

RESACA DE LOS FRESNOS FIRE BURNED AREA REHABILITATION PLAN

**U.S. FISH AND WILDLIFE SERVICE
LOWER RIO GRANDE VALLEY NATIONAL WILDLIFE REFUGE
SEPTEMBER 2006**

FIRE DATE: July 18, 2005

AGENCY/UNIT: U.S. Fish and Wildlife Service
Lower Rio Grande Valley National Wildlife Refuge
Route 2, Box 202a
Alamo Texas, 78516
Phone: 956-784-7500

LOCATION/SIZE: La Feria, Cameron County, Texas
31.8 acres

PREPARED BY: U.S. Department of Interior
U.S. Fish and Wildlife Service
Mitch Sternberg, Wildlife Biologist

Submitted By: _____

Date: _____

Kenneth L. Merritt, Project Leader, South Texas Refuges Complex

BURNED AREA REHABILITATION PLAN REVIEW AND APPROVAL

I. Project Leader approval that the Burned Area Rehabilitation Plan meets approved land management plan management objectives.

Kenneth L. Merritt, Project Leader, South Texas Refuge Complex

Date

II. Regional Fire Management Coordinator concurrence that the plan fits the technical definition for use of Rehabilitation finding.

Regional Fire Management Coordinator, Region 2

Date

III. Rehabilitation Funding Approval (check one box below):

Approved

Approved with Revision (see attached)

Disapproved

Regional Director, Region 2

Date

Resaca de los Fresnos Fire
(21550-9141-B0GY)
BURNED AREA REHABILITATION PLAN

UNIT: Lower Rio Grande Valley NWR, Resaca de los Fresnos Tract

LOCATION: La Feria, Cameron County, Texas

DATE: September 30, 2006

PREPARED BY: Mitch Sternberg, Wildlife Biologist

EXECUTIVE SUMMARY

Introduction

This Burned Area Rehabilitation Plan has been prepared in accordance with Department of the Interior and U.S. Fish and Wildlife Service (FWS) policy, the Lower Rio Grande Valley (LRGV) National Wildlife Refuge (NWR) Comprehensive Conservation Plan (CCP), and the South Texas Refuge Complex (STRC) Fire Management Plan. This plan provides rehabilitation recommendations for all land burned within the Resaca de los Fresnos Fire. Primary objectives of the Resaca de los Fresnos Fire Burned Area Rehabilitation Plan are to:

1. Reduce stands of introduced invasive grass species that pose a fire hazard, to less than 5% total vegetative cover.
2. Rehabilitate a stable shrubland ecosystem at the burn site according to approved land management plans, utilizing native plant species and restoration techniques that will minimize recolonization by introduced grasses and the susceptibility of this site to wildfire.
3. Implement threatened and endangered species recovery plans to restore the wildlife habitat corridor in order to enhance the recovery of Federally-listed endangered species, including the ocelot, jaguarundi and *Ayenia limitaris*, as well as flora and faunal species protected by the State of Texas.

This plan continues actions that were conducted through a Burned Area Rehabilitation Plan initiated on September 11, 2005. These plans implement the recommendations for rehabilitation that were documented in the Resaca de los Fresnos Burned Area Assessment Report by the LRGV NWR Plant Ecologist on September 9, 2005. This assessment includes:

1. Background information on the fire, including the cause, fuels, and impacts to infrastructure and historic sites.
2. An accurate map of the area affected by the fire.
3. Site history and land use, including analysis of aerial photography from 1974, 1983, 1987 and 2002.
4. Fire impacts on vegetation, wildlife and other natural resources, including rare, threatened and endangered species.
5. Compilation of site characteristics that are pertinent to restoration and management, including climate, geology, topography, soils, existing and potential vegetation, and wildlife habitat values.
6. Specific recommendations for restoration, monitoring and management of natural resources at the site.
7. Estimate costs associated with the recommended specifications.

The Burned Area Assessment Report is attached in Appendix V. Appendix II contains the National Environmental Policy Act (NEPA) compliance documentation summary. The Burned Area Rehabilitation Maps are found in Appendix III. Appendix IV contains photographic documentation. Site monitoring reports and other supporting documentation are included in Appendix V. Part E is a summary of costs by jurisdiction. Rehabilitation treatment specifications and monitoring are described in Part F.

Fire Background

The Resaca de los Fresnos Fire (21550-9141-B0GY) was discovered on the Resaca de los Fresnos tract of LRGV NWR on July 15, 2005. It was contained on July 17 and declared out on July 18, 2005. The burned area is bounded on the west by the FM 800, on the north-east by the vegetated levee of the Arroyo Colorado, and on the south by a portion of the tract that was successfully revegetated in 1999. The fire appears to have been caused by a lightning strike.

Fire Damages and Threats to Human Safety and Natural and Cultural Resources

The fire perimeter was mapped with d-GPS on September 7, 2005, and the burned area was determined to be 31.8 ac (see attached map, Resaca de los Fresnos Burn 2005). The entire burned area is contained on refuge-owned land. The main fuel was dense, dry Kleberg bluestem (*Dicanthium annulatum*), as well as guineagrass (*Urochloa maxima*). Weather at the time of the fire was hot and dry, but the prevailing southeast winds were relatively light. The fire and fire suppression activities caused minor damage to portions of the refuge-owned fence FM 800. No other damages to infrastructure or historic sites occurred. However, if the fire had not been controlled, it could have spread along the Arroyo Colorado, threatening residences and other structures situated along the north bank of the Arroyo. Furthermore, smoke drifting across the highway could create significant hazards to motorists.

The fire burned through a very sparse stand of Texas ebony, huisache and tepeguaje trees that were planted in 1992. These trees range from 3 to 7 m in height. Some of the native woody plants were killed outright by the fire, while the majority were top-killed and are coppicing from the bases of the trunks. The herbaceous vegetation though most of the burned area consists of nearly 100% cover of Kleberg Bluestem (*Dicanthium annulatum*), an introduced, invasive grass, which recovered quickly after the fire. Another introduced, invasive grass, guineagrass (*Urochloa maxima*), predominates in those few shaded portions of the burned area. The major impact of the fire to native vegetation was the reduction of the size, density and cover of native trees and shrubs, and the stimulation of vigorous regrowth of Kleberg bluestem. Kleberg bluestem has relatively little value as a forage grass for domestic livestock, and essentially no value to rodents, quail and other seed-eating fauna, as well as the predators that depend on these prey. The rapid regeneration of Kleberg bluestem, and the ability of this grass to suppress native plants (perhaps through allelopathy), creates a fire-adapted non-native plant community that promotes, and is perpetuated by, frequent wildfires.

