

Recommendation for Council Action

Austin City Council Commissioners Court Meeting

Item ID 34883 Agenda Number 37.

Meeting Date: 8/28/2014 Department: Parks and Recreation

Subject

Authorize negotiation and execution of an amendment to an interlocal agreement with the University of Texas at Austin, extending the term by a 12-month period with one six-month extension option in which to complete the study of the hydrodynamics of water flow in Barton Springs Pool.

Amount and Source of Funding

No fiscal impact.

Fiscal Note

Purchasing	
Language:	
Prior Council Action:	October 19, 2006 – Council passed a Resolution directing the development of a master plan for Barton Springs Pool; September 10, 2007 – Council authorized \$6.2 million for short-term improvement projects and studies at Barton Springs, which included the Hydrodynamic Flow Modeling study; January 15, 2009 – Council adopted the Barton Springs Pool Master Plan: Concepts for Preservation and Improvement; August 25, 2011 – Council authorized negotiation and execution of an interlocal agreement with the University of Texas to perform a hydrodynamic flow modeling study of Barton Springs Pool with two 12-month extensions for a total amount not to exceed \$272,357.
For More	Gary Gregson (PARD) 512-974-9475; Nathan Bendik (WPD) 512-974-2040; April Shaw
Information:	(PARD) 512-974-6716
Boards and	
Commission Action:	
MBE / WBE:	
Related Items:	

Additional Backup Information

From the late 1920's through 1974, dams and a bypass culvert were built creating Barton Springs Pool (BSP), which disconnected it from Barton Creek, except during floods that exceeded the capacity of the bypass culvert. This isolation from the natural flows of Barton Creek has shifted the hydrodynamics of BSP from a naturally, free-flowing creek to a small reservoir. The shift is most apparent in the reduced efficiency of natural scouring and transport of suspended material, particularly during floods. This increases the requirements for human labor in removing this material and maintaining the desired, clear, clean, and safe swimming hole. Although there were some changes in operations and environmental management, none can eliminate or reverse the effects of the existing infrastructure, particularly the dams.

Therefore, the City of Austin's long-term goal for improving BSP is to create maximum operational flexibility to respond to all creek and climatic conditions in ecologically sound ways, while ensuring continued recreational use. More specifically, the long-term goal for improving the aquatic environment in BSP is to determine how to reconstruct a more natural creek-like flow regime, thereby shifting the ecological character back toward historical conditions and maintaining the major characteristics that attract recreational users. The first step in meeting these

goals requires hydrodynamic modeling of BSP for a variety of inflow/outflow conditions with potential physical modifications of infrastructure.

This hydrodynamic flow modeling will provide the City with information as to what infrastructure and/or other changes may be needed at BSP to improve the water quality, reduce accumulation of flood debris within the pool, and improve the habitat for the endangered Barton Springs Salamander.

Delays due in part to construction work related to the bypass tunnel and student turnover require an extension in order for the University of Texas to complete the study within a 12-month period with one six-month extension option.