

**ARIZONA GAME AND FISH DEPARTMENT
HABITAT PARTNERSHIP COMMITTEE
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

Game Branch / HPC Project Number:	13-501
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PROJECT INFORMATION

Project Title: Invasive Exotic Grass Mitigation, Santa Catalina Mountains, Coronado National Forest	
Region and Game Management Unit: V / 33	
Local Habitat Partnership Committee (LHPC): • Tucson	Was the project presented to the LHPC? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Has this project been submitted in previous years? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> If Yes, was it funded? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> → Funded HPC Project #(s):	
Project Type: Habitat Restoration / Vegetation Treatment	
<p>Brief Project Summary: The southwest slopes of the Santa Catalina Mountains on the Coronado National Forest are infested with aggressive exotic buffelgrass (<i>Pennisetum ciliare</i>) and fountain grass (<i>P. setaceum</i>). The endemic Sonoran Desert on the lower elevations of these slopes includes the highest-priority invasive species treatment areas on the Forest because of their unique vegetation and associated wildlife, wilderness values, important view sheds, recreation opportunities, and proximity to the wildland-urban interface. These high-priority areas include the Pusch Ridge Wilderness and the Big Horn Sheep Management Area. The funding requested for this HPC grant will treat approximately 200 acres of buffelgrass and fountain grass with herbicide in 2014.</p> <p>This project contributes to the Arizona HPC <i>Priorities for Habitat Enhancement and Wildlife Management</i> for bighorn sheep: “Coordinate with federal and state land management agencies to implement invasive and noxious weed control and rehabilitation efforts in bighorn sheep habitat.”</p>	
Big Game Wildlife Species to Benefit: Desert bighorn sheep, Sonoran Desert tortoise, desert mule deer, white-tailed deer, javelina	

Implementation Schedule (Month/Day/Year): <u>Project Start Date:</u> January 2014 <u>Project End Date:</u> December 2014	Environmental Compliance: NEPA Completed: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Projected Completion Date: _____ State Historic Preservation Office - Archaeological Clearance: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Projected Completion Date: _____ Arizona Game and Fish Department EA Checklist: N/A <input checked="" type="checkbox"/> To be Completed by: _____ Projected Completion Date: _____
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PROJECT FUNDING

Special Big Game License Tag Funds Requested:	\$ 36,854
Cost Share or Matching Funds:	\$ 120,191
Total Project Costs:	\$ 157,045

PARTICIPANT INFORMATION

Applicant (please print): Sharon Biedenbender Invasive Species Coordinator, Coronado National Forest	Address: Coronado National Forest 300 West Congress Street Tucson, AZ 85701	E-mail: sbiedenbender@fs.fed.us
Telephone: 520- 559-2762		Date: 08/26/2013
AGFD Contact and Phone No. (If applicant is not AGFD personnel): Ben Brochu (520) 591-7636)		
Project has been coordinated with:		

NEED STATEMENT – PROBLEM ANALYSIS:

Buffelgrass (*Pennisetum ciliare*) infests thousands of acres on the southwest slopes of the Santa Catalina Mountains on the Coronado National Forest, including the Big Horn Sheep Management Area and the Pusch Ridge Wilderness Area. Fountain grass (*P. setaceum*) is a serious problem in canyon bottoms in particular and to a lesser extent on slopes and ridges. Current research indicates that buffelgrass is spreading at exponential rates in the Santa Catalina Mountains. Through competitive exclusion and increased fire frequency and intensity, these exotic, highly invasive grasses threaten the existence of the endemic saguaro/palo verde Sonoran Desert ecotype and the unique wildlife, wilderness, recreation, and economic values it represents. This area is habitat for the desert bighorn sheep and other game species such as javelina, mule deer, white-tailed deer, dove and quail, and for the Sonoran Desert tortoise.

A long-term, landscape-scale, adaptive, integrated control program is necessary to reduce existing buffelgrass and fountain grass infestations and prevent them from spreading. The Coronado National Forest Invasive Species Program encompasses multiple years, methods and funding sources. Both manual and herbicide methods are utilized depending on the time of year (plant phenology) and infestation size and location.

All invasive weed projects require a commitment to retreatment. It is critical to understand that buffelgrass seeds persist in soil for three-to-five years, making it imperative that initial treatments must be followed up for several subsequent years in order to prevent reinfestation and insure long-term success. Then periodic monitoring and spot treatments can maintain effective control.

