Off-Highway Vehicle and Snowmobile Management in Idaho

by
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and
Jay O’Laughlin
The College of Natural Resources Policy Analysis Group (PAG) was established by the Idaho Legislature in 1989 to provide objective analysis of the impacts of natural resource proposals (see Idaho Code § 38-714). The PAG is administered by William J. McLaughlin, Dean, College of Natural Resources.

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### Policy Analysis Group Reports

Off-Highway Vehicle and Snowmobile Management in Idaho

by

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and
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About the Policy Analysis Group (PAG)

Role and Mission. The Idaho Legislature created the Policy Analysis Group (or “PAG”) in 1989 as a way for the University of Idaho to provide timely, scientific and objective data and analysis, and analytical and information services, on resource and land use questions of general interest to the people of Idaho. The PAG is a unit of the College of Natural Resources Experiment Station, administered by William J. McLaughlin, Interim Director and Dean, College of Natural Resources.

PAG Reports. This is the twenty-seventh report of the Policy Analysis Group (see inside cover). The PAG is required by law to report the findings of all its work, whether tentative or conclusive, and make them freely available. PAG reports are primarily policy education documents, as one would expect from a state university program funded by legislative appropriation. The PAG identifies and analyzes scientific and institutional problems associated with natural resource policy issues. In keeping with the PAG’s mandate, several alternative policy options are developed and their potential benefits and detrimental effects are analyzed. As an operational policy the PAG does not recommend an alternative.

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Executive Summary

Recreational use of off-highway vehicles (OHVs) and snowmobiles has been one of the fastest growing forms of outdoor recreation in the U.S. and Idaho. The number of recreationists has increased, and technology has evolved so that OHVs and snowmobiles can get to areas that were previously inaccessible. Increased use and accessibility can lead to adverse effects on the land and its flora and fauna, as well as the experiences of other recreationists. The need for more responsive policies and better management strategies is growing. The objective of this analysis is to provide policy-relevant information and alternatives for improving OHV and snowmobile policies and management in Idaho. Information is presented in a question-and-reply format. In the following summary replies, citations to references are omitted; they are provided in the body of the report.

What are Off-Highway Vehicles?

Federal regulations for the U.S. Forest Service and Bureau of Land Management (BLM) define OHVs broadly and similarly, as motor vehicles designed for or capable of cross-country travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or other natural terrain. Idaho Code does not define OHV, instead using more specific definitions— all-terrain vehicle (ATV), motorbike, utility type vehicle (UTV), and snowmobile—based on the vehicle's characteristics, such as weight, number of tires, and type of steering.

How much OHV and snowmobile recreation occurs in Idaho?

The number of OHVs registered in Idaho increased from about 8,000 in 1987 to 117,000 in 2007. The number of snowmobiles has been holding steady at about 50,000 registrations per year for the last five years. Surveys have found that at least one-third of Idaho adults participate in some form of OHV recreation, and 21% participate in snowmobiling. Surveys also indicate that at least 17% of nonresident visitors to Idaho participate in OHV recreation while in Idaho, and the same percentage participate in snowmobiling. Currently, thousands of miles of unpaved roads and trails are open to OHVs on the national forests and BLM lands in Idaho, and in addition, millions of acres are open to cross-country travel. The situation is changing however, as both federal land management agencies are implementing more restrictive travel management plans.

What state registration, equipment, and operational laws apply to OHV and snowmobile recreationists?

In 2008, the Idaho Legislature passed and the Governor signed House Bill No. 602 (Session Law Chapter 409), which made numerous changes to Idaho's OHV laws. The new registration and licensing requirements for ATVs, UTVs, and motorbikes will be effective January 1, 2009. For the purpose of describing these requirements, the term OHV includes ATVs, UTVs, and motorbikes.

When OHVs are on public highways, the operational rules of the road apply and the operator must have a valid driver's license. OHVs used on public highways must meet the applicable equipment standards in Idaho's motor vehicle code, including requirements for features such as brake lights, headlights, taillights, mirrors, and horns.

To operate OHVs off public highways, on unpaved highways located on state or federal lands that are not part of Idaho's state highway system, or on other highways not closed to their use, owners are required to have two types of registration: a restricted vehicle license plate ($3 for seven years) and an off-road registration sticker ($10 annually). OHVs registered for off-road use are subject to a noise limitation standard and must be equipped with an exhaust system as well as a spark arrester to reduce fire ignition risk. OHVs used exclusively on private lands for agricultural or snow removal purposes are not required to be registered. OHV operators and passengers under 18 years of age must wear helmets, except when such vehicles are operated on private property or used as "an implement of husbandry" (i.e., for farm or ranch work).

