DECISION NOTICE/DESIGNATION ORDER

Decision Notice
Finding of No Significant Impact
Designation Order

By virtue of the authority vested in me by the Secretary of Agriculture under regulations at 7 CFR 2.42, 36 CFR 251.23, and 36 CFR Part 219, I hereby establish the Swift Creek Research Natural Area. It shall be comprised of lands described in the section of the Establishment Record entitled "Location."

The Regional Forester has recommended the establishment of this Research Natural Area in the Record of Decision for the Bridger-Teton National Forest Land and Resource Management Plan. That recommendation was the result of analysis of the factors listed in 36 CFR 219.25 and Forest Service Manual 4063.41 Results of the Regional Forester's analysis are documented in the Bridger-Teton National Forest Land and Resource Management Plan and Final Environmental Impact Statement which are available to the public.

The Swift Creek Research Natural Area will be managed in compliance with all relevant laws, regulations, and Forest Service Manual direction regarding Research Natural Areas. It will be administered in accordance with the management direction/prescription identified in the Establishment Record.

I have reviewed the Bridger-Teton Land and Resource Management Plan (LRMP) directed for this RNA and find that the management direction cited in the previous paragraph is consistent with the LRMP and that a Plan amendment is not required.

The Forest Supervisor of the Bridger-Teton National Forest shall notify the public of this decision and mail a copy of the Decision Notice/Designation Order and amended direction to all persons on the Bridger-Teton National Forest Land and Resource Management Plan mailing list.

Based on the Environmental Analysis, I find that designation of the Swift Creek Research Natural Area is not a major Federal action significantly affecting the quality of the human environment (40 CFR 1508.27.)

This decision is subject to appeal pursuant to 36 CFR Part 217. A Notice of Appeal must be in writing and submitted to:

The Secretary of Agriculture
14Th & Independence Ave., S. W.
Washington, D. C. 20250

and simultaneously to the Deciding Officer:

Chief (1570)
USDA, Forest Service
P.O. Box 96090
Washington, D. C. 20090-6090

The Notice of Appeal prepared pursuant to 36 CFR 217.9 (b) must be submitted within 45 days from the date of legal notice of this decision. Review by the Secretary is wholly discretionary. If the Secretary has not decided within 15 days of receiving the Notice of Appeal to review the Chief's decision, appellants will be notified that the Chief's decision is the final administrative decision of the U. S. Department of Agriculture (36 CFR 217.17 (d)).

_____ _____

Chief Date

SIGNATURE PAGE

for

RESEARCH NATURAL AREA ESTABLISHMENT RECORD

Swift Creek Research Natural Area

Bridger-Teton National Forest

Lincoln County, Wyoming

The undersigned certify that all applicable land management planning and environmental analysis requirements have been met and that boundaries are clearly identified in accordance with FSM 4063.21, Mapping and Recordation and FSM 4063.41 5.e (3) in arriving at this recommendation.

Prepared by_____ Date_____
Walter Fertig, Botanist
Wyoming Natural Diversity Database

Prepared by_____ Date_____
George Jones, Ecologist/Coordinator
Wyoming Natural Diversity Database

Recommended by_____ Date_____

Greys River Ranger District, Bridger-Teton NF

Recommended by_____ Date_____

Bridger-Teton National Forest

Recommended by_____ Date_____

Intermountain Region

Recommended by_____ Date_____

TITLE PAGE

Establishment Record for Swift Creek
Research Natural Area within Bridger-Teton
National Forest, Lincoln County, Wyoming

ESTABLISHMENT RECORD FOR
SWIFT CREEK RESEARCH NATURAL AREA
BRIDGER-TETON NATIONAL FOREST
LINCOLN COUNTY, WYOMING

INTRODUCTION

The Swift Creek Research Natural Area (RNA) is located on the west slope of the Salt River Range, approximately 5 air miles east of Afton, Wyoming. The RNA includes the middle drainage of Swift Creek (excluding the head of the creek and the Periodic Spring area) and the surrounding slopes and ridges bordering the watershed. The Swift Creek watershed contains outstanding examples of several coniferous forest, riparian, and montane forbland community and habitat types (Tuhy 1987). North and east-facing slopes are dominated by subalpine fir (Abies lasiocarpa)[1] and Engelmann spruce (Picea engelmannii), while other areas are dominated by a rich mosaic of forb, riparian, upland shrub, and alpine communities (Moseley 1989).

Since settlement times, the Swift Creek watershed has been used primarily for sheep grazing and recreation. Sheep grazing occurred primarily in the upper reaches of the creek, and ceased in 1965 (Tuhy 1987). Most of the vegetation in the upper portion of the RNA has recovered from this past use. Recreational activities have included hunting, horseback riding, and use of all-terrain, two-wheel, and over-snow motorized vehicles. The Periodic Spring Geological Area National Natural Landmark and adjacent picnic area on Swift Creek have been excluded from the RNA.

The upper Swift Creek drainage was originally discussed as a potential RNA at the 1984 Wyoming natural area needs workshop (Tuhy 1987). This area, however, was not included in the final recommendations of the workshop (Collins 1985), nor among the list of potential RNAs in the draft Forest Plan for Bridger-Teton National Forest (USDA Forest Service 1986). In 1987, Joel Tuhy of The Nature Conservancy conducted an Environmental Analysis of the site and recommended it for RNA designation (Tuhy 1987). Tuhy's preferred alternative (No. 5) was recommended for designation by the District Ranger of the Greys River Ranger District in 1988 (Newcom 1988).

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[1]Nomenclature for vascular plants (except trees) follows Dorn (1992) for scientific names and Hitchcock and Cronquist (1973)

for common names. Tree nomenclature follows Little (1979). Nomenclature for vertebrates follows Baxter and Stone (1985), Clark and Stromberg (1987), and Dorn and Dorn (1990).

Land Management Planning

The Swift Creek RNA was recommended for designation in the preferred alternative of the Bridger-Teton National Forest Land and Resource Management Plan (USDA Forest Service 1989 a, p 49) and in the Record of Decision for the Forest plan (USDA Forest Service 1990, p 6).

OBJECTIVES

The main objective of the Swift Creek RNA is to maintain and preserve several coniferous forest, riparian, and montane forbland habitat and community types. The RNA provides areas for the study of natural processes, baseline areas for determining long and short-term ecological changes, monitoring comparison areas for assessing effects of resource management techniques and practices applied to similar ecosystems, and protects biological diversity.

