



Rocky Mountain Elk Foundation

PAC Project Proposal

Habitat Enhancement, Wildlife Management, Research

Use your tab key to move between fields

Use shift/Tab or arrow keys to go back

Instruction sheet available as a separate file

Form #: HEWMRE - 2013

Date Submitted: 12-20-12

Project Title: Rolling Thunder Aspen Treatment

Project Synopsis: Briefly describe your project and what you hope to accomplish in one to five sentences, using popular writing style that may be used in our *Bugle* magazine. Quaking aspen are considered a keystone species because of the high quality wildlife forage they provide, sites they provide for the establishment of other plants, and the wildlife that depend on them, including elk. However, aspen coverage in the West has been declining over the past 100-150 years. This project will address the primary factor limiting aspen regeneration at this site, a lack of disturbance, by removing conifers and overmature aspen stems by mechanical treatment. Three-hundred fifty acres of aspen-conifer mix will be treated in this phase of the project to produce prolific aspen suckering.

Geographic Information

Location: (National Forest & Ranger District, BLM District & BLM Resource Area, or local name) Upper Hoback River drainage about 10 miles southeast of Bondurant, WY.

State: WY **County(s):** List predominant county first Sublette

Please provide the geographic center of the project treatment site. If the project consists of more than one treatment site (i.e. weed and water projects with scattered spot treatments), please select the largest treatment site and list its geographic center. This point should lie in the predominant county listed above.

Latitude and Longitude (decimal degrees only): ex: 46.919042 N -114.032922 W Lat 43.082 N Long -110.322 W

Try this website to convert your coordinates: <http://transition.fcc.gov/mb/audio/bickel/DDDMSS-decimal.html>

Project Site Land Ownership: Federal % State % Local gvt % Private 100% Tribal %

If private land, list landowner name: Tim Delaney

Ranch name: Rolling Thunder Ranch

If private land, list any adjacent federal, state or other wildlife areas: The Bridger Teton National Forest directly borders the west boundary of the 3500-acre ranch. An approximately 3,000-acre contiguous tract of BLM and WY State Trust lands border the east ranch boundary.

Has RMEF funded a project on/near this project site? Yes ☐ No ☒ **Habitat Enhancement** ☐ **Study** ☐

Submitted By: Dave Kimble

(Lead Agency Project Coordinator)

Submitter's Title: Fish & Wildlife Biologist

Submitter's Email: david_kimble@fws.gov

Agency: US Fish & Wildlife Service-Partners for F&W Program **Telephone:** 307-783-3976 **Ext:**

Address: 1565 Hwy 150 Suite A

City: Evanston

State: WY **Zip:** 82930

Coordinated With (Other Than Lead Agency): Jill Randall (see attached WY G&F letter of support)

Position/Title: Terrestrial Habitat Biologist

Signature: _____

Agency: WY Game & Fish Dept.

Telephone: 307-367-4347 **Ext:**

Address:

City: Pinedale

State: WY **Zip:**

Project Type (Burn, thin, water, seeding, noxious weed, fencing {aspen}, study {telemetry}, etc.) (List each type as a separate line item)	Size of Treatment Area (Acres, miles of road, etc.)	Anticipated	Field Work
		Field Work Start Date (mm/dd/yy)	Completion Date (mm/dd/yy)
Type 1: planning/fundraising	Type 1: 350	Type 1: 1/1/10	Type 1: 4/1/13
Type 2: mechanical treatment	Type 2: 350	Type 2: 6/1/12	Type 2: 9/1/13
Type 3:	Type 3:	Type 3:	Type 3:
Type 4:	Type 4:	Type 4:	Type 4:

Type 5: | Type 5: | Type 5: | Type 5:

*Give Total acres treated without duplicating acres that had more than one type treatment during this project period. ***

RMEF Policy requires at least a 1:1 match ratio!