The recommended treatment of the burned area consists of thorough eradication of invasive non-native grass species, followed by restoration of native subtropical evergreen forest that is far less susceptible to wildfire. The invasive grass species, primarily Kleberg bluestem, will be treated 6 times over the course of 12 to 18 months with glyphosate herbicide. Follow-up spot treatments with glyphosate and/or imazapyr herbicides may be made following establishment of native woody plants. The timing of repeated herbicide treatments is critical for success.

Restoration of native subtropical evergreen forest will be accomplished, following effective control of invasive grasses, by transplanting seedlings of native trees and shrubs, and direct seeding of native herbaceous plants. The rapid establishment of native herbaceous plants, consisting of sub-shrubs and forbs that reproduce quickly in the field will minimize subsequent re-invasion by Kleberg bluestem. Transplantation will be accomplished between September 15 and December 15, 2007, provided that

natural rainfall has restored available soil moisture to a depth of no less than 18 inches. Direct seeding will be conducted immediately after seedling transplant. Seedlings for this project will be grown under contract by local vendors; these contracts must be established no later than January 2007.

This site occurs within the Rio Grande delta in alluvial mud of Quaternary origin. Soil at this site, classified as Harlingen Clay, is extremely level, with low permeability and slow runoff. It is subject to a high degree of shrinking and swelling as moisture levels change, resulting in deep cracks that aid in the establishment of trees and shrubs. The subtropical climate is characterized by long periods of hot, dry weather. Annual rainfall is sporadic, averaging about 24 inches per year. Very heavy rainfall often results from tropical storms that are most frequent from late August through October; cold fronts from October through December, colliding with warm moist air masses from the Gulf of Mexico, also result in heavy rains. Due to availability of soil moisture, the shorter day length, and the more moderate temperatures, the optimal season for tree and shrub establishment is mid-September through mid-December.

Nearly all of the native vegetation in the Rio Grande delta was cleared during the early 20th century for agriculture. Remnants of native vegetation occur along the Arroyo Colorado, and in isolated tracts, such as the Harlingen Birding Festival, Noriega, Garza-Cavazos and Ranchito tracts (LRGV NWR), and Longoria and Resaca de la Palma tracts (TPWD). These sites provide models for the potential vegetation at the Resaca de los Fresnos burn site. These are extremely dense, subtropical, evergreen forests, ranging from 5 to 15 m in height. Dominant tree species include Texas ebony (*Chloroleucon ebano*), anacua (*Ehretia anacua*), honey mesquite (*Prosopis glandulosa* var. *glandulosa*), tenaza (*Havardia pallens*), border palo verde (*Parkinsonia texana* var. *macrum*), jaboncillo (*Sapindus saponaria*), Wright's Acacia (*Acacia wrightii*) and sabal palm (*Sabal mexicana*). A good indicator of very old-growth stands is the presence of large guayacán (*Guaiacum angustifolium*), Texas persimmon (*Diospyros texana*), Sierra Madre torchwood (*Amyris madrensis**), Vasey's Adelia (*Adelia vaseyi**), brasil (*Condalia hookeri*), coma (*Sideroxylon celastrinum*), mescal bean (*Sophora secundiflora*) and limoncillo (*Esenbeckia runyonii**). The very dense, diverse shrub understory includes snake-eyes (*Phaulothamnus spinescens*), crucita (*Eupatorium odoratum*), blue mist-flower (*Eupatorium azureum*), Mexican Trixis (*Trixis inula*), David's milkberry (*Chiococca alba**), brush holly (*Xylosma flexuosa**), colima (*Zanthoxylum fagara*), elbow bush (*Forestiera angustifolia*) and lotebush (*Ziziphus obtusifolia*). Species indicated with an asterisk are rare, endemic or peripheral. A Federally-listed Endangered plant species, *Ayenia limitaris*, occurs in this habitat type along the Arroyo Colorado near Harlingen. A pilot reintroduction of this species was established in 1999 in the site revegetated just south of the burn site. The *Ayenia* seedlings survived and have reproduced spontaneously at the site, indicating that additional reintroductions are possible here.

The subtropical evergreen forests of the Rio Grande delta are considered critical habitat for two Federally-listed Endangered felids, the ocelot (*Leopardus pardalis*) and jaguarundi (*Herpailurus yaguarondi*); the jaguar (*Panthera onca*) was extirpated from this region in 1946. This habitat type is utilized by numerous species of neotropical migratory birds, such as the tropical parula, Altamira oriole and tropical kingbird. Resident neotropical birds include the chachalaca, green jay and great kiskadee. The chachalaca and white-winged dove are important game species.

Due to the relatively small size of the Resaca de los Fresnos fire, only one Burned Area Assessment Report was prepared.

Lower Rio Grande Valley Management Requirements

The suppression of wildfire and restoration of native vegetation are provisions of the refuge Comprehensive Conservation Plan (established as an Interim Comprehensive Management Plan and Draft Environmental Assessment, approved by Regional Director Lynn B. Starnes, September 24, 1997):

S.5.1.A. Acquisition and Land Status Objectives (p. 42).

2. Acquire lands (tracts) that will: (1) Provide for the protection of endangered species; (2) Assist in the achievement of a contiguous river wildlife corridor; (3) Enlarge established brush tracts or create corridors connecting tracts of native habitat; (4) Enhance or connect existing refuge tracts not on or near the river; and (5) Protect isolated tracts of desirable habitat.

S.5.1.D. Revegetation and Habitat Management Objectives (pp 44-46).

1. Continue to protect and restore refuge lands containing any of the 11 biotic communities identified in the Land Protection Plan (LPP).
2. Continue to revegetate up to 1,000 acres of refuge cropland per year with appropriate native plant species...Prioritize revegetation of fields according to the following scale (with A being the highest priority): A) fields located immediately adjacent to the Rio Grande which would directly link habitat corridor segments.
3. The primary objective of revegetation is to restore high-quality habitat on disturbed sites (mainly croplands), modeled on undisturbed sites with similar characteristics, in the minimum length of time.
4. a) Provide a diversity and composition of native plant species modeled on the vegetation of undisturbed sites with similar characteristics.

d) Minimize the impact of perennial exotic species, the most significant of which are the exotic grass species and Russian Thistle (*Salsola kali*).

S. 5.1.E. Fire Management (p. 47).

1. Use a combination of strategies such as discing [sic], prescribed fire, and herbicides (depending on location and other factors) to control and lessen fuel loads in areas susceptible to high growth levels of bermuda and other exotic grasses and Russian thistle, especially tracts within the Hidalgo County District as 40% of all suppressed fires in the LRGV are in that area. Areas would not be reforested until these exotics are removed.
2. Presuppression / Suppression --- The refuge will maintain a standing force of fire program personnel whose primary duty will be to detect and suppress those wildfires found on the refuge.