JUSTIFICATION

The Swift Creek RNA was selected to help fill gaps in the RNA system for Picea engelmannii/Galium triflorum, Abies lasiocarpa/Acer glabrum and A. lasiocarpa/Ribes montigenum (R. montigenum phase) coniferous forest habitat types. In addition, the RNA protects several underrepresented forbland and riparian community types, including Salix boothii/Smilacina stellata [Maianthemum stellatum] community type, Mertensia ciliata community type, Arnica longifolia community type, and Heracleum lanatum-Rudbeckia occidentalis community type (Tuhy 1987). Swift Creek RNA also provides potential habitat for six US Forest Service (USFS) Region 4 and Bridger-Teton National Forest (BTNF) Sensitive species and US Fish and Wildlife Service (USFWS) candidate species. These are: boreal draba (Draba borealis), Payson's bladderpod (Lesquerella paysonii), North American lynx, northern goshawk, boreal owl, and three-toed woodpecker (USDA Forest Service 1991; US Fish and Wildlife Service 1993; Joslin 1994).

PRINCIPAL DISTINGUISHING FEATURES

Important features of the area include:

-- A rich mosaic of coniferous forest, upland shrub, riparian, montane forbland, and alpine talus plant communities in relatively undisturbed condition. This assortment of communities represents a large sample of the community variation in the Salt River Range and serves as an important repository of native biological diversity.

-- Potential habitat for six USFS Region 4 Sensitive and USFWS candidate plant and animal species. The area also provides habitat for a number of locally or regionally rare species monitored by The Nature Conservancy's Wyoming Natural Diversity Database (WYNDD).

-- The RNA protects the middle stretches of the Swift Creek watershed.

LOCATION

The Swift Creek RNA is located within the Greys River Ranger District of Bridger-Teton National Forest. Figures 1-2 show the location of the RNA.

Latitude and Longitude

The approximate center of the RNA is at latitude 42° 44' 23" north and longitude 110° 48' 19" west. The geographic center of the RNA is at UTM coordinates 4731669.34837 north and 516119.72122 east (Figure 2).

Boundary

Swift Creek RNA is a parcel of land located in Sections 13, 24 (E2 & NW4), and 25 (NE4) of Township 32 North, Range 118 West and Sections 16 (SW4), 17 (S2), 18 (SE4), 19, 20, 21 (W2), 28 (W2), 29, 30 (N2 & SE4), 32 (N2 & NE4SE4), and 33 (W2) of Township 32 North, Range 117 West of the Sixth Principal Meridian.

The boundary of the RNA (Figure 1) primarily follows topographic features. The western border follows the crest of the divide separating Swift Creek from the first two downstream tributaries in the vicinity of Periodic Spring. Along its southwestern edge, the boundary follows the crest of the divide separating Swift Creek from the Dry Creek watershed. The eastern border follows the crest of the Salt River Range from peak 10540 (approximately 0.4 miles southwest of the South Three Forks Lakes) to peak 10689 (approximately 0.75 miles south of Mount Fitzpatrick). The northern boundary is the crest of the ridge dividing the main stem of Swift Creek from an unnamed tributary

drainage originating south of Rock Lake Peak.

Area

Total area of the RNA is 4170 acres (1688 hectares).

Elevation

Elevation ranges from 7080 ft (2158 m) along Swift Creek on the western edge of the RNA, to 10907 ft (3324 m) on the west summit of Mount Fitzpatrick at the southeast boundary.

Access

Swift Creek RNA is located approximately 5 air miles east of Afton, Wyoming. It may be reached by foot or by motorized all-terrain, two-wheel, or over-snow vehicles. An established, well-maintained trail follows Swift Creek for its entire length. Slopes surrounding the creek valley are steep and may entail strenuous climbing.

From the west, the RNA is accessible by the Swift Creek Road (FS Road 10211) (Figure 1). Proceed east on this road from US Highway 89 in Afton, following signs to the Periodic Spring picnic ground (approximately 6 miles over a sedan-grade gravel road). At the parking lot for the picnic ground, follow the smaller, up-slope trail approximately 0.75 miles to the eastern boundary of the RNA, which begins just beyond the point where a large tributary stream enters Swift Creek on the south bank. The larger downslope trail at the parking lot leads to a dead-end at the Periodic Spring. To reach the Swift Creek trail from the Periodic Spring requires a steep climb upslope of about 100 feet.

From the southwest, the RNA is accessible from the trailhead at Dry Creek Lake. From Afton, proceed approximately 3.5 miles south on US Highway 89 to the Dry Creek Road (FS Road 10079). Proceed east approximately 8.5 road miles on the gravel road to Dry Creek Lake. At road's end, follow the hiking trail north 1 mile over the ridge to Swift Creek Lake, just inside the southwest boundary of the RNA.

AREA BY COVER TYPES

The Vegetation

The vegetation of the Swift Creek RNA is a mix of early seral and mid seral stands. The woodlands in the northwestern part of the RNA are a mix of early successional and late successional species. On south-facing slopes, Douglas-fir dominates woodlands in the Abies lasiocarpa/Acer glabrum habitat type that have the potential to be dominated by subalpine fir in their climax condition. Across the valley on the north-facing slopes, the woodlands on the Abies lasiocarpa/Vaccinium scoparium and A. lasiocarpa/V. globulare habitat types are a mix of subalpine fir, Engelmann spruce, and Douglas-fir. In the absence of disturbance, subalpine fir probably will slowly increase in cover until it constitutes the dominant overstory tree. Avalanches on the north-facing slopes will maintain narrow strips of shrubby subalpine fir-Rocky Mountain maple vegetation.

The vegetation on south- and west-facing slopes in the northwestern part of the RNA includes patches of arrowleaf balsamroot-Rocky Mountain little sunflower, and this forb vegetation will persist on those dry sites.

The central and southern parts of the RNA support a complex mosaic of woodlands, herbaceous vegetation, shrubby vegetation, and rock outcrops. The woodlands on the Abies lasiocarpa/Ribes montigenum habitat type of the steep, west-facing slopes are dominated by subalpine fir and whitebark pine and contain some Douglas-fir. The climax woodlands there will have a similar composition, but with less Douglas-fir. Although the avalanche tracks have the potential to support climax subalpine fir or subalpine fir-whitebark pine woodlands, the frequent disturbance there will maintain the shrubby subalpine fir-aspen vegetation and the mix of the fern-leaf lovage-western larkspur (Ligusticum filicinum-Delphinium occidentale) community, the cow parsnip-blackhead (Heracleum lanatum-Rudbeckia occidentale) community, and the nettleleaf horsemint-viguiera (Agastache urticifolia-Viguiera multiflora) community.

Woodlands in the valley bottom are dominated by Engelmann spruce, and spruce probably will continue to dominate. Most of the riparian area on the Picea engelmannii/Galium triflorum habitat type in the valley bottom has the potential to support Engelmann spruce woodlands, but avalanches reaching the riparian area will maintain the herbaceous and willow vegetation types found there now, including the ciliate bluebells community and the fernleaf lovage-western larkspur community.