Proposed RMEF Funds (List each type from above as separate line item)		Matching/Contributor Funds (List each type from above as separate line item)		Total Project Cost (List each type from above as separate line item)		For RMEF Use Only PAC Recommended Amount
Type 1:	\$0	Type 1:	\$34,286	Type 1:	\$34,286	
Type 2:	\$25,000	Type 2:	\$238,500	Type 2:	\$263,500	
Type 3:		Type 3:		Type 3:		
Type 4:		Type 4:		Type 4:		
Type 5:		Type 5:		Type 5:		
*	\$25,000		\$272,786		\$297,786	

**To total columns, place cursor on zero at bottom of column, right click, select "update field." If you change any number, update the fields again.*

Matching/Contributors Funds (Agency/Org, etc.) List each on a separate line Do not include RMEF \$ in this section	Contribution (\$ Amount)
Landowner (cash)	85,000
FWS-Partners Program (cash)	26,000
WY Wildlife & Natural Resource Trust (cash)	50,000
WY Governor's Big Game License Coalition (cash)	5,000
Other pending sources: Pinedale Anticline PO, WLCI	87,500 (pending)
RMEF (in-kind) not in this grant request	15,287
WY Game & Fish (in-kind)	666
FWS Partners Program (in-kind)	3,333

May have to move cursor with mouse to next field, instead of Tab key.

Number of elk that will benefit from this project: Hoback herd size is about 1000 elk. An unknown proportion proportion of the herd will use this habitat in spring, summer, and fall. Ten-percent of the herd, or 100 elk, is a reasonable estimate.

Subspecies of elk in project area: Rocky Mountain ☒ Roosevelt ☐ Manitoban ☐ Tule ☐

List Elk Management/Herd Unit Number: 104 (Hoback) **List Hunt Area Number:** 87

Elk Population Status: At state objective ☒ Below state objective ☐ Above state objective ☐

Habitat Classification: Winter range ☐ Crucial winter range ☐ Summer range ☒ Yearlong habitat ☐
Parturition area ☒ Migration corridor ☒ Transition range ☒

Is NEPA complete and signed by appropriate authority? Yes ☒ No ☐ Does Not Apply ☐

If NEPA is not complete, what is the expected date of completion and sign-off?

Any opportunity for RMEF volunteer participation? Yes ☐ No ☒ **Weekend participation?** Yes ☐ No ☒

What type of volunteer work/participation?

Is elk hunting allowed on this project site? Yes ☒ No ☐ **If yes how is permission granted:**

Non-fee hunting private land

Project Analysis: *What resource challenges will be addressed by this project? List anticipated benefits to elk and to other wildlife?* Quaking aspen are considered a keystone species due to the high quality wildlife forage they provide, sites they provide for the establishment of other plants, and the number of wildlife species that depend on them for most of

their habitat needs (e.g. cavity-nesting birds). Specifically pertaining to elk, the high value of aspen as a browse forage during seasons when grass and forbs are low quality forage or inaccessible due to snow is well documented. However, aspen coverage in the West has declined substantially over the past 100-150 years. Most estimates of the decline range from 50 to 90%. There is a multitude of contributing factors to this decline across the West. The primary and current factor causing the aspen decline at this project site appears to be fire suppression, which has caused conifer encroachment and suppressed aspen root suckering. With no action, the aspen forest will gradually convert to a conifer forest, which will result in a loss of the deciduous forest habitat that is so unique in the West and so valuable for the wildlife species previously mentioned.

Project Objectives: *List specific objectives of project.* The primary objective of the project is to stimulate aspen suckering and produce a new cohort of aspen stems in the project area that will eventually grow into the overstory and support future sustained growth of suckers.

