

Fiscal Year 2010-2011 Proposed Work Scope Texas A&M Urban Solutions Center

Proposed Activities and Time Line

Urban Solutions Center proposes to build on recent analyses of the Lake Lavon watershed conducted by the AgriLife Urban Solutions Center and the Texas A&M University Spatial Sciences Laboratory (SSL) in College Station to model various future development scenarios. Urban Solutions Center additionally proposes to provide Soil and Water Assessment Tools (SWAT) training for City Staff, as well as “natural” stream stabilization/restoration demonstration/training

Task 1. SWAT Modeling

- Model current land use of the City of McKinney and projected land use scenarios utilizing the current city comprehensive plan as baseline model runs.
- Model development scenarios associated with the implementation of iSWM practices and providing the practices best suited to McKinney based on cost and effectiveness.
- Utilize SWAT to evaluate floodplain and storm water management policies and stream restoration practices.

Task 2. Trainings and Workshops

- Conduct an introductory 2 day SWAT workshop for city staff on the capabilities and function of the model. (Nov. 2010)
- Conduct a 2 day training course for city staff on stream restoration and stabilization management. (Dec. 2010)

Task 3. Demonstrations

- Work with City staff to develop a concept plan including construction drawings as necessary for a stream stabilization/restoration demonstration site. Concept plans may include “natural” in-stream stabilization practices such as J-hooks, W-weirs, cross vanes, root wads, and stream bank vegetation management

Task 4. Reporting

- Submit quarterly electronic update reports to the City of McKinney (Nov. 2010, Feb. 2011, May 2011, Aug. 2011).
- Make two presentations to City Council on modeling work performed, demonstration sites designed and trainings conducted (Feb. 2011) (May 2011). Gather input on model runs.
- The final report will be presented to the City Council in September 2011.