forward process is continuing
 - Draft plan recommendations projected to be developed by mid-2018
- Austin continuing to participate in development of the next Region K plan update
 - Current planning cycle is 5th Planning Cycle
 - Region K plan projected to be developed by end of 2021
- Happy to schedule future updates, as desired

