

Water 2120: Updated Conservation Plan



Water 2120 Policy D Continued progress in conservation to achieve a gallons per capita per day (GPCD) water usage of 110 will further extend our water supplies even in the face of climate change. The Authority shall utilize the conservation program to reduce GPCD to 110 by 2037.

Katherine Yuhas, Water Resources Division Manager
Carlos Bustos, Water Conservation Program Manager



Albuquerque Bernalillo County
Water Utility Authority

Our presentation will cover:

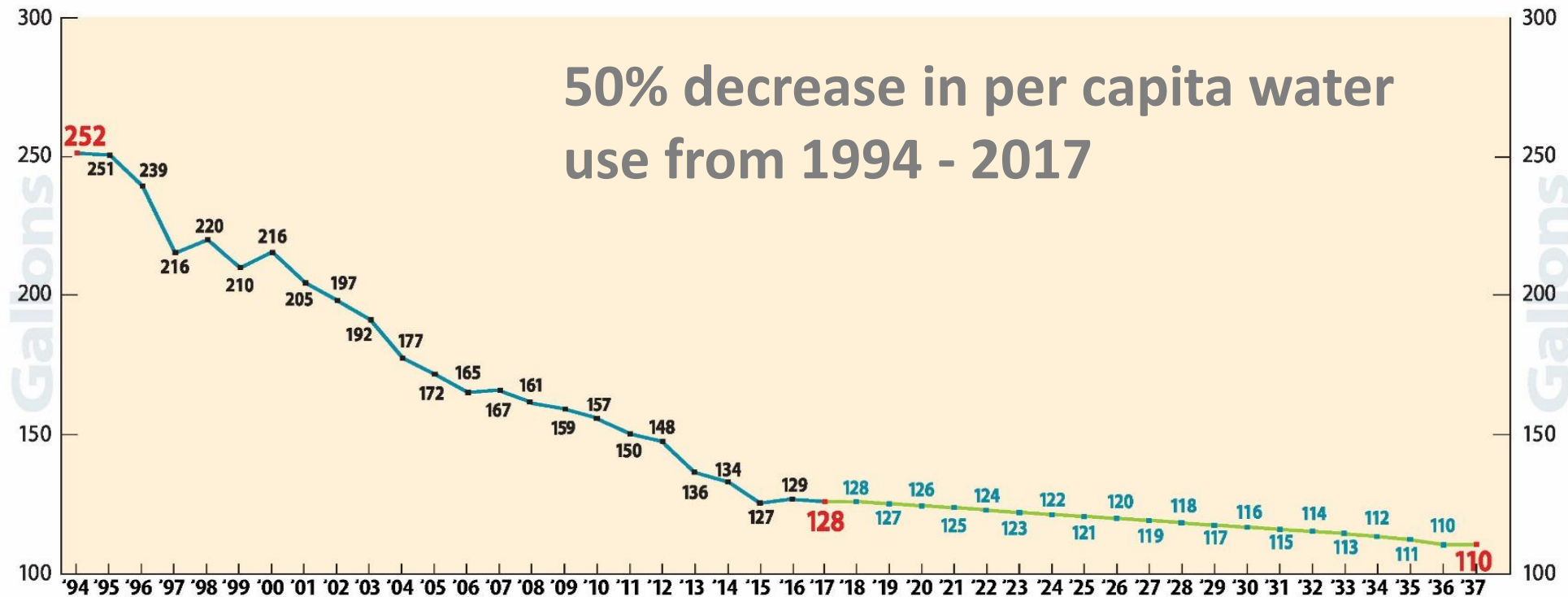
- **2017 Water Usage**
- **NM Drought and Response**
- **Water Conservation Plan Update**
- **Water Waste Ordinance Changes**