Project Strategies: *List specific actions which will be taken to achieve objectives.* This project will address the primary factor limiting aspen regeneration at the project site through the removal of conifers and overmature aspen stems. Firewise Landscapes, Inc. completed a forest inventory of the Rolling Thunder Ranch in 2010. About 1300 acres of the approximately 3500 acre ranch is aspen/conifer forest. A large proportion of aspen forests on the ranch are being encroached by shade tolerant conifer species, especially subalpine fir. A site-specific, adaptive treatment approach will be utilized: Some areas contain an uneven-aged stand of aspen with prolific suckering, but are being encroached by conifers. Conifers will be cut from these areas, but the aspen overstory will be largely undisturbed. Some areas contain conifers and large, mature aspen, but little aspen regeneration. Conifers and mature aspen may be cut at some of these sites, while others may lend themselves to prescribed fire depending availability of fuels necessary to safely carry a fire. The sagebrush peripheries of the aspen-conifer complex will be burned or mechanically treated with a Lawson aerator in some areas to encourage aspen, grass, and forb establishment in the mountain big sagebrush. In all, 350 acres of primarily aspen-conifer mix will be treated. Only minor browsing by livestock or wildlife on young aspen was observed on site visits in 2011 and 2012. Livestock grazing of the site is light and the site typically is too high in elevation for wintering elk or deer. Therefore, it is not expected that browsing will significantly suppress aspen regeneration post-treatment.

Area Description: *Attach required map with project site clearly marked. Discuss value or potential value of the area to the elk resource and elk use of the area.* The project area is within the Hoback Crucial Terrestrial Priority Area, as identified in the WY Game & Fish Strategic Habitat Plan. Part of the project area has been identified by WY G&F as important elk parturition range. The McNeel elk feedgrounds are approximately 4.5 miles northwest of the ranch, which underscores the importance of the area as spring-summer-fall elk habitat. (see attached maps)

Existing Project Area Land Management Activities: *Is this project part of a larger project or a series of projects? Identify related activities/programs that exist in support of this project. Include associated past RMEF project numbers and titles if applicable.* This project is the first phase of a plan to treat late-successional aspen converting to conifers on approximately 1500 acres of the ranch. The Rolling Thunder Ranch is also entering into a perpetual conservation easement with the Rocky Mountain Elk Foundation, anticipated closing in 2013.

Is project on an active Livestock Allotment? Yes ☐ No ☒ **Allotment Name**

Will there be an adjustment in grazing after treatment? Yes ☐ No ☒

Describe adjustment The livestock grazing is already minimal

Use of RMEF Funds: *Describe specifically how the grant funds will be used. List individual items and/or activities along with unit costs, i.e. supplies, equipment rental, contractors, etc.* On-the-ground treatment costs have been estimated at \$750/acre. This may be a higher cost than some aspen treatments on public land, but private lands pose a different set of challenges and circumstances than are encountered on public lands. Public land crews are not readily available to treat private land acres in a timely manner so the cash needs for this type of project are greater. However, the large landowner cash contribution helps to reduce public/NGO cost to about \$500/acre. The RMEF funds will go directly towards implementation costs: contractor labor and equipment.

Project Monitoring Plan: *Describe the monitoring techniques that will be used to assess and quantify the effectiveness of the project as related to the objectives. What criteria will you use to evaluate the project's success? Include both short term and long term monitoring. What monitoring feedback will you provide to RMEF?* Seven photopoints have been established across the treatment area that will be monitored for the long term. Additional photopoints may be established

just prior to treatment at key locations. In addition, we plan to establish transects to monitor aspen sucker density and height. We expect a substantial increase in aspen sucker density and an increase in sucker height over time post-treatment, and this is how we will determine whether or not the project was successful. This metric will be a good measurement of the project's ultimate elk habitat benefit. The transects will be monitored in the short term. We will provide repeated photopoints to RMEF and transect data if requested.

Additional Project Benefits: *Describe any additional benefits of the project from an ecological, educational and or socio/economic perspective (i.e. reduction of threat of catastrophic wildfire, preserving ranching traditions, increasing public awareness, conserving cultural resources).* The project area has been identified by WY G&F as important moose winter range. The area receives seasonal mule deer use as a transitional area between fawning grounds and winter range. The project site is also within 5 miles of the Daniel greater sage-grouse core area and the sagebrush/aspen interface is late brooding-rearing sage grouse habitat. Also, sustaining aspen at this site may benefit other WY State Species of Concern such as dusky flycatcher and migratory songbirds such as green-tailed towhee and lazuli bunting. The property's west adjoining border with the Bridger-Teton National Forest increases the possible benefits of the enhancement to a variety of wildlife species that require large home ranges.