Summary of Accomplishments, Remaining Treatments and Activities

Refuge Forestry Technicians worked two days to inspect the site and map potential safety hazards, such as collapsed irrigation lines, standing dead snags, pipes etc. They then shredded the burned area, June 6 – 23, 2006, to reduce the amount of standing dead wood and dormant dry grass. Herbicide application will begin when sufficient rainfall stimulates vigorous growth of the invasive grass (mainly Kleberg bluestem). We expect to make this first application during the month of October, under the current FY06 Burned Area Rehabilitation plan. The remaining specifications from the FY06 BAR plan will be conducted through the FY07 Plan. These include:

1. 5 Applications of glyphosate herbicide, some by refuge Forestry Technicians until contracts with local sources are established. The applications will be made from October 2006 until September 2007, when soil moisture and the growth rate of target grasses favor effective herbicide treatment. We have purchased enough glyphosate and adjuvants through the FY06 plan to complete 3 applications.
2. Establish contracts with local native plant nurseries to produce 9,540 seedlings of native trees and shrubs, for delivery in September 2007.
3. Establish contracts with local native plant nurseries to collect seeds of native understory shrubs and forbs, to be delivered by September 2007.
4. Establish seedling furrows with subsoiler through contract with local farmer by September 2007.
5. Transplant native tree and shrub seedlings through contracted laborers, September – October 2007 (depending on soil moisture).
6. Direct seed native understory and shrub seeds, October - December 2007 (Forestry Technicians).
7. Spot application of Imazapyr herbicide, as needed (may be conducted through FY08 plan or force account).
8. Collect data on vegetation composition, cover and growth, in treated and adjacent untreated area, September 2007.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	4
TABLE OF CONTENTS	8
PART A - FIRE LOCATION AND BACKGROUND INFORMATION	9
PART B - NATURE OF PLAN	9
PART C - REHABILITATION ASSESSMENT	10
PART D - TEAM ORGANIZATION, MEMBERS, AND RESOURCE ADVISORS	10
PART E - SUMMARY OF ACTIVITIES AND COSTS.....	11
PART F - INDIVIDUAL SPECIFICATION.....	12
PART H - CONSULTATIONS.....	31
APPENDIX I - BURNED AREA ASSESSMENT REPORTS.....	32
APPENDIX II - ENVIRONMENTAL COMPLIANCE	32
APPENDIX III – MAPS	36
APPENDIX V - SUPPORT DOCUMENTS	36

PART A - FIRE LOCATION AND BACKGROUND INFORMATION

Fire Name	Resaca de los Fresnos
Fire Number	21550-9141-B0GY
Agency Unit	SRR
Region	2
State	TX
County(s)	Cameron
Ignition Date/Cause	07-15-05 / Lightning
Zone	SACC
Date Fully Contained	07-18-05
Jurisdiction	FWS 31.8 Acres
<i>other jurisdictions</i>	None
Total Acres	31.8 Acres
Date Controlled	07-18-05

PART B - NATURE OF PLAN

Type of Action (check one box below)

<input type="checkbox"/>	Initial Submission
<input checked="" type="checkbox"/>	Amendment to the Initial Submission

PART C - REHABILITATION ASSESSMENT

Rehabilitation Objectives

- 1 Reduce stands of introduced invasive grass species that pose a fire hazard, to less than 5% total vegetative cover.
- 2 Rehabilitate a stable shrubland ecosystem at the burn site according to approved land management plans, utilizing native plant species and restoration techniques that will minimize recolonization by introduced grasses and the susceptibility of this site to wildfire.
- 3 Implement threatened and endangered species recovery plans to restore the wildlife habitat corridor in order to enhance the recovery of Federally-listed endangered species, including the ocelot, jaguarundi and *Ayenia limitaris*, as well as flora and faunal species protected by the State of Texas.

PART D - TEAM ORGANIZATION, MEMBERS, AND RESOURCE ADVISORS

I. Burned Area Emergency Response Team Members and Resource Advisors.

Position	Team Member (Agency)
Team Leader, Plan Preparation	Mitch Sternberg, Wildlife Biologist, LRGV NWR (FWS)
Plan Preparation	(Vacant), Plant Ecologist, LRGV NWR (FWS)
Public Information	(Vacant), Public Outreach Specialist, STRC (FWS)
Operations	Patrick Pearson, FMO STRC (FWS)
NEPA Compliance & Planning	Ernesto Reyes, Ecological Services (FWS)
Vegetation, GIS and Photography	(Vacant), Plant Ecologist, LRGV NWR (FWS)
Wildlife Biologist	Mitch Sternberg, Wildlife Biologist, LRGV NWR (FWS)
Fire Ecologist, Resource Advisor	Mark Kaib, Fire Ecologist Southwest Region (FWS)
Resource Advisor	(Vacant), Refuge Manager, LRGV NWR (FWS)

PART F - INDIVIDUAL SPECIFICATION

TREATMENT NAME	Seedlings	PART E SPECIFICATION #	1
NFPORS TREATMENT CATEGORY*	Other Treatment	FISCAL YEAR(S) (list each year):	2007
NFPORS TREATMENT TYPE *	Biological	WUI? Y / N	Y
IMPACTED COMMUNITIES AT RISK	La Feria	IMPACTED T&E SPECIES	Ocelot, Jaguarundi, <i>Ayenia limitaris</i>

* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

I. WORK TO BE DONE (describe or attach exact specifications of work to be done):

<p>Number and Describe Each Task:</p> <p>A. General Description: Produce seedlings of native trees and shrubs, according to standard contract specifications used by LRGV NWR (attached).</p> <p>B. Location/(Suitable) Sites: Contract nursery(s).</p> <p>C. Design/Construction Specifications:</p> <p>Standard seedling contract is attached. Contractor(s) will produce seedlings and deliver to LRGV NWR on or before September 15, 2007.</p> <p>D. Purpose of Treatment Specifications: Revegetate site of Resaca de los Fresnos burn.</p> <p>E. Treatment Effectiveness Monitoring Proposed:</p> <p>Refuge personnel will inspect tree seedlings upon delivery to determine compliance with standard seedling contract specifications (attached).</p>
--

II. LABOR, MATERIALS AND OTHER COST:

< PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item): Do not include contract personnel costs here (see contractor services below).	COST / ITEM
TOTAL PERSONNEL SERVICE COST	n/a
< EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.	COST / ITEM
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	n/a
< MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):	COST / ITEM
(All necessary material supplies were previously acquired by the Refuge).	
TOTAL MATERIALS AND SUPPLY COST	n/a
< TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):	COST / ITEM
TOTAL TRAVEL COST	n/a
< CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):	COST / ITEM
9,540 seedlings x \$0.91/seedling	