Area by Types

Cover types were mapped on 1:24,000 scale topographic maps using aerial photos and field reconnaissance. The area of each

cover type was estimated from the maps.

SAF Cover Type (Eyre 1980), Figure 3.	Acres	Hectares
206 Engelmann Spruce–Subalpine Fir	1255	502
208 Whitebark Pine	133	53
210 Interior Douglas–Fir	413	165
217 Aspen	8	3

Kuchler Types (Kuchler 1966), Figure 4.	Acres	Hectares
11 Douglas–fir forest	440	176
14 Western spruce–fir forest	1454	581

Habitat Types & Community Types, Figure 6.	Acres	Hectares
Abies lasiocarpa/Acer glabrum habitat type (Steele et al. 1983)	700	280
Abies lasiocarpa/Osmorhiza chilensis habitat type, *Pachistima myrsinites* phase (Steele et al. 1983)	8	3
Abies lasiocarpa/Vaccinium globulare habitat type, *Vaccinium scoparium* phase (Steele et al. 1983)	429	172
Abies lasiocarpa/Vaccinium scoparium habitat type, *Vaccinium scoparium* phase (Steele et al. 1983)	129	52
Abies lasiocarpa/Ribes montigenum habitat type, *Ribes montigenum* phase (Steele et al. 1983)	742	297
Picea engelmannii/Galium triflorum habitat type (Steele et al. 1983)	46	18
Picea engelmannii/Vaccinium scoparium habitat type (Steele et al. 1983) and *Arnica longifolia* community (Gregory 1983)	49	20
Salix boothii/Smilacina stellata community type (Youngblood et al. 1985)	8	3
Artemisia tridentata ssp. *vaseyana* f. *spiciformis*/Mountain Forb community type (Bramble–Brodahl 1978)	29	12

Mertensia ciliata community type (Gregory 1983)		8	3
Mertensia ciliata community type with Ligusticum filicinum-Delphinium occidentale community type (Gregory 1983)	137	55	
Ligusticum filicinum-Delphinium occidentale community type with Heracleum lanatum-Rudbeckia occidentale community type, and Agastache urticifolia -Viguiera multiflora community type (Gregory 1983)		500	200
Balsamorhiza sagittata-Helianthella uniflora community type (Gregory 1983)		250	100
Populus tremuloides-Abies lasiocarpa series (Mueggler 1988)		29	12
Abies lasiocarpa-Acer glabrum avalanche chute (Montana Natural Heritage Program no date)		10	4

PHYSICAL AND CLIMATIC CONDITIONS

Physical Conditions

Swift Creek RNA is located on the west slope of the Salt River Range and contains the mid-reach of the Swift Creek watershed. The creek drains northward, following the north-south trend of the ridges of the Salt River Range, before turning sharply westward near the north end of the RNA. From this point and beyond, the creek flows west to southwest, perpendicular to the strike of the underlying rock beds. Upstream of the bend, Swift Creek valley is relatively broad and U-shaped, whereas downstream the canyon is narrowly V-shaped with extremely steep side slopes (Tuhy 1987).

Climatic Conditions

The Salt River Range is included in the western Wyoming climate region by Baker (1944). This area, which includes the Wyoming Range, Tetons, and Yellowstone Plateau, is characterized by uniform, moderately high monthly precipitation. The climate of this region contrasts sharply with mountainous areas to the east which have drier, more continental climatic conditions.

No climate stations are maintained in the Salt River Range. The nearest station is located approximately 5 miles to the west in Afton, Wyoming, at the eastern edge of the Star Valley. This station is at a considerably lower elevation than the upper Swift Creek watershed, and thus provides only a rough approximation of climate conditions in the upper reaches of the RNA.

In Afton, peak precipitation occurs in May and June and drops to a minimum from July to September (Alyea 1969). The growing season averages 62 days, but temperatures below freezing may occur on any day of the summer. Winds are generally light, but during thunderstorms may gust to 80-100 mph. Relative humidity is low in the summer, but can average 80% in winter (Alyea 1969).

Summary of Monthly Climate Values, Afton, Wyoming
Elevation 6210 feet (1892 m), 1951-1980
(From Martner 1986)

Month	Mean Temperature		Average Precipitation	
	°F	°C	Inches	mm
January	16.2	- 8.8	1.71	43.4
February	20.4	- 6.4	1.35	34.3
March	25.8	- 3.4	1.30	33.0
April	36.8	2.7	1.67	42.4
May	47.5	8.6	1.94	49.3
June	54.1	12.3	1.98	50.3
July	61.4	16.3	1.00	25.4
August	59.7	15.4	1.28	32.5
September	52.3	11.3	1.38	35.1
October	42.3	5.7	1.34	34.0
November	28.3	- 2.1	1.42	36.1

December 18.1- 7.7 1.6642.2

Mean Annual 38.6 3.7 18.03 458.0

Mean April-Sept. 52.0 11.1 9.25 235.0

DESCRIPTION OF VALUES

Flora

Climax vegetation on slopes in the northwestern part of the Swift Creek RNA is primarily subalpine fir (Abies lasiocarpa) woodlands and Engelmann spruce (Picea engelmannii) woodlands. The north-facing slopes currently support mixed woodlands of subalpine fir, Douglas-fir, and Engelmann spruce. The south-facing slopes currently support Douglas-fir woodlands and mixed woodlands of Douglas-fir and subalpine fir. Smaller areas on both the north- and south-facing slopes are covered in herbaceous vegetation of the arrowleaf balsamroot-Rocky Mountain little sunflower (Balsamorhiza sagittata-Helianthella uniflora) community, which is the climax vegetation for those areas.

On slopes in the central and eastern parts of the RNA, the climax vegetation is a mosaic of patches of subalpine fir woodland and whitebark pine (Pinus albicaulis) woodland mixed with patches of herbaceous vegetation, principally the fernleaf lovage-western larkspur (Ligusticum filicinum-Delphinium occidentale) community, the cow parsnip-blackhead (Heracleum lanatum-Rudbeckia occidentale) community, and the nettleleaf horsemint-viguiera (Agastache urticifolia-Viguiera multiflora) community. Those vegetation types are currently found on the slopes. Both east-facing and west-facing slopes include large amounts of bare rock and substantial areas of avalanche tracks, where the vegetation probably will be maintained in a seral condition. Along Swift Creek, the climax vegetation is Engelmann spruce woodlands, although parts of the valley bottom also are maintained in a seral state by avalanches.