The reduction of conifers at the site will decrease the odds of catastrophic wildfire, as conifers carry fire much more readily than aspen. Also, removal of conifers will decrease evapotranspiration at the site, which could increase downstream flows for coldwater species such as trout.

The project will provide a demonstration to encourage private landowners and public land agencies to continue to actively manage aspen habitats for the benefit of aesthetics, catastrophic fire prevention, and fish & wildlife habitat. This project may educate other landowners about the benefits of partnering with conservation groups and agencies to benefit public resources while enhancing their private land.

Dept. of Treasury - Internal Revenue Service requires RMEF to have an IRS Form W-9 on file for any grant recipient or vendor, in the case of vendor direct payments (whoever we write the check to). Please wait to submit this form until the grant is approved and invoices are being submitted. We have these forms on file for U.S. Forest Service, Bureau of Land Management and most state wildlife management agencies.

Funds cannot be forwarded without this documentation on file!

Project Worksheet

Is this project improving an area already used by elk but in need of improvement? Yes ☒ No ☐

Is this project designed to attract elk from another area? Yes ☐ No ☒

What is the life expectancy of the project results? 50 years, with the most benefits in the first 25 years

Select the habitat/cover type most representative of project site. aspen List other.

Project Type Details: Complete where applicable

Access Management (Road closures)

Is the closure part of a new travel management plan? ☐ *or an existing plan?* ☐

Is the closure permanent? ☐ *List number of miles*

Is the closure seasonal? ☐ *List number of miles*

Will the roadbed be ripped? Yes ☐ No ☐ *and/or seeded?* Yes ☐ No ☐

How many acres of elk habitat behind the closure will be affected?

Is there public support for this project? Yes ☐ No ☐

Fencing Permanent ☐ Temporary ☐ Excludes livestock ☐ Excludes wildlife ☐

Mechanical Thinning/Manipulation Forest/Woodland type ☒ Shrub steppe type ☐ Meadow type ☐

What is estimated acreage of the project? 350

What equipment will be used to thin? Chainsaw Explain other equipment **Heavy forestry equipment will be used for some areas, but not the entire 350 acres**

What is the estimated number of trees per acre prior to treatment? 300-500 trees/acre

What is the estimated number of trees per acre after treatment (Residual basal)? 0 live trees in some areas, with up to 500 trees/acre in uneven-aged aspen/conifer removal areas

Describe the trees to be cleared (species, estimated diameter, single stem, multi-stem). Large, overmature aspen in the 10+ inch diameter at breast height range and early to mid-successional subalpine fir and Englemann spruce in the 0-15 inch d.b.h. range.

Describe terrain (slope, soil type, rocks, etc.). Soils are loamy to shallow loamy, with relatively few rocks. Slopes mostly 10 to 30%

Noxious Weed – Herbicide

How many acres will be treated (not affected)?

How many acres could be affected by this invasive in 10 years if not treated?

What are the weeds to be treated?

What toxicant will be used?

What surfactant will be used?

What deposition agent will be used?

What is the application rate (per acre)?

Noxious Weed – Biological Controls

How many acres will be treated (not associated or adjacent acres)?

How many release sites?

List Genus and species of bio-controls.

Prescribed Burn - *Is this proposal part of a burn block project?* Yes ☐ No ☐

List the acreage within the black-line perimeter.

What percentage of the area will be blackened?

Seeding Native ☐ Non-native ☐ Mix ☐

What is the seeding rate (lbs per acre)?

Please list the seed mix by common name and percentages in mix.

How will the seed be distributed?

Explain other

Water Development Spring development ☐ Well ☐ Guzzler ☐ Dirt tank ☐ Pond ☐ Other ☐

Is this a new construction? ☐ *or repair of existing structure?* ☐

Storage capacity? *Number of drinker sites?* *How far to nearest perennial water source?*

Is water dedicated solely to wildlife? ☐ *Is water available to livestock?* ☐

Acres influenced by the water development?

Permanent? ☐ *Temporary?* ☐

Access to the site? 2 wheel drive *Can emergency water be easily delivered to this site?* Yes ☐ No ☐