TOTAL CONTRACT COST \$8,681

SPECIFICATION COST SUMMARY

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLISHMENTS	PLANNED COST
FY2007	01/15/07	09/15/07	C	Seedling	\$0.91	Produce seedlings for revegetation	\$8,681
TOTAL							\$8,681

Work Agent: CA=Coop Agreement, FA=Force Account, G=Grantee, P=Permitee, SC=Service Contract, TSP=Timber Sales Purchaser, V=Volunteer

SOURCE OF COST ESTIMATE

1. Estimate obtained from 2-3 independent contractual sources.	C
2. Documented cost figures from similar project work obtained from local agency sources.	
3. Estimate supported by cost guides from independent sources or other federal agencies	
4. Estimates based upon government wage rates and material cost.	
5. No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:

<p>List Relevant Documentation and Cross-Reference Location within the Accomplishment Report.</p> <p>Standard LRGV NWR Seedling Contract Specifications attached in Appendix V.</p>
--

TREATMENT NAME	Seedling Transplant	PART E SPECIFICATION #	2
NFPORS TREATMENT CATEGORY*	Other Treatment	FISCAL YEAR(S) (list each year):	2007
NFPORS TREATMENT TYPE *	Biological	WUI? Y / N	Y
IMPACTED COMMUNITIES AT RISK	La Feria	IMPACTED T&E SPECIES	Ocelot, Jaguarundi, <i>Ayenia limitaris</i>

* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

I. WORK TO BE DONE (describe or attach exact specifications of work to be done):

<p>Number and Describe Each Task:</p> <p>A. General Description: Transplant seedlings of native trees and shrubs.</p> <p>B. Location/(Suitable) Sites: Resaca de los Fresnos Burn site.</p> <p>C. Design/Construction Specifications:</p> <ol style="list-style-type: none"> Seedlings shall be transplanted between September 1, 2007 and November 30, 2007. Seedlings shall be transplanted in ripped rows at spacing specified by Refuge personnel. Measuring ropes, provided by the Refuge, shall be used to measure spacing between seedlings within rows. <p>D. Purpose of Treatment Specifications: Revegetate site of Resaca de los Fresnos burn.</p> <p>E. Treatment Effectiveness Monitoring Proposed:</p> <p>Refuge personnel will inspect transplanting operation at least once per day and following completion.</p>

II. LABOR, MATERIALS AND OTHER COST:

< PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item): Do not include contract personnel costs here (see contractor services below).	COST / ITEM
TOTAL PERSONNEL SERVICE COST	n/a
< EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.	COST / ITEM
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	n/a
< MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item): (All necessary material supplies were previously acquired by the Refuge).	COST / ITEM
TOTAL MATERIALS AND SUPPLY COST	n/a
< TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):	COST / ITEM
TOTAL TRAVEL COST	n/a
< CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):	COST / ITEM
9,540 seedlings x \$0.30 per seedling	\$2,862

TOTAL CONTRACT COST \$2,862

SPECIFICATION COST SUMMARY

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLISHMENTS	PLANNED COST
FY2007	9/01/07	11/30/07	C	Seedling	\$0.30	Transplant seedlings	\$2,862
TOTAL							\$2,862

Work Agent: CA=Coop Agreement, FA=Force Account, G=Grantee, P=Permitee, SC=Service Contract, TSP=Timber Sales Purchaser, V=Volunteer

SOURCE OF COST ESTIMATE

1. Estimate obtained from 2-3 independent contractual sources.	C
2. Documented cost figures from similar project work obtained from local agency sources.	
3. Estimate supported by cost guides from independent sources or other federal agencies	
4. Estimates based upon government wage rates and material cost.	M
5. No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:

List Relevant Documentation and Cross-Reference Location within the Accomplishment Report.
--

TREATMENT NAME	Direct seed native shrubs and forbs	PART E SPECIFICATION #	3
NFPORS TREATMENT CATEGORY*	Other Treatment	FISCAL YEAR(S) (list each year):	2007
NFPORS TREATMENT TYPE *	Biological	WUI? Y / N	Y
IMPACTED COMMUNITIES AT RISK	La Feria	IMPACTED T&E SPECIES	Ocelot, Jaguarundi, <i>Ayenia limitaris</i>

* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

I. WORK TO BE DONE (describe or attach exact specifications of work to be done):

<p>Number and Describe Each Task:</p> <p>A. General Description: Direct seed native shrubs and forb seeds.</p> <p>B. Location/(Suitable) Sites: Resaca de los Fresnos Burn site.</p> <p>C. Design/Construction Specifications:</p> <ol style="list-style-type: none"> Seeds shall be planted between October 1, 2007 and December 30, 2007 Seeds shall be planted with a no-till rangeland drill, equipped with a fluffy-seed box, at a rate of 20 PLS per square foot. Planting depth shall be controlled at 0.5 cm (0.2 inches). <p>D. Purpose of Treatment Specifications: Revegetate site of Resaca de los Fresnos burn.</p> <p>E. Treatment Effectiveness Monitoring Proposed:</p> <p>Refuge personnel will inspect seeding operation continuously during operation and following completion. Seed germination and establishment will be monitored at 3 month intervals for 12 months.</p>
--

II. LABOR, MATERIALS AND OTHER COST:

< PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item): Do not include contract personnel costs here (see contractor services below).	COST / ITEM
GS 7 @ \$24/hour x 108 hours	
TOTAL PERSONNEL SERVICE COST	\$2,592
< EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.	COST / ITEM
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	n/a
< MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):	COST / ITEM
Native shrub and forb seeds @\$200/ac x 31.8 ac	
TOTAL MATERIALS AND SUPPLY COST	\$6,360
< TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):	COST / ITEM
TOTAL TRAVEL COST	n/a
< CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):	COST /

n/a	TOTAL CONTRACT COST	n/a
-----	---------------------	-----

SPECIFICATION COST SUMMARY

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLISHMENTS	PLANNED COST
FY2007	10/01/07	12/30/07	FA	Hour	\$24	Transplant seedlings	\$2,592
FY2007	10/01/07	12/30/07	FA	Acre	\$200	Transplant seedlings	\$6,360
TOTAL							\$8,952

Work Agent: CA=Coop Agreement, FA=Force Account, G=Grantee, P=Permitee, SC=Service Contract, TSP=Timber Sales Purchaser, V=Volunteer

SOURCE OF COST ESTIMATE

1. Estimate obtained from 2-3 independent contractual sources.	C
2. Documented cost figures from similar project work obtained from local agency sources.	
3. Estimate supported by cost guides from independent sources or other federal agencies	
4. Estimates based upon government wage rates and material cost.	P
5. No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:

List Relevant Documentation and Cross-Reference Location within the Accomplishment Report.
--