PROJECT OBJECTIVES:

- 1) Preserve the ecological integrity of the Sonoran Desert in the Santa Catalina Mountains.
- 2) Preserve habitat for big game species and other wildlife that depend on native Sonoran Desert vegetation.
- 3) Reduce the risk of catastrophic wild fires that would destroy this ecosystem and its wildlife, wilderness, recreation, scenic, and economic values.
- 4) Reduce the risk of catastrophic wild fires that threaten homes, property and public health at the wildland-urban interface.

PROJECT DESCRIPTION AND STRATEGIES:

- 1) Prioritize high-value treatment sites based on natural resources at risk, fire danger at the WUI, opportunities to limit spread, and accessibility.
- 2) Manual removal of invasive grasses throughout the year by Department of Corrections crews and volunteers.
- 3) Herbicide treatments during phenologically appropriate windows of opportunity, typically following summer rains, but also during some warm, wet winters.
- 4) Retreat infested sites to insure the efficacy and success of both manual and herbicide treatments.
- 5) Monitor treatment sites over the long term and spot treat as necessary.

PROJECT LOCATION:

Santa Catalina Mountains, Coronado National Forest, Sonoran Desert

LAND OWNERSHIP AT THE PROJECT SITE(S):

(if the project area is private property, please state specifically and provide the landowner’s name)

- Coronado National Forest

IF PRIVATE PROPERTY, IS THERE A COOPERATIVE BIG GAME STEWARDSHIP or LANDOWNER AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT?

YES[] NO[] N/A[x]

HABITAT DESCRIPTION:

Sonoran Desert Upland, 10-13 inches annual precipitation, shallow hills and basalt hills soils along southwest-facing slopes and drainages in the lower elevations (3000-5000 ft) of the Santa Catalina Mountains; major species include saguaro cacti and other succulents, foothills palo verde, brittlebush and other desert shrubs, native grasses and forbs.

ITEMIZED USE OF FUNDS:

Funds will be used for herbicide treatments on buffelgrass and fountain grass in the Santa Catalina Mountains on the Coronado National Forest. Funds will be allocated through an existing Invasive Plant Control IDIQ contract.

Requested from HPC

Contract labor to spray 200 acres @ \$180.52/acre = \$36,104	\$36,104
Chemicals (herbicide, adjuvants) ~\$750	\$750
Total HPC Request 2014	\$36,854

Forest Service Match

Contract labor to spray 300 acres @ \$180.52/acre = \$54,156	\$54,156
Chemicals (herbicide, adjuvants) ~\$1500	\$1,500
Romero Canyon – manual removal	
DOC crew 15 days @ ~\$1500/day = \$22,500	\$22,500
Pima Canyon– manual removal	
DOC crew 15 days @ ~\$1500/day = \$22,500	\$22,500
Project oversight, contract administration	
Forest Invasive Spp Coordinator 15 days @ \$347 = \$5,205	\$5,205
District Invasive Spp Coordinator 15 days @ \$333 = \$4,995	\$4,995
Forest GIS Specialist 15 days @ \$289 = \$4,335	\$4,335
In-house packing services to deliver supplies in wilderness	
Personnel, animals & equipment ~\$500/day for 10 days = \$5,000	\$5,000
Total Forest Service Match	\$120,191

Special Big Game License Tag Funds

\$36,854

Cost Share or Matching Funds (for volunteer labor rates please refer to the worksheet below)

\$120,191

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

AZ State Forestry Division – DOC crews for manual invasive grass removal projects

**WOULD IMPLEMENTATION OF THIS PROJECT ASSIST IN PROVIDING, MAINTAINING,
OR FACILITATING RECREATIONAL ACCESS?**

YES[] NO[] N/A[x]

PROJECT MONITORING PLAN:

The Coronado National Forest and Santa Catalina District Invasive Species Coordinators will monitor project progress throughout implementation, at completion, and as needed over time for long-term success.

PROJECT MAINTENANCE:

The Coronado National Forest and Santa Catalina District Invasive Species Invasive Species Coordinators will continue to seek funds to maintain the project over time.

