

Texas AgriLife Extension Service

Sheldon Lake State Park Prairie Wetland Restoration

FY 10 CWA 319(h)

TSSWCB Project 10-05

Quarter no. 6 From 1-1-12 Through 3-31-12

I. Abstract

The project site has received significant rainfall during this quarter, such that all the ponds have reached and maintained pond-full levels. This facilitated our significant increase in planting workdays at the Park where we have focused on installation within the more remote Phase III ponds (17 to 20).

Extension continued to promote the Sheldon Lake SP restoration methodology during the multiple lectures/presentations to various groups this quarter.

Extension has also been fortunate to host multiple student group workdays at the Park as part of the restoration education component.

Planning began for the second Wetland Field Day which is scheduled to take place on April 19th, 2012.

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 sixth quarterly report submittal.

54% 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 quarter.
- B. A budget revision was also initiated.

54% 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 contacted the TSSWCB project leader regarding various contract issues or project deliverables. Additionally, Extension informally coordinated details of the workdays at the Park with Park staff (due to new construction onsite).

54% 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. Heartwood Chapter Master Naturalist – Wetland Restoration at Sheldon Lake State Park, February 1, 2012
 - ii. Galveston Bay Area Chapter Master Naturalist –Wetland Values and Functions; Wetland Restoration at Sheldon Lake State Park, March 1, 2012
 - iii. Southeast and South Central Texas Watershed Coordination Steering Committee, March 15, 2012

54% 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>), and the Sheldon Lake SP restoration project webpage for the Texas Coastal Watershed Program (www.urban-nature.org/urbanwet/sheldon.htm).

54 % 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. A Wetland Field Day postcard was created in order to promote the upcoming Field Day (see attached, "Field Day postcard April2012.pdf")
- B. A draft news release was created by Extension staff and reviewed by TSSWCB staff to be later distributed through AgriLife Today.

54% 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 13,064 native wetland plants were collected as part of the restoration effort this quarter (species include: *Spartina spartinae*, *Spartina spartinae*, *Sagittaria platyphylla*, *Iris virginica*, *Cyperus virens*, *Rhynchospora corniculata*, *Thalia dealbata*, *Eleocharis montana*, *Hydrolea ovata* and *Eleocharis quadrangulata*) (see attached “plant tally TSSWCB 6qtr”)

54 % 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. Additionally, the Wetland Restoration Team continued the long process of removing viable material from the grow-out ponds and staging/planting material into the basins (4 of the 6 ponds have been processed to remove all viable material for planting and replace ponds with fresh material to propagate).

54 % 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 15 Wetland Team workdays within this quarter, where each workday focused on restoration training aspects for the Sheldon Lake SP project (see attached “signin_shts_1st_qtr_2012.pdf”)

54% 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 12 Wetland Team training workdays (workdays without students) as part of the ongoing wetland team mentor training for the Master Naturalist volunteers (see attached “signin_shts_1st_qtr_2012.pdf”).

Extension has also set Wetland Plant Identification training class dates for this summer (July to August 2012) and advertised the class through the Master Naturalist chapters (see Wetland Restore Class12.pdf)

45 % 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. Extension drafted an initial outline which was sent to Texas Parks and Wildlife Department staff for review. The staff agreed to the outline as an appropriate beginning for the O&M plan. Extension has completed an initial section (Invasive Species). (see attached, "PrairieMarshO&M_outline.pdf" and "PrairieMarshOM_Invasives.pdf")

55% 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. Extension has conducted 15 Wetland Team workdays as part of the ongoing wetland team mentor training for the Master Naturalist volunteers (see attached "plant tally TSSWCB_6qtr.xls")

54% 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 was completed during this quarter.

54 % 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:

- C. Extension has planned and began preparation for the second Field Day at Sheldon Lake State Park to take place on April 19th, 2012.

30% 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. Extension provided a brief synopsis of the Sheldon project in conjunction with advertising the upcoming Field Day at the Regional Watershed Coordination meeting. Additionally, electronic information was disseminated to both the Natural Resources Uses and Water and Sediment Quality Subcommittees for the Galveston Bay Council for this quarter.
- B. Electronic contact with H-GAC was also pursued to promote the upcoming Wetland Field Day through the BIG contact list.

30 % 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.

The region has received a significant amount of rain such that access to some of the more remote basins has been inhibited. However, the Wetland Team utilizes those opportunities to remove viable material from the grow-out ponds.

IV. Project Work for Next Quarter

- Task 1. Extension will submit 7th quarterly report for the project and complete % of this subtask. Extension expects to complete our amendment to move funds from Equipment category to Travel category, through Contracts and Grants office. Extension expects to coordinate with TSSWCB project manager regarding additional outreach materials to be produced for the project.
- 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 or the grow-out ponds at the Park. Extension expects to conduct workdays which involves some training for the Wetland Restoration Team.
- Task 3. Extension will continue to draft more sections of the O&M manual based on the approved outline from the Park. Extension will conduct quarterly vegetation and photopoint monitoring cycles.
- Task 4. Extension will conduct the next springtime Field Day at Sheldon Lake State Park, and determine the date for the 3rd Field Day.