Albuquerque Bernalillo County
Water Utility Authority

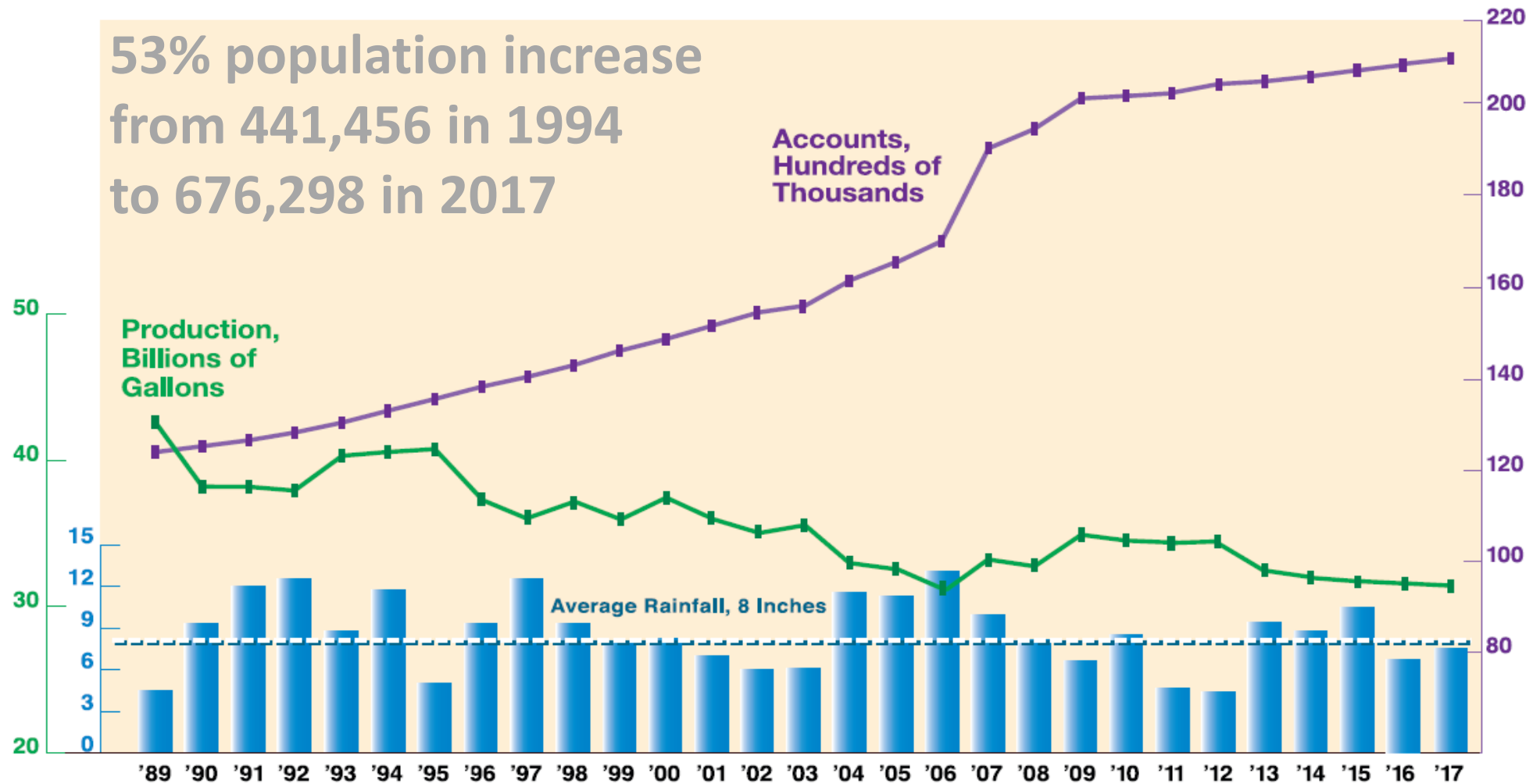
Gallons Per Capita Per Day • 1994 - 2037

(Historical and Projected)



