CONSERVATION Current

A Newsletter Published by the New Mexico Water Conservation Alliance

Building Design Features Conservation

In May, the New Mexico Water Conservation Alliance held its meeting at the new offices of the Southern Sandoval County Arroyo Flood Control Authority and toured the building to view its water conservation features and other "green building" designs. The following article, written by J. Stace McGee of Environmental Dynamics, Inc. in Albuquerque, describes the design concepts that are incorporated into the building.

Environmental Dynamics, Inc. (EDI) had the pleasure of designing a new office building for the Southern Sandoval County Arroyo Flood Control Authority (SSCAFCA) implementing sustainable design principles. Part of SSCAFCA's mission is "to provide protection up to the 100-year storm for the public health, safety and welfare of residents and properties within its boundaries." EDI evaluated the relationship between the retention systems used by SSCAFCA and the site's natural arroyo systems to develop a design concept integrating the project with the surrounding ecosystem.

The main entry of SSCAFCA's new building is a metaphor for water movement and the resultant mass of earth carved away by the unceasing flow of water. The smooth, canted west wall represents a man-made diversion channel while the split-faced east wall represents a steeply eroded natural arroyo. The reception desk is located off the main circulation path, in an *eddy*, a hollow of relative calm carved out by water as it passes by. The lobby is intersected by a secondary circulation path, a culvert-covered passageway representing man-made interventions into natural waterways and providing axial circulation for the staff.

The new facility was designed to have minimal impact on the land, preserve open space, and leave habitat for native species. The building is located high on the site to maintain the natural site drainage. Water runoff from the building flows through the landscap-

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Xeriscape Conference 2003

OUR FUTURE... OUR LEGACY

"Water: Our Future, Our Legacy" is the theme for Xeriscape Conference 2003, to be held at the convention center in Albuquerque October 17-18.

The conference will feature keynote addresses by two internationally recognized experts in water resources: Peter Gleick, co-founder and president of the Pacific Institute for Studies in Development; and Amy Vickers, author of the award-winning *Handbook of Water Use and Conservation.*

During the two-day conference, seminars and workshops will cover a wide variety of topics pertaining to the environment, landscape water use, and resource conservation. Topics include water harvesting and irrigation policies, sustainable planning, landscape ecology, effects of climatology, and global water use.

Xeriscape Conference 2003 is the ninth conference presented by the Xeriscape Council of New Mexico. A xeriscape fair and trade show will run concurrently with the seminars and presentations. On Saturday, the public will also be invited to tour the xeriscape fair.

A registration fee of $100 includes all presentations, educational materials, lunches, refreshments, and admission to the exhibit hall. For more information, call 505-468-1021 or visit the Xeriscape Council web site at www.xeriscapenm.com. Seating is limited; and early registration is recommended.

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ing, reducing the need for an extensive irrigation system.

> *" The SSCAFCA landscape provides an attractive oasis for employees and visitors, habitat for indigenous wildlife, and a living example of sustainable design."*

Conservation of potable water and reuse of rainwater are major components of the design. Approximately 75 percent of the water from the roof is harvested into a 4,800-gallon cistern for reuse in landscaped areas. The remaining roof runoff is directed into landscaped areas either directly or through canales. Furthermore, almost all of the water that falls onto the site is detained. This, coupled with an innovative gravel-paved parking lot system, allows water to percolate directly back into the ground with minimal runoff. Low-flow toilets and showerheads, as well as faucets with aerators, reduce potable water consumption by approximately 20 percent over conventional standards.

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The SSCAFCA landscape provides an attractive oasis for employees and visitors, habitat for indigenous wildlife, and a living example of sustainable design. This landscape is also intended to be culturally and aesthetically compatible with this site's sandy soils and arid environment. Given appropriate care, the landscape treatment at SSCAFCA will grow in value and appearance throughout cycles of drought and abundance.

Rio Rancho Approves Ordinance

by Lorri Skeie-Campbell, Rio Rancho Water Conservation Officer

Rio Rancho's City Council adopted a new water conservation ordinance at its June meeting that officially affects the community's residents and businesses at the end of September.

