#### FINAL REPORT

# Upper Oso Watershed Water Quality Improvement and Habitat Education Project GLO Contract #13-050-000-6917

#### **PROJECT SUMMARY:**

The purpose of the Upper Oso Watershed Water Quality Improvement and Habitat Education Project was to construct a detention wetland, establish habitat along the perimeter of the wetland, and incorporate a public education signage component. All project elements were accomplished with the assistance of the grant funds obtained from the Texas General Land Office. Three acres of land were excavated in order to create a wetland that now provides drainage benefits for the nearby Oso Creek Watershed. The stormwater detention wetland filters and cleans runoff from the land and parking areas in the vicinity. Vegetation, such as waterlilies, bulltongue, and spikerush, was planted along the shallow edges of the wetland. The vegetation serves several purposes such as: providing a food source for water fowl; providing cover for nesting and protection; and providing shoreline erosion control and sediment stabilization. Interpretive signage was placed at the project site as an educational tool for the public. The park is frequented by visitors of all ages i.e. youth sport leagues and local residents. Also included in the project was an ADA accessible overlook and benches for the public to view the new wetland and vegetation.

#### **ADMINISTRATIVE ACCOMPLISHMENTS:**

<u>Description</u>	<u>Date</u>
GLO Contract executed	11/12/2012
Engineering contract executed	01/02/2013
Plans and specifications sent to GLO	01/16/2013
Wetland design provided to GLO	01/16/2013
GLO approval of plans and specifications	04/04/2013
Construction IFB closed	05/29/2013
Vegetation plan provided to GLO	07/30/2013
Construction contract executed	07/24/2013
Grant period end date	06/30/2014

#### **CONSTRUCTION ELEMENTS:**

<u>Description</u> <u>Date</u>

Start of construction 08/01/2013

Completion of wetlands overlook 09/27/2013 - 02/28/2014

Installation of park benches 02/28/2014

Installation of interpretive signage 05/22/2014

Planting of vegetation 06/05/2014

#### **ANALYSIS OF WETLAND PERFORMANCE:**

The vegetation planted along the lower shelf of the wetland was thriving in the shallow water as pictures show (2 months after planting – see attached pictures). At the time of planting (June 2014), the County was experiencing drought conditions however the plant continued to thrive for the next 4 months. Eventually, water levels in the wetland became increasingly low and the plants became stressed. An area was hydro-seeded in an effort to restore the vegetation which revived the plants. However, in more recent months, there have been significant rain events in Nueces County filling the wetland to its maximum capacity (see attached pictures). The plants are now completely submerged in the wetland. Plants can still be seen submerged however they are once again stressed. The contract landscaper has stated the plants should be able to bounce back once normal conditions return. Once the water recedes, the County intends to determine whether the plants can be restored or if re-planting and repositioning must be done.

#### COASTAL MANAGEMENT PROGRAM (CMP) CYCLE 17 FINAL REPORT PHOTOS

#### UPPER OSO WATERSHED WATER QUALITY IMPROVEMENT AND HABITAT EDUCATION PROJECT GLO Contract #13-050-000-6917

PREPARED BY: NUECES COUNTY GRANTS ADMINISTRSTION
SUBMITTED TO: GENERAL LAND OFFICE
COASTAL MANAGEMENT PROGRAM
AUGUST 2015

#### **WETLAND POND PHOTOS**

Aerial view of park wetland area prior to pond construction:



Aerial view of park wetland area after pond\* construction:



\*Pond seen towards the right top corner of the photo

Ground view of project area before pond construction:



Ground view of project area before pond construction:



\*\*\*Project area photos <u>during</u> pond construction and excavation were taken however were inadvertently deleted by mistake. Nueces County is currently trying to get in contact with the project contractor who did the excavation to see if any photos can be retrieved.

# Ground view of project area after pond construction:



# Ground view of project area after pond construction:



# Ground view of project area after pond construction:



# Ground view of project area after pond construction:



### OVERLOOK/BENCH/CROSSOVER PHOTOS

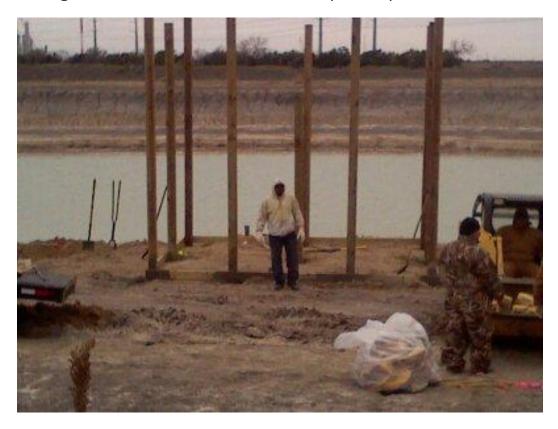
Work during the construction of the Overlook/Bench/Crossover unit:



Work during the construction of the Overlook/Bench/Crossover unit:



Work during the construction of the Overlook/Bench/Crossover unit:



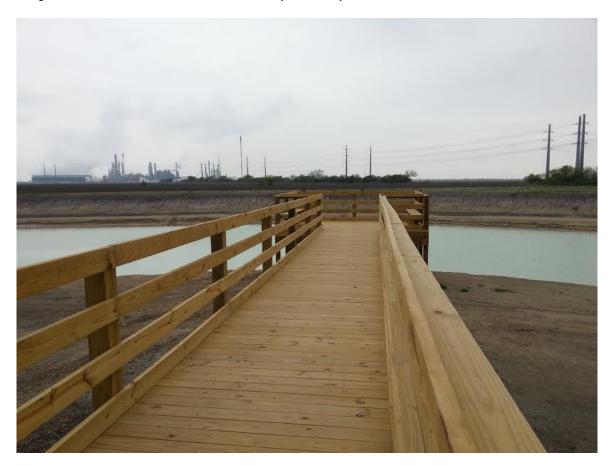
Work during the construction of the Overlook/Bench/Crossover unit:



# After photo of the finished Overlook/Bench/Crossover unit:



# After photo of the finished Overlook/Bench/Crossover unit:



# After photo of the finished Overlook/Bench/Crossover unit:



After photo of the finished Overlook/Bench/Crossover unit:



# <u>VEGETATION PHOTOS</u>

Pond photo before vegetation planting:



Pond photo before vegetation planting:



# Pond photo before vegetation planting:





Photo during the planting of the vegetation:





Photo during the planting of the vegetation:







Photo of vegetation thriving seven (7) days after planting:



Photo of vegetation thriving seven (7) days after planting:



Photo of vegetation thriving seven (7) days after planting:



Photo of vegetation thriving seven (7) days after planting:



Photo of vegetation thriving seven (7) days after planting:



Photo of vegetation thriving seven (7) weeks after planting:



Photo of vegetation thriving seven (7) weeks after planting:



# Photo of vegetation thriving seven (7) weeks after planting:



Photo of vegetation thriving seven (7) weeks after planting:



### Photo of vegetation one (1) year after planting:



Picture below were taken on July 10, 2015, one year (+) after being planted. Notice how high the water level is (at the overlook) compared to when they were first planted. Pond retention is very high due to extraordinary rainfall amounts/flooding.

#### **SIGNAGE PHOTOS**

#### Interpretive signage photo:



### Permanent GLO signage photo:



### Permanent GLO signage photo:

