

## APPENDIX 2-C

### PALISADES WILDERNESS STUDY AREA Bridger-Teton National Forest

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*Autumn Maples, Red Creek*

## DESCRIPTION.

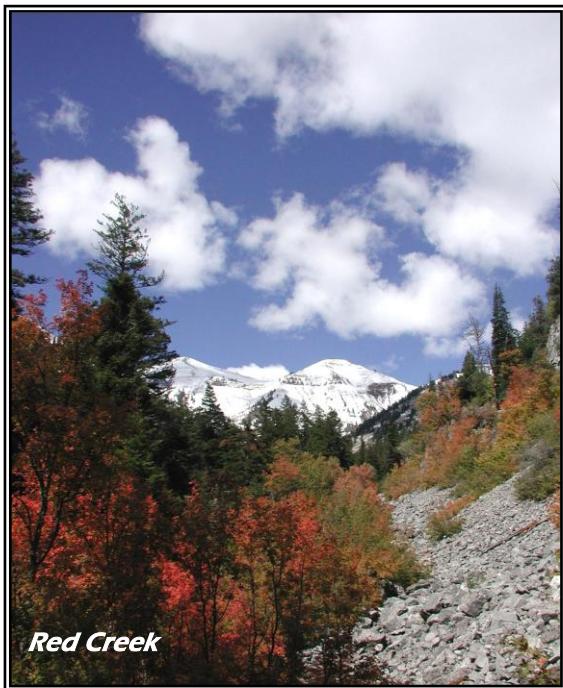
The Palisades Wilderness Study Area (WSA) was designated by Congress as part of the 1984 *Wyoming Wilderness Act*. It includes approximately **135,800** acres on the Bridger-Teton and Targhee National Forests (**82,584** acres are within the BTNF). The WSA includes the crest of the Snake River Range and most of the major canyons on the south and east. Exceptions are Mosquito Creek, the North Fork of Fall Creek, and some of their tributaries.

**Location and access:** The Palisades Wilderness Study Area is located in Teton and Lincoln Counties, Wyoming and Bonneville County, Idaho (Bridger-Teton and Targhee National Forests). The WSA is bounded on the south and east by the Snake River Canyon and U.S. 89 and on the north by Wyoming Highway 22. Primary access to the Bridger-Teton part of the WSA is from U.S. 89, the Wilson-Fall Creek Road, and Teton Pass.

## CAPABILITY.

Natural and undeveloped character. The breakdown of acreage in each ROS physical setting shows that 28 percent of the BTNF section of the area is primitive, 65 percent semi-primitive non-motorized, and 7 percent semi-primitive motorized or within the area of influence of nearby roads (see Figure 1).

Long-term ecological processes are intact and operating in this area, nearly all of which is part of the Palisades Wilderness Study Area. For most of the WSA the presence and magnitude of human-induced changes such as physical developments (e.g. roads, utility right-of-ways) is limited to the northern edge where Wyoming Highway 22 climbs Teton Pass. Some alteration of native vegetation has occurred in places; for example, pure *Wyethia* stands and some non-native plants occur along trails and old sheep bed grounds, but these are local in scope. Constructed facilities for recreation, domestic livestock grazing, and other activities are minor and primitive in nature, and have no significant influence on long-term ecological processes. Therefore a high degree of natural integrity exists in the Palisades Wilderness Study Area.

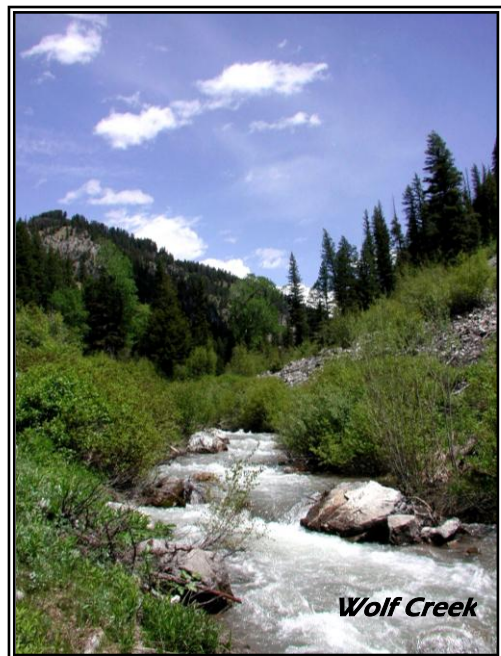


Outstanding opportunities for solitude and primitive, unconfined recreation. The WSA offers visitors outstanding opportunities to experience adventure, challenge, and to practice skills of self-reliance. The area is large enough to accommodate multi-day trips; it offers a feeling of large size and remoteness. Although the area is close to Jackson Hole and some trailheads originate