The new water conservation ordinance has three main components:

- Water waste and fugitive water
- Time-of-day watering restrictions
- Water-by-request

The water waste and fugitive water portion of the ordinance has been enforced for quite some time. However, the new council action moves the regulation from the City Development Department to the Utilities Department ordinance.

The time-of-day watering restriction is new, and is a seasonal outdoor watering schedule from April through September. The newly adopted water conservation ordinance limits outdoor watering with air-propelled sprinkler systems between 6 p.m. and 10 a.m. Hand-held hose watering is exempt from the time-of-day restriction.

The water-by-request portion of the ordinance is also new, and affects lodging and eating establishments. Hotel guests will now have to be given a choice of whether they want their linens laundered each day of their stay, and restaurant patrons will have to request drinking water. The city's Water Conservation Office is providing literature to help these local businesses and their patrons practice efficient water use.

A permit and variance system has been established, as well as an appeals process. Enforcement assessment of a dual-fee schedule for violations will be conducted by the Utility Department staff. Fees for violations range from $50 to $500, depending on meter size. Upon the sixth violation, a flow restriction device will be placed on the water user's meter. A misdemeanor charge will apply with the seventh violation within a two-year period.

More Events...

Water 2025

The U.S. Bureau of Reclamation will host a regional Water 2025 conference in Albuquerque on August 12 to discuss that agency's new proposal aimed at dealing with water supply problems in several western hot spots. Albuquerque and the Middle Rio Grande Basin have been identified as one of those hot spots.

Reclamation proposes to spend $11 million to begin addressing scarce water supplies through conservation, water marketing, improvements in technology, and

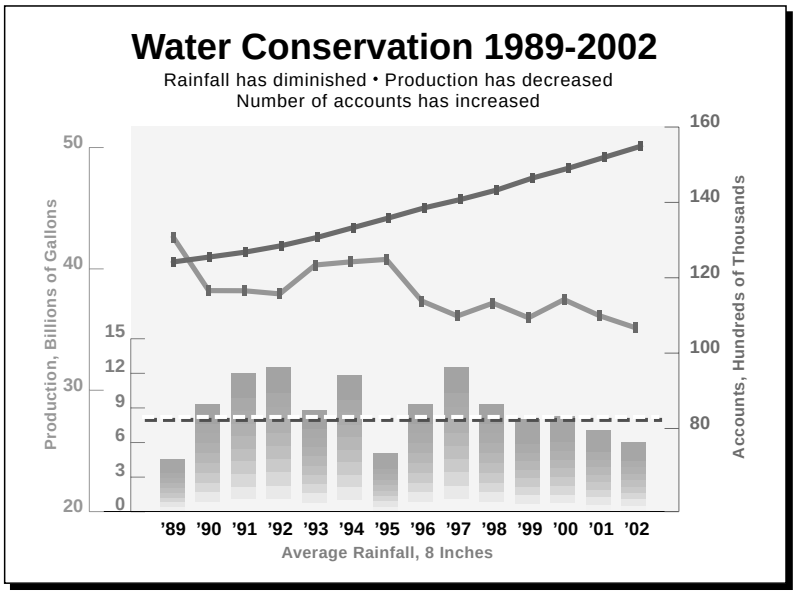
Albuquerque Expands Program

by Katherine Yuhas, Albuquerque Water Conservation Officer

In 1995, Albuquerque set its water conservation goal at 30 percent, compared to baseline water usage established from 1987-1993. By the end of 2002, the city had reduced overall usage by 26 percent, measured by a per-account method. Total production in 2002 was more than two billion gallons less than in 1996. These water savings have been achieved even as the city has added more than 16,000 new water accounts to its system since 1996, and despite the fact that rainfall has been below average for the past four years.

In May, Mayor Martin Chávez announced that Albuquerque would increase its conservation goal from 30 percent to 40 percent, effective from 2005 to 2014. To achieve this additional savings, the city will:

- ask city departments to develop new water conservation plans to meet the new goal;
- reduce unaccounted-for water to less than 10 percent of production;
- expand and increase rebate programs;
- develop recycling standards for car washes and re-circulating standards for cooling towers;
- evaluate the water waste fee structure and hire more seasonal water waste enforcement inspectors;
- create penalties for all large users (50,000 gallons per day or more) who have failed to submit water conservation plans or who have failed to implement their approved plans; and
- create an irrigation licensing and certification program.