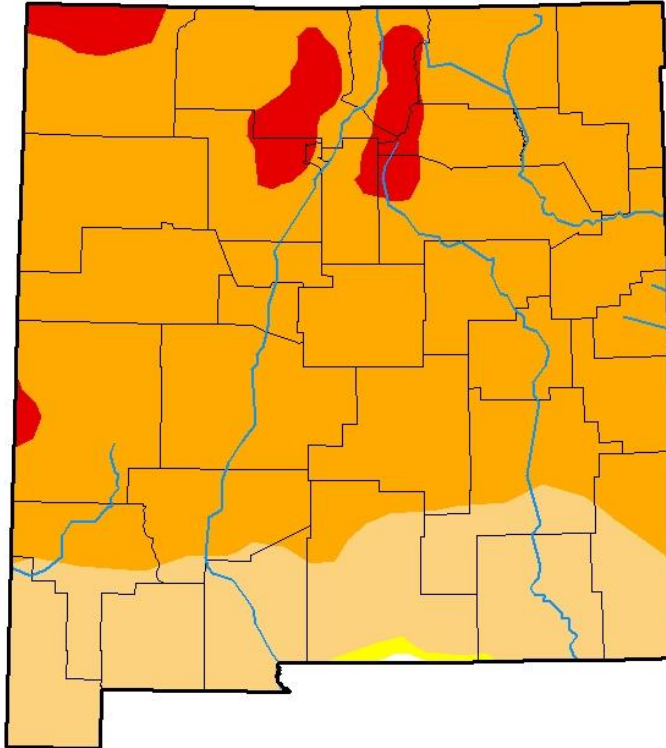
Water Usage 1989-2017

53% population increase
from 441,456 in 1994
to 676,298 in 2017



NM Drought

U.S. Drought Monitor New Mexico



February 20, 2018
(Released Thursday, Feb. 22, 2018)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.08	99.92	99.51	77.99	5.23	0.00
Last Week 02-13-2018	0.00	100.00	99.65	80.09	3.96	0.00
3 Months Ago 11-21-2017	78.85	21.15	4.64	0.00	0.00	0.00
Start of Calendar Year 01-02-2018	7.01	92.99	45.97	4.76	0.00	0.00
Start of Water Year 09-26-2017	85.16	14.84	0.00	0.00	0.00	0.00
One Year Ago 02-21-2017	86.71	13.29	2.49	0.00	0.00	0.00

Intensity:

D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought
D2 Severe Drought	

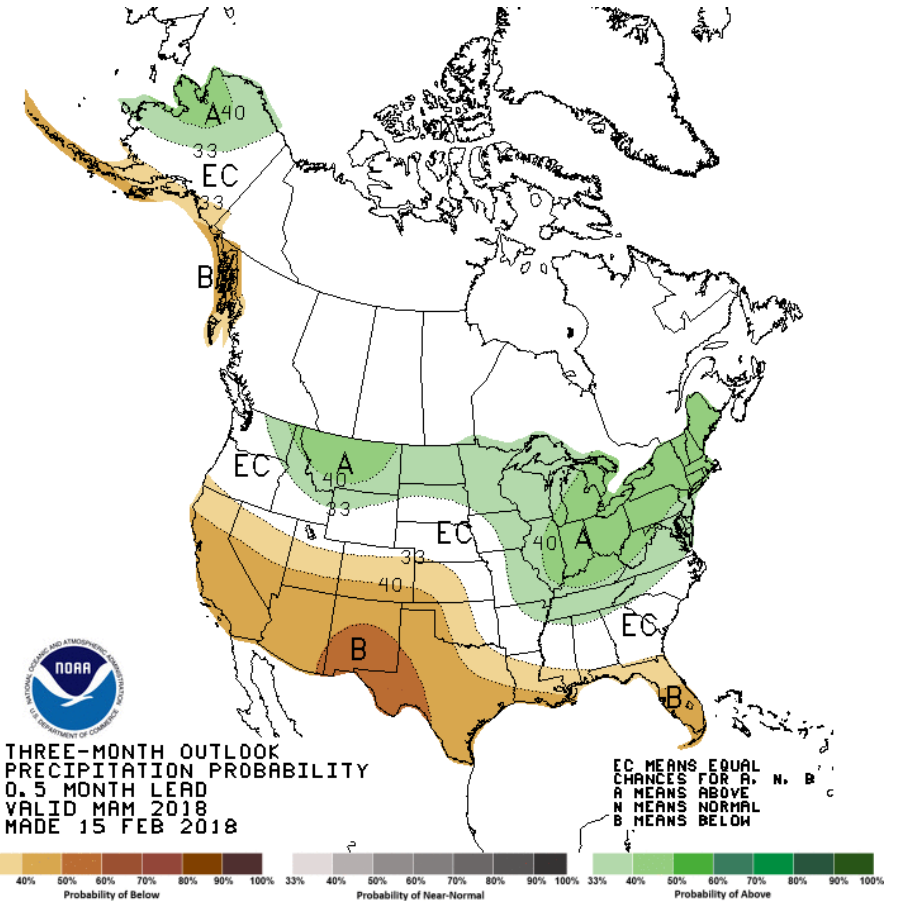
The Drought Monitor focuses on broad-scale conditions.
Local conditions may vary. See accompanying text summary
for forecast statements.