along paved highways, it is distant from large population centers and for much of the year receives low to moderate levels of recreation use. The WSA has a high capability of providing primitive and unconfined types of recreation, including camping, hunting, fishing, ski touring and winter camping, backpacking, hiking, riding, photography, and other outdoor activities. Although use is concentrated on certain trails during the fall hunting season, in many parts of this area the opportunity for solitude is high. Increasing recreation use has reduced the opportunity for solitude in the Teton Pass – Mosquito Creek area, but this affects only a small part of the WSA.

A good trail system penetrates this area but there are many places where cross-country travel is possible, with the need to route-find, ford creeks, and travel over rough and steep terrain. Some trails are gentle and moderately used; others are steep and rarely used except during the fall hunting season. Most of the peaks can be hiked up, although they are remote and steep enough that these are challenging hikes. Several outfitter-guides operate in the area, giving visitors without stock or special equipment an opportunity to enjoy the area.

Special features and values. The Palisades WSA includes high peaks (Indian and Observation Peak are at the head of South Fall and Coburn Creeks) with beautiful subalpine terrain. A variety of plant communities and vegetation types exists in the area, including some that are not common within the BTNF (curl-leaf mahogany; bigtooth maple). From many high points in the WSA there are views of distant ranges, including the Tetons. Montane parklands in the mid-to-upper elevations have a wide diversity of forbs that create spectacular wildflower displays all summer. Most of the outstanding cliffs, caves, and rugged, bare mountains are on the Targhee National Forest part of the Palisades WSA, although Wolf Creek, Red Pass, and the head of Cabin Creek also have scenic cliffs and colorful rock strata. Many places in the lower elevations of the WSA have bigtooth maple, aspen, and deciduous shrubs, which are colorful attractions in the fall.



Areas or features of ecological, geological, or other scientific, educational, scenic, or historical value are discussed in more detail below.

**Ecological:** The vegetative types in the WSA are diverse. In the lower elevation forests, lodgepole pine co-dominates with subalpine fir, Englemann spruce, and Douglas-fir. On dry south slopes shrubs and deciduous trees are dominant, including sagebrush, chokecherry, bigtooth maple, and snowberry. Aspen stands are found throughout the area at lower to mid-elevation. In the higher elevations open spruce/fir forest is mixed with open meadows. On the highest ridges, small subalpine fir, lodgepole pine, and whitebark pine are found. Ground vegetation varies from a dense grass-brush type to sparse grass on the steeper slopes.

Bailey-Kuchler communities represented in the area are K-20 Douglas-fir forest (*Pseudotsuga*), K-23 western spruce/fir forest (*Pices-Abies*), K-26 lodgepole pine (*Pinus*), and K-29 sagebrush steppe (*Artemisia-Agrophyron/Elymus*).

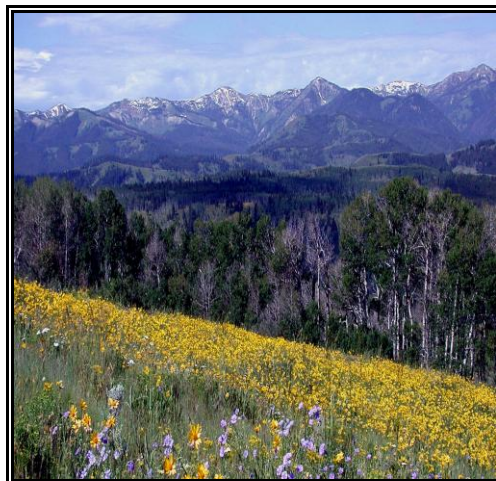
The WSA provides representation for ecosystems of Rocky Mountain spruce/fir-Douglas-fir and Rocky Mountain sagebrush steppe. Representation of these ecosystems has been identified as in short supply in the National Wilderness Preservation System. (This predates the *Wyoming Wilderness Act*, which added a considerable amount of these types in the Gros Ventre Wilderness and Jedediah Smith Wilderness.)

