Appendix E
Example of a Planned Prescribed Burn

Recommendations for Planning a Prescribed Burn within Wyoming Big Sagebrush

- ✓ Analysis should be done on a 5th order Hydrologic Unit (HU) (See Appendix A) This example illustrates a 5th order HU within Sublette Co., (#14044010203) consisting of 181,405 acres.

- ✓ Map the Wyoming big sagebrush within the HU as follows:
  1) Area not treatable
  2) 0-5% canopy cover
  3) 5-15% canopy cover
  4) > 15% canopy cover

- ✓ Review landscape objectives for Wyoming big sagebrush (Figure 3). In the example approximately 48% of the HU is occupied by sagebrush with a canopy cover > 15%. The landscape objective recommends approximately 40% of the landscape should be occupied by Wyoming big sagebrush (*Ar. tr.wy.*) with a canopy cover > 15%.

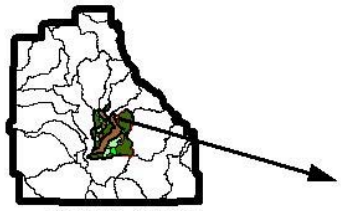
- ✓ Recommend treatments that address the landscape objectives. In the example, three (3) sites within one larger patches of sagebrush having canopy cover > 15% are selected for treatment. The proposed treatments range from 5-7,000 acres in size and are positioned to enhance patchiness.

- ✓ A mosaic pattern of burned and unburned (40-60%) within the treated areas should be a management objective (not illustrated in the example). Reentry to treat unburned sagebrush patches or islands within burned areas is not recommended.

- ✓ Other important/essential planning and management considerations are:

  1) Apply all other applicable map "layers" (i.e. sage-grouse seasonal habitats, livestock grazing system, seasonal big game ranges, etc.).
  2) Establish a plan for short and long-term grazing management that promotes a healthy sustainable sagebrush community.
  3) Implement a monitoring program that addresses short and long-term objectives and goals.
  4) Review the decision elements on page 12 of this document.

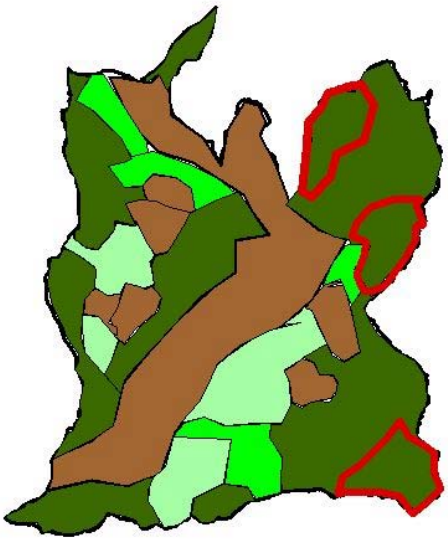
Wyoming Big Sagebrush Prescribed Burn Example



Sublette County
Fifth Order Hydrologic Units

Pre and Post Rx Burn Sagebrush Conditions
(% of HU by Canopy Class)

Artrwy (canopy class)	Pre	Post
Not Treatable	30%	30%
0-5%	7%	16%
5--15%	12%	12%
>15%	48%	39%



Hydrologic Unit #14044010203
(181,405 ac.)

Not Treatable
0-5% Canopy Cover
5-15% Canopy Cover
>15% Canopy Cover

Rx Burn Units
(3 units = 17,195 ac)

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MONITORING PLAN	
Preparer(s): Stroud, Kilpatrick, Scott	Date: 10/22/02
Location: Pinedale BLM	Project Name: Prescribed Burn Example
Project Cooperators: WYGF, BLM, FS	Burn Unit: Prescribed Burn Example
Monitoring Contact: Stroud	Season of Burn: fall/spring

PHYSICAL DESCRIPTION OF BURN UNIT

(ATTACH PROJECT MAP THAT INCLUDES PLANT COMMUNITIES AND/OR HABITAT TYPES)