Author:

Deborah Bathke
National Drought Mitigation Center



<http://droughtmonitor.unl.edu/>

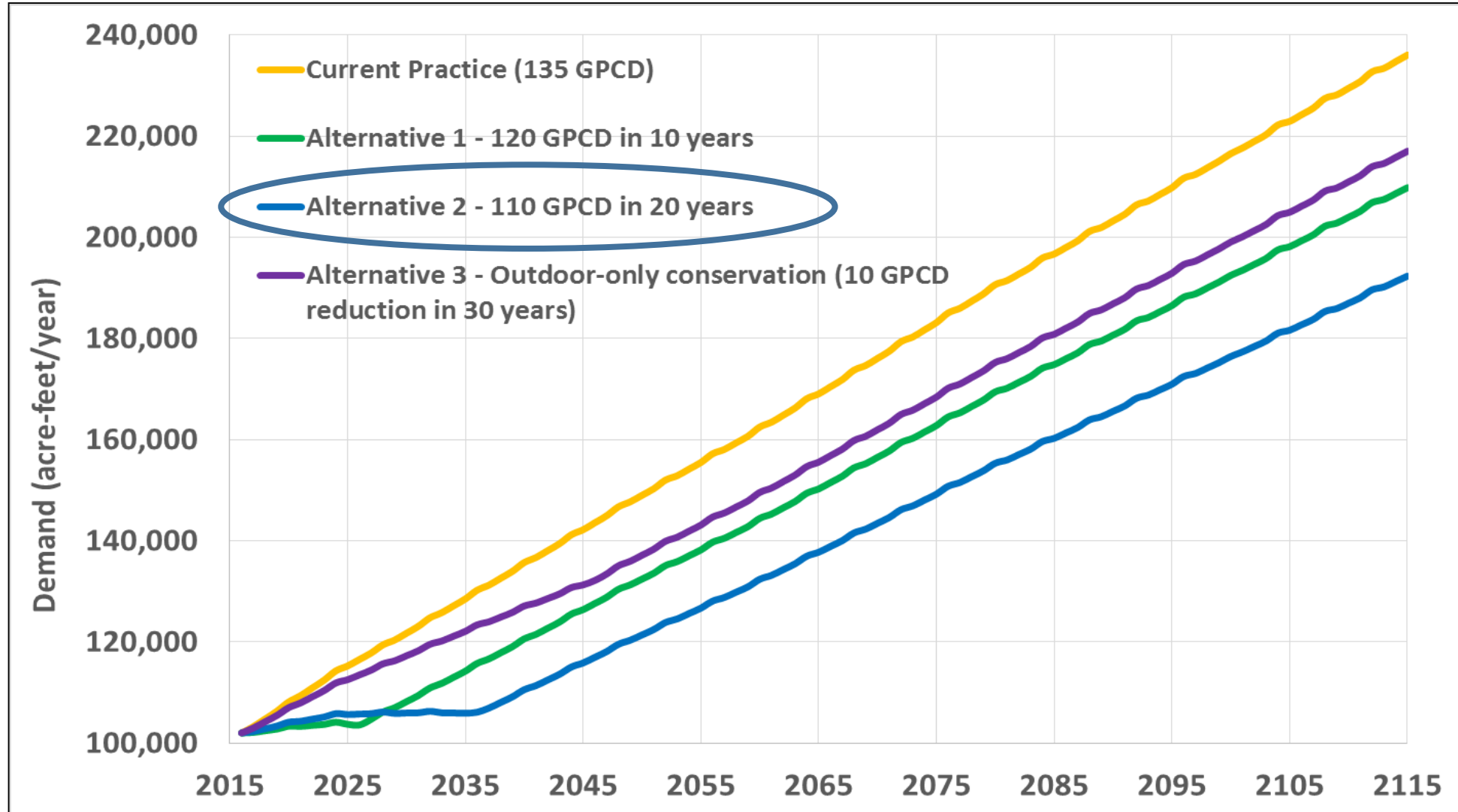


Albuquerque Bernalillo County
Water Utility Authority

Drought Declaration and Drought Stage Criteria

Groundwater Pumping /GPCD	Less than 120% of the GW pumping goal	Between 120% and 130% of GW pumping goal	Between 130% and 140% of GW pumping goal	More than 140% of the GW pumping goal