None of the above are unique or rare plant associations. Although, there is potential, especially in high-elevation limestone areas, for indigenous plant species. A rare plant inventory conducted in the Snake River Canyon revealed the presence of some sensitive plants (Payson's milkvetch), so it is reasonable to surmise that such plants would be present in the adjacent WSA also.

**Geological:** Palisades geology is typical of the Overthrust Belt, with the sedimentary sequence found also in the Salt River and Wyoming Ranges. Subalpine lake basins on the west side of the divide are attractions.

**Educational:** The Palisades WSA is suitable for outdoor education, and is currently used by outdoor and educational groups. At least one special use permittee who offers summer hikes in the Palisades WSA, emphasizes natural history interpretation and education.

**Scenic:** The Palisades WSA includes a number of attributes that contribute to high scenic integrity and natural beauty. These include landforms, diverse vegetation, water features, and the natural character of the landscape. Wolf Creek is an eligible wild and scenic river, nearly all of which is within the WSA.



*Observation Peak and Palisades WSA, seen from Munger Mountain*

**Historic:** A few trapper's caches and cabins have been found in the WSA, but have not been evaluated for their historic significance. Considerable evidence of seasonal use by prehistoric people exists, including obsidian quarry sites near Teton Pass.

## MANAGEABILITY.

The Forest Service's ability to manage this area to retain and enhance the attributes discussed above is high for most of the Palisades WSA. The area is large and intact enough at its core to be easily managed to retain and enhance its backcountry setting and character whether managed as it is or as potential future wilderness.

Potential to manage as enduring wilderness resource. This area is large and remote enough to be managed as wilderness.

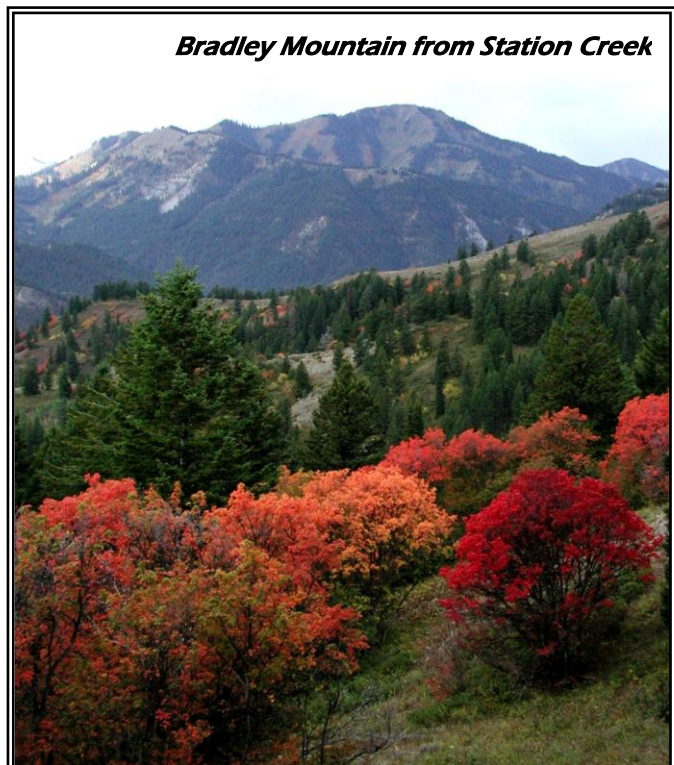
Boundary acts as a natural shield. The roadless area boundary comes quite close to existing roads and highways but there is some vegetational and topographic screening in many areas. Most of the area is shielded from the sights and sounds of human settlement.

Boundary provides opportunity for access. U.S. 89, Wyoming Highway 22 and BTNF system roads give access to many trailheads. Very little of the WSA is affected by lack of public access across private land.

Along the Snake River Canyon, the boundary is very close to the highway, and the existing power line right-of-way is within the WSA in places. At Teton Pass, between the summit and Crater Lake on the east slope, another powerline right-of-way appears to be just inside the WSA boundary. However, the boundary has never been surveyed and the maps are only available to 1/2 inch/mile approximations, so it is reasonable to assume that the intent was to exclude the existing powerlines and other permanent structures from the WSA.

## AVAILABILITY.

The Bridger-Teton section of the Palisades WSA is mostly available for potential additions to the National Wilderness Preservation System. Resource uses that would be facilitated by such designation include backcountry non-motorized



recreation, retention of wildlife habitat, livestock grazing as it currently exists, natural scenery, watershed values and water quality, and natural processes that could change vegetation patterns, such as fire. Other resource uses that would not be compatible should the area be added to the Wilderness system include motorized recreation, fuels treatments that are not directly wilderness-related, and the construction of permanent facilities.