No federally listed Threatened or Endangered plant species are found in the Swift Creek RNA. Two USFS Region 4 Sensitive plant species and eleven state rare species (monitored by WYNDD) are known or suspected to occur in the RNA. These species are listed below:

Species Comments

Antennaria aromatica	A regional endemic known from the Corral Creek Lake area, just south of the boundary of the RNA (Hartman and Nelson 1993). Suitable limestone talus habitat may exist in the RNA, especially on the west flank of Mount Fitzpatrick.
Artemisia tridentata var. vaseyana f. spiciformis	A regional endemic known from fewer than 10 occurrences in western Wyoming. A small stand occurs in the middle part of Swift Creek Canyon (Tuhy 1987).
Astragalus shultziorum	Formerly listed as Sensitive in Region 4 (USDA Forest Service 1989 b). One occurrence is known from the Upper Swift Creek drainage, on the divide between Swift and Upper Corral creeks (Marriott 1990). This population lies just outside of the RNA boundaries as recommended by Tuhy (1987). The population would be included, however, if the RNA boundaries of Tuhy's Alternative 4 were adopted.
Botrychium simplex var. tenebrosum	A species of limited distribution in Wyoming. One occurrence is known from a talus ridge approximately 2 miles south of the RNA (Hartman and Nelson 1993). Potential habitat may occur on rock slides at high elevations along the eastern boundary of the RNA.
Carex deweyana var. bolanderi	A species of limited distribution in Wyoming, known only from Lincoln and Park Counties. One population is known from the middle stretches of Swift Creek (Rocky Mountain Herbarium [RM] records).
Cercocarpus ledifolius var. intercedens [syn. = C. l. var. intermontanus]	This variety is of limited distribution in Wyoming, being restricted to Lincoln and Teton Counties. Scattered individuals are found on steep, open slopes in the RNA.

Draba borealis	A BTNF Sensitive species. Known from one historical collection on "Swift Creek at North Fork", just outside the boundary of the RNA (Fertig and Marriott 1993). Suitable habitat may exist in the RNA on moist, shady limestone outcrops or talus in the middle reaches of Swift Creek.
Festuca occidentalis	A species of limited distribution in Wyoming, previously known only from Yellowstone National Park. Tuhy documented the first population from Lincoln County in the RNA in 1987 (RM records).
Lesquerella paysonii	A USFS Region 4 Sensitive species and USFWS C2 candidate. Known from two occurrences just outside the eastern and southern boundaries in the vicinity of Crow Creek and Corral Creek lakes (Hartman and Nelson 1993). Potential habitat may exist within the RNA on semi-open calcareous ridges.
Lomatium graveolens [syn. = L. nuttallii, misapplied]	A regional endemic known from one historical record in the Crow Creek Lakes area, just east of the boundary of the RNA (Hartman and Nelson 1993). Potential habitat may exist on ridges or sagebrush slopes.
Machaeranthera canescens var. monticola	A regional endemic known from one occurrence in the canyon near the eastern border of the RNA (RM records).
Phacelia heterophylla var. virgata	A species of limited distribution in Wyoming, known only from Lincoln and Teton Counties. Relatively common in semi-open meadows and trailsides in the RNA.
Polemonium foliosissimum var. alpinum	This variety is a regional endemic. Found in open meadows along the Swift Creek trail in the eastern portion of the RNA.

Tuhy (1987) mentioned Astragalus paysonii as another

potential rare species for the RNA. This Region 4 Sensitive species was not located in the Swift Creek watershed during recent surveys, and is not likely to occur there due to a lack of suitable, disturbed habitat (Fertig and Marriott 1993).

A brief and incomplete floristic survey was conducted in the Swift Creek RNA in July, 1993. The following species checklist is based on field studies by Tuhy (1987), Marriott (1990) and Fertig (unpublished records 1993). For additional information on the vascular plants of the Salt River Range, consult Hartman and Nelson (1993, 1994).

Common Vascular Plants of Swift Creek RNA
(* indicates taxa suspected to occur in the RNA)

Scientific Name	Common Name
	Trees
Abies lasiocarpa	Subalpine fir
Acer glabrum	Rocky Mountain maple
Acer grandidentatum	Canyon maple
Cercocarpus ledifolius var. intercedens	Intermountain curl-leaf mountain-mahogany
Juniperus scopulorum	Rocky Mountain juniper
Picea engelmannii	Engelmann spruce
Picea pungens	Blue spruce
Pinus contorta var. latifolia	Lodgepole pine
Pinus flexilis	Limber pine
Populus tremuloides	Quaking aspen
Prunus virginiana	Common chokecherry
Pseudotsuga menziesii	Douglas-fir
	Shrubs
Amelanchier alnifolia var. alnifolia var. pumila	Western serviceberry
Amelanchier utahensis	Utah serviceberry
Artemisia tridentata var. vaseyana	
f. vaseyana	Mountain big sagebrush
f. spiciformis	Osterhout sagebrush
Ceanothus velutinus	Mountain balm
Cornus sericea	Red-osier dogwood
Juniperus communis var. depressa	Common juniper
Lonicera involucrata	Black twin-berry

Lonicera utahensis Utah honeysuckle
Mahonia repens Oregon grape
Paxistima myrsinites Mountain lover
Physocarpus malvaceus Mallow ninebark
Ribes hudsonianum Stinking currant
Ribes inerme Whitestem gooseberry
Ribes lacustre Swamp gooseberry
Ribes montigenum Mountain gooseberry
Ribes viscosissimum Sticky currant
Rosa nutkana Nootka rose
Rosa sayi Prickly rose
Rosa woodsii Woods rose
Rubus idaeus Red raspberry
var. aculeatissimus
Rubus parviflorus Thimbleberry
Salix boothii Booth's willow
Salix drummondiana Drummond willow
Salix melanopsis Dusky willow
Sambucus racemosa Elderberry
Sorbus scopulina Mountain-ash
Symphoricarpos oreophilus Mountain snowberry
var. utahensis
Vaccinium globulare Blue huckleberry
Vaccinium scoparium Grouse whortleberry

Forbs

Achillea millefolium Common yarrow
var. lanulosa
Actaea rubra Red baneberry
Agastache urticifolia Nettleleaf horsemint
Agoseris aurantiaca Orange agoseris
Agoseris glauca Pale agoseris
var. dasycephala
Alyssum alyssoides Pale alyssum
* Antennaria aromatica Aromatic pussy-toes
Antennaria microphylla Small-leaved pussy-toes
Antennaria rosea Rosy pussy-toes
Apocynum androsaemifolium Spreading dogbane
Aquilegia coerulea Colorado columbine
Arabis confinis Spreadingpod rockcress
Arabis glabra Towermustard
Arabis holboellii Holboell's rockcress
var. secunda
Arenaria congesta Ballhead sandwort
var. congesta
Arnica cordifolia Heart-leaf arnica
Arnica longifolia Seep-spring arnica
Arnica parryi Nodding arnica