The area is predominantly a Wyoming big sagebrush community with interspersed meadows, riparian communities, and barren ridges. Western wheatgrass (*Pascopyrum smithii*), needle-and – thread (*Stipa comata*), Idaho fescue (*Festuca idahoensis*), bluegrass (*Poa* spp.) , June grass (*Koleria cristata*), and spikefescue (*Leucopoa kingii*), Hood's phlox *(Phlox hoodii*), rose pussy-toes (*Antennaria rosea*), goldenweed (*Haplopappus acaulis*) and winterfat (*Eurotia lanata*) limited number of other forbs make up the understory. Fuels are generally discontinuous except in depressions and along ephemeral drainages where more mesic conditions enhance forage production and fuels. Sagebrush canopy cover is generally > 15% and the understory herbaceous component depauperate except for mat-forming species.

RESOURCE MANAGEMENT OBJECTIVES

SEE "RESOURCE MANAGEMENT OBJECTIVES" IN THE BURN PLAN

MONITORING OBJECTIVES

TIERED FROM SECTION 4 "RANGE OF ACCEPTABLE RESULTS, EXPRESSED IN QUANTIFIABLE TERMS" IN THE BURN PLAN. IN SOME CASES, THE RANGE OF ACCEPTABLE RESULTS CAN BE USED FOR MONITORING, HOWEVER IF MORE SPECIFICITY IS DESIRED, MORE COMPLETE MONITORING OBJECTIVES CAN BE WRITTEN AND INSERTED BELOW.

IMMEDIATE POST BURN	1. Treat 30-50% of the sagebrush having >15% canopy cover in a mosaic pattern within each of the three burn units. 2. Achieve >80% mortality of *Artrwy* plants in treated areas (80 % statistical reliability). 3. 4.
LONG-TERM	1. Increase herbaceous species diversity by 30% within $\leq$ 3 years post burn. 2. Reestablish pre-burn *Artrwy* densities within < 25 years post-burn (80% statistical reliability). 3. Achieve >50% ground cover within 10 years post-burn. 4. Achieve and maintain $\geq$ 8 vascular plant species within 3 years post-burn. 5. Increase frequency of forb occurrence by 35% within 3 years post-burn (80% statistical reliability).

PLOTS NECESSARY TO MONITOR FIRE OBJECTIVES		
Community Type	Number of Plots	Plot Type(s) Include all applicable plots
Artrwy	6 – 2 for ea. Unit	Nested Frequency, Belt Transect, Line Intercept, and Photo point [established paired plots (control & treatment) for each burn unit].

MONITORING PLOT LOCATION(S)

NOTE THE PLANT COMMUNITIES AND/OR HABITAT TYPES MONITORING PLOTS RESIDE

	Location (UTMs)			
Plot #	East	North	Community/Hab. Type	Notes
1	456678	5432456	Artrwy	Unit A Control
2	456732	5432501	Artrwy	Unit A Treatment
3	457823	5433201	Artrwy	Unit B Control
4	458134	5436011	Artrwy	Unit B Treatment
5	456018	5437006	Artrwy	Unit C Control
6	456116	5437306	Artrwy	Unit C Treatment

MONITORING SCHEDULE

All plots were read from 07/10/02 to 07/18/02 with a full nested frequency for pre-burn treatment information. The next scheduled readings will be immediately post-burn. Belt transects will be read for sagebrush density/mortality, photo points will be retaken, and the burned/unburned areas mapped. The next scheduled readings will be three years post-burn at which time species diversity, frequency of occurence, and numbers of vascular plants will be monitored with nested frequency methodology. Photo points will also be retaken. A third post-burn reading will occur at year 10 to determine ground cover. Photo points will be retaken and full or partial nested frequency may also be conducted if managers wish to monitor other parameters (optional). A fourth post-burn reading (belt transect) will occur at year 25 to determine sagebrush density. A full or partial nested frequency may be done if managers feel it necessary to monitor other parameters (optional).

NOTES

Indicator species may be selected for conducting partial nested frequency monitoring.