Pecos River Basin Assessment Program FY04 CWA Section 319(h) TSSWCB Project No. 04-11

Quarter no. <u>10</u> From <u>01/01/07</u> Through <u>03/31/07</u>

I. Abstract

Most subtasks regarding basin assessment, educational programming and the monitoring program are concluding. Final reports for these subtasks will provide information for the composition of the watershed protection plan. Work on the WPP has continued and is moving along. It is anticipated that a revised draft of the plan will be ready at the end of the month and will be passed around for review by project participants before it is sent out to the stakeholders. It is anticipated that the plan will be sent to stakeholders at the beginning of the summer (early June) and the first round of stakeholder comment meetings will be held sometime in mid summer. A project update document was developed and was distributed to stakeholders at a meeting that was organized by the NRCS; in addition, the update will be mailed out to over 1,000 early during the next quarter. A presentation was also made at a Pecos River conference held in San Marcos on March 9th. A general description of the project and some historical information about the Pecos and how this 319 project came about was presented to conference participants.

II. Overall Progress and Results by Task

TASK 1: Basin Assessment

Subtask 1.1: Aerial Photography, Delineation, and Characterization

The following actions have been completed during this reporting period:

a. The final subtask 1.1 report was completed and submitted to TSSWCB for approval.

100% Complete

Subtask 1.2: Historical Water Quality, Irrigation Delivery, Rainfall, Red Bluff Lake Levels, and Groundwater Monitoring

The following actions have been completed during this reporting period:

- a. Work continued toward gathering and compiling groundwater data for the basin.
- b. Relevant water news items were identified and distributed to team members.

Subtask 1.3: Aquatic Life and Habitat Inventory

The following actions have been completed during this reporting period:

a. TCEQ began analysis on samples collected during the biological survey of the upper reach of river, and received biological samples from a survey done in the lower Pecos River by the USGS. TCEQ performed identification of most of the biological samples.

90% Complete

Subtask 1.4: Identify and Characterize the Volume and Quality of Tributaries and Springs

The following actions have been completed during this reporting period:

a. There has been no activity this quarter, due to absence of measurable water quantities in tributaries identified as part of this study.

25% Complete

Subtask 1.5: Identify and Characterize Saline Water Sources Entering the Pecos River

The following actions have been completed during this reporting period: a. This subtask is completed

100% Complete

Subtask 1.6: Simulate Flow and Salinity of the Pecos River for Evaluating River Management Options

The following actions have been completed during this reporting period:

a. Modeling and coding of the streamflow and salt routing was completed.

85% Complete

Subtask 1.7: Economic Modeling of the Pecos River Basin and Assessment of Saltcedar Control Activities

The following actions have been completed during this reporting period:

a. The principle investigator for this subtask returned from active military duty, and activity for this subtask will resume during the next quarter.

Task 2: Educational Programming

Subtask 2.1: Publish Written Informational Materials to Educate Private Landowners, Stakeholders, and Policy Makers about the Pecos River basin and the effects of saltcedar

The following actions have been completed during this reporting period:

- a. The historical document titled "A Brief History of Water Resources Challenges Facing the Pecos Basin of Texas" is in the process of being printed.
- b. A letter to stakeholders and a one-page project publication were drafted. These documents outline upcoming project activities and some proposed management measures included in the draft WPP, and will be distributed to stakeholders in the Pecos Basin.

90% Complete

Subtask 2.2: Educational Meetings of Interested Parties for Input and Organizational Support

The following actions have been completed during this reporting period:

- a. Project personnel attended and distributed the Year 2 Annual Report and onepage update publication at a stakeholder meeting in Iraan, TX.
- b. A presentation was given to a group of approximately 55 stakeholders at a nontraditional Pecos River conference held in San Marcos at the River Systems Institute on March 9th. Topic for the conference ranged from ancient history, to current activities on the river to the Pecos in films and folklore.

55% Complete

Subtask 2.3: Develop a Website for Dissemination of Information

The following actions have been completed during this reporting period:

a. Ongoing activities and updates were posted to the project website.

90% Complete

Task 3: Establish a Monitoring Program

Subtask 3.1: Develop a QAPP for Sampling Protocol

The following actions have been completed during this reporting period:

a. This task is completed.

Subtask 3.2: Water Quality Monitoring, including Total Dissolved Solids (TDS), Total Suspended Solids, Potential Hydrogen (pH), Dissolved Oxygen (DO), and Electrical Conductivity (EC)

- The following actions have been completed during this reporting period:
- a. Routine water quality samples were collected as part of the Texas Clean Rivers Program.

75% Complete

Subtask 3.3: Quantity and Fate of Water Salvage as a Result of Saltcedar Control

The following actions have been completed during this reporting period:

- a. Conducted additional slug tests of monitoring wells to determine subsurface hydraulic conductivity in January;
- b. Verified land surface and monitoring wellhead elevation and collected additional hydrological profile data in February;
- c. Analyzed slug test data and calculated saturated hydraulic conductivity using Bouwer and Rice method;
- d. Evaluated and interpreted groundwater surface profile data;
- e. Prepared draft of final report for this subtask.

90% Complete

Task 4: Watershed Protection Plan

Subtask 4.1: Develop Annual Reports and a Final Report Summarizing Basin Assessment, Educational Programming, and Monitoring

The following actions have been completed during this reporting period:

a. No activity this quarter.

75% Complete

Subtask 4.2: Produce the Final Watershed Protection Plan for Pecos River Segments 2312, 2311, and 2310

The following actions have been completed during this reporting period:

a. Edits began on the first draft of the Watershed Protection Plan, subsequent to receiving comments internally from project personnel.

III. Related Issues/Current Problems and Favorable or Unusual Developments

- NRCS has made an effort to form a Pecos River watershed stakeholder group and get input from them about forming a 501c3 organization that is completely separate from this project. The next meeting of this group will be in Iraan, TX on May 10th at 9:30 a.m.
- The project update will be mailed out to approximately 1,000 stakeholders early during the next quarter.
- A project meeting was held in Ft. Stockton on February 6th where task leaders came together and discussed remaining project activities and their estimated timeline for completion.

IV. Projected Work for Next Quarter

The following will be accomplished during the coming quarter:

Subtask 1.1 – No activities planned. This subtask is complete.

Subtask 1.2 – Work will continue towards the completion of a groundwater database for the basin.

Subtask 1.3 – TCEQ will complete the identification of biological samples and prepare the metric for assessment of all of the biological data collected in the Pecos River. TCEQ will perform an assessment of the habitat data collected during the biological sampling events. Data and assessment will then be sent to USIBWC CRP to prepare the final report.

Subtask 1.4 – Selected tributaries will be sampled if measurable water quantities exist.

Subtask 1.5 – No activities planned. This subtask is complete.

Subtask 1.6 – Complete the documentation of the salt and flow routing model.

Subtask 1.7 – Work on this subtask will resume.

Subtask 2.1 – Printing of the historical document will be completed. The stakeholder letter and one-page update publication will be mailed to 1,000 landowners and stakeholders in the Pecos Basin.

Subtask 2.2 – Project personnel will attend a stakeholder meeting in Iraan, TX on May 10.

Subtask 2.3 – Post updates and documents to the project website.

Subtask 3.1 – No activities planned. This subtask is complete.

Subtask 3.2 – Routine water quality samples will be collected as part of

monitoring activities carried out through the Texas Clean Rivers Program.

Subtask 3.3 – Finalize characterization of soils and hydrological properties of the aquifer. Analyze hydrological profile data and monitoring data to characterize surface water and groundwater interaction. Finish the final report.

Subtask 4.1 – No activities planned.

Subtask 4.2 – Edits to the first draft of the WPP will be completed. The document will be distributed to stakeholders and other interested parties for comments.