Artemisia dracunculus Tarragon
Artemisia ludoviciana Prairie sage
var. latiloba
Aster alpigenus Alpine aster
var. haydenii
Aster engelmannii Engelmann's aster
Aster glaucodes
Aster integrifolius Entire-leaved aster
Astragalus kentrophyta Thistle milkvetch
var. tegetarius
* Astragalus shultziorum Shultz's milkvetch
Balsamorhiza sagittata Arrowleaf balsamroot
Bupleurum americanum American thorough-wax
Castilleja angustifolia Desert paintbrush
var. dubia
Castilleja linearifolia Wyoming paintbrush
Castilleja miniata Scarlet paintbrush
Castilleja rhexifolia Rhexia-leaved paintbrush
Castilleja sulphurea Sulfur paintbrush
Cerastium arvense Field chickweed
Cerastium fontanum Mouse-ear chickweed
Chimaphila umbellata Prince's-pine
Cirsium subniveum Jackson's Hole thistle
Clematis hirsutissima Sugarbowls
Clematis occidentalis Rock clematis
var. grosseserrata
Collomia linearis Narrow-leaved collomia
Collinsia parviflora Small-flowered blue-eyed Mary
Crepis acuminata Tapertip hawksbeard
Crepis modocensis Siskiyou hawksbeard
Cymopterus longilobus Henderson's cymopterus
Cymopterus longipes Long-stalk spring parsley
Delphinium bicolor Little larkspur
Delphinium occidentale Western larkspur
Draba albertina Slender draba
* Draba borealis Boreal draba
Draba oligosperma Few-seeded draba
Epilobium angustifolium Fireweed
var. angustifolium
Epilobium brachycarpum Tall annual willow-herb
Erigeron compositus Cut-leaved daisy
var. discoideus
Erigeron eatonii Eaton's daisy
Erigeron peregrinus Wandering daisy
Erigeron speciosus Showy fleabane
Eriogonum ovalifolium Oval-leaved wild
var. purpureum buckwheat
Eriogonum umbellatum Sulfur buckwheat
var. majus

Erysimum inconspicuum Small-flowered rocket
Fragaria vesca Woods strawberry
Fragaria virginiana Virginia strawberry
Galium aparine Cleavers
Galium bifolium Thinleaf bedstraw
Galium triflorum Sweetscented bedstraw
Gayophytum diffusum Spreading groundsmoke
var. strictipes
Geranium richardsonii White geranium
Geranium viscosissimum Sticky geranium
Geum macrophyllum Large-leaved avens
var. perincisum
Gilia tenerrima Delicate gilia
Habenaria dilatata White bog-orchid
Habenaria unalascensis Alaska rein-orchid
Hackelia micrantha Blue stickseed
Hackelia patens Spreading stickseed
Haplopappus acaulis Stemless goldenweed
Hedysarum occidentale Western sweetvetch
Helianthella quinquenervis Nodding helianthella
Helianthella uniflora Rocky Mountain little-
Sunflower
Heracleum lanatum Cow-parsnip
Heuchera parvifolia Small-leaved alumroot
Hieracium albiflorum White-flowered hawkweed
Hydrophyllum capitatum Ballhead waterleaf
Ipomopsis aggregata Scarlet gilia
Isatis tinctoria Dyer's woad
Lepidium densiflorum Prairie peppergrass
var. macrocarpum
* Lesquerella paysonii Payson's bladderpod
Ligusticum filicinum Fern-leaf lovage
Linanthus septentrionalis Northern linanthus
Lithophragma parviflorum Smallflowered fringecup
Lomatium dissectum Fern-leaved biscuitroot
* Lomatium graveolens Stinking desert-parsley
Lomatium triternatum Nineleaf biscuitroot
var. platycarpum
Lupinus argenteus Silvery lupine
Machaeranthera canescens Mountain spiny-aster
var. monticola
Maianthemum racemosum False spikenard
var. amplexicaule
Maianthemum stellatum Starry false Solomon's seal
Medicago lupulina Black medic
Mertensia ciliata Ciliate bluebells
Microseris nutans Nodding microseris
Mimulus guttatus Yellow monkey-flower
Mimulus lewisii Lewis' monkey-flower

Mitella stauropetala Sideflowered mitella
Nemophila breviflora Great Basin nemophila
Osmorhiza depauperata Blunt-fruit sweetroot
Osmorhiza occidentalis Western sweetroot
Oxytropis parryi Parry's crazyweed
Pedicularis bracteosa Bracted lousewort
Pedicularis racemosa Sickletop lousewort
var. alba
Penstemon attenuatus Taper-leaved penstemon
var. pseudoprocerus
Penstemon cyananthus
Penstemon humilis Lowly penstemon
Penstemon montanus Mountain beardtongue
Penstemon whippleanus Whipple's penstemon
Perideridia montana Gairdner's yampah
Petrophyton caespitosum Rocky Mountain rockmat
Phacelia hastata Silverleaf phacelia
Phacelia heterophylla Virgate phacelia
var. virgata
Phacelia sericea Silky phacelia
Polemonium foliosissimum Alpine leafy polemonium
var. alpinum
Polygonum douglasii Douglas knotweed
Potentilla arguta Tall cinquefoil
Potentilla diversifolia Diverse-leaved cinquefoil
var. perdissecta
Potentilla glandulosa Glandular cinquefoil
Potentilla gracilis
var. nuttallii Slender cinquefoil
var. pulcherrima Soft cinquefoil
Pyrola asarifolia Pink wintergreen
Rudbeckia occidentalis Blackhead
Saxifraga odontoloma Brook saxifrage
Scrophularia lanceolata Lanceleaf figwort
Sedum debile Weak-stemmed stonecrop
Sedum lanceolatum Lanceleaved stonecrop
Senecio crassulus Thick-leaved groundsel
Senecio serra Butterweed groundsel
var. serra
Senecio sphaerocephalus Mountain-marsh butterweed
Senecio streptanthifolius Cleft-leaf groundsel
var. rubricaulis
Senecio triangularis Arrowleaf groundsel
Silene menziesii Menzies' silene
var. menziesii
Smelowskia calycina Alpine smelowskia
var. americana
Stellaria jamesiana Sticky starwort
Stellaria umbellata Umbellate starwort

Streptopus amplexicaulis Clasping-leaved twisted- stalk
Swertia radiata Green gentian
Synthyris pinnatifida Cut-leaf synthyris
Taraxacum laevigatum Red-seeded dandelion
Taraxacum officinale Common dandelion
Telesonix heucheriformis James' saxifrage
Thalictrum fendleri Fendler's meadowrue
Thalictrum occidentale Western meadowrue
Thlaspi arvense Field pennycress
Thlaspi montanum Mountain pennycress
Tragopogon dubius Yellow salsify
Trifolium hybridum Alsike clover
Urtica dioica Stinging nettle
Valeriana occidentalis Western valerian
Veronica biloba Bilobed speedwell
Veronica serpyllifolia Thyme-leaved speedwell
Viguiera multiflora Viguiera
Viola adunca Early blue violet
Viola canadensis Canada violet