Constraints and encumbrances on the land within this roadless area: the land is entirely within the Bridger-Teton National Forest. The Forest Service has a high degree of control over the surface of the area to prevent development of unresolvable, incompatible uses that would lessen wilderness character and potential. Potential effects of wilderness designation on adjacent lands: the roadless area is largely managed for backcountry recreation now, so expected changes should the area be designated in the future are slight.

A minor part of what appears to be within the WSA is committed through contractual agreements for use, purposes, or activities not in concert with the requirements of the *Wilderness Act of 1964*. In the Snake River Canyon there is a powerline right-of-way up the hill from the highway, and some of the Palisades WSA maps show the boundary going all the way to the road. A very slight adjustment in the WSA boundary is all that would be needed to correct this. The electronic site, powerline, and avalanche cache at Teton Pass are on the border of the WSA; some maps show the WSA going all the way to Wyoming Highway 22. The WSA boundary should be adjusted to omit these developments, for which land has been committed to non-wilderness uses.

## **NEED.**

The Bridger-Teton National Forest includes the Teton, Gros Ventre, and Bridger Wildernesses for a total of approximately 1.3 million acres. Although these wildernesses differ from one another in character, they primarily represent high mountain environments and rugged terrain. The Teton Wilderness, known for its long distances and big game hunting opportunities, is visited by people from the larger region and nation-wide; a large majority of recreation use is guided and the major period of recreation use is late summer and fall. The Bridger Wilderness, known for its mountain lakes, scenery, and climbing, also attracts visitation from all over the nation and the world, with the high-use season being mid-summer. The Gros Ventre Wilderness is smaller and lesser known than the other two and attracts mostly local and regional visitation, although its proximity to Jackson Hole makes it attractive to national and international visitors as well. During the *2002 National Visitor Use Monitoring Study* in the Bridger-Teton National Forest, wilderness visitors surveyed originated from over seventy zip codes. It was estimated that over 52,000 people visited one of the three wildernesses within the forest that year.

Present visitor pressure on wilderness focuses on favored destinations. Particularly in the Bridger Wilderness, mainline trails and lakeshores popular for camping can be crowded to the point that set standards for the social setting are not met. Crowded conditions in other BTNF wildernesses are generally found only during peak use periods and in the most popular destination areas. Trends in wilderness use reflect trends in general forest use – stays are shorter than they once were (although wilderness stays tend to be considerably longer than for other parts of the forest,

at an average of about 31 hours per stay). As the local and regional population increases wilderness use also increases, although the stays are short and often limited to day use. On the other hand there is an increase in more strenuous forms of backcountry recreation so that some remote, off-trail areas in wilderness are seeing increases in day use by marathon hikers and trail runners.

In determining whether there is a need to recommend the WSA for wilderness, the following factors were considered:

**Location, size, and type of other wildernesses in the general vicinity and their distance from the WSA; proximity to large population centers.** The nearest wildernesses are the Gros Ventre (less than ten miles away) and Jedediah Smith Wildernesses (just north of Wyoming Highway 22 and less than two miles from the north end of the Palisades WSA).

The WSA is accessible to users via all-season paved highways or gravel forest roads. Although it is not close to major population centers, it is near Jackson Hole, which attracts large numbers of visitors.

**Present visitor pressure on other wildernesses, the trends in use, changing patterns of use, population expansion factors, trends and changes in transportation, and nation-wide travel patterns.** Although national studies indicate that people are taking shorter vacations and staying closer to home, there has not been a decrease in use in the Bridger, Gros Ventre, or Teton Wildernesses. Many wilderness users are from the region. The Palisades WSA is approximately 115 air miles from Salt Lake City, Utah and 90 air miles from Idaho Falls, Idaho. The Wasatch Front and Southeastern Idaho are among the fastest-growing population centers in the country, and both are significantly represented in the BTNF user profile.

**The extent to which nonwilderness lands on the National Forest, other Federal lands, State lands, and private lands other than wildernesses are likely to provide opportunities for unconfined outdoor recreation experiences.** Currently, the non-wilderness backcountry areas of the BTNF, including the Palisades WSA, are prized by those who are seeking solitude, adventure, and unconfined recreation. In addition, it can serve visitors who do not necessarily want a wilderness experience but still want a large, scenic backcountry setting.



