
Meeting Date: March 21, 2018

Staff Contact: Carlos A. Bustos, Water Conservation Program Manager

TITLE: Approving the Update to the Water Conservation Plan

ACTION: Recommend Approval

BACKGROUND:

This update to the Water Conservation Plan was developed to align the plan with the goals of the new Water Resources Management Strategy adopted in September 2016, "Water 2120: Securing Our Water Future." A key element of WATER 2120 is the new water conservation goal of 110 gallons per capita per day (GPCD) by 2037. This update to the Water Conservation Plan addresses "Policy D of WATER 2120: Update and Maintain the Water Conservation Strategy – Implementation of the Water Conservation Plan. Continued progress in conservation to achieve water usage of 110 gallons per capita per day (GPCD) will further extend water supplies even in the face of climate fluctuations. The Water Authority shall utilize the conservation program to reduce GPCD to 110 by 2037."

To achieve this new conservation goal, the Water Authority proposes to emphasize outdoor (consumptive use) savings over indoor (non-consumptive use) savings. As climate fluctuations occur, the demand for outdoor water use will likely increase and because outdoor water use is consumptive, the opportunity for reuse or return flow credit does not exist.

SUMMARY:

Customer input from the previous Water Conservation Plan update in 2013 as well as from the WATER 2120 public process was considered during the development of this update. Additionally, the plan was presented at two Technical Customer Advisory Committee meetings and four public meetings. The Water Authority Water Conservation staff also met with industry, property managers and public agency personnel to gather input on new initiatives.

In order to fund an expansion of outdoor rebates, some indoor rebates will need to be curtailed. An evaluation of participation and the need for indoor rebates was conducted to determine which rebates could be phased out. Additionally, the evaluation of all

rebates is subject to R-06-12, which requires no rebate program shall be approved where the cost-benefit is projected to be more than \$20.00 per unit (748 gallons) of water saved.

Achievement of this modest increase in conservation efforts will reduce water demand at the end of the planning period of Water 2120 by 50,000 acre-feet.

Proposed Changes to the Water Conservation Program Include:

Washing machine rebate (change)

To incentivize purchase of the most water efficient washing machines available, the Water Authority will limit rebates to machines with an International Water Factor (IWF) of 3.0 or less. The washing machine rebates will remain at \$100, available every five years or when the property is sold.

WaterSmart Workshops (change)

Gardening workshops will continue, emphasizing a broad range of topics to provide customers with the most up-to-date information on growing food and irrigating landscapes efficiently. Rebates will no longer be offered for these classes.

Toilet, urinals, showerheads, hot water recirculation systems, swamp cooler thermostats (phase out)

Phase out rebates that focus on indoor savings to allow more funding for outdoor efficiency rebates.

Garden website and newsletter (new)

The website and monthly newsletter will cover topics on efficient horticultural practices, landscape maintenance, irrigation principles and seasonal tips.

Professional landscape dripline (new)

Customers with inefficient tree irrigation systems will be able to take advantage of this rebate via the Treebate program.

Efficient irrigation and pre-xeriscape conversion consultations (new)

Educational home visit to assist customers with topics related to irrigation efficiency and turf-to- xeriscape conversions.

Pressure regulation valves, backflow prevention valves, and pressure vacuum break (phase out)

Phase out of these rebates for low participation and these items are now generally standard with irrigation system installation.

Flow sensors (new)

Irrigation flow sensors measures irrigation water flow and can work with an irrigation controller to stop or adjust a zone of the irrigation system and alert the customer of a broken pipe or other system leaks. A 25% rebate per controller (up to \$100 for residential customers and up to \$500 for commercial customers).

Bulk Organic Mulch (new)

This rebate will promote increased moisture content, soil buildup, and healthy root establishment in landscapes. The mulch incentive will be available for Xeriscape Rebate and Treebate participants. A 25% rebate up to \$100 for residential customers and up to \$500 for commercial customers.

Water Efficient Incentive Program (new)

This will promote water conservation initiatives such as installing water efficient devices and technologies that result in at least 100,000 gallons saved annually. Approved projects will be evaluated for an incentive of up to a \$10 per unit of water saved annually. Commercial customers could qualify for up to 50% of the cost of the project totaling up to \$50,000 per year. Savings will be calculated after the first year of installation and if savings meet threshold requirements, a one-time credit will be adjusted to the customer account.

Multi-setting sprinkler timer (change)

Rebates only for “Smart Irrigation” controllers. Rebate will be limited to 25% per controller, up to \$100 for residential customers and up to \$500 for commercial customers, per account.

“Gardens to Go” rebate (new)

Rebate to raise interest in xeric gardening for newly constructed homes or customers looking to redesign their landscapes. Customers will be able to choose from a variety of easy, professionally planned, xeric garden kits and apply for a rebate.

In-ground soil moisture sensors and wind sensing technology rebate (new)

In-ground soil moisture sensors measure soil moisture content in the active root zone. Wind sensing technology interrupts irrigation cycles in the presence of significant wind. A 25% rebate per controller up to \$100 for residential customers and up to \$500 for commercial customers.

Soil Moisture Enhancers (new)

A soil moisture enhancer rebate will benefit water efficiency in parks, golf courses and other big landscape areas. Soil moisture enhancers used by landscape managers include but are not limited to organic soil, humus, vermiculite, polymers, naturally derived soil

surfactants, humectants and hygroscopic compounds. A 25% rebate per site up to \$500 for commercial customers.

Low Income Pilot Program (new)

Develop a pilot program to assist low-income customers in becoming more water efficient. Possible services include low-flow fixtures, efficient irrigation systems, water reduction visits and leak repair.

FISCAL IMPACT:

None. All program changes will be covered within the current Water Conservation Program budget.

BILL NO. R-18-8

1 WHEREAS, the former Drought Management Plan has been updated to be
2 consistent with Water2120 and renamed "Plan for Customer Demand Reduction During
3 Drought"; and

4 WHEREAS, the update to the plan includes input provided by industrial,
5 commercial and institutional customers, and

6 WHEREAS, four public meetings were held February 6, 8, 13 and 15 of 2018 to
7 present the updates to the public; and

8 WHEREAS, the Technical Customer Advisory Committee met on January 10,
9 2018 and unanimously approve the update to the Water Conservation Plan; therefore

10 BE IT RESOLVED BY THE WATER AUTHORITY:

11 Section 1. Replacement of Previous Water Conservation Plans and Policies. This
12 update to the water conservation plan replaces and supersedes all previous plans,
13 policies, procedures and strategies.

14 Section 2. GPCD Goal of 110 by 2037. The Water Authority's new water
15 conservation goal shall be 110 GPCD by 2037. Progress toward this goal shall be
16 measured annually and presented to the Board.

17 Section 3. All changes to rebate programs will be made in accordance with R-
18 06-12, "Enhancing the Water Conservation Program and Establishing a Process for
19 Evaluating and Amending the Program. Customers will be notified six months in advance
20 of the phase out of any rebate program.

21 Section 4. All approval of new rebates and changes to the rebates will be
22 recommended by the Water Conservation Program Manager or the Water Resource
23 Division Manager.

24 Section 5. No new rebate program shall pay for more than half the cost of the
25 product, no rebate shall pay more than \$20 per anticipated unit (748 gallons) of water
26 saved.

27 Section 6. Prior to the elimination or reduction of any rebate program, the Water
28 Authority shall make the public aware of the change for at least six months prior to the
29 change.

30 Section 7. The former "Drought Management Plan" shall be renamed "Plan for
31 Customer Demand Reduction During Drought" and incorporated into the Water
32 Conservation Plan.

1 Section 8. Customers are given ninety (90) days to submit a rebate request from
2 purchase date. Exceptions may be approved when the customer has met all the program
3 requirements, the customer makes a reasonable request, if funding in budget is available
4 and if the request is made within the same fiscal year of product purchase. Rebate
5 exceptions are approved by the Water Conservation Manager or Designee if they meet
6 all exception requirements.

7 Section 9. Implementation of new programs shall begin April 1, 2018. Any
8 reduction or elimination of rebates will be advertised as described in Section 6.

9 A. Washing machine rebate - to incentivize purchase of the most water efficient
10 washing machines available, the Water Authority will limit rebates to machines
11 with an International Water Factor (IWF) of 3.0 or less. The washing machine
12 rebates will remain at \$100, available every five years or when the property is
13 sold.

14 B. WaterSmart Workshops - gardening workshops will continue, emphasizing a
15 broad range of topics to provide customers with the most up-to-date information
16 on growing food and irrigating landscapes efficiently. Rebates will no longer
17 be offered for these classes.

18 C. Toilet, urinals, showerheads, hot water recirculation systems, swamp cooler
19 thermostats - phase out rebates that focus on indoor savings to allow more
20 funding for outdoor efficiency rebates.

21 D. New garden website and newsletter - the website and monthly newsletter will
22 cover topics on efficient horticultural practices, landscape maintenance,
23 irrigation principles and seasonal tips.

24 E. Professional landscape dripline - customers with inefficient tree irrigation
25 systems will be able to take advantage of this rebate via the Treebate program.

26 F. Efficient irrigation and pre-xeriscape conversion consultations – free
27 educational visits to assist customers with topics related to irrigation efficiency
28 and turf-to- xeriscape conversions.

29 G. Pressure regulation valves, backflow prevention valves, and pressure vacuum
30 break - phase out of these rebates for low participation and because these
31 items are now generally standard with irrigation system installation.

32 H. Flow sensors - irrigation flow sensors measure irrigation water flow and can
33 work with an irrigation controller to stop or adjust a zone of the irrigation system

1 and alert the customer of a broken pipe or other system leaks. A 25% rebate
2 per controller will be offered (up to \$100 for residential customers and up to
3 \$500 for commercial customers).

4 I. Bulk Organic Mulch - this rebate will promote increased moisture content, soil
5 buildup, and healthy root establishment in landscapes. The mulch incentive will
6 be available for Xeriscape Rebate and Treebate participants. A 25% rebate up
7 to \$100 for residential customers and up to \$500 for commercial customers.

8 J. Water Efficient Incentive Program - this will promote water conservation
9 initiatives such as installing water efficient devices and technologies that result
10 in at least 100,000 gallons saved annually. Approved projects will be evaluated
11 for an incentive of up to a \$10 per unit of water saved annually. Commercial
12 customers could qualify for up to 50% of the cost of the project totaling up to
13 \$50,000 per year. Savings will be calculated after the first year of installation
14 and if savings meet threshold requirements, a one-time credit will be adjusted
15 to the customer account.

16 K. Gardens to Go rebate - rebate to raise interest in xeric gardening for newly
17 constructed homes or customers looking to redesign their landscapes.
18 Customers will be able to choose from a variety of easy, professionally planned,
19 xeric garden kits and apply for a rebate.

20 L. In-ground soil moisture sensors and wind sensing technology rebate - in ground
21 soil moisture sensors measure soil moisture content in the active root zone.
22 Wind sensing technology interrupts irrigation cycles in the presence of
23 significant wind. A 25% rebate will be offered per controller up to \$100 for
24 residential customers and up to \$500 for commercial customers.

25 M. Soil Moisture Enhancers - a soil moisture enhancer rebate will benefit water
26 efficiency in parks, golf courses and other big landscape areas. A 25% rebate
27 will be offered per site up to \$500 for commercial customers.

28 Section 10. Programs for Evaluation. The following new programs require the
29 development of studies that will be undertaken by Water Authority staff.

30 A. Low Income Pilot Program – develop a pilot program to assist low-income
31 customers in becoming more water efficient. Possible services include low-
32 flow fixtures, efficient irrigation systems, water reduction visits and leak repair.

1 B. Multi-setting sprinkler timer - rebates only for “Smart Irrigation” controllers. The
2 Water Authority will be evaluating which Smart Irrigation Controllers work best
3 for our region and type of landscapes by tracking current participation, type of
4 landscape and controller type during the irrigation seasons of 2018 and 2019.
5 Additionally, a pilot program in partnership with Smart Irrigation Controller
6 manufacturers to install units in residential and commercial sites to identify the
7 most effective units will be developed. The pilot study requires an investment
8 of \$20,000 per year to purchase and install controllers. If revised the rebate will
9 be limited to 25% per controller, up to \$100 for residential customers and up to
10 \$500 for commercial customers, per account.



Water Conservation: Changes to Rebate Programs

2018

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CONTINUED ON REVERSE

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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.

Carlos Bustos, Water Conservation Program Manager



Albuquerque Bernalillo County
Water Utility Authority

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



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