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**"Increasing Springflow Across the Edwards Plateau:
Implications for Management and Restoration"**

BY

Dr. BRAD WILCOX

Professor, Department of Ecosystem Science and Management, Texas A&M University

Date:	Monday, May 3, 2010
Time:	11:00 a.m. - Noon
Location:	The Nature Conservancy 200 East Grayson Street – Suite 202 (Full Goods Building – Pearl Brewery) San Antonio, TX 78215
Please RSVP to:	Patty Garcia - 210/224-8774

Abstract: The related phenomena of degradation and woody plant encroachment have transformed huge tracts of rangelands. Woody encroachment is assumed to reduce groundwater recharge and streamflow. We analyzed the long-term (85 years) trends of four major river basins in the Edwards Plateau region of Texas. This region, in which springs are abundant because of the karst geology, has undergone degradation and woody encroachment. We found that, contrary to widespread perceptions, streamflows have not been declining. The contribution of baseflow has doubled—even though woody cover has expanded and rainfall amounts have remained constant. We attribute this increase in springflow to a landscape recovery that has taken place concurrently with woody expansion—a recovery brought about by lower grazing pressure. Our results indicate that for drylands where the geology supports springs, it is degradation and not woody encroachment that leads to regional-scale declines in groundwater recharge and streamflows.

