

EDUCATION

Albuquerque's Explora Offers Hands-On Water Education

Edith Menning – Explora

In the desert Southwest, the maxim that water is life is evident everywhere. Agua de la Vida/La Vida del Agua, a multipart exhibit in Albuquerque's newly expanded Explora Science Center, invites visitors to experience water from a variety of interactive perspectives.

At the entrance to the exhibit area, a 20-foot erosion table cascades a stream of water over and through a landscape of plastic sand, which is endlessly rearranged by visitors, circumstance, and the simulated river itself.

Land and water shape one another. The exhibit also illustrates water's capacity to carry other materials within it, a theme that can be examined in more depth in Explora's nearby water laboratory, where visitors can test water samples—their own, or ones from around New Mexico supplied by Explora.

Like a meandering streambed, Agua de la Vida wanders among interactive exhibits where visitors can create wave patterns on moving sheets of water, experiment with surface tension, or divert a faucet stream with static electricity. Another stream table offers opportunities to dam or control water flow through joined structures, some of which have surprising twists. As a corollary to the exhibit, Explora's two-story laminar flow fountain shoots coherent bursts of water into the air in complex patterns that are partially controlled by visitors.

The Agua de la Vida exhibit represents Explora's long-term commitment to the water theme. For the next three to four years, the exhibit will continue examining how water acts as a medium for natural and man-made materials. Future perspectives will consider the following topics: water

as a necessity for life, focusing on how living things use water; water as a tool for agriculture, travel, power generation and other uses; and water as a dynamic force that sometimes behaves in unpredictable and uncontrollable ways. Interwoven throughout these primary perspectives will be opportunities to experience and learn principles of physics, chemistry, biology, and geology, as well as the social implications of water in arid lands.



Visitors test water samples at the laboratory.

Explora's mission is "to create opportunities for inspirational discovery and the joy of lifelong learning through interactive experiences in science, technology and art." In Agua de la Vida/La Vida del Agua, and in

the more than 200 additional exhibits that fill the new building, visitors of ages one to 101 will find something to inspire them and bring them back to investigate further.

Visit www.explora.mus.nm.us.



Visitors can see stream patterns or reroute the water flow at Explora's erosion table.



Selected recent USGS hydrology publications from around the Southwest:

Water quality in the Great Salt Lake Basins: Utah, Idaho, and Wyoming, 1998-2001, by K. M. Waddell, S. J. Gerner, S. A. Thiros, E. M. Giddings, R. L. Baskin, J. R. Cederberg and C. M. Albano.
<http://water.usgs.gov/pubs/circ/2004/1236/>

Water quality in the Santa Ana Basin, California, 1999-2001, by Kenneth Belitz, S.N. Hamlin, C.A. Burton, Robert Kent, R.G. Fay, and Tyler Johnson. Circular 1238.
<http://water.usgs.gov/pubs/circ/2004/1238/>

Water resources of Colorado: Evaluation of streamflow losses along the Gunnison River from Whitewater downstream to the Redlands Canal Diversion Dam, near Grand Junction, Colorado, water years 1995-2003, by Gerhard Kuhn and C.A. Williams.
<http://water.usgs.gov/pubs/sir/2004/5095/>

Review of knowledge on the occurrence, chemical composition, and potential use for desalination of saline ground water in Arizona, New Mexico, and Texas with a discussion of potential future study needs, by G.F. Huff.
<http://water.usgs.gov/pubs/of/2004/1197/>

U.S. Geological Survey, Arizona District • <http://az.water.usgs.gov>