TREATMENT NAME	Application of herbicide Imazapyr herbicide and glyphosate (purchase)	PART E SPECIFICATION #	4
NFPORS TREATMENT CATEGORY*	Other Treatment	FISCAL YEAR(S) (list each year):	2007
NFPORS TREATMENT TYPE *	Biological	WUI? Y / N	Y
IMPACTED COMMUNITIES AT RISK	La Feria	IMPACTED T&E SPECIES	Ocelot, Jaguarundi, <i>Ayenia limitaris</i>

* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

I. WORK TO BE DONE (describe or attach exact specifications of work to be done):

<p>Number and Describe Each Task:</p> <p>A. General Description: Apply glyphosate herbicide two times to 31.8-ac Resacas de los Fresnos burn and spot apply glyphosate and/or imazapyr herbicide to Kleberg bluestem</p> <p>B. Location/(Suitable) Sites: Resaca de los Fresnos Burn site.</p> <p>C. Design/Construction Specifications:</p> <ol style="list-style-type: none"> Apply 13.1 oz/ac (active ingredient) glyphosate herbicide in 5 – 10 gal water/ac, with 1.7 lb/ac NH₄SO₄, and surfactant and marking dye at label rates, with overhead boom sprayer. The refuge will supply the quantity of glyphosate herbicide, NH₄SO₄, surfactant and marking dye. Contractor shall supply all necessary spraying equipment, fuel, water and transport to site. Herbicide shall be applied to entire 31.8-ac area two times between October 1, 2006 and September 30, 2007 (five times in total with additions by contractor), while target grass is actively growing. Refuge personnel will indicate when applications should be made (minimum of 1 week advance notice). From 10 to 20 days after each main application, herbicide shall be re-applied as described above to all areas that were not adequately treated during the main application, as evidenced by lack of herbicide symptoms (yellowing, wilting and tissue necrosis). Re-treatment is not necessary if specification number 4 has been met. Additional re-treatment(s) shall be made until Specification number 4 is met. Each of the 2 treatments (plus re-applications as necessary) is complete when untreated areas comprise less than 1% of the total treated area. Technician will inspect rehabilitation site 4 times per year for one year, and will spot-apply herbicide as needed to Kleberg bluestem <p>D. Purpose of Treatment Specifications: Prevent re-establishment of Kleberg bluestem at Resaca de los Fresnos burn.</p> <p>E. Treatment Effectiveness Monitoring Proposed:</p> <p>Refuge personnel will sample rehabilitation site to determine % cover of native versus introduced vegetation.</p>

II. LABOR, MATERIALS AND OTHER COST:

<p>< PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item): Do not include contract personnel costs here (see contractor services below).</p>	COST / ITEM
GS 7 @ \$24/hour x 88 hours/year x 1 years	
TOTAL PERSONNEL SERVICE COST	\$2,112
<p>< EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.</p>	COST / ITEM
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	n/a
<p>< MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):</p>	COST / ITEM
Imazapyr herbicide at \$280/gal x 3 gal	\$840

Glyphosate + adjuvants @\$15/ac x 31.8 ac x 2 applications x 1 year	\$954
TOTAL MATERIALS AND SUPPLY COST	\$1,794
< TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):	COST / ITEM
TOTAL TRAVEL COST	n/a
< CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):	COST / ITEM
31.8 ac x \$65.00/ac x 2 applications	\$4,134
TOTAL CONTRACT COST	\$4,134

SPECIFICATION COST SUMMARY

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLISHMENTS	PLANNED COST
FY2007	10/01/06	9/30/07	FA	acres	\$24	Treat Invasive Plants	\$2,112
FY2007	10/01/06	9/30/07	FA	gal	\$280	Treat Invasive Plants	\$840
FY2007	10/01/06	9/30/07	C	acres	\$65	Treat Invasive Plants	\$4,134
FY2007	10/01/06	9/30/07	C, FA	acres	\$15	Treat Invasive Plants	\$954
TOTAL							\$8,040

Work Agent: CA=Coop Agreement, FA=Force Account, G=Grantee, P=Permitee, SC=Service Contract, TSP=Timber Sales Purchaser, V=Volunteer

SOURCE OF COST ESTIMATE

1. Estimate obtained from 2-3 independent contractual sources.	C
2. Documented cost figures from similar project work obtained from local agency sources.	
3. Estimate supported by cost guides from independent sources or other federal agencies	
4. Estimates based upon government wage rates and material cost.	P, M
5. No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:

List Relevant Documentation and Cross-Reference Location within the Accomplishment Report.
--

TREATMENT NAME	Water transport and supplemental assistance	PART E SPECIFICATION #	5
NFPORS TREATMENT CATEGORY*	Other Treatment	FISCAL YEAR(S) (list each year):	2007
NFPORS TREATMENT TYPE *	Biological	WUI? Y / N	Y
IMPACTED COMMUNITIES AT RISK	La Feria	IMPACTED T&E SPECIES	Ocelot, Jaguarundi, <i>Ayenia limitaris</i>

* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

I. WORK TO BE DONE (describe or attach exact specifications of work to be done):

<p>Number and Describe Each Task:</p> <p>A. General Description: Transport water to project site for herbicide application; assist in locating and mapping site; equipment transport.</p> <p>B. Location/(Suitable) Sites: Resaca de los Fresnos Burn site.</p> <p>C. Design/Construction Specifications:</p> <p>Technicians will transport 200 gal water in refuge fire engine, as needed for force-account herbicide application. Other equipment hauling and assistance will be provided as needed to assist in force-account operations.</p> <p>D. Purpose of Treatment Specifications: Eradicate Klegberg bluestem at Resaca de los Fresnos burn.</p> <p>E. Treatment Effectiveness Monitoring Proposed:</p> <p>Refuge personnel will sample rehabilitation site to determine % cover of native versus introduced vegetation.</p>
--

II. LABOR, MATERIALS AND OTHER COST:

< PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item): Do not include contract personnel costs here (see contractor services below).	COST / ITEM
Forestry Technicians (Fire) @ \$24/hour x 160 hours	
TOTAL PERSONNEL SERVICE COST	\$3,840
< EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.	COST / ITEM
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	n/a
< MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):	COST / ITEM
TOTAL MATERIALS AND SUPPLY COST	n/a
< TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):	COST / ITEM
TOTAL TRAVEL COST	n/a
< CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):	COST / ITEM

SPECIFICATION COST SUMMARY

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLISHMENTS	PLANNED COST
FY2007	10/01/06	9/30/07	FA	Acres	\$121	Treat Invasive Plants	\$3,840
TOTAL							\$3,840

Work Agent: CA=Coop Agreement, FA=Force Account, G=Grantee, P=Permitee, SC=Service Contract, TSP=Timber Sales Purchaser, V=Volunteer

SOURCE OF COST ESTIMATE

1. Estimate obtained from 2-3 independent contractual sources.	
2. Documented cost figures from similar project work obtained from local agency sources.	
3. Estimate supported by cost guides from independent sources or other federal agencies	
4. Estimates based upon government wage rates and material cost.	P
5. No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:

List Relevant Documentation and Cross-Reference Location within the Accomplishment Report.

