



LONG-TERM MONITORING AND MANAGEMENT OF RESTORED WETLANDS IN FLORIDA

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WETLAND RESERVE EASEMENTS (WRE) - TEAM BIOLOGIST

RESTORE WETLANDS TO THEIR NATURAL, HISTORIC STATE PRIOR TO HYDROLOGICAL MANIPULATION AND CONVERSION TO AGRICULTURE

- 178,172 ACRES UNDER EASEMENT, 120 PROPERTIES
- MANAGE IN PERPETUITY – FOREVER’S A LONG TIME!!!!
- ANNUAL MONITORING OF ALL RESTORED SITES
- HABITAT MANAGEMENT BASED ON MONITORING RESULTS – ENSURE PROGRAM GOALS MET

FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION - MONITORING



MONITORING PARAMETERS

- DEED VIOLATIONS OR UNAUTHORIZED ACTIVITIES – CUA OR NO
- EXISTING CUA BEING FOLLOWED
- OBJECTIVES OF MANAGEMENT PLANS MET – GRAZING PLAN, WRPO, ETC.
- INSTALLED PRACTICES PROPERLY OPERATED/MAINTAINED – WCS, DIKE, DITCH PLUGS, ETC.
- RESTORATION OBJECTIVES BEING MET
- PROPER HYDROLOGY PRESENT
- PROPER VEGETATION PRESENT
- INVASIVE EXOTIC OR NUISANCE SPECIES PRESENT
- AREAS OF CONCERN
- RECOMMENDED ENHANCEMENTS

ANNUAL MONITORING WORKSHEET

County/Parish

Select the Appropriate Program: EWPP-FPE EWRP FRPP GRP HFRP WRP

Landowner(s) Phone Monitoring Date

NEST Agreement & Parcel Number Other identifying name or number

Monitor(s) Affiliation if other than NRCS

The purpose of monitoring is to ensure compliance with program policy, the terms of easement deeds, evaluate restoration progress, determine restoration repairs or enhancements needed to ensure maximum environmental benefits, and to maintain contact with landowners or partners. Staff with applicable expertise should collect the monitoring information. Partners with the appropriate technical expertise may be authorized to conduct monitoring reviews. The landowner or decision maker should be offered the opportunity to participate in monitoring reviews.

Photographs from designated points are recommended when conducting onsite monitoring.

Methods of Monitoring

<input type="radio"/> Ownership Review	Landowner contact and answer question 1 of this worksheet. <i>Only applicable in the year immediately following onsite monitoring that did not require corrective actions or had no violations.</i>
<input type="radio"/> Offsite	A review of the most recent aerial photography and answer questions 1, 3 and 4 of this worksheet.
<input type="radio"/> Summary Review	At a minimum; a cursory onsite visit, a landowner contact and answer questions 1, 2, 3 and 4 of this worksheet. <i>Only applicable during the pre-restoration phase.</i>
<input type="radio"/> Onsite	At a minimum; landowner contact, a review of available aerial photography and answer all questions on this worksheet.

Landowner Information

1) A. Landowner Contact (attempted) Date Contact Method

B. Was current land ownership verified? YES NO

Date of verification Verified by

C. If there is a new landowner, were they notified of the easement and have records been updated? (If yes, Onsite Monitoring is required for the next 2 years) YES NO

New landowner name(s) (if applicable)

D. Follow up requested by landowner

2) Was the landowner or decision maker present during the review? YES NO

4 PRIMARY NRCS CONSERVATION PRACTICES UTILIZED IN WRP/WRE TO MANAGE WILDLIFE HABITAT

- EXOTIC AND NUISANCE VEGETATION CONTROL - CHEMICAL
- BRUSH MANAGEMENT - ROLLER CHOPPING, GRINDING, SHREDDING, MOWING, ETC.
- PRESCRIBED BURNING
- PRESCRIBED GRAZING

USE MULTI-PRONG APPROACH FOR MAXIMUM RESULTS - BURN THEN CHEMICALLY TREAT,
CHOP THEN BURN, ETC.

PURPOSE OF VEGETATION MANAGEMENT PRACTICES

- SET BACK SUCCESSION - CONTROL WOODY INVASION
- CONTROL INVASIVE EXOTIC AND NUISANCE SPECIES
- MAINTAIN/RESTORE PROPER ECOLOGICAL STRUCTURE AND STATE – UPLANDS & WETLANDS
- FIRE ADAPTED COMMUNITIES – REGENERATION (CUTTHROAT GRASS, SAWGRASS, CYPRESS, PINE)

CONSERVATION PRACTICE CAVEATS

- EXOTIC AND NUISANCE VEGETATION CONTROL – UF/IFAS RECOMMENDATIONS, APPLY TIME OF YEAR WHEN MOST EFFICIENT/LETHAL
- BRUSH MANAGEMENT – BASED ON WILDLIFE BENEFIT NOT CATTLE BENEFIT
- PRESCRIBED BURNING – ECOLOGICAL BURNS, NATURAL/HISTORICAL FIRE REGIME, MOSAIC, BUT RECOGNIZE ANY BURN IS BETTER THAN NO BURN
- PRESCRIBED GRAZING – BASED ON HABITAT BENEFIT NOT ECONOMIC BENEFIT, NRCS GRAZING PLAN, ROTATIONAL GRAZING, COMMUNITY SPECIFIC RECOMMENDATIONS, STUBBLE HEIGHT BY SPECIES

EXOTIC & NUISANCE CONTROL - CAROLINA WILLOW



BRUSH MANAGEMENT - HEAVY ROLLER CHOPPING





PRESCRIBED BURNING - CUTTHROAT SEEP



PRESCRIBED GRAZING



PARTNERS

- FWC - ANNUAL MONITORING AND HABITAT MANAGEMENT PLANS
- USACE - EXOTIC VEGETATION CONTROL (CHEMICAL & MECHANICAL) AND FENCE
- FFS - PRESCRIBED BURNING
- LANDOWNERS - BRUSH MANAGEMENT AND PRESCRIBED GRAZING (COMPATIBLE USE AUTHORIZATION AND JOB SHEETS REQUIRED)

QUESTIONS?