PROJECT COMPLETION REPORT TO BE FILED BY:

Coronado National Forest Invasive Species Coordinator

WATER DEVELOPMENT PROJECTS (please use the worksheet below):

TREE CLEARING/REMOVAL PROJECTS (please use the worksheet below):

ARIZONA GAME AND FISH DEPARTMENT **WATER DEVELOPMENT WORKSHEET**

PROJECT TITLE: _____

- 1) **Is the water development listed as a priority in the most recent “Wildlife Water Development Annual Implementation Schedule?”**
- 2) **Please list the Development Branch personnel and date coordinated with for this project.**
- 3) **What is the estimated annual inches of precipitation for the area? (mark one)**
2-4 4-6 6-8 8-10 10-12 12-14 14-16 >16
- 4) **Is there a perennial water source available to big game within four miles of this project?**

YES (please complete #5 below) NO (skip #5 below)

- 5) **For the accessible, perennial water source nearest this project:**

Name of water source:

Type of water source (catchment, spring, dirt tank):

Ownership of water source:

Distance in miles from project:

- 6) **Is the target wildlife species a result of transplant efforts? YES NO**

- 7) **Please list any special land management status for the project site (i.e. Wilderness, National Park, National Monument). If private land, list landowner.**

- 8) **Please provide the following information about access to the proposed site:**

Type of access (mark one): 2x4 vehicles 4x4 only foot only**

**If foot access only: Distance in miles: _____ Approximate hiking time: _____

-- Does access to this site require crossing private or tribal lands? YES NO

-- Please describe any restrictions to public access:

- 9) **Please list below (or on a separate sheet) the material type and dimensions of each component proposed to be added, modified, or repaired.**

- 10) **Was a site visit completed? Yes No**

If Yes, please list personnel that attended and date.

ARIZONA GAME AND FISH DEPARTMENT **TREE CLEARING/REMOVAL WORKSHEET**

PROJECT TITLE: _____

- 1) **What is the estimated acreage of the project?**

- 2) **How are the trees going to be cleared? (agra axe, chain saw, grubbing, push, chaining):**

- 3) **What is the estimated number of trees per acre?**

- 4) **Describe trees to be cleared (species, estimated diameter, single stem, multi-stem):**

- 5) **Describe terrain (slope, soil type, rocks)**

- 6) **Please list any special land management status for the project site (e.g. Wilderness, National Park, National Monument). If private land, list landowner.**

- 7) **Please provide the following information about access to the proposed site:**
Type of access (mark one): 2x4 vehicles 4x4 only Foot only**

**If foot access only: Distance in miles: Approx. hiking time:

Does access to this site require crossing private or tribal lands? YES[] NO[]

Is the site relatively accessible for tree removal equipment? YES[] NO[]

Please describe any restrictions to public access:

ARIZONA GAME AND FISH DEPARTMENT

VOLUNTEER HOURLY RATES AND CLASSIFICATIONS WORKSHEET

PROJECT TITLE: _____

The value of volunteer labor should be calculated at the hourly rate of an employee doing similar work, or using hourly rates from the Arizona Department of Administration's Human Resource web site, plus a standard ERE rate of 35%. http://www.hr.az.gov/HR_Professional/Class_Comp/PDF/alphacovered.pdf

\$0.445/mile should be the calculation used for mileage.

Water Development	Volunteer Hours	Volunteer Miles	Hourly Rate	Estimated Value
			\$14.14	
Habitat Restoration and Clean Up	Volunteer Hours	Volunteer Miles	Hourly Rate	Estimated Value
			\$14.14	
Fisheries	Volunteer Hours	Volunteer Miles	Hourly Rate	Estimated Value
			\$14.14	
Nongame Branch Project	Volunteer Hours	Volunteer Miles	Hourly Rate	Estimated Value
			\$14.14	
Misc/office work	Volunteer Hours	Volunteer Miles	Hourly Rate	Estimated Value
			varies	
Community Services	Volunteer Hours	Volunteer Miles	Hourly Rate	Estimated Value
			\$7.44	
Events and Other	Volunteer Hours	Volunteer Miles	Hourly Rate	Estimated Value
			\$14.14	
Research Branch	Volunteer Hours	Volunteer Miles	Hourly Rate	Estimated Value
			\$14.14	
Wildlife Area Hosts	Volunteer Hours	Volunteer Miles	Hourly Rate	Estimated Value
			\$17.44	
Education Programs	Volunteer Hours	Volunteer Miles	Hourly Rate	Estimated Value
			\$16.07	
Totals				