



WATER RESOURCES RESEARCH GRANT PROPOSAL

Project ID: 2004AZ50B

Title: Impact of drought on management of salt sensitive plants with reclaimed water

Project Type: Research

Focus Categories: Water Quality, Drought, Irrigation

Keywords: Reclaimed water, salinity, drought, plant growth

Start Date: 03/01/2004

End Date: 02/28/2005

Federal Funds: \$7,000

Non-Federal Matching Funds: \$30,492

Congressional District: 5th

Principal Investigator:

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Abstract

Salinity of soils and water is an ever increasing issue in Arizona and the arid Southwest. With the population expected to double in the next 40 years and a drought during six out of the seven last years, demands on the decreasing water supplies will be more difficult to meet in the future.

The amount of reclaimed water produced in the state is increasing and is the only source of water that will continue to increase as more water is used. Reclaimed water is expected to become increasingly vital to sustain the quality of life for desert communities, and may soon become the only option for irrigating landscapes. The proposed study will examine the impact of drought on management of salt sensitive plants that are irrigated with reclaimed water. Plants that are commonly used in Southwestern landscapes and that have previously been identified as being salt sensitive will be grown with reclaimed and potable water. Water stress will be imposed to develop management strategies on how to irrigate salt sensitive plants with reclaimed water and maintain their functional and aesthetic value. Results will benefit the green industry, commercial and residential customers, and anyone interested in growing plants in the arid Southwest.