Snowmobiles must be registered annually for a fee of $32.50 for personal machines or $62.50 for rental machines. Snowmobiles are required to have lighted headlights and taillights...
between the hours of dusk and dawn, at any time when crossing or using any public highway, and when otherwise required for safety. Snowmobiles also are required to have either a hand- or foot-operated brake and an "adequate" muffler. Snowmobiles are not allowed to operate on public highways except under limited circumstances.

**What are Idaho landowners’ and managers’ current policies regarding OHV use?** Federal agencies are responsible for the management of about 63% of the land in Idaho. The state of Idaho manages 5% of the land, and the remaining 32% is managed by private individuals and organizations, Tribes, counties, and municipalities. The U.S. Forest Service manages 20.4 million acres in Idaho's national forests, on which a travel management plan guides the use of OHVs, including snowmobiles. Each national forest has its own plan that follows a set of national travel management rules. The national forests use a closed-unless-open approach to OHV access. Each national forest must designate roads, trails, and areas that are open for motor vehicle use, including any restrictions on class of vehicle and time of year. After these roads, trails, and areas are designated, motor vehicle use not in accordance with the designations is prohibited. Designated roads, trails, and areas must be identified on a motor vehicle use map that must be made available to the public at the national forest headquarters and ranger district offices.

The BLM manages about 12 million acres in Idaho and designates its lands as either open, limited, or closed to OHVs through its resource management plans. During 2008, the BLM was moving more areas from the open classification to the limited and closed classifications.

The Idaho Department of Lands does not have specific regulations regarding OHV access to its lands, but has broad authority to manage the state's 2.5 million acres of endowment lands to protect the trust land assets for the trust beneficiaries, most of which are public schools. Protective regulations include those restricting OHV use during times of high fire danger.

The Idaho Department of Parks and Recreation oversees the OHV off-road and snowmobile registration programs and distribution of funds from registration fees. The funds generated by OHV off-road registration are placed in a state "motorbike recreation account" that is used for OHV-related facilities and programs. The department also administers the "off-road motor vehicle account" that is funded with a portion of state motor vehicle fuel taxes and also used for OHV-related facilities and programs. The department also oversees the distribution of snowmobile registration funds to county snowmobile programs.

The Idaho Department of Fish and Game is involved in OHV management because of its role in protecting and managing the state's wildlife and the resulting laws and regulations. Hunting from all motorized vehicles, including OHVs, is prohibited. In addition, motorized vehicle access by hunters to some designated hunting areas is restricted to established roadways capable of being traveled by full-size automobiles, except to retrieve downed game or pack camping equipment if such travel is allowed by the landowner or manager. Department conservation officers perform law enforcement functions and are empowered to enforce a) state OHV and snowmobile laws and b) travel restrictions on national forests if the restrictions are in place to protect wildlife or wildlife habitat.

Counties in the state of Idaho have several responsibilities related to OHV and snowmobile recreation. The county assessor's automobile licensing office in each of Idaho's 44 counties handles the initial off-road registration and restricted plate licensing of ATVs, UTVs, and motorbikes. Counties are authorized to close sections of roads under their jurisdictions to OHVs. Counties also may establish their own snowmobile programs. When registering a snowmobile, the owner may designate which county with a snowmobile program receives 85% of the registration fee. In addition, county sheriffs are empowered to enforce state OHV and snowmobile laws and travel restrictions created by county ordinance. Counties may also...
enter into contracts with federal land management agencies to enforce travel management rules on federal lands.

Private landowners’ policies regarding OHV and snowmobile use on their lands may range from complete prohibition to fee access or free and open access. Private landowners who allow OHV and snowmobile use by the public on their property without charge are covered by Idaho’s limited liability for recreational use statute.

What are the management challenges of OHV and snowmobile recreation? One challenge for land managers is providing OHV and snowmobile recreation experiences to an increasing number of OHV and snowmobile recreationists. Managers must contend with conflict between user groups. There is a tension between a) opening more areas to OHV and snowmobile travel, and b) reducing the number of open areas in order to concentrate impacts on smaller areas.