< 2 GPCD over the goal	None	None	None	Stage 1
2-4 GPCD over the goal	None	Stage 1	Stage 1	Stage 2
4-6 GPCD over the goal	None	Stage 1	Stage 2	Stage 3
> 6 GPCD over the goal	Stage 1	Stage 2	Stage 3	Stage 3

Water Conservation Goals Considered in Water 2120



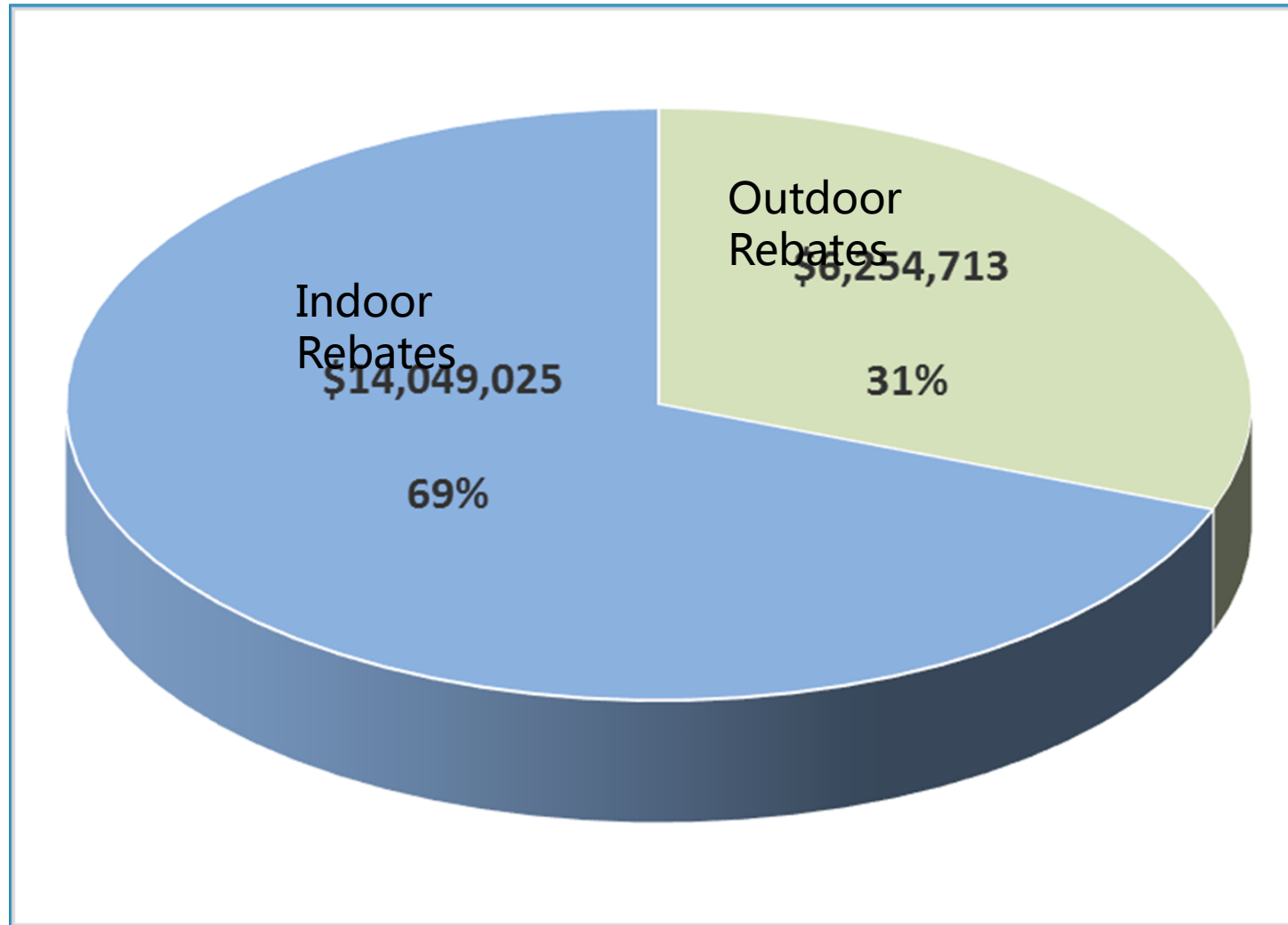
Albuquerque Bernalillo County
Water Utility Authority

