Thursday, November 18, 2010

## Watershed Protection Department RECOMMENDATION FOR COUNCIL ACTION

Item No. 53

**Subject**: Authorize negotiation and execution of an Interlocal Agreement with LOWER COLORADO RIVER AUTHORITY and BARTON SPRINGS/EDWARDS AQUIFER CONSERVATION DISTRICT regarding water rights for the Stoneledge Recharge Enhancement Project.

Amount and Source of Funding: There is no unanticipated fiscal impact.

**Fiscal Note:** A fiscal note is not required.

For More Information: David Johns, 974-2781; or Ross Crow, 974-2159

Boards and Commission Action: Recommended by the Environmental Board.

**Prior Council Action:** April 25, 2002- Council passed a resolution authorizing purchase of Wenzel tract which contains the quarry.

July 17, 2003- Council passed a resolution authorizing acceptance of funds from Hill Country Conservancy to establish a flow station to gage flow in Little Bear Creek adjacent to the quarry.

The City of Austin and the Hill County Conservancy partnered to purchase the abandoned Stoneledge Quarry in 2002 with the goal of conducting a recharge enhancement project. The 85 acre property includes an approximately 18 acre quarry pit. Little Bear Creek, with an upstream drainage area of approximately 10 square miles, crosses the southeast corner of the property. This project would divert storm water runoff from Little Bear Creek through a diversion channel into the quarry pit where the water would slowly recharge the Edwards Aquifer. Diverting storm flows could enhance recharge to the Edwards Aquifer by approximately 286-to-385 ac/ft/yr or the equivalent of 0.4-to-0.5 cfs at Barton Springs, 12 miles to the northeast. Project benefits include:

- •Helping preserve flow at Barton Springs during times of drought
- •Diverting storm water returns to the Colorado River slowly via Barton Springs
- •Maximizing water quality benefits of upstream land parcels protected by the City, which comprise approximately 40% of the drainage area to Little Bear Creek at the quarry
- •Serving as a pilot project for determining feasibility of using other quarries over the Edwards Aquifer as recharge enhancement features.

The project has required partnership and cooperation from multiple organizations including Lower Colorado River Authority, Barton Springs/Edwards Aquifer Conservation District, Hill Country Conservancy, National Fish and Wildlife Foundation, Texas Parks and Wildlife Department, Texas Commission on Environmental Quality, 3M, and Jones and Carter, Inc.

Under this Interlocal Agreement, the City of Austin will fund, apply for permits, construct, and operate the facility. The LCRA will provide 40.2 ac-ft/yr of firm water rights for the project and provide staff support for permit acquisition. The BSEACD will evaluate the additional recharge to the aquifer and consider

designating it for Ecological Flows (not available for other uses) and provide staff support for permit acquisition. Each party will seek approval from governing Boards and Councils in Fall 2010.

Significant additional permits are required from the Texas Commission on Environmental Quality for water diversion and potentially the U.S. Army Corps of Engineers for construction in a waterway. Construction is expected to begin in 2014.