Unauthorized access or trespass by OHV and snowmobile recreationists may lead to a proliferation of unauthorized trails. On public lands these trails are unmanaged and raise individual and public safety concerns. Potential resource damage is part of the reason landowners restrict access. Resource damage can result from either unauthorized or authorized access, and can be either intentional or unintentional. Preventing resource damage is challenging for several reasons, including that it may be dispersed over large areas that are often remote, making personal contact difficult and expensive for either educational or enforcement purposes. Enforcement is also challenging because despite the increased need many law enforcement agencies do not receive funding specifically for OHV- and snowmobile-related enforcement.

How does OHV and snowmobile recreation affect the land, its flora and fauna, and other recreation experiences? All recreational activities produce complex interrelated effects on the environment in which the recreation takes place. The types and magnitudes of OHV and snowmobile recreation effects may be unique. Regardless of vehicle type similar general effects occur, with differences in effect levels due to intensity of use, or use characteristics, in combination with the level of fragility of the affected environment.

Soil, vegetation, and water are affected by OHV use, and the effects are often interrelated. Soils can be displaced as well as compacted. Vegetation effects are a) the bending or flattening of plants and b) the removal of plants from the soil. Damaged vegetation may open the door to invasive plant species. OHV use near water bodies can contribute additional sediment loads.

Noise and disturbance attributable to OHV and snowmobile use may affect wildlife. Effects vary by species, and can influence breeding, foraging, dispersal, and survival of individuals and populations. Because of the number and diversity of wildlife species, the specific effects of OHV and snowmobile use on wildlife are largely unknown.

OHV and snowmobile use can conflict with non-motorized recreational uses. Recreationists have different attitudes about noise and intrusion of the modern world into nature. The environmental effects of motorized use can reduce the pleasure of non-motorized visitors, and sometimes results in their displacement. Resource management agencies need to understand the types and characteristics of motorized and non-motorized uses and users, and the ways in which users define their activities, values, and ties to the land.

What roles are public, private, and cooperative efforts playing in the management of OHV and snowmobile use? Public land and recreation management agencies in Idaho have formed the Idaho Interagency OHV Coordinating Committee. It includes representatives of the Idaho Department of Parks and Recreation, Idaho Department of Fish and Game, Idaho Department of Lands, U.S. Bureau of Land Management, and U.S. Forest Service. The committee attempts to address issues common to all its member organizations in a consistent manner through the Idaho OHV Outreach Project, which uses outdoor billboards, radio advertising, a website, direct mail and other
support products to promote the responsible use of OHVs on Idaho's public lands.

Many national, private groups are involved in OHV and snowmobile issues in Idaho. Groups such as Tread Lightly!, American Trails, BlueRibbon Coalition, National Off-Highway Vehicle Conservation Council, and American Council of Snowmobile Associations work to protect OHV and snowmobile access to public lands. State-level organizations include the Idaho All-Terrain Vehicle Association, Idaho Trail Machine Association, and the Idaho State Snowmobile Association.

Some organizations look less than favorably at OHV and snowmobile recreation. For example, the Consumer Federation of America has criticized ATV manufacturers' responses to child safety concerns. Some groups advocate more restrictive off-road policies for public lands; one example is the Natural Trails and Waters Coalition, whose members include the American Hiking Society, American Lands Alliance, Bluewater Network, Sierra Club, and The Wilderness Society.

**What policy alternatives exist to address OHV and snowmobile management needs?** Not all management alternatives involve policy changes, but understanding the range of actions available to managers provides helpful guidelines for discussions of policy alternatives. Management actions to address OHV and snowmobile issues fall into four categories: indirect actions, direct actions, resource-hardening actions, and bridge-building/collaboration actions. Indirect actions include posters or signs, bulletin boards, maps, brochures, and other educational materials. Direct actions include law enforcement, area or trail closure or use limits, and trail relocation. Resource-hardening actions include creating staging areas with parking facilities, installing artificial trail tread and drain dips, and specifying maximum trail grades. Bridge-building/collaboration actions include personal contacts, volunteer patrols, local OHV club meetings, and adopt-a-trail programs. The effectiveness of each management action depends on the nature of the OHV issue being addressed.

Many public land management agencies are adopting a closed-unless-open approach to controlling OHV and snowmobile access. The effectiveness of this approach remains to be seen. Enforcing closures over large areas is difficult due to the dispersed nature of OHV and snowmobile recreation coupled with limited law enforcement resources. Indirect or bridge-building/collaboration actions in addition to law enforcement seem likely to improve the effectiveness of closures.