TREATMENT NAME	Planning/Implementation/Monitoring, Wildlife Biologist	PART E SPECIFICATION #	6
NFPORS TREATMENT CATEGORY*	Other Treatment	FISCAL YEAR(S) (list each year):	2007
NFPORS TREATMENT TYPE *	Other Treatment	WUI? Y / N	Y
IMPACTED COMMUNITIES AT RISK	La Feria	IMPACTED T&E SPECIES	Ocelot, Jaguarundi, <i>Ayenia limitaris</i>

* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

I. WORK TO BE DONE (describe or attach exact specifications of work to be done):

<p>Number and Describe Each Task:</p> <p>A. General Description: Plan, implement and monitor Resaca de los Fresnos Burned Area Rehabilitation Plan</p> <p>B. Location/(Suitable) Sites: Resaca de los Fresnos Burn site.</p> <p>C. Design/Construction Specifications:</p> <ol style="list-style-type: none"> Develop and submit plan before 09/30/06 Write contract specifications and monitor contract and force account work through project completion. <p>D. Purpose of Treatment Specifications: Rehabilitate site of Resaca de los Fresnos burn.</p> <p>E. Treatment Effectiveness Monitoring Proposed:</p>
--

II. LABOR, MATERIALS AND OTHER COST:

<p>< PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item): Do not include contract personnel costs here (see contractor services below).</p>	COST / ITEM
GS 11 @ \$44/hour x 60 hours	
TOTAL PERSONNEL SERVICE COST	\$2,640
<p>< EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.</p>	COST / ITEM
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	n/a
<p>< MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):</p> <p>(All necessary material supplies were previously acquired by the Refuge).</p>	COST / ITEM
TOTAL MATERIALS AND SUPPLY COST	n/a
<p>< TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):</p>	COST / ITEM
TOTAL TRAVEL COST	n/a
<p>< CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):</p>	COST / ITEM
TOTAL CONTRACT COST	n/a

SPECIFICATION COST SUMMARY

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLISHMENTS	PLANNED COST
FY2007	10/01/06	09/30/07	FA	Hour	\$44	Project Lead	\$2,640
TOTAL							\$2,640

Work Agent: CA=Coop Agreement, FA=Force Account, G=Grantee, P=Permitee, SC=Service Contract, TSP=Timber Sales Purchaser, V=Volunteer

SOURCE OF COST ESTIMATE

1. Estimate obtained from 2-3 independent contractual sources.	
2. Documented cost figures from similar project work obtained from local agency sources.	
3. Estimate supported by cost guides from independent sources or other federal agencies	
4. Estimates based upon government wage rates and material cost.	P
5. No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:

List Relevant Documentation and Cross-Reference Location within the Accomplishment Report.

TREATMENT NAME	Planning/Implementation/Monitoring, , (Forestry Technician GS 7) Contract implementation	PART E SPECIFICATION #	7
NFPORS TREATMENT CATEGORY*	Other Treatment	FISCAL YEAR(S) (list each year):	2007
NFPORS TREATMENT TYPE *	Other Treatment	WUI? Y / N	Y
IMPACTED COMMUNITIES AT RISK	La Feria	IMPACTED T&E SPECIES	Ocelot, Jaguarundi, <i>Ayenia limitaris</i>

* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

I. WORK TO BE DONE (describe or attach exact specifications of work to be done):

<p>Number and Describe Each Task:</p> <p>A. General Description: Implement and monitor Resaca de los Fresnos Burned Area Rehabilitation Plan</p> <p>B. Location/(Suitable) Sites: Resaca de los Fresnos Burn site.</p> <p>C. Design/Construction Specifications:</p> <ol style="list-style-type: none"> 1. Monitor contract compliance, create GPS maps of burned areas and treatments, collect data on treatment effectiveness. 2. Contract implementation will require gathering information of contractors, inviting bids for various contractual work, selecting appropriate bids with FWS personnel, verifying from FWS personnel certification of contractual work, and paying contractors at the request of FWS personnel. <p>D. Purpose of Treatment Specifications: Rehabilitate site of Resaca de los Fresnos burn.</p> <p>E. Treatment Effectiveness Monitoring Proposed:</p>
--

II. LABOR, MATERIALS AND OTHER COST:

< PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item): Do not include contract personnel costs here (see contractor services below).	COST / ITEM
GS 7 @ \$24/hour x 420 hours	
TOTAL PERSONNEL SERVICE COST	\$10,080
< EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.	COST / ITEM
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	n/a
< MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):	COST / ITEM
(All necessary material supplies were previously acquired by the Refuge).	
TOTAL MATERIALS AND SUPPLY COST	n/a
< TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):	COST / ITEM
TOTAL TRAVEL COST	n/a
< CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):	COST / ITEM
\$10/hour x 100 hours	n/a
	\$1,000

TOTAL CONTRACT COST

SPECIFICATION COST SUMMARY

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLISHMENTS	PLANNED COST
FY2007	01/01/06	09/30/07	FA	Hour	\$24	Monitoring and implementation	\$10,080
FY2007	01/01/06	09/30/07	C	Hour	\$10	Implementation	\$1,000
TOTAL							\$11,080

Work Agent: CA=Coop Agreement, FA=Force Account, G=Grantee, P=Permitee, SC=Service Contract, TSP=Timber Sales Purchaser, V=Volunteer

SOURCE OF COST ESTIMATE

1. Estimate obtained from 2-3 independent contractual sources.	
2. Documented cost figures from similar project work obtained from local agency sources.	
3. Estimate supported by cost guides from independent sources or other federal agencies	C
4. Estimates based upon government wage rates and material cost.	P
5. No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:

List Relevant Documentation and Cross-Reference Location within the Accomplishment Report.
--

TREATMENT NAME	Collect Vegetation Data Technician	PART E SPECIFICATION #	8
NFPORS TREATMENT CATEGORY*	Other Treatment	FISCAL YEAR(S) (list each year):	2007
NFPORS TREATMENT TYPE *	Other Treatment	WUI? Y / N	Y
IMPACTED COMMUNITIES AT RISK	La Feria	IMPACTED T&E SPECIES	Ocelot, Jaguarundi, <i>Ayenia limitaris</i>

* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

I. WORK TO BE DONE (describe or attach exact specifications of work to be done):

<p>Number and Describe Each Task:</p> <p>A. General Description: Collect vegetation data as it pertains to vegetation composition, cover and growth in treated site and adjacent untreated areas at Resaca de los Fresnos Burned Area Rehabilitation Plan.</p> <p>B. Location (Suitable) Sites: Resaca de los Fresnos Burn site.</p> <p>C. Design/Construction Specifications:</p> <p>1. Collect data on treatment effectiveness from 10 randomly generated locations for vegetation sampling on rehabilitation site and adjacent untreated areas.</p> <p>2. Technique will sample species composition, structure, canopy coverage, frequency of occurrence, importance value, density, and growth @ 10 replicate locations in burned area and adjacent untreated area.</p> <p>D. Purpose of Treatment Specifications:</p> <p>Establish a statistical percent success rate of vegetation composition, cover and growth at rehabilitated site versus adjacent untreated areas at Resaca de los Fresnos burn.</p> <p>E. Treatment Effectiveness Monitoring Proposed:</p> <p>Refuge personnel will sample rehabilitation site to determine % cover of native versus introduced vegetation.</p>

II. LABOR, MATERIALS AND OTHER COST:

<p>< PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item): Do not include contract personnel costs here (see contractor services below).</p>	COST / ITEM
GS 7 @ \$24/hour x 80 hours	
TOTAL PERSONNEL SERVICE COST	\$1,920
<p>< EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.</p>	COST / ITEM
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	n/a
<p>< MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):</p> <p>(All necessary material supplies were previously acquired by the Refuge).</p>	COST / ITEM
TOTAL MATERIALS AND SUPPLY COST	n/a
<p>< TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):</p>	COST / ITEM

	TOTAL TRAVEL COST	n/a
<	CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):	COST / ITEM
		n/a
	TOTAL CONTRACT COST	n/a

SPECIFICATION COST SUMMARY

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLISHMENTS	PLANNED COST
FY2007	10/01/06	09/30/07	FA	Hour	\$24	Monitoring and implementation	\$1,920
TOTAL							\$1,920

Work Agent: CA=Coop Agreement, FA=Force Account, G=Grantee, P=Permitee, SC=Service Contract, TSP=Timber Sales Purchaser, V=Volunteer

SOURCE OF COST ESTIMATE

1. Estimate obtained from 2-3 independent contractual sources.	
2. Documented cost figures from similar project work obtained from local agency sources.	
3. Estimate supported by cost guides from independent sources or other federal agencies	
4. Estimates based upon government wage rates and material cost.	P
5. No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:

List Relevant Documentation and Cross-Reference Location within the Accomplishment Report.
--

TREATMENT NAME	Herbicide application equipment	PART E SPECIFICATION #	9
NFPORS TREATMENT CATEGORY*	Other Treatment	FISCAL YEAR(S) (list each year):	2007
NFPORS TREATMENT TYPE *	Other Treatment	WUI? Y / N	Y
IMPACTED COMMUNITIES AT RISK	La Feria	IMPACTED T&E SPECIES	Ocelot, Jaguarundi, <i>Ayenia limitaris</i>

* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

I. WORK TO BE DONE (describe or attach exact specifications of work to be done):

<p>Number and Describe Each Task:</p> <p>A. General Description: 4x4 A.T.V.</p> <p>B. Location/(Suitable) Sites: 52.4-acre Resaca de los Fresnos Burn site</p> <p>C. Design/Construction Specifications:</p> <ol style="list-style-type: none"> 1. KVF 700AGF Kawasaki A.T.V. Prairie 700 4x4 2. Foam fill anti-puncture for four tires 3. Assembly Charge 4. Delivery Charge 5. GSA contract # GS 07F-0314K <p>D. Purpose of Treatment Specifications: Application of herbicide in areas inaccessible by Tractor</p> <p>E. Treatment Effectiveness Monitoring Proposed:</p>

II. LABOR, MATERIALS AND OTHER COST:

< PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item): Do not include contract personnel costs here (see contractor services below).	COST / ITEM
TOTAL PERSONNEL SERVICE COST	n/a
< EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.	COST / ITEM
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	n/a
< MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):	COST / ITEM
KVF 700 NAF Kawasaki A.T.V. Prairie 700 4x4	\$6256
Foam Fill Anti-Puncture (4 tires)	\$400
Assembly Charge	\$175
Delivery Charge to Alamo, TX	\$500
TOTAL MATERIALS AND SUPPLY COST	\$7331
< TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):	COST / ITEM

TOTAL TRAVEL COST	n/a
< CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):	COST / ITEM
TOTAL CONTRACT COST	

SPECIFICATION COST SUMMARY

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLISHMENTS	PLANNED COST
FY2007	10/01/06	11/01/07	FA	Total	\$7,331	Apply Herbicide	\$7,331
TOTAL							\$7,331

Work Agent: CA=Coop Agreement, FA=Force Account, G=Grantee, P=Permitee, SC=Service Contract, TSP=Timber Sales Purchaser, V=Volunteer

SOURCE OF COST ESTIMATE

1. Estimate obtained from 2-3 independent contractual sources.	M
2. Documented cost figures from similar project work obtained from local agency sources.	
3. Estimate supported by cost guides from independent sources or other federal agencies	
4. Estimates based upon government wage rates and material cost.	
5. No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:

List Relevant Documentation and Cross-Reference Location within the Accomplishment Report.
--

PART G - RESTORATION REQUIREMENT

The following are post-rehabilitation implementation, operation, maintenance, monitoring, and evaluation actions beyond three years from fire control to ensure the effectiveness of initial investments. Estimated annual cost and funding source (subactivity) is indicated.

1. Monitor seedling survival and growth rates at 3-month, 6-month and 1-year post-planting (\$384 – 1261).
2. Monitor invasive grass re-colonization and germination from dormant seed at 3-month, 6-month and 1-year post-planting (\$384 – 1261).
3. Spot application of glyphosate or imazypyr herbicide, as needed, at 1- and 2-years post planting (\$1000 – 1261).
4. Monitor native plant and invasive plant densities and canopy coverage at 3 and 5 years post-planting. (\$2,560 – 1261).
5. Long-term wildfire detection and suppression (\$10,000 – 9141).