*Cabin Creek*

**The ability of certain biotic species to compete with increasing public use and developments.** The only surveys that have been completed to ascertain the existence of species

that may be most affected by increased human use are those conducted to determine the extent of use by wolverines. Generally, large backcountry areas such as the Palisades WSA serve to provide sanctuary to wildlife that require primitive surroundings.

**Other indicators of "need".** One measure of need for wilderness in this area may be the level of interest expressed by the public, during the roadless area reviews and since. There has been high interest for wilderness designation expressed in the past, as well as suggestions that some other designation (other than wilderness, such as "backcountry") to maintain roadless recreation opportunities. During the RARE II study, the Forest Service recommended the Palisades area for further planning because of high unproven oil and gas potential and high wilderness attribute ratings. When the *Wyoming Wilderness Act* was passed in 1984, the Palisades was congressionally designated as a Wilderness Study Area because of its high value for wilderness and the potentially conflicting presence of recoverable oil and gas in the area.

Of the signed letters received during RARE II (data for entire Palisades Roadless Area including Targhee National Forest), 3,131 favored wilderness designation, 753 were for wilderness with boundary adjustments, 12 letters were for further planning, and 2,272 responses were for non-wilderness.

**The area's ability to provide for preservation of identifiable landform types and ecosystems.** The Palisades WSA is part of the geologic structure known as the overthrust, a belt of Paleozoic and Mesozoic sedimentary rocks that has been highly folded and faulted. The overthrust includes the Wyoming and Salt River ranges to the south, and the Big Hole Mountains to the west. No unusual or unique plant and animal community has been identified in the WSA; the vegetation and habitat types are found elsewhere on the forest and are not threatened. There is subalpine limestone, which may harbor sensitive plants, but no surveys have yet been completed.



**Existing Land Uses.**

A primary use of the WSA is backcountry recreation, including horsepacking, hiking, hunting, fishing, and trail vehicle use. Cross country skiing, skiing with helicopter support, and snowmobiling occur in winter. There is an extensive trail system, although most of the trails on

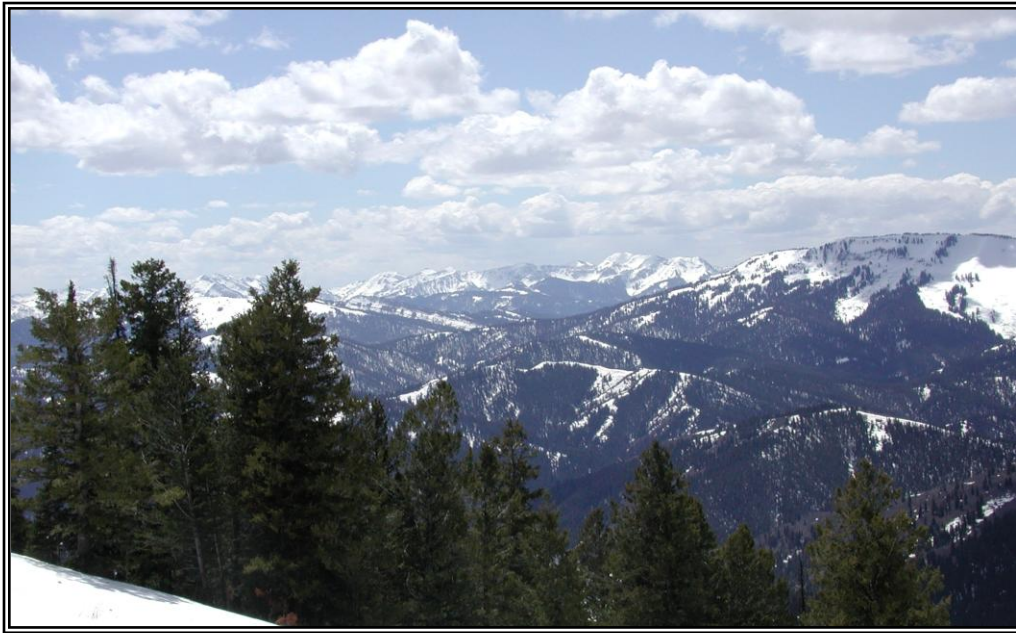


the east and south sides (the BTNF sides) of the WSA have not been maintained in years and need to be reestablished.

The area is grazed annually by approximately 4,917 AUMs<sup>1</sup> of cattle and 15,000 AUMs of sheep. In the Snake River Range, 9,326 acres are roaded and have been managed for timber. Three oil and gas wells have been drilled since 1978. The shallowest well, 9,300 feet, was drilled in 1978, and the deepest, 16,350 feet, was completed in 1982. All three wells have no production.

Existing motorized/mechanized recreation in the WSA includes mountain biking, trail bike riding, heli-skiing, and snowmobiling. According to the current travel map for the Teton Division, motor vehicles are restricted to designated routes. The winter travel map of the WSA allows unrestricted motorized use everywhere except the Teton Pass area, which is closed to snowmobiles.

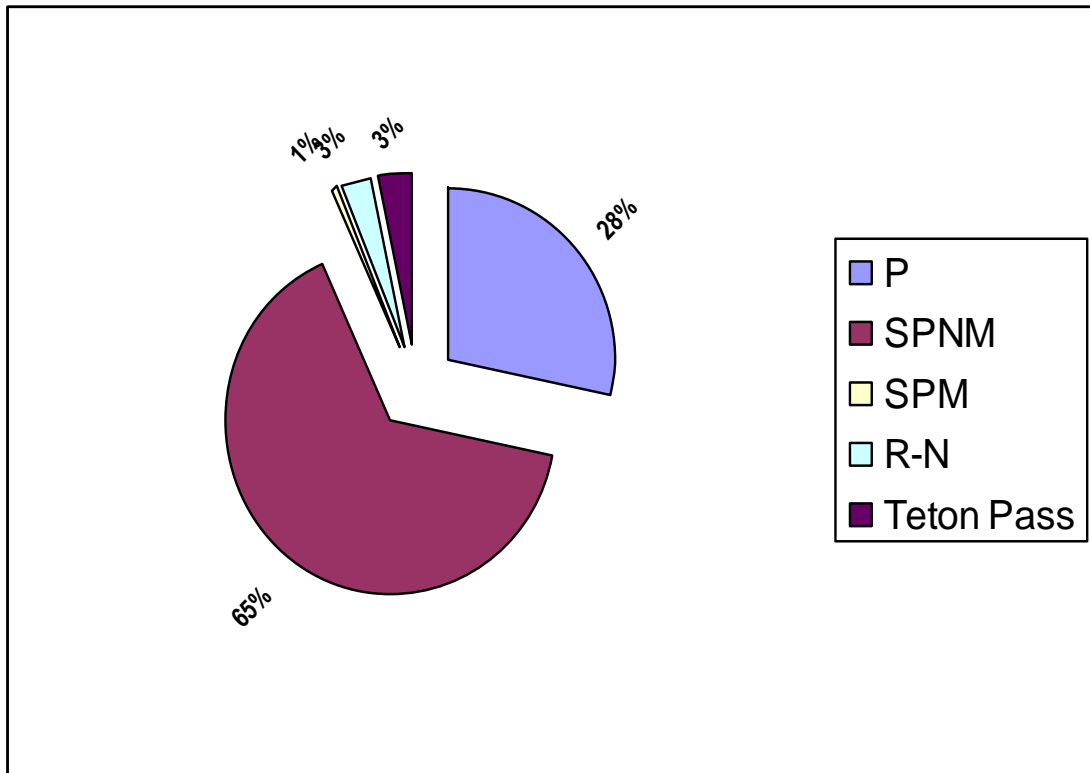
**Private lands and rights-of-way.** There is one inholding of approximately 190 acres in the Palisades WSA (in the South Fork of Fall Creek, Trails End Ranch). Other ranches and subdivisions exist at the forest boundary and are adjacent to the WSA. Two existing power lines skirt the edges of the WSA; one in the Snake River Canyon, the other over Teton Pass.



*Palisades WSA from Munger Mountain Summit*

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<sup>1</sup>The amount of forage required by one animal unit (AU) for one month is called an Animal Unit Month (AUM). One animal unit is defined as a 1,000 lb. (450 kg) beef cow with or without a nursing calf with a daily requirement of 26 lb. (11.8 kg) of dry matter forage. Therefore, one AUM is equal to 780 lb. (355 kg) of dry matter forage (30 days x daily forage requirement).



*Figure 1. Pie chart of ROS settings within the WSA. The area labeled 'Teton Pass' is that part of the WSA being managed for high use in a semi-primitive setting.*

*P = Primitive*

*SPNM = Semi-Primitive Non-Motorized*

*SPM = Semi-Primitive Motorized*

*R-N = Roaded-Natural*