Opinions are divided over the importance and impact of regulation. Some groups assert that regulations do not go far enough, while others counter that additional regulations would penalize the majority of OHV and snowmobile users who obey current rules and regulations. Several groups suggest that increased enforcement of current regulations is necessary. More cooperative law enforcement policies may be appropriate for Idaho. Several groups also suggest that current penalties for violations of OHV and snowmobile regulations and actions that damage resources need to be increased in order to be a more effective deterrent against such behaviors.

Funding is needed for most management actions, whether providing more recreation opportunities or enforcing regulations. Several groups have called for increases in land management agencies' budgets, but these days such increases in funding from general revenues seem unlikely. One alternative to reliance on general appropriations is to create a dedicated source of funding, such as an excise tax on OHV and/or snowmobile equipment, similar to federal wildlife and sport fish restoration programs that for decades have relied on taxes on firearms, ammunition, and fishing equipment. Other ways to provide more funding are: increase registration fees, expand the types of OHVs required to have an off-road registration (e.g., four-wheel drive sport utility vehicles and trucks, dune buggies, tracked vehicles), implement user fees at specific recreation sites, increase the portion of state-collected motor fuel taxes contributed to management of OHV and snowmobile activities, and use local recreation districts to collect
property taxes to support OHV and snowmobile recreation activities.

Communication and education programs can be effective ways of dealing with some OHV and snowmobile management issues. To be effective, messages must be appropriately targeted and communication methods carefully considered. Mandatory education requirements for OHV and snowmobile recreationists are one way to address educational needs, and some states have adopted such requirements.

No single set of policy responses can address every situation, but a more comprehensive framework for addressing OHV and snowmobile recreation management issues may be helpful. The National Off-Highway Vehicle Conservation Council suggests a comprehensive approach that it calls the "Four E's": Engineering, Education, Enforcement, and Evaluation. Through their steady application a fifth "E"—"Enculturation"—can result in modified behavior over time.
1.0. Introduction

Recreational use of off-highway vehicles (OHVs) and snowmobiles has been one of the fastest growing forms of outdoor recreation in the U.S. (Cordell et al. 2005) and Idaho (Idaho OHV Outreach Project 2007). In addition to an increase in the number of recreationists, technology has evolved so that OHVs and snowmobiles can get to areas that were previously inaccessible. Increased use and accessibility can lead to adverse effects on the land and its flora and fauna, as well as the experiences of other recreationists. U.S. Forest Service Chief Emeritus Dale Bosworth identified unmanaged recreation, particularly OHV use, as one of four major threats to the national forest system (USFS 2006). Federal, state, and private lands in Idaho provide many opportunities for OHV and snowmobile recreation. The need for more responsive policies and better management strategies is growing.

The objective of this analysis is to provide policy-relevant information and identify alternatives for improving OHV and snowmobile policies and management in Idaho. We do this through replies to a series of focus questions:

- What are off-highway vehicles?
- How much OHV and snowmobile recreation occurs in Idaho?
- What state registration, equipment, and operational laws apply to OHV and snowmobile recreationists?
- What are Idaho landowners' and managers' current policies regarding OHV and snowmobile use?
- What are the management challenges of OHV and snowmobile recreation?
- How does OHV and snowmobile recreation affect land, its flora and fauna, and other recreation experiences?
- What roles are public, private, and cooperative efforts playing in the management of OHV and snowmobile use?
- What policy alternatives exist to address OHV and snowmobile management needs?

2.0. What are Off-Highway Vehicles?

One of the challenges in analyzing off-highway vehicle (OHV) recreation and its management is knowing which vehicles and activities to include. Different policies may apply depending on the design and use of a vehicle. OHV, off-road vehicle (ORV), all-terrain vehicle (ATV), four-wheeled drive vehicle, and other terms are sometimes used synonymously, but may have distinct meanings in policies affecting their uses. Some examples follow.

2.1. Federal regulations. Federal regulations for the management of National Forest System lands by the U.S. Forest Service define an "off-highway vehicle" (OHV) as any motor vehicle designed for or capable of cross-country travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or other natural terrain (36 CFR 212.1). The regulations of the U.S. Bureau of Land Management (BLM) provide a similar definition for off-road vehicle as any motorized vehicle capable of, or designed for, travel on or immediately over land, water, or other natural terrain (43 CFR 8340.0-5). The regulatory definitions of OHV and off-road vehicle are broad enough to include snowmobiles.