Last year, the city added three new rebates to the Water Conservation Program. Multi-setting sprinkler timers qualify for a rebate of $10. The purchase of a rainwater harvesting barrel warrants a $25 rebate, and re-circulating hot water heaters, $100.

In July, the city is adding three more new rebate programs. Water customers who install a graywater reuse system in accordance with state guidelines will qualify for a rebate of $500. Converting from a swamp cooler to energy-efficient centralized air conditioning will earn city customers a rebate of $500; and low-water-use dishwashers will now qualify for a rebate of $100. In addition, xeriscape rebates have been increased from $.25/square foot to $.40/square foot, with the maximum rebate for residential projects now at $800 and the maximum for commercial projects at $5,000.

removal of institutional barriers, and is holding forums in nine western cities to introduce the proposed actions. The Albuquerque event will take place at the Sheraton Uptown and will be limited to approximately 300 people.

For more information and/or to pre-register, visit http://www.usbr.gov/uc /albuq.water2025/nm/index.html.

Denver Workshop

Saving Water: Smart Technologies to Improve the Bottom Line for Business, Industry, and Municipalities is the title of a workshop to be held August 14 in Denver. The workshop is sponsored by the U.S. Department of Energy and the Colorado Governor's Office of Energy Management and Conservation.

Local and national experts will teach water and energy efficiency strategies and address short and long-term management issues. The three educational tracks are:

- Optimizing Water and Energy Using Systems
- Securing Program Assistance/ Financing Alternatives
- Using Innovative Technologies to Save Water

For more information, visit www.SavingWater2003.com or contact Tim Rooney at trooney@mcneiltechno.com or 303-273-0071.

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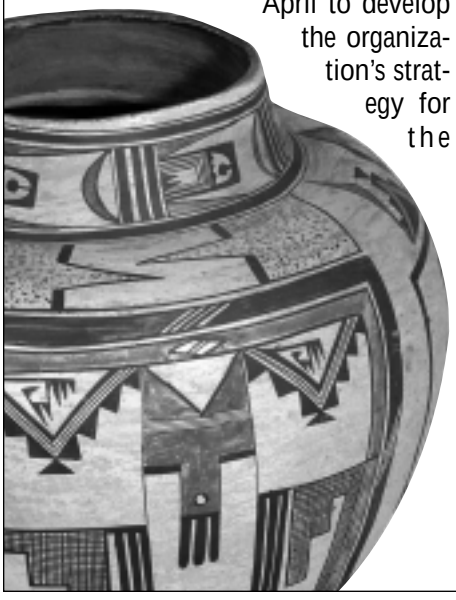
Alliance Retreat Defines Activities

by Jean Witherspoon, President, New Mexico Water Conservation Alliance

Members of the New Mexico Water Conservation Alliance met in late April to develop the organization's strategy for the year. Foremost among the agreed-upon goals was that the Alliance should become more outward-focused. The primary strength of the Alliance over the last decade has been the networking between the professionals who work in water conservation in New Mexico. Given the "state of the water" now, though, it's time to reach out to others, sharing and building on the considerable expertise the group represents.



Activities intended to further that goal in 2003 include starting to organize Alliance "pods" in the northern and southern parts of the state, connecting with the upcoming professionals now studying in universities and other schools in New Mexico, and playing a part in conservation legislative initiatives. We hope to achieve better recognition for the Alliance and its members, becoming a more visible advocate for this critical component of the state's water future.

Success in these broader areas may occur slowly, but outreach and growth are essential to the organization's health. At the same time, we are all determined not to lose the educational and networking benefits the organization has always provided. Join us in working to better spread our message to the larger New Mexico community.

Join the Alliance

Join the Alliance at its remaining meetings in 2003: September 4 and November 6 – and watch the web site (http://wrri.nmsu.edu/wrdis/nmwca/alliance.html) for updated information on meeting locations and programs. A membership form is also found on the web site.