Thursday, August 7, 2008

## Watershed Protection and Development Review RECOMMENDATION FOR COUNCIL ACTION

Item No. 46

**Subject:** Authorize negotiation and execution of an Interlocal Cooperation Agreement with the Texas Water Development Board (TWDB) for a volumetric survey of Lake Austin, in an amount not to exceed \$20,628.

**Amount and Source of Funding:** Funding is included in the Fiscal Year 2007-2008 Capital Budget of the Watershed Protection & Development Review Department.

Fiscal Note: A fiscal note is attached.

For More Information: Nancy McClintock, 974-2652; Edward Peacock P.E., 974-2224; Mary Gilroy, 974-2717; Julia Lee 974-3357

The Texas Water Development Board (TWDB) will perform a volumetric survey of Lake Austin, collecting bathymetric or depth measurements to develop an updated elevation-area-capacity table and associated maps, including a contour map and shaded relief plot of the lake bottom. The last bathymetric survey of this water body was conducted by TWDB in 1999, and several significant floods (July 2002, November 2004 and July 2007) have occurred in the intervening period. An updated survey will provide information relating to accumulation and loss of sediment in creek deltas and along the lakeshore, as well as change in lake volume. This data is also used in locating and mapping submerged nuisance vegetation, such as hydrilla, for floodplain mapping at creek mouths, and as a frame of reference in developing detailed designs for projects involving shoreline or underwater construction. WPDRD staff plan on participating in a side by side (simultaneous) survey to calibrate existing equipment, so more accurate depth measurements may be collected during annual biological and habitat assessments of the lake.