2.2. Idaho Code. Idaho Code does not define the term off-highway vehicle (OHV). Instead more specific descriptors are used based on the characteristics of the vehicle. Both the recreation and motor vehicle sections of Idaho Code (Titles 67 and 49, respectively) define "all-terrain vehicle" (ATV) as any recreation vehicle with three or more tires, weighing under 900 pounds, 50 inches or less wide, with a wheelbase of 61 inches or less, traveling on low-pressure tires of 10 psi or less, with handlebar steering, and a seat designed to be straddled by the operator (Idaho Code 67-7101(1) and 49-102(10)). This definition of an ATV reflects changes made by the 2008 Idaho Legislature (Session Law Chapter 409, effective July 1, 2008). Idaho Code defines "motorbike" as any self-propelled two-wheeled motorcycle or motor-driven cycle designed for or capable of traveling off developed roadways and highways. Motorbikes are also referred to as trail bikes, enduro bikes, trials bikes, motocross bikes, or dual purpose motorcycles (Idaho Code 67-7101(9)).
Idaho Code defines "snowmobile" as any self-propelled vehicle under 1,000 pounds, designed primarily for travel on snow or ice or over natural terrain, which may be steered by tracks, skis, or runners (Idaho Code 67-7101(14)). U.S. Forest Service regulations use the broader term "over-snow vehicle" as a motor vehicle that is designed for use over snow and that runs on a track or tracks and/or a ski or skis while in use over snow (36 CFR 212.1).

Idaho Code defines the term "utility type vehicle" (UTV) to describe any recreational motor vehicle other than an ATV, motorbike or snowmobile, designed for and capable of travel over designated unpaved roads, traveling on four or more low-pressure tires of 20 psi or less, with a maximum width less than 74 inches, maximum weight less than 2,000 pounds, or having a wheelbase of 94 inches or less, except golf carts, vehicles specially designed to carry a disabled person, or implements of husbandry (Idaho Code 67-7101 (15) and 49-122 (8)).

2.3. Definitional policy challenges. One of the policy challenges of OHV recreation is keeping vehicle definitions in policies up to date as new vehicle designs, technologies, and specifications develop (IDPR 2007c). Rough terrain vehicles and tracked ATVs are just two of many emerging vehicle designs that present recreation policy challenges (Recreation Next 2008).

2.4. Definitions for this report. We use the general term off-highway vehicle, or OHV, in this report to include all types of motor vehicles designed for or capable of off-pavement use. If a more specific term is necessary for clarity or accuracy, we use it. We use the terms "off-highway" and "off-road" synonymously. Although the U.S. Forest Service and BLM regulatory definitions of OHV and off-road vehicle include snowmobiles, we separate snowmobiles out in this report because most activity statistics, reports, and policies treat them differently from other OHVs, and their management issues also are somewhat different.

3.0. How much OHV and snowmobile recreation occurs in Idaho?

Three dimensions of this question are considered: the number of OHVs and snowmobiles registered in Idaho, the number of participants in OHV and snowmobile recreation, and the land base available for OHV and snowmobile recreation. The use of OHVs and snowmobiles for recreation has increased substantially in the last two decades (Bowker et al. 1999, Cordell et al. 2005), a trend that appears to be continuing in Idaho (IDPR 2007c). However, recent statistics at the national level show a flat or declining trend in OHV and snowmobile recreation participation (RoperASW 2004, Sporting Goods Manufacturers Association 2003).

3.1. Registrations. The number of OHVs registered in Idaho increased dramatically in the last two decades (Figure 3-1). Some of the increase may be due to better record keeping and increased registration compliance (Sanyal, review; IDFG 2007b), but currently, more than 117,000 ATVs and motorbikes are registered in Idaho, and that number has been growing recently by more than 10,000 registrations each year (IDPR 2007a). Snowmobile registrations are holding steady at about 50,000 registrations per year (IDPR 2007b).