Current Water Authority Conservation Strategies and Incentives:

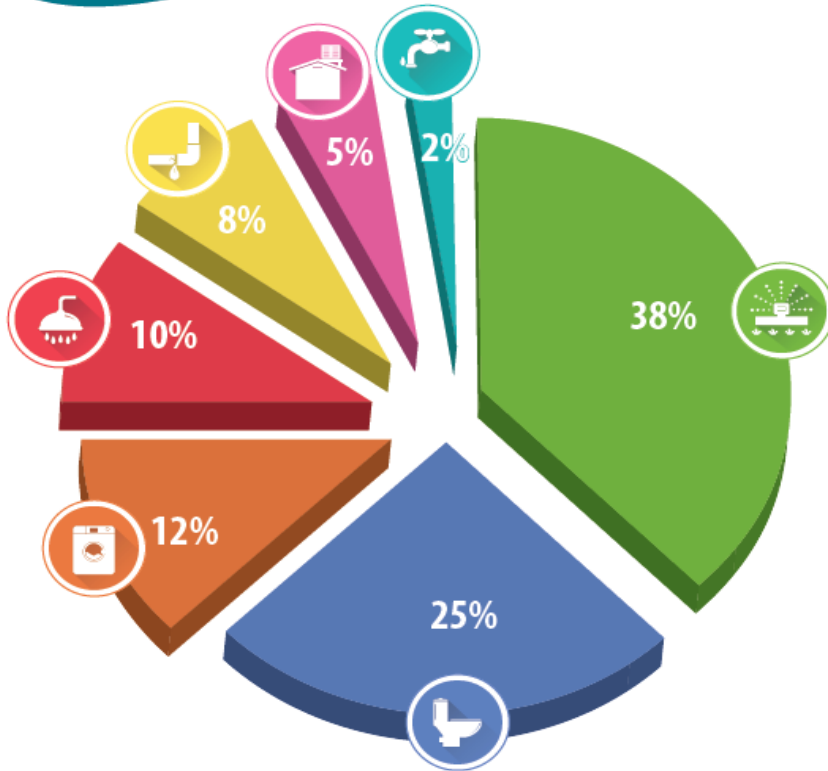
- Public education efforts (including TV, radio, billboards, bill inserts, social media)
- Student education (including field trips, in-class experiments and puppet shows)
- Indoor and outdoor rebates
- Water audits
- Water waste enforcement
- Water rates that incentivize conservation
- Water Smart Workshops
- Water Loss Reduction Program
- Water budgets and irrigation surcharges for irrigation-only meters
- Non-potable water for irrigation



Rebate Expenditures by Type, 1996-2016



How We Use Our Water



Outdoor



Toilet



Clothes Washer



Shower



Leaks



Swamp Cooler



Faucet

Non-Consumptive Use (indoor) and Consumptive Use (outdoor)



