

FEATURE – RIO GRANDE RESEARCH FOR WATER CONSERVATION

INTRO: Researchers at New Mexico State University are looking at ways to conserve water from the Rio Grande River. USDA's Pat O'Leary has more. (1:59)

THE RIO GRANDE HAS NOURISHED FARMS, FAMILIES AND WILDLIFE IN THE SOUTHWEST FOR CENTURIES. AS DEMANDS ON THE WATER INCREASE, RESEARCHERS ARE LOOKING AT NEW AND OLD WAYS TO INCREASE EFFICIENCY OF IRRIGATION AND OTHER USES. THE USDA-FUNDED RIO GRANDE BASIN INITIATIVE IS SPONSORING SEVERAL PROJECTS ON FARMS IN THE REGION.

Tom Dean, Ag Agent, Socorro County, New Mexico: What we've been doing with some of our Rio Grande Basin Initiative demonstrations here in Socorro is actually trying to monitor some soil moisture. We take farmers and bring them out and do field days and show them. And you know, actually showing people what they can do is worth a lot more than showing them on paper.

Chris Sichler, New Mexico Farmer: We grow fruit and vegetables and quite a bit of alfalfa. We've always used flood irrigation, and just recently on our vegetables we're going into the drip irrigation, mainly just because it's more efficient. We get a lot more production out of our land and the water we use with the drip.

SCIENTISTS AT TEXAS A& M AND NEW MEXICO STATE UNIVERSITY ARE LOOKING AT BOTH LARGE AND SMALL FARMS.

Steve Guldan, New Mexico State University: Here at the Alcalde Sustainable Agriculture Science Center one of the main projects is related to acequia systems, acequia irrigation systems and their influence on the hydrology of the irrigated corridor. Acequias are the traditional irrigation ditches or canals around here.

Alfredo Montoya, Farmer: Acequias became much more than a canal to transport water to irrigate crops. They became a way of life, it became a culture. So many events evolve around an acequia. In many of our villages the annual ditch cleaning is a community affair because it sustains the whole village, not just those that own irrigated land.

UNLIKE CANALS THAT ARE LINED WITH CEMENT TO PREVENT LEECHING, THE EARTHEN ACEQUIAS ALLOW SEEPAGE INTO GROUNDWATER. BUT THE RESEARCHERS ARE FINDING THAT THE SEEPAGE ISN'T WASTED. IT PROMOTES RIPARIAN BUFFERS, CLEANER GROUNDWATER AND POSSIBLY MORE EFFICIENT STORAGE OF WATER.

Guldan: The reservoirs in place, there's a lot of water that's lost due to evaporation. And so we'd like to put numbers on this to see to what extent are we actually storing water more efficiently underground here because of the seepage taking place, for return later to the river.

IN ALCALDE, NEW MEXICO FOR THE USDA I'M PAT O'LEARY.