3.2. Participation rates. Several surveys estimate the number of people participating in OHV and snowmobile recreation in Idaho. The National Survey on Recreation and the Environment estimates that about 320,800 Idahoans 16 years of age or older participate in OHV recreation each year (Cordell et al. 2005). This means 33.5% of Idaho’s population participates in OHV recreation and ranks Idaho third in the nation, behind only West Virginia (34.5%) and Wyoming (33.8%) (Cordell et al. 2005).

Another survey, the 2004 Idaho Outdoor Recreation Survey, estimates that 52.4% of Idaho adult residents participate in some form of OHV recreation (IDPR 2007c). This percentage includes 36.8% of Idaho residents who participate in "four-wheel driving," 33.7% who participate in ATV riding, and 14.0% who participate in dual sport or dirt bike
motorcycling (IDPR 2007c). In addition, the survey estimates that 18.3% of Idaho youth participate in four-wheel driving, 20.4% participate in ATV riding, and 10.9% participate in dual sport or dirt bike motorcycling. Between 2002 and 2004 participation in ATV riding and four-wheel driving increased 26% and 10%, respectively (IDPR 2007c). The survey also found 20.7% of Idaho adults and 13.8% of Idaho youth participate in snowmobiling (IDPR 2007c).

Frequency of participation in a recreation activity is also an important measure. The 2005 Statewide Outdoor Recreationist Profile Survey found ATV and motorbike riders were distributed more towards regular (3 to 8 times per year) and enthusiast (9 or more times per year) participants, while snowmobilers were distributed more towards casual (1 or 2 times per year) and regular participants (Table 3-1).

Nonresident visitors to Idaho also participate in OHV and snowmobile recreation. The 1999-2000 Idaho Statewide Motor Vehicle Travel Survey found that 17% of nonresident visitors participated in four-wheel driving, 11% participated in ATV riding, 9% participated in motorbiking, and 17% participated in snowmobiling (McLaughlin et al. 2001).

3.3. Available land base. Determining the amount of land in Idaho used for OHV and snowmobile recreation is challenging. In addition to use on trails and paved and

![Graph: Idaho ATV, motorbike, and snowmobile registrations, 1987-2007](image-url)

Figure 3-1. OHV registrations in Idaho, 1987-2006, and snowmobile registrations in Idaho, 2003-2007.

unpaved roads, by definition OHVs and snowmobiles are capable of cross-country travel; therefore, almost any land not occupied by a building or other structure could potentially be used at some time for OHV or snowmobile recreation. For example, snow-covered crop land or unmaintained roads may be accessible to snowmobiles in winter. Less than one percent of Idaho's 53 million acres of land is urbanized (Scott et al. 2002), so most of Idaho's land could potentially experience use by OHVs or snowmobiles; however, most public agencies and private landowners have some restrictions on OHV and snowmobile access and use (see Section 5.0). For example, Idaho has about 4 million acres in the National Wilderness Preservation System, where motorized use is prohibited. In addition, because Idaho's two largest land management agencies, the U.S. Forest Service and the BLM, are both undertaking major revisions of their OHV access policies and management plans (see Section 5.0), estimates of the amount of roads, trails, and areas open to OHV recreation are changing rapidly and such estimates may be outdated.

The U.S. Forest Service estimates that during the 2001-2003 period, Idaho's national forests had more than 346,000 visits annually of groomed snowmobile trails are now available, a 22% reduction (IDPR 2007c). Trail estimates capture only a portion of the areas used by OHVs and snowmobiles because a significant proportion of use takes place off designated trails (Table 3-2, IDPR 2007c).

National forests provide many of Idaho's OHV recreation opportunities because almost 39% of the state is part of the National Forest System. The U.S. Forest Service reports that currently in Idaho's national forests more than 8,300 miles of trails are "open to motor vehicle use" (Table 3-3; USFS 2007b). This estimate of trail mileage is different than and not necessarily comparable to the one in the Idaho Statewide Comprehensive Outdoor Recreation and Tourism Plan, 2003-2007 (IDPR 2002) cited above, probably due in part to the different ways in which open to "motor vehicle use" or ATVs or motorbikes were categorized to make the estimates.

More than 6 million acres (out of a total of 20.4 million acres) of the National Forest System lands in Idaho are open to cross-country motor vehicle travel (Table 3-3; USFS 2007b). However, not all of these lands are suitable for travel due to steepness, vegetation cover, rockiness, and other natural barriers and constraints. Also, the U.S. Forest Service is updating its travel management plans for each national forest in Idaho, so the amount of open areas is changing (see Section 5.1).