Albuquerque Bernalillo County
Water Utility Authority

Water Authority staff
evaluated conservation
programs to see what
changes needed to be made
to reach our goals and we
identified our biggest
opportunities in the area of
**OUTDOOR
IRRIGATION
EFFICIENCY**



Public Outreach Process

Summer 2016 – selection of 110 GPCD water conservation goal during Water 2120 public meetings

- Customer Conversations (4 meetings)
- Neighborhood coalitions (4 meetings)
- Town hall meeting

June 1 2017 – TCAC presentation on Water Conservation Program Evaluation and Warning System Results

January 10 2018 – Presentation to Technical Customer Advisory Committee on WC Plan Update, Water Waste Ordinance Update and Drought Management Strategy Incorporation into the WC Plan

February 2018 – 4 Customer Outreach Meetings throughout the service area

February and March 2018 Board Meetings: Present Water Conservation Plan Update, Changes to the Water Waste Ordinance and Incorporation of the Drought Management Strategy into the Water Conservation Plan for Approval

After Board approval in March:

- 6-month media campaign on rebate program changes
- Neighborhood Coalitions Presentations
- Supply Store visits, events and information kiosks
- WaterSmart Lunch & Learn
- Landscapers and Property Managers Open House

Water Conservation Program: Rebates and Education at Completion of 5-Year Plan

Residential

- Irrigation and pre-xeriscape conversion **consultations**
- Irrigation efficiency **consultations**
- WaterSmart **Workshops**
- **Washing Machine** rebate for IWF of 3.0 or less - \$100 once every 5 years (to be evaluated 2020)
- **Xeriscape** rebate (\$1-\$1.50/sq. ft.) plus compost, organic mulch and rental of sod removal equip. (25% rebate up to \$100, up to \$50 for equip. rental)
- **Smart-controller** rebate - 25% up to \$100
- Rain, soil moisture, wind and flow **sensors** rebate - 25% rebate up to \$100 per controller
- Efficient **nozzles** rebate - \$2 per head
- **Treebate** – 25% up to \$100
- **Rainwater harvesting cisterns** - \$25 - \$150 rebate depending on size
- **Gardens to Go**

Public Agencies, Commercial, Multifamily and Industrial

- The **water efficient incentive program** for water conservation initiatives such as installing water-efficient devices and technologies – rebate \$10 per unit of water saved annually
- Irrigation efficiency **consultations**
- WaterSmart **Academy** & WaterSmart **Lunch & Learn**
- **Xeriscape** rebate (\$1.50-\$2/sq. ft.), plus compost, organic mulch & rental of sod removal equip (25% rebate up to \$500, up to \$50 for equip. rental)
- **Smart-controller** rebate – 25% rebate up to \$500 per controller
- Rain, soil moisture, wind and flow **sensors** rebate - 25% rebate up to \$500 per controller
- Efficient **nozzles** rebate - \$2 per head
- **Treebate** – 25% up to \$500
- **Rainwater harvesting cisterns** - \$25 - \$150 rebate depending on size

- **Soil moisture enhancers** – 25% rebate up to \$500 per year



Abuquerque Bernalillo County
Water Utility Authority

Changes to Water Waste Ordinance

1. All customer classes with equal actions:

- Warning for first report
- Certified notice of violation with opportunity for Irrigation Efficiency Consultation
- Fee assessed if audit not scheduled/problem not fixed

2. Modify fee schedule by meter size:

a) Meter size of 1.5 inches or less

- First observed violation - \$20
- Second observed violation - \$50
- Third observed violation - \$100

b) Meter size larger than 1.5 inch and up to 4 inches

- First observed violation - \$100
- Second observed violation - \$250
- Third observed violation - \$500

c) Meter size larger than 4 inches and up to 8 inches

- First observed violation - \$250
- Second observed violation - \$500
- Third observed violation - \$1,000



The amended Water Waste Reduction Ordinance will provide the following benefits:

- Emphasize less enforcement and more education
- Create opportunities for more positive interaction with the public
- Increase participation in Efficient Irrigation Visits for education
- Lessen staff tracking efforts
- Increase staff response effectiveness

