**FY21 ANNUAL REPORT**

Bernalillo County Water Conservation Program

*Promoting the efficient and responsible use of Bernalillo County’s water resources*

**FY21 Summary**

This fiscal year marked the first year of implementation of the FY21-25 Bernalillo County Water Conservation Plan Update. Although operations were impacted by the COVID-19 pandemic, the Water Conservation Program met performance targets and launched major new program initiatives, as specified in the plan. This annual report provides an update on the status of initiatives for each of the Water Conservation Program’s five core components: water conservation incentives, education and outreach, Water Conservation Ordinance implementation, assistance to small water systems, and County facility water efficiency.

**Achievements**

1. Rolled out three new water conservation incentive programs: Smart Water Monitor Program, High-Efficiency Washing Machine Coupon Program, and Smart Irrigation Controller Program (FY21-25 Water Conservation Plan goal)

2. Developed a new customer relationship management system for water conservation incentive programs that provides an online application form, centralized customer data, improved workflow tracking, and robust reports for monitoring program performance (FY21-25 Water Conservation Plan goal)

3. Provided 367 rain barrels to customers, meeting increased demand during the pandemic shutdown

4. Created a new, more robust water efficiency consultation that includes estimates on annual water savings for recommended water conservation measures and an optional landscape water budget (FY21-25 Water Conservation Plan goal)

5. Launched a new partnership with the ABQ Backyard Refuge Program to provide rain barrels to backyard refuge certification recipients (FY21-25 Water Conservation Plan goal)

6. Received Bureau of Reclamation WaterSmart Small-Scale Water Efficiency Project grant to upgrade manual-read, mechanical water meters to ultrasonic, Advanced Metering Infrastructure at all County facilities served by wells (FY21-25 Water Conservation Plan goal)
WATER CONSERVATION INCENTIVE PROGRAMS

211 Properties served
(Annual goal = 200)

The Bernalillo County Water Conservation Program provides water conservation incentives to the approximately 17,000 properties in unincorporated Bernalillo County served by private wells and small water systems.¹

In FY21, the Water Conservation Program served 211 properties with water conservation incentives, exceeding its performance target of 200. The majority of incentives were delivered in District 5, consistent with the high number of Water Conservation Program customers in the East Mountains and high historical participation of East Mountain residents in water conservation incentive programs due to the impact of declining aquifer levels on private wells.

¹ The Albuquerque Bernalillo County Water Utility Authority has a separate Water Conservation Program that provides water conservation rebates to approximately 215,000 properties in the urbanized area of Albuquerque.
Water conservation incentives delivered

Since its inception in 2006, the Water Conservation Program has offered two water conservation incentive programs: high-efficiency toilet retrofits and rain barrels. In accordance with the FY21-25 Water Conservation Plan Update, new water conservation incentive programs for smart water monitors, high-efficiency washing machine coupons, and smart irrigation controllers were launched in April 2021. The high number of rain barrels delivered in FY21 reflects the fact that customer demand for rain barrels increased during the pandemic shutdown, new water conservation incentive programs were made available late in the fiscal year, and high-efficiency toilet retrofits were suspended due to COVID-19 restrictions in March 2020 and restarted with the new water conservation incentive programs.

215,800

Gallons of water saved annually by water conservation incentives delivered April – June 2021

The Water Conservation Program initiated WaterWays, a new customer relationship management system for the water conservation incentive programs, in April 2021. WaterWays provides a centralized platform for managing customer data and communications, improved workflow tracking, and dashboards for monitoring program performance, including gallons of water saved.

---

2 The Smart Water Monitor Program was in a pilot phase in FY21. In the pilot program, customers received a highly-discounted smart water monitor in exchange for feedback on the device.
WATER CONSERVATION
EDUCATION AND OUTREACH

Water Efficiency Consultations

To qualify for water conservation incentives, customers must receive a water efficiency consultation for their home or business. In response to customer feedback and in accordance with the FY21-25 Water Conservation Plan Update, the Water Conservation Program developed a new, more detailed water efficiency consultation in FY21. The new consultation includes review of the customer’s plumbing fixtures, appliances, landscape design, irrigation system, and watering schedule. It provides recommendations on indoor and outdoor water conservation measures, and offers the estimated water savings for all available water conservation incentives. The new consultation also includes an optional outdoor water budget that can be compared with outdoor water use, if the customer provides water usage data. 211 water efficiency consultations were conducted in FY21, consistent with the number of properties served by water conservation incentive programs.

Workshops

Eight water conservation workshops were planned in 2020 in collaboration with the Bernalillo County Open Space Program but were cancelled due to COVID-19 restrictions. Instead, the Water Conservation Program partnered with the Bernalillo County Stormwater Quality Program, Bernalillo County Open Space Program, Ciudad Soil and Water Conservation District, and Arid LID Coalition to develop a 13-part series of short training videos on how to design, construct, and maintain residential passive water harvesting features (available at www.bernco.gov/rainwater). The training included the installation of a Rainwater Harvesting Learning Landscape in front of the Gutiérrez-Hubbell House History and Cultural Center, a Bernalillo County Open Space. This demonstration project was constructed under the guidance of four local rainwater harvesting experts by the Rocky Mountain Youth Corp, providing training to five youth corp members. Project partners also conducted a three-part residential rainwater harvesting virtual workshop that incorporated the training videos and an on-site info-session at the Rainwater Harvesting Learning Landscape in June 2021, which reached a total of 149 people. The Rainwater Harvesting Learning Landscape was funded in part by the Alliance for Water Efficiency’s Learning Landscape Grant Program, which supports educational outdoor spaces that allow school-age children to experience hands-on, applied learning about outdoor water efficiency. The grant was accompanied by a curriculum that was integrated into Gutiérrez-Hubbell House educational programming for 4th-7th graders, and Ciudad Soil and Water Conservation District educational programming for 5th-7th graders. Eight virtual site visits to the Rainwater Harvesting Learning Landscape were conducted for elementary schools in FY21, which reached a total of 212 students and 8 teachers.

GovDelivery News Bulletins

Bernalillo County initiated a new web-based email subscription platform, GovDelivery, in FY21. The Water Conservation Program sent quarterly news bulletins with water conservation guidance and program updates to its 1,200-person subscriber list.
**Backyard Refuge Program Partnership**

In accordance with the FY21-25 Water Conservation Plan Update, the Water Conservation Program launched a new partnership with the Friends of Valle de Oro's ABQ Backyard Refuge Program to provide free rain barrels to backyard refuge certification recipients. Backyard refuges contribute to a network of habitat that supports wildlife in the urbanized area of Albuquerque. To qualify for certification, backyard refuges must provide food, water, and shelter for wildlife, and incorporate best practices in soil and water conservation. The rain barrel and accompanying rainwater harvesting educational resources provided by the Water Conservation Program promote the incorporation of rainwater harvesting into backyard refuges.

**Local Conferences**


**WATER CONSERVATION ORDINANCE**

Water Conservation Program staff review residential and commercial building permits for compliance with Water Conservation Ordinance requirements. The number of permits reviewed in FY21 was slightly higher than prior fiscal years, consistent with a County-wide upward trend in construction permitting. Water Conservation and Plumbing staff share responsibility for conducting inspections for Water Conservation Ordinance compliance after project construction and prior to Certificate of Occupancy issuance.

<table>
<thead>
<tr>
<th>Year</th>
<th>Residential Building Permits</th>
<th>Commercial Building Permits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY17</td>
<td>479</td>
<td>134</td>
</tr>
<tr>
<td>FY18</td>
<td>579</td>
<td>118</td>
</tr>
<tr>
<td>FY19</td>
<td>569</td>
<td>153</td>
</tr>
<tr>
<td>FY20</td>
<td>623</td>
<td>147</td>
</tr>
<tr>
<td>FY21</td>
<td>777</td>
<td>116</td>
</tr>
</tbody>
</table>

Number of Permits Reviewed for Water Conservation Ordinance Requirements (FY17 - FY21)
ASSISTANCE TO SMALL WATER SYSTEMS

The primary form of assistance offered by the Water Conservation Program to small water systems in Bernalillo County is the provision of water conservation incentives to water system customers, as small water systems generally have limited funding for water conservation initiatives. The Water Conservation Program partnered with the two largest water systems in its service area, Entranosa Water and Wastewater Association and Sandia Peak Utility, on the roll out of new water conservation incentive programs in FY21. It plans to extend outreach on water conservation incentive programs to the other small community water systems in its service area in FY22.

COUNTY FACILITY WATER EFFICIENCY

County facility water efficiency is accomplished through a partnership between Land Management, Fleet and Facilities Management, and the Water Conservation Program. In FY21, the Facility Water Conservation Working Group comprised of staff from these three department sections met quarterly to identify water efficiency projects at County facilities, based on the water usage data.

The Water Conservation Program monitors water usage at County facilities served by the Albuquerque Bernalillo County Water Utility Authority (Water Utility Authority), Sandia Peak Utility, and County wells. In FY21, the Water Conservation Program started to receive and review weekly leak reports from the Water Utility Authority for County facilities with Advanced Metering Infrastructure (AMI). The Water Conservation Program secured grant funding in FY21 to replace mechanical, manual-read water meters with ultrasonic AMI water meters at County wells to improve accuracy of meter readings and frequency of water use monitoring.

Because approximately 80% of water is used outdoors at County facilities, overall water use did not decrease in FY21, even with reduced staffing during the COVID-19 pandemic. The County continues to perform well on outdoor water efficiency, which can be credited to Land Management staff. For facilities served by the Water Utility Authority, outdoor water use was 79% of estimated landscape water need and 86% of the Water Utility Authority-allocated irrigation budget in FY21.

In FY21, County staff resolved water conservation issues or completed water efficiency projects at 14 facilities, exceeding the performance target of 10. These included fixing 11 leaks and upgrading 6 irrigation controllers to Rainbird ESP-LX smart controllers with flow sensors, in order to modernize and ensure uniformity of all irrigation controllers across the County.
FY21-25 WATER CONSERVATION PLAN: FORTHCOMING INITIATIVES

The following initiatives are planned for FY22:

1. Launch the Laundry-to-Landscape Gray Water incentive program, to include development of an online training on laundry-to-landscape gray water systems and the provision of laundry-to-landscape gray water system kits (FY21-25 Water Conservation Plan goal)

2. Expand the Rainwater Harvesting incentive program to include larger rain barrels per customer request (FY21-25 Water Conservation Plan goal)

3. Finalize terms and contracts for the permanent Smart Water Monitor incentive program (FY21-25 Water Conservation Plan goal)

4. Expand outreach for the water conservation incentive programs to all small water systems in the Water Conservation Program service area and underserved communities in District 2

5. Engage in a partnership with the Natural Resource Conservation Service and Middle Rio Grande Conservancy District to provide funding for on-farm irrigation efficiency projects (FY21-25 Water Conservation Plan goal)

6. Resume water conservation workshops in partnership with Bernalillo County Open Space Program and other local organizations (FY21-25 Water Conservation Plan goal)

7. Send out quarterly water conservation news bulletins through GovDelivery

8. Install an interpretive sign at Gutiérrez-Hubbell House Rainwater Harvesting Learning Landscape in partnership with the Bernalillo County Open Space Program

9. Replace mechanical, manual-read water meters with ultrasonic, Advanced Metering Infrastructure at all County wells (FY21-25 Water Conservation Plan goal)