The U.S. Forest Service estimates that during the 2001-2003 period, Idaho's national forests had more than 346,000 visits annually

| Table 3-1. Percentage of OHV recreationists who are casual, regular, or enthusiast participants based on the number of times participating in the activity each year. |
|-------------------------------------------------|-----------------|-----------------|-----------------|
|                                                  | Casual          | Regular         | Enthusiast      |
|                                                  | (1 or 2 times per year) | (3 to 8 times per year) | (9 or more times per year) |
| ATV riding                                       | 30%             | 33%             | 37%             |
| Motorbiking                                      | 27%             | 33%             | 40%             |
| Snowmobiling                                    | 41%             | 32%             | 27%             |

Source: IDPR (2007c).
Table 3-2. Percent of participants reporting where *most* time was spent, by activity and facility, during previous twelve months.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Backcountry road</th>
<th>Backcountry trail</th>
<th>Off-trail</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATV riding</td>
<td>50.5%</td>
<td>39.4%</td>
<td>10.1%</td>
</tr>
<tr>
<td>Motorbiking</td>
<td>49.7%</td>
<td>40.3%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Four-wheel driving</td>
<td>82.2%</td>
<td>14.0%</td>
<td>3.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity</th>
<th>Marked (groomed) trail</th>
<th>Unmarked (ungroomed) trail</th>
<th>Off-trail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snowmobiling</td>
<td>43.7%</td>
<td>26.0%</td>
<td>30.2%</td>
</tr>
</tbody>
</table>

Source: IDPR (2007c).

Table 3-3. Road, trails, and acres open to motor vehicle use in Idaho national forests, 2007.

<table>
<thead>
<tr>
<th>National forest</th>
<th>Roads open to motor vehicle use (miles)</th>
<th>Trails open to motor vehicle use (miles)</th>
<th>Single-track trails open to motor vehicle use (miles)</th>
<th>Acres open to cross-country motor vehicle use (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clearwater</td>
<td>2,408</td>
<td>1,356</td>
<td>547</td>
<td>1,439,939</td>
</tr>
<tr>
<td>Idaho Panhandle</td>
<td>2,622</td>
<td>814</td>
<td>646</td>
<td>1,354,207</td>
</tr>
<tr>
<td>Nez Perce</td>
<td>2,000</td>
<td>954</td>
<td>787</td>
<td>900,000</td>
</tr>
<tr>
<td>Boise</td>
<td>3,725</td>
<td>966</td>
<td>966</td>
<td>0</td>
</tr>
<tr>
<td>Targhee</td>
<td>1,588</td>
<td>530</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Caribou</td>
<td>885</td>
<td>796</td>
<td>147</td>
<td>0</td>
</tr>
<tr>
<td>Curlew*</td>
<td>92</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Payette</td>
<td>1,677</td>
<td>656</td>
<td>584</td>
<td>510,930</td>
</tr>
<tr>
<td>Salmon-Challis</td>
<td>2,739</td>
<td>1,436</td>
<td>1,436</td>
<td>1,017,463</td>
</tr>
<tr>
<td>Sawtooth</td>
<td>1,706</td>
<td>874</td>
<td>832</td>
<td>905,766</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>19,442</strong></td>
<td><strong>8,382</strong></td>
<td><strong>5,945</strong></td>
<td><strong>6,128,305</strong></td>
</tr>
</tbody>
</table>

* Curlew National Grassland is managed by the U.S. Forest Service and subject to its travel management regulations.

where OHV recreation was the primary purpose of the trip and more than 912,000 visits annually in which OHV recreation was among the purposes of the trip (Table 3-4). In the Northern Region of the U.S. Forest Service, which includes northern Idaho and western Montana, the Clearwater and Idaho Panhandle National Forests (IPNF) rank first and second, respectively, in trips including OHV recreation. The IPNF had the highest percentage of trips where OHV recreation was the primary purpose (English et al. 2004). On all national forests nationwide, OHV recreation was the primary purpose of 3% of 204.8 million visits and was among the activities on 6.6% of visits (USFS 2004).

Lands managed by the BLM make up 22% of Idaho and also provide many OHV and snowmobile recreation opportunities. Currently, about 3.3 million acres (28%) of BLM’s lands in Idaho are classified as "open" to OHV recreation, 8.4 million acres (68%) are classified "limited" access, and 0.5 million acres (4%) are classified as "closed" to OHV use (T. Heslin, personal communications; see Section 5.2 for classification explanation). In FY 2004, BLM lands in Idaho provided 249,537 visitor days of off-highway travel and 43,907 visitor days of snowmobile and other winter motorized travel (BLM 2005).