PART H – CONSULTATIONS

U.S. Fish and Wildlife Service
Ernesto Reyes, Wildlife Biologist
Ecological Services
956-784-7560

U.S. Fish and Wildlife Service
Mitchell Sternberg, Wildlife Biologist
Lower Rio Grande Valley NWR
956-784-7592

U.S. Fish and Wildlife Service
Patrick Pearson, Fire Management Officer
Lower Rio Grande Valley NWR
956-784-7602

U.S. Fish and Wildlife Service
Mark Kaib, Regional Fire Ecologist
Region 2 Regional Office
505-248-6819

APPENDIX I - BURNED AREA ASSESSMENT REPORTS

1. Resaca de los Fresnos Burned Area Assessment (attached).

APPENDIX II - ENVIRONMENTAL COMPLIANCE

Federal, State, and Private Lands Environmental Compliance Responsibilities

All projects proposed in the Resaca de los Fresnos Burned Area Rehabilitation Plan that are prescribed, funded, or implemented by Federal agencies on Federal, State, or private lands are subject to compliance with the National Environmental Policy Act (NEPA) in accordance with the guidelines provided by the Council on Environmental Quality (CEQ) Regulations (40 CFR 1500-1508); Department of the Interior and U.S. Fish and Wildlife Service. This Appendix documents the Burned Area Emergency Response team considerations of NEPA compliance requirements for prescribed rehabilitation and monitoring actions described in this plan for all jurisdictions affected by the Resaca de los Fresnos Fire.

Related Plans and Cumulative Impact Analysis

Resaca de los Fresnos Burned Area Rehabilitation Plan (*approval date*). The Resaca de los Fresnos Fire Burned Area Rehabilitation Plan was reviewed and it was determined that actions proposed in the Resaca de los Fresnos Fire Burned Area Rehabilitation Plan within the boundary of the Resaca de los Fresnos Fire are consistent with the management objectives established in the Comprehensive Conservation Plan. The Comprehensive Conservation Plan NEPA compliance process (Environmental Assessment) specifically addresses:

- Biological Resources
- Air Quality
- Water Quality
- Wetland Preservation and Enhancement
- Compatibility and Service Policy on Recreational Uses
- Cultural Resources
- Socioeconomics

Cumulative Impact Analysis

Cumulative effects are the environmental impacts resulting from the incremental impacts of a proposed action when added to other past, present, and reasonably foreseeable future actions, both Federal and non-Federal. Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time. The rehabilitation treatments for areas affected by the Resaca de los Fresnos Fire, as proposed in the Resaca de los Fresnos Fire Burned Area Rehabilitation Plan, do not result in an intensity of impact (i.e. major ground disturbance, etc.) that would cumulatively constitute a significant impact on the quality of the environment. The treatments are consistent with the above jurisdictional management plans and associated environmental compliance documents and categorical exclusions listed below.

Applicable and Relevant Categorical Exclusions

The individual actions proposed in this plan for the Resaca de los Fresnos fire burned area are Categorically Excluded from further environmental analysis as provided for in the Department of Interior and U.S. Fish and Wildlife Service categorical exclusions. All applicable and relevant Department and Agency Categorical Exclusions are listed below. Categorical Exclusion decisions were made with consideration given to the results of required emergency consultations completed by the Burned area emergency response team and documented below.

Applicable Department of Interior Categorical Exclusions

516 DM 2 App; 2, 1.6
516 DM 6 App. 7.4 L (3)

Applicable U.S. Fish and Wildlife Service Categorical Exclusions

516 DM 6 App. 1.4 B (1)
516 DM 6 App. 1.4 B (3) iii
516 DM 6 App. 1.4 B (5)

Statement of Compliance for the Resaca de los Fresnos Fire Burned Area Rehabilitation Plan.

This section documents consideration given to the requirements of specific environmental laws in the development of the Resaca de los Fresnos Fire Burned Area Rehabilitation Plan. Specific consultations initiated or completed during development and implementation of this plan are also documented. The following executive orders and legislative acts have been reviewed as they apply to the Resaca de los Fresnos Fire Burned Area Rehabilitation Plan:

- National Historic Preservation Act (NHPA).
- Executive Order 11988. Flood plain Management.
- Executive Order 11990. Protection of Wetlands.
- Executive Order 12372. Intergovernmental Review.
- Executive Order 12892. Federal Actions to Address Environmental Justice in Minority and Low-income Populations.
- Endangered Species Act.
- Secretarial Order 3127. Federal Contaminated
- Clean Water Act.
- Clean Air Act.

CONSULTATIONS

Not applicable.

NEPA Checklist: If any of the following exception applies, the Burned Area Rehabilitation Plan cannot be Categorically Excluded and an Environmental Assessment (EA) is required.

(Yes) (No)

- (X) Adversely affect Public Health and Safety
- (X) Adversely affect historic or cultural resources, wilderness, wild and scenic rivers aquifers, prime farmlands, wetlands, floodplains, ecologically critical areas, or Natural Landmarks.
- (X) Have highly controversial environmental effects.
- (X) Have highly uncertain environmental effects or involve unique or unknown environmental risks.
- (X) Establish a precedent resulting in significant environmental effects.
- (X) Relates to other actions with individually insignificant but cumulatively significant environmental effects.
- (X) Adversely effects properties listed or eligible for listing in the National Register of Historic Places
- (X) Adversely affect a species listed or proposed to be listed as Threatened or Endangered.
- (X) Threaten to violate any laws or requirements imposed for the "protection of the environment" such as Executive Order 1 1 988 (Floodplain Management) or Executive Order 1 1 990 (Protection of Wetlands).

National Historic Preservation Act

Ground Disturbance:

- None
- Ground disturbance did occur and an archeologist survey, required under section 110 of the NHPA will be prepared. A report will be prepared under contract as specified by the Burned Area Rehabilitation Plan.

A NHPA Clearance Form:

- Is required because the project may have affected a site that is eligible or on the national register. The clearance form is attached. SHPO has been consulted under Section 106 (see Cultural Resource Assessment, Appendix I).
- Is not required because the Burned Area Rehabilitation Plan has no potential to affect cultural resources (initial of cultural resource specialist).

Other Requirements

(Yes) (No)

- (X) Does the Burned Area Rehabilitation Plan have potential to affect any Native American uses? If so, consultation with affiliated tribes is needed.
- () Are any toxic chemicals, including pesticides or treated wood, proposed for use? If so, local agency integrated pest management specialists must be consulted.

I have reviewed the proposals in the Resaca de los Fresnos Fire Burned Area Rehabilitation Plan in accordance with the criteria above and have determined that the proposed actions would not involve any significant environmental effect. Therefore it is categorically excluded from further environmental (NEPA) review and documentation. Burned area emergency response team technical specialists have completed necessary coordination and consultation to insure compliance with the National Historic Preservation Act, Endangered Species Act, Clean Water Act and other Federal, State and local environment review requirements.

Wildlife Biologist, Lower Rio Grande Valley National Wildlife Refuge

Date

Project Leader, South Texas Refuges Complex

Date

APPENDIX III – MAPS

- GPS of Resaca de los Fresnos Fire overlaid on Digital Ortho Quarter Quad Color CIR Image.

(See Attached CD)

APPENDIX V - SUPPORT DOCUMENTS

1. Native / Non-Native Plant Worksheet
2. LRGV NWR Seedling Contract Specifications

(See Attached CD)