Graminoids

Agrostis exarata Spike bentgrass
Bromus carinatus California brome
Bromus inermis Smooth brome
Calamagrostis rubescens Pinegrass
Carex aquatilis Water sedge
Carex deweyana Dewey's sedge
var. bolanderi
Carex elynoides Kobresia-like sedge
Carex hoodii Hood's sedge
Carex microptera Small-winged sedge
Carex raynoldsii Raynold's sedge
Carex rossii Ross sedge
Dactylis glomerata Orchard-grass
Elymus spicatus Bluebunch wheatgrass
Eymus trachycaulus Slender wheatgrass
var. trachycaulus
Festuca idahoensis Idaho fescue
Festuca occidentalis Western fescue
Hordeum brachyantherum Meadow barley
Juncus ensifolius Dagger-leaf rush
Koeleria macrantha Junegrass
Luzula parviflora Smallflowered woodrush
Melica spectabilis Showy oniongrass
Oryzopsis exigua Little ricegrass
Phleum alpinum Alpine timothy
Phleum pratense Common timothy
Poa interior Inland bluegrass

Poa pratensis Kentucky bluegrass
Poa secunda
var. elongata Pine bluegrass
Stipa nelsonii Nelson's needlegrass
Trisetum spicatum Spike trisetum

Ferns

* Botrychium simplex Least grape-fern
var. simplex
Cystopteris fragilis Brittle bladder-fern
Polystichum lonchitis Mountain holly-fern

Fauna

No federally listed Threatened or Endangered vertebrate species are currently known to occur in the Swift Creek RNA. Potential habitat may exist for eleven USFS Region 4 Sensitive species and WYNDD "rare, uncommon, or imperiled" species in the vicinity of the RNA (Garber 1991 a; USDA Forest Service 1991). These species include:

Species	Comments
	Mammals
Hoary bat	Listed by WYNDD as rare or uncommon. Reported for the general area by Garber (1991 b).
Montane vole	Listed by WYNDD as rare or uncommon. Reported from the vicinity of the RNA by Clark and Stromberg (1987).
Mountain lion	Listed by WYNDD as rare or uncommon. May be an occasional visitor to the RNA. In 1993, a lion was reported in the Swift Creek Campground, approximately 4 miles west of the RNA (Game warden's personal comm. to W. Fertig, camper).
Lynx	A USFS Region 4 Sensitive species and USFWS C2 candidate. Three historical records are known from the mountains south of the RNA (WYNDD records).

Birds

Sharp-shinned hawk	Listed by WYNDD as rare or uncommon. Potential habitat is available in the conifer forests of the RNA (C. Garber, personal comm.).
Cooper's hawk	Listed by WYNDD as rare or uncommon. Conifer forests in the RNA may contain some potential breeding habitat (C. Garber, personal comm.).
Northern goshawk	A USFWS C2 candidate. Potential habitat is available in the conifer forests of the RNA (C. Garber, personal comm.).
Boreal owl	A USFS Region 4 Sensitive species. Suitable habitat may be present in the RNA (C. Garber, personal comm.).
Northern saw-whet owl	Listed by WYNDD as rare or uncommon. Breeding records are known from the general vicinity of the RNA (Dorn and Dorn 1990).
Three-toed woodpecker	A USFS Region 4 Sensitive species. Potential habitat is present in the conifer forests of the RNA (C. Garber, personal comm.).

Amphibians and Reptiles

Rubber boa	Listed by WYNDD as imperiled. One museum record is known from Afton (Baxter and Stone 1985). Potential habitat may exist in the RNA.

Vertebrate species have not been systematically inventoried in the Swift Creek RNA. The following tentative species list is derived from literature sources (Baxter and Stone 1985; Clark and Stromberg 1987; Dorn and Dorn 1990; Oakleaf et al. 1992). Species for which suitable habitat is lacking in the RNA have been excluded from this list.

Common Name	Scientific Name

Mammals

Masked shrew Sorex cinereus cinereus
Dusky shrew Sorex vagrans obscurus
Water shrew Sorex palustris navigator
Little brown myotis Myotis lucifugus carissima
Long-legged myotis Myotis volans interior
Long-eared myotis Myotis evotis evotis
Big brown bat Eptesicus fuscus pallidus
Hoary bat Lasiurus cinereus cinereus
PikaOchotona princeps ventorum
Nuttall's cottontail Sylvilagus nuttallii grangeri
Snowshoe hare Lepus americanus
Least chipmunk Tamias minimus consobrinus
Yellow pine chipmunk Tamias amoenus luteiventris
Uinta chipmunk Tamias umbrinus fremontii
Yellow-bellied marmot Marmota flaviventris nosophora
Uinta ground squirrel Spermophilus armatus
Golden-mantled ground squirrel Spermophilus lateralis castanurus
Red squirrel Tamiasciurus hudsonicus
Northern flying squirrel Glaucomys sabrinus bangsii
Northern pocket gopher Thomomys talpoides bridgeri
Beaver Castor canadensis
Deer mouse Peromyscus maniculatus
Bushy-tailed woodrat Neotoma cinerea
Southern red-backed vole Clethrionomys gapperi idahoensis
Heather vole Phenacomys intermedius
Montane vole Microtus montanus
Long-tailed vole Microtus longicaudus longicaudus
Muskrat Ondatra zibethicus
Western jumping mouse Zapus princeps utahensis
Porcupine Erethizon dorsatum
Coyote Canis latrans
Red fox Vulpes vulpes macroura
Black bear Ursus americanus cinnamomum
Raccoon Procyon lotor hirtus
Marten Martes americana
Ermine Mustela erminea muricus
Long-tailed weasel Mustela frenata
MinkMustela vison
Striped skunk Mephitis mephitis hudsonica
Mountain lion Felis concolor
Lynx Felis lynx canadensis
Bobcat Felis rufus pallescens
ElkCervus elaphus nelsoni
Mule deer Odocoileus hemionus hemionus
Moose Alces alces shirasi

Birds

Sharp-shinned hawk Accipiter striatus
Cooper's hawk Accipiter cooperi
Northern goshawk Accipiter gentilis
Red-tailed hawk Buteo jamaicensis
Golden eagle Aquila chrysaetos
American kestrel Falco sparverius
Blue grouse Dendragapus obscurus
Ruffed grouse Bonasa umbellus
Sandhill crane Grus canadensis
Common snipe Gallinago gallinago
Mourning dove Zenaida macroura
Great horned owl Bubo virginianus
Boreal owl Aegolius funereus
Northern saw-whet owl Aegolius acadicus
Common nighthawk Chordeiles minor
Calliope hummingbird Stellula calliope
Broad-tailed hummingbird Selasophorus platyceras
Red-naped sapsucker Sphyrapicus nuchalis
Downy woodpecker Picoides pubescens
Three-toed woodpecker Picoides tridactylicus
Red-shafted flicker Colaptes auratus cafer
Olive-sided flycatcher Contopus borealis
Western wood-pewee Contopus sordidulus
Hammond's flycatcher Empidonax hammondii
Cordilleran flycatcher Empidonax occidentalis
Tree swallow Tachycineta bicolor
Gray jay Perisoreus canadensis
Steller's jay Cyanocitta stelleri
Clark's nutcracker Nucifraga columbiana
Black-billed magpie Pica pica
Common raven Corvus corvax
Black-capped chickadee Parus atricapillus
Mountain chickadee Parus gambeli
Red-breasted nuthatch Sitta canadensis
White-breasted nuthatch Sitta carolinensis
Brown creeper Certhia americana
American dipper Cinclus mexicanus
Ruby-crowned kinglet Regulus calendula
Mountain bluebird Sialia currucoides
Townsend's solitaire Myadestes townsendi
Swainson's thrush Catharus ustulatus
Hermit thrush Catharus guttatus
American robin Turdus migratorius
Gray catbird Dumetella carolinensis
American pipit Anthus rubescens
Warbling vireo Vireo gilvus
Yellow warbler Dendroica petechia
Audubon's warbler Dendroica coronata auduboni
MacGillivray's warbler Oporornis tolmiei

Wilson's warbler	Wilsonia pusilla
Western tanager	Piranga ludoviciana
Lazuli bunting	Passerina amoena
Green-tailed towhee	Pipilo chlorurus
Chipping sparrow	Spizella passerina
Vesper sparrow	Pooectes gramineus
Fox sparrow	Passerella iliaca
Song sparrow	Melospiza melodia
White-crowned sparrow	Zonotricha leucophrys
Dark-eyed junco	Junco hyemalis
Western meadowlark	Sturnella neglecta
Common grackle	Quiscalus quiscula
Rosy finch	Leucosticte arctoa
Pine grosbeak	Pinicola enucleator
Cassin's finch	Carpodacus cassinii
Red crossbill	Loxia curvirostra
Pine siskin	Carduelis pinus
Evening grosbeak	Coccothraustes vespertinus

Amphibians and Reptiles

Tiger salamander	Ambystoma tigrinum
Northern leopard frog	Rana pipiens
Boreal chorus frog	Pseudacris triserata maculata
Rubber boa	Charina bottae
Wandering garter snake	Thamnophis elegans vagrans

Geology

The Swift Creek RNA is on the western edge of the Salt River Range, one of a series of north-south trending mountain ranges (overthrust belt) on the Idaho/Wyoming border. These mountains are composed of overlapping folds and sheets of crust moved eastward by horizontal compression and contraction forces during the Sevier orogeny, 150 to 55 million years ago (Lageson and Spearing 1988; Blackstone 1988).

The thrust faults of the Salt River Range are relatively shallow and flat, and do not expose Precambrian basement rocks (Lageson and Spearing 1988). Surface rocks in the Swift Creek RNA are primarily of sedimentary origin, dating from the Permian to Jurassic (Love and Christiansen 1985). Scattered areas of glacial debris are also found in the upper reaches of the watershed. The RNA contains outcroppings of the Nugget Sandstone, Phosphoria Formation, Ankareh Formation, Thaynes Limestone, Woodside Shale, and Dinwoody Formation (Love and Christiansen 1985). These formations are composed mostly of limestone, sandstone, siltstone, and shale.

For additional information on the geology of the Salt River Range and the Afton Front RNA, consult Kivi, W. J. (1940), Knapp (1976), Lageson (1980), and Pacht (1976).

Soils

Information on soils was provided by Randy Davis of the Bridger-Teton National Forest Supervisor's Office.

Soils on south-facing and west-facing slopes in the RNA belong to the Quander-Greyback families complex. They are moderately deep to deep, well drained to excessively well drained, and have loam, cobbly loam, and very cobbly loam horizons. Permeability of the soils is moderate and available water capacity is low to moderate. The soils are 26 inches to over 60 inches (66 cm to 152 cm) deep over a variety of sedimentary and crystalline bedrock types. Soils in this complex are marginally stable. Vegetation is Douglas-fir woodlands, subalpine fir woodlands, whitebark woodlands, and forb communities. Avalanche tracks are common on these soils.

Soils on the east-facing slopes belong to the Greyback-Pishkun Families - Rock outcrop complex. These soils are moderately deep to very deep over limestone bedrock, and are well drained, with moderate permeability, and low available water capacities. The horizons are very cobbly loam, very cobbly clay loam, and very gravelly sandy clay loam. The potential for surface runoff is high. Soils in this complex are marginally unstable. Vegetation on these soils in the RNA is a mix of conifer woodlands and herbaceous communities. Rock outcrops are common.

The north-facing slopes in the northwestern part of the RNA are blanketed with soils of the Evaro-Agneston Families - Talus complex overlying limestones and dolomites. The soils are moderately deep to deep and well drained, and contain horizons of gravelly loam, cobbly and very cobbly loam, sandy clay loam, and sandy clay loam. Water permeability is moderate and the potential for surface runoff is high. The soils provide little available water capacity. Soils in this complex are marginally unstable. Vegetation is mixed woodland of subalpine fir, Engelmann spruce, and Douglas-fir.

Slopes of the valley bottom belong to the Greyback-Spearhead Families complex. These soils are developed in Quaternary slopewash and Pleistocene till. They are moderately deep to very deep and have horizons of gravelly loam and gravelly, cobbly, or stony sandy loam. Permeability is moderate to moderately rapid and the available water capacity is low. The soils have a

moderate to high potential for surface runoff. Soils in this complex are stable. The vegetation is a mix of Engelmann spruce woodlands, subalpine fir woodlands, and riparian shrublands.

Lands

The Swift Creek RNA is all reserved Forest Service land with no encumbrances (Tuhy 1987).

Cultural

There are no known historical or cultural sites within the RNA.

IMPACTS AND POSSIBLE CONFLICTS

Mineral Resources

The Swift Creek RNA has few known mineral resources. At present, there are no active oil, gas, or phosphate leases within the boundaries of the RNA (Tuhy 1987). There are several mining claims dating from 1961 (all by American Nuclear) in the extreme western portion of the RNA (Tuhy 1987). The Swift Creek watershed is ranked as having only moderate potential for economic accumulations of oil and gas by Holm (1987), based on the lack of significant reported shows from wells in the immediate area. Phosphates are known to occur in outcrops of the Phosphoria Formation in the RNA. The entire RNA is within Phosphate Reserve # 4, Wyo. # 1 (Tuhy 1987).

In the BTNF Forest Plan (USDA Forest Service 1989 a), the Swift Creek RNA is to be managed under prescription DFC4. Under the plan, new oil and gas leasing is allowed, but all new leases will be issued with a No-Surface-Occupancy stipulation. All of the area is withdrawn from locatable mineral entry and phosphate leasing.

Grazing

The entire Swift Creek basin has been closed to grazing by domestic livestock since 1965 to protect watershed values (Tuhy 1987). There is currently no fencing to exclude incidental grazing by sheep from the adjacent allotment at the southern boundary of the RNA.

Timber

Swift Creek RNA contains 1894 acres of coniferous forest. Average timber volume in the area is 15 MBF per acre, and is made

up of approximately 60 percent Douglas-fir, 20 percent subalpine fir, and 20 percent Engelmann spruce (Tuhy 1987). Forests in the middle reaches of the watershed are considered to be of commercial quality. Most of these stands, however, are unsuitable for harvest due to their occurrence on steep slopes with technically unstable soils (Tuhy 1987). In order to enhance watershed values, the Swift Creek watershed is not scheduled for timber harvest in the Forest Plan (USDA Forest Service 1989 a). As an RNA, Swift Creek is exempted from logging and wood gathering activities (Forest Service Manual 4063.3).

Watershed Values

Withdrawal of the RNA from phosphate, oil, and gas leasing and from timber harvesting and livestock grazing will eliminate the major potential sources of erosion and protect watershed values in the Swift Creek RNA and downstream.

Recreation Values

An established, maintained trail follows Swift Creek from the parking area for the Periodic Springs picnic area to the Swift Creek/Corral Creek divide. This trail is used for hiking, horseback riding, and motorcycle, all-terrain, and snow machine riding. Most recreational use of the RNA is concentrated along this trail, although there is some dispersed foot, horse, and camping use during the summer and in hunting season.

With the exception of the trail corridor, recreational use of the RNA is relatively low and has had a minimal effect on the natural communities of the RNA. Access to motorized vehicles should continue to be allowed in the RNA, provided that use is limited to established, designated trails within areas presently managed under prescription DFC 2B (USDA Forest Service 1989 a). Trails should not be expanded into adjacent areas being managed to fulfill specific objectives of Swift Creek RNA.

Ten miles of Swift Creek have been recommended for Recreation River status (USDA Forest Service 1990). Although the creek's low volume does not allow for a wide variety of recreational uses, the water quality and scenic values are sufficient to justify consideration for potential designation.

Wildlife and Plant Values

The Swift Creek RNA contains known or potential habitat for several USFS Region 4 Sensitive species (North American lynx, northern goshawk, boreal owl, three-toed woodpecker, boreal draba and Payson's bladderpod). Most of these species are dependent on

shady, coniferous forests for survival. The lone exception is Payson's bladderpod which requires semi-open calcareous ridges with minimal disturbance. Maintaining these habitats is in keeping with the objectives for the establishment of the RNA and the direction of FSM 2670, which calls for the Region to "provide special management emphasis that will ensure [the] viability [of Sensitive species] and will preclude trends toward endangerment that would result in the need for Federal listing" (USDA Forest Service 1988).

Special Management Area Values

There are no congressionally designated special management areas within the RNA. The Periodic Spring Geological Area National Natural Landmark, which encompasses the area immediately surrounding the Periodic Spring on Swift Creek, is excluded from the boundaries of the RNA (Tuhy 1987). Swift Creek itself has been identified as a potential Recreation River in the Record of Decision for the Forest Plan (USDA Forest Service 1990, Attachment 2, p 4).

Transportation Values

There are currently no existing or planned roads within the Swift Creek RNA. One established trail is present that follows Swift Creek the entire length of the RNA. This trail is maintained for foot, horse, and motorized vehicle traffic and is managed under prescription DFC 2B according to standards that will protect soil and water values (USDA Forest Service 1989 a). Although prescription DFC 2B calls for development of trails for motorized use, no additional trails should be established outside of the existing corridor to minimize impacts between motorized recreational uses and the values which the RNA has been established to protect.

MANAGEMENT PRESCRIPTION

The Swift Creek RNA lies within Community Interest Area 6 (Afton Front) and Management Area 33 (Star Valley North) as defined by the BTNF Management Plan (USDA Forest Service 1989 a). The RNA is managed under prescription DFC4, which emphasizes the protection or improvement of municipal water quality and supply. Under this prescription, recreation is limited to existing facilities, range is managed to maintain and enhance range and watershed conditions, timber is managed to protect and improve soil and water values, locatable minerals and phosphates are withdrawn from leasing, and oil and gas leases are issued with No-Surface-Occupancy stipulations (USDA Forest Service 1989 a).

Vegetation Management

The Swift Creek RNA is closed to livestock grazing, and this closure will be continued to maintain watershed conditions (Tuhy 1987). Timber harvest is not scheduled in the area. Wildfires will be suppressed. During the normal fire season, the primary suppression strategy will be containment and control. Before and after the fire season, the suppression strategies may include containment, confinement, and surveillance (USDA Forest Service 1989 a).

The combination of timber and fire management prescriptions probably will result in the Douglas-fir forests growing on the subalpine fir habitat type in the northwestern part of the RNA being slowly replaced first by a mixed forest of Douglas-fir and subalpine fir, and eventually by subalpine fir forests.

ADMINISTRATION RECORDS AND PROTECTION

Administration and protection of the Swift Creek RNA will be the responsibility of Bridger-Teton National Forest. The District Ranger, Greys River Ranger District, has direct responsibility.

The Director of the Intermountain Research Station, Ogden, Utah, will be responsible for any research projects conducted in the RNA. Requests to conduct research in the Swift Creek RNA should be referred to the director, who will evaluate research proposals and coordinate all studies and projects in the area with the District Ranger.

All plant and animal specimens collected in the course of research conducted in the RNA will be properly preserved and maintained within university or federal agency herbaria and museums approved by the Intermountain Research Station Director.

Records for the RNA will be maintained in the following offices:

Regional Forester, Intermountain Region, Ogden, UT
Supervisor, Bridger-Teton National Forest, Jackson, WY
District Ranger, Greys River Ranger District, Afton, WY
Director, Intermountain Research Station, Ogden, UT

ARCHIVING

Designated personnel at the Intermountain Research Station

will be responsible for maintaining data and reports from Horse Creek RNA. Descriptive data on Horse Creek RNA will also be stored in the computerized RNA database at the office of the Northern Region, Missoula, Montana.

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