### 4.0. What state registration, equipment, and operational laws apply to OHV and snowmobile recreationists?

Many state laws applicable to OHVs and snowmobiles are located in the recreation section of Idaho Code, Chapter 71 of Title 67. However, because some types of OHVs also can be operated on roads as well as off-road, some provisions of the motor vehicle section of Idaho Code, Title 49, also apply. During its 2008 session, the Idaho Legislature passed and the

<table>
<thead>
<tr>
<th>National forest</th>
<th>Number of visits</th>
<th>% of total visits</th>
<th>Number of visits</th>
<th>% of total visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clearwater</td>
<td>38,829</td>
<td>3.56</td>
<td>214,628</td>
<td>19.67</td>
</tr>
<tr>
<td>Idaho Panhandle</td>
<td>49,094</td>
<td>5.63</td>
<td>132,547</td>
<td>15.19</td>
</tr>
<tr>
<td>Nez Perce</td>
<td>19,665</td>
<td>3.12</td>
<td>83,756</td>
<td>13.30</td>
</tr>
<tr>
<td>Boise</td>
<td>781</td>
<td>0.05</td>
<td>25,096</td>
<td>1.64</td>
</tr>
<tr>
<td>Caribou-Targhee</td>
<td>195,312</td>
<td>7.57</td>
<td>306,098</td>
<td>11.87</td>
</tr>
<tr>
<td>Payette</td>
<td>14,661</td>
<td>2.35</td>
<td>38,680</td>
<td>6.21</td>
</tr>
<tr>
<td>Salmon-Challis</td>
<td>14,586</td>
<td>3.14</td>
<td>48,897</td>
<td>10.52</td>
</tr>
<tr>
<td>Sawtooth</td>
<td>13,890</td>
<td>1.52</td>
<td>62,533</td>
<td>6.86</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>346,818</strong></td>
<td><strong>3.97</strong></td>
<td><strong>912,235</strong></td>
<td><strong>10.48</strong></td>
</tr>
</tbody>
</table>

* Survey data was collected nationwide from January 1, 2000 to September 30, 2003. It is not possible to know precisely when Idaho’s national forest data was collected.

Source: English et al. (2004).
Governor signed House Bill No. 602 (Session Law Chapter 409), which made numerous changes to Idaho's OHV laws. The following reply reflects those changes.

4.1. Registration. Beginning January 1, 2009, for operation of ATVs, UTVs, and motorbikes off public highways, on unpaved highways located on state or federal lands that are not part of Idaho's state highway system, or on other highways not closed to their use, two types of registration are required: a "restricted vehicle" license plate and an off-road registration sticker (Idaho Code 49-402(4) and 67-7122). The off-road registration program is administered by the Idaho Department of Parks and Recreation (IDPR). An off-road registration sticker costs $10 per year (Idaho Code 67-7122(1)). The vehicle license plate program is administered by the Idaho Transportation Department, and a restricted vehicle license plate costs $3 and is valid for seven years (Idaho Code 49-443 and 49-450). The off-road registration sticker and the restricted vehicle license plate can be purchased at the county assessor's or other county motor vehicle offices in each of Idaho's 44 counties. The annual off-road renewal stickers also can be purchased at vendors approved by IDPR.

There are exceptions to registration requirements. ATVs, motorbikes, and UTVs that are used exclusively in connection with agricultural, horticultural, dairy, or livestock growing and feeding operations, or used exclusively for snow removal purposes, do not need either a restricted vehicle license plate or off-road registration sticker (Idaho Code 67-7122(1), 49-402(4), and 49-426(2)). Non-resident ATV, motorbike, and UTV owners are not required to purchase an off-road registration sticker. Snowmobiles must be registered through an IDPR administered program (Idaho Code 67-7102). The annual registration fee is $32.50 for personal machines or $62.50 for rental machines. Any ATV operating on a groomed snowmobile trail must purchase a snowmobile registration (Idaho Code 67-7112). Non-resident snowmobilers are not required to register their snowmobiles in Idaho, but must obtain a nonresident snowmobile user certificate through the IDPR administered program for $32.50 per year (Idