The Greater Edwards Aquifer Alliance (GEAA) has originated a comprehensive program of science, advocacy, and public engagement aimed at protecting the quality and quantity of spring flows from the Edwards and Trinity aquifers. We are in need of support to fund science, advocacy and public participation projects by GEAA and our member groups in key policy making processes that are currently underway.

<u>Aquifer 101 Workshops</u> – The Greater Edwards Aquifer Alliance will present a series of workshops designed to promote awareness of the fragile and unique nature of the Edwards Aquifer and an understanding of measures needed to protect our groundwater resources in a format geared to inform local elected officials, planning and zoning commissioners, and pertinent staff of municipal and county governments within the Edwards Aquifer region.

<u>**GEAA Community In Schools Program**</u> In partnership with Communities in Schools of San Antonio, GEAA staff and volunteers teach hundreds of students about the mysteries of our karst groundwater system - the Edwards Aquifer, using our karst aquifer model and hands on lab exercises. GEAA also trains teachers to use our five part film, *Inside the Edwards Aquifer*, which incorporates lab exercises, vocabulary and resource materials consonant with the Texas Assessment of Knowledge and Skills requirements.

The Greater Edwards Aquifer Alliance Technical Assistance Program provides our member groups, governmental agencies and policy makers, and the public at large with technical expertise and access to information that addresses issues of regional and local concern as related to the preservation of the quality and quantity of the waters in the Edwards Aquifer, its contributing watersheds, and its indigenous plant and animal species. Citizens, news media, and increasingly, elected officials and public agencies rely on GEAA staff to provide or direct them to technical expertise regarding the management and protection of the Edwards and Trinity karst aquifer formations.

**Public Comment and Ad Hoc Issues** - GEAA receives requests for technical assistance on a regular basis on a wide variety of issues from individual landowners, regional municipalities, and governmental agencies soliciting public comment on programs and policies relating to the region's ground and surface water systems. The expertise of our technical staff is critical to expanding our capacity to promote adequate protection of our water resources and is essential to accomplishing our goals. We rely upon the largess of several experts who have volunteered their time and the benefit of their expertise as needed on specific projects. Because of the recognized excellence of our work, GEAA is regularly called upon to research specific issues and projects, to comment on proposed projects, rules and programs, and to generate policy and regulatory recommendations and remedies.

GEAA provides practical guidance to the development and construction industries, enhancing our ability to further our goal of aquifer protection by furnishing expertise on proven methods and practices to developers referred to GEAA by government agencies to advise on specific projects. Additionally, GEAA will continue to work with municipalities within the Edwards Region to promote the adoption of sustainable development techniques into the Codes of municipalities and into State recommended Best Management Practices. **Permanent Protection of the San Geronimo Valley** The San Geronimo Valley is approximately 7,000 acres within Northwest Bexar County and proximal Medina County. The San Geronimo Creek and significant recharge features found in the upland areas are estimated to contribute approximately seven to fifteen percent of the entire recharge of the San Antonio segment of the Edwards Aquifer. The San Geronimo Valley is under immense pressure from encroaching development, with plans underway to provide roadways and flood control based on the scenario that the entire area will be developed out. Permanent protection of this area through the purchase of conservation easements would preempt plans for development, thus preserving this important region so that it will continue to contribute significant volumes of high quality recharge to the Edward Aquifer in perpetuity.

## GEAA Research on the Impact of Sub Surface Pollution on the Edwards Aquifer

The agencies tasked with oversight of water quality of the Edward Aquifer, most notably the TCEQ and the Edwards Aquifer Authority (EAA) rely on the use of stormwater management as the chief strategy for protecting water quality of the Edwards Aquifer. Measures to address the quality of stormwater infiltrating the Edwards, however, provide no protection from the introduction of subsurface pollution of the aquifer from human sewage, which becomes particularly problematic with increased high density residential development of the Edwards Aquifer Recharge Zone.

The GEAA Technical Team, with the help of student interns from Trinity University, Texas State University, and Our Lady of the Lake University, is currently researching the Impact of On Site Sewage Facilities (septic tanks) vs Centralized Sewage Systems on the Edwards Aquifer Recharge Zone. Our goal is to produce a White Paper that will examine all aspects of regulation of sewage within the Edwards Aquifer Recharge Zone, including an overview and assessment of current regulatory and agency practices, recommendations for improvements, and estimates of leakage that might determine which method of sewage disposal poses the greatest threat to the Edwards Aquifer.

## GEAA Low Impact Development Manual for Edwards and Trinity karst aquifer systems

To address the needs of south Texas, residential and commercial sites should be designed to minimize the water uptake by plants and the need to irrigate during times of drought, provide maximum filtration on the Trinity Aquifer Recharge Zone and the Edwards Aquifer Recharge Zone, and enhance opportunities for infiltrating high quality water to recharge these aquifers. GEAA has taken the lead in initiating, administering, and contributing to a collaborative effort to devise a Technical Guidance Manual specific to the Edwards Region of Central and South Texas.

<u>**GEAA Legislative Program**</u> GEAA provides expert testimony and researches issues as needed by the members of the House and Senate Natural Resource Committees and our local delegation to inform decisions made in the State Legislature pertinent to the management of our water resources. We will be visiting with legislators and researching, assembling and securing consensus on an agenda for the next Legislative Session beginning in January 2013.

For more information, visit our web site at <u>www.AquiferAlliance.org</u>. If you would like to volunteer to work on any of these projects, contact Annalisa Peace at 210-320-6294.