

Texas AgriLife Extension Service

Sheldon Lake State Park Prairie Wetland Restoration

FY 10 CWA 319(h)

TSSWCB Project 10-05

Quarter no. 4 From 7-1-11 Through 9-30-11

I. Abstract

The drought has caused a significant delays in the planting of the wetland basins in Phase 2 and 3. Thus, AgriLife Extension has spent a considerable amount of time vested into seed collection and preparation. With the school year beginning this quarter, our efforts with student-based restoration work has increased and will continue on a monthly basis.

A significant amount of effort for this quarter went into the preparation of the Wetland Field Day at Sheldon Lake State Park on October 27, 2011. There was a significant amount of planning for the event which needed to occur to ensure its success.

II. Overall Progress and Results by Task

Task 1 – Project Administration and Coordination

Subtask 1.1: AgriLife Extension will prepare electronic quarterly progress reports (QPRs) for submission to the TSSWCB. QPRs shall document all activities performed within a quarter and shall be submitted by the 15th of January, April, July and October. QPRs shall be posted on the project website and distributed to all project partners.

The following actions have been completed during this reporting period:

- A. Texas AgriLife Extension Service (Extension) per this document completes the third quarterly report submittal.

36% complete (11 quarterly reports total for project)

Subtask 1.2: AgriLife Extension will perform accounting functions for project funds and will submit appropriate Reimbursement Forms to TSSWCB at least quarterly.

The following actions have been completed during this reporting period:

- A. Extension has submitted a quarterly invoice for the previous 2 quarters.

18% complete

Subtask 1.3: *AgriLife Extension will host coordination meetings or conference calls, at least quarterly, with project partners to discuss project activities, project schedule, communication needs, deliverables, and other requirements. AgriLife Extension will develop lists of action items needed following each project coordination meeting and distribute to project personnel.*

The following actions have been completed during this reporting period:

- A. Extension has contacted the TSSWCB representative to verify project adjustments via phone. No additional coordination was determined necessary.

36% complete (11 scheduled coordination meetings total)

Subtask 1.4: *AgriLife Extension will attend and participate in public meetings as appropriate in order to communicate project goals, activities, and accomplishments to affected parties. Such meetings may include, but are not limited to, Galveston Bay Council and subcommittee meetings, Clean Rivers Program Basin Steering Committee and Coordinated Monitoring meetings, Texas Forest Service Wetland/BMP Coordinating Committee meetings, TMN Gulf Coast Chapter meetings, and watershed stakeholder meetings for certain TMDLs and WPPs.*

The following actions have been completed during this reporting period:

- A. Project Manager attended the following meetings:
 - i. Wetland Lecture at YES Prep High School – Brays Oak Campus, Houston; August 27, 2011
 - ii. Gulf Coast Master Naturalist – Wetland Lecture at Sheldon Lake State Park, September 24, 2011

36% complete

Subtask 1.5: *AgriLife Extension will develop (Months 1-3), host and maintain (Months 4-36) a project webpage for the public dissemination of project materials.*

The following actions have been completed during this reporting period:

- A. Extension currently hosts and updates the Wetland Restoration Team NING website with up-to-date information regarding the project. (<http://wetlandteam.ning.com>). In addition, Extension has currently posted a draft webpage about the Sheldon restoration project for the Texas Coastal Watershed Program (www.urban-nature.org/urbanwet/sheldon.htm).

36 % complete

Subtask 1.6: *AgriLife Extension will develop and disseminate project informational materials, including, but not limited to, flyers, brochures, letters, news releases, and other appropriate promotional publications. TSSWCB must approve all announcements, letters and publications prior to distribution.*

The following actions have been completed during this reporting period:

- A. Extension has completed the initial informational flyer about the Sheldon project. This is the basic model for the extended piece which is still in draft form.

36% complete

Subtask 1.7: *AgriLife Extension will develop a Final Report.*

The following actions have been completed during this reporting period:

- A. No activity to report this quarter.

