

YEAR ZERO WORK PLAN

1. Sediment and non-native plant removal

Current labor costs are based on an assumed rate of sediment removal using the specified hydrosuction methodology outlined in the HCP. It is critical for Year Zero to logistically test the actual methodology in the field and determine the practical rate of sediment removal and associate logistics to compare against the estimated effort and budget requirements in the annual work plan. \$ 50,000

2. Texas wild rice and native aquatic plant propagation

Access to adequate amounts of Texas wild rice and native aquatic plants necessary to support target non-native aquatic plant removal and TWR/native aquatic planting needs is problematic. Initiation of production starting in January of 2013 will unnecessarily delay access to adequate plant material by months and work efforts would impinge on the recreation season. We are proposing to initiate TWR and native plant propagation at the Freeman Aquatic Building facilities. These facilities have been used previously for successful TWR production. Production would be shifted to the NFHTC in 2013 when their production of plants is ramped up. \$ 50,000

3. State Scientific Areas Year zero activities

It is anticipated that the TPWD will formally adopt the San Marcos SSA in the next month. We believe it is important to test, evaluate and install recreation control measures now since flow rates are likely to reach levels where control measures will have to be initiated in 2012. This will require enforcement for the SSA areas in 2012. \$25,000

4. Permitting

We have identified up to 11 potential permits necessary to implement HCP work plan elements. Some of these permits can take up to 18 months to obtain approval. This would impose an unacceptable delay in implementing HCP work plans if permitting started in January of 2013. Texas State University, City of San Marcos, and the City of New Braunfels propose to hire a contractor to review the HCP work plans and identify all required permits. This would then be followed by a workshop with all permit agencies where the work plans are reviewed and input on requirements are identified. The contractor would then prepare the necessary permit

applications. We propose to initiate this activity as soon as the Work Plans are adopted by the Implementing Committee. \$50,000

5. LID/BMP

The City of San Marcos is currently engaged in the development of a Comprehensive Plan that includes elements of impervious cover and water quality measures. We believe it is critical that the anticipated contractor for the HCP Work Plan Measure 5.7.3 be involved now to ensure that the addition of LID/BMP components designed to reduce impacts of impervious cover on the San Marcos River are appropriately addressed. The requested funding is to provide support during 2012 to coordinate the development of these river protection components that can be adopted by city council and implemented starting in 2013. \$ 25,000

6. SMNFHTC – Experiments and Experimental Channel Design

The ad hoc technical team believes that a series of meetings will be required to discuss the technical aspects of the experimental designs for each of the targeted Tier A research components. Once this has been accomplished, it will permit the proper context for technical discussions on the required design aspects of the proposed experimental channel(s). This will permit a significantly earlier start to their actual implementation beginning in 2013. \$25,000

7. Ecosystem Modeling

The ad hoc technical team believes that a series of workshop/technical meetings should be undertaken to critically examine the available modeling approaches (e.g., regression, neural networks, IBMs, etc) and collectively agree on the specific modeling framework to adopt and the underlying mathematical/algorithm basis for the modeling. This will permit a clear SOW to be developed for the basis of the RFP and selection of contractor(s) in early 2013. \$ 25,000