

STATUS REPORT FROM DR. THOMAS HARDY

Primary work efforts in the first quarter focused on a review of existing technical fisheries and hydrology reports developed since the initial modeling of the San Marcos and Comal river systems were undertaken by USU in the late 1980's and early 1990's. In addition, several coordination meetings were held with individuals represented on the technical team (and others) to get one-on-one input to the existing status of each of these systems in terms of the physical, chemical, and ecological components. This included a two day meeting with Ms. Jean Cochrane who is heading up the Structured Decision Making effort for the USFWS to coordinate our respective study efforts. This effort also included development of an integrated meeting agenda for the first full technical team meeting. The first full technical team meetings were held over three days in which the first prototype of the influence diagrams for the Fountain darter, Texas wild rice, and the Comal riffle beetle were generated. The meetings also provided an opportunity to review the available scientific data currently available on the Comal and San Marcos Rivers and a review of known on-going studies that may have a bearing on the existing work. Field trips were also conducted on the entire Comal and San Marcos Rivers to examine the physical setting relative to the time frame in which the original modeling work conducted by USU was undertaken. Finally, the existing models developed at USU for the Comal and San Marcos systems were retrieved from backup and are being reconstituted on computer systems at the River Systems Institute by Texas Parks and Wildlife Department.

The focus of the next quarter will be to update/finalize the initial influence diagrams for the fountain darter, wild rice, and Comal riffle beetle. Work will be completed on updating the presence/absence and density equations developed by USU for fountain darters based on field data collections over the past 7 years since the initial work was undertaken. The corresponding habitat models for the Comal and San Marcos Rivers will be updated with these new relationships. The models will also be expanded to assess potential impacts associated with recreation use based on existing studies. A priority will also be given for defining the initial hydrology modeling runs that will be used in the initial assessments in order to request these runs by the EAA (or others). The hydrology outputs and revised habitat models will then be used to examine the initial flow dependent relationships for the priority target species. Work will also continue on the integration of the potential impacts to the priority target species given introduced plant and animal species in the two systems.