0% complete

Task 2 – Wetland Plant Propagation

Subtask 2.1: *AgriLife Extension will collect local native wetland plants (within 50 mile radius of Sheldon Lake SP) to restore the wetland site. Collection will be conducted using ecologically sound methodologies to ensure the integrity of native wild populations.*

The following actions have been completed during this reporting period:

- A. Approximately 2,280 native wetland plants were collected as part of the restoration effort this quarter (species include: *Spartina spartinae*, *Hydrolea ovata*, *Hibiscus laevis*, and *Panicum virgatum*) (see attached “plant tally TSSWCB_4qtr.xls”)

36 % complete

Subtask 2.2: *AgriLife Extension will propagate all collected native wetland plants. All plants will remain on Sheldon Lake SP.*

The following actions have been completed during this reporting period:

- A. The material collected from local sites for this quarter has all been directly transplanted into the Phase 2 or Phase 3 wetland basins.

36 % complete

Subtask 2.3: *AgriLife Extension will work with TMN to train Wetland Restoration Team members to be mentors for the restoration process. Training will include classroom and field instruction as well as practicals (i.e. outdoor labs).*

The following actions have been completed during this reporting period:

- A. AgriLife completed 16 Wetland Team workdays within this quarter, where each workday focused on restoration training aspects for the Sheldon Lake SP project (see attached "4qtrTSSWCB_wkdays_signin.pdf")

36% complete

Task 3 – Wetland Restoration

Subtask 3.1: *AgriLife Extension will train and organize with TMN to prepare mentors for completing restoration (planting) of constructed site.*

The following actions have been completed during this reporting period:

- A. Extension has conducted 16 Wetland Team workdays as part of the ongoing wetland team mentor training for the Master Naturalist volunteers (see attached "4qtrvolhrs.xls" and "4qtrTSSWCB_wkdays_signin.pdf")

36 % complete

Subtask 3.2: *AgriLife Extension and TPWD will produce an engineering design for this restored wetland system. The design will include a description specifying physical dimensions and functionality such as total area, through-flow, water depth(s), type and amount of vegetation, and the maintenance, recreational, educational infrastructure to be installed at the site. The drawings will also include detailed descriptions of the materials used in the construction of the wetland system and all its structures and the location, density and type of vegetation of all vegetated areas in the wetland. The design shall be consistent with NRCS conservation practice standards for Wetland Restoration (657) and Constructed Wetland (656).*

The following actions have been completed during this reporting period:

- A. No additional activity to report this quarter.

90% complete

Subtask 3.3: *AgriLife Extension will include in the Final Report maps that delineate the contributing watershed for the restored wetland and a description of current and historic land use of the wetland and its contributing watershed.*

The following actions have been completed during this reporting period:

- A. No activity to report this quarter.

0% complete

Subtask 3.4: *TPWD shall obtain all necessary local, state, and federal permits that apply before the restoration is conducted. Texas water rights permits and Clean Water Act § 401/404 permits may be required.*

The following actions have been completed during this reporting period:

- A. No additional activity to report this quarter.

90% complete

Subtask 3.5: *AgriLife Extension and TPWD will develop (Months 1-12) an operation and maintenance plan for the restored wetland. TPWD will implement (Months 13-36+) the O&M plan for the designed life of the restored wetland. The O&M plan shall be consistent with NRCS Conservation Practice Standards for Wetland Restoration (657) and Constructed Wetland (656).*

The following actions have been completed during this reporting period:

- A. AgriLife met with TPWD staff (see attached "TPWDMtg827.pdf") to discuss goals and needs with regards to the O&M Manual. The notes from the meeting will help to generate an outline for the document.

50% complete

Subtask 3.6: *AgriLife Extension and TMN will plant the constructed restoration site with trained mentors and student volunteers under the guide of the trained mentors.*

The following actions have been completed during this reporting period:

- A. The Wetland Restoration Team has planted within the constructed restoration site, and completed their efforts at the Demonstration wetland at the Region 4 office (on the north side of Sheldon Lake State Park) (see attached "plant tally TSSWCB 4.xls")

15% complete

Subtask 3.7: *AgriLife Extension will conduct vegetation transects to determine wetland plant stand establishment. Criteria for determining stand establishment shall be consistent with the engineering design (Subtask 3.2) and NRCS Conservation Practice Standards.*

The following actions have been completed during this reporting period:

- A. Photopoint monitoring and vegetation cover monitoring was completed during this quarter.

36 % complete

Task 4 – Outreach and Education

Subtask 4.1: *AgriLife Extension and TPWD will conduct 4 field days at the restored wetland site (2 per year) to highlight the innovative construction methods and utility of the restored wetland. Targeted audiences should include 1) other entities in the Galveston Bay area considering conducting wetland restoration, 2) TPWD staff from other State Parks, and 3) media including TV and newspapers.*

The following actions have been completed during this reporting period:

- A. The date for the field Field Day at Sheldon Lake State Park is set for October 27, 2011. Advertising has been posted electronically for the Field Day (see attached “agenda.pdf” and “field day postcard.pdf”)

15% complete

Subtask 4.2: *AgriLife Extension will make presentations on the restored wetland at local and regional meetings, including 1) GBEP meetings, 2) TSSWCB Southeast and South Central Texas Regional Watershed Coordination Steering Committee, and 3) HGAC NRAC, CRP, and BIG meetings.*

The following actions have been completed during this reporting period:

- A. No additional activity for this quarter.

10 % complete

Subtask 4.3: *AgriLife Extension and TPWD will explore the applicability of enrollment of this restored wetland system in the Wetland Reserve Program, a USDA Farm Bill program. AgriLife Extension will develop outreach materials promoting participation in WRP targeted to entities in the Galveston Bay area.*

The following actions have been completed during this reporting period:

- A. No activity to report this quarter.

0% complete

Subtask 4.4: *TPWD will develop and install interpretive signage at Sheldon Lake SP highlighting the restored wetland system. TPWD will develop educational materials for distribution to visitors (general public and youth) at Sheldon Lake SP highlighting the restored wetland system.*

The following actions have been completed during this reporting period:

- A. No additional activity to report this quarter.

5% complete

Subtask 4.5: *TPWD will 1) publish an article on this project in the quarterly TPWD Wetland News, and 2) produce a short program on this project for TPW-TV.*

The following actions have been completed during this reporting period:

- A. No activity to report this quarter.

0% complete

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

This webpage has recently been updated with relevant information regarding the Wetland Field Day, however, Extension keeps the wetlandteam.ning.com website as the current up-to-date site with a weekly blog and current completion numbers.

Due to the drought, Extension has not pushed its normal restoration planting activities to planting. We have put significant effort into seed work which will be critical when the “rainy season” returns and the ponds are filled.

IV. Project Work for Next Quarter

- Task 1. Extension will submit 1st quarterly (2012) report for the project and complete 45% of this subtask. Extension expects to submit our second invoice for the project, through Contracts and Grants office. Extension expects to conduct another scheduled coordination meeting with our TSSWCB project manager. Additionally, we expect to coordinate with TSSWCB project manager regarding additional outreach materials to be presented at the Field Day. .
- Task 2. Extension expects to submit documentation of volunteer hours and effort showing hours spent in propagation or collection of native plant materials. Extension expects to collect native wetland plants and directly plant them into excavated basins. Extension expects to conduct workdays which involves some training for the Wetland Restoration Team.
- Task 3. Extension expects to have set dates for the 2012 Plant Identification training class for the Wetland Restoration Team (early January). Extension will draft a working outline of the O&M guide for the restored wetlands. Extension will conduct quarterly vegetation and photopoint monitoring cycle.
- Task 4. Extension will complete the first Field Day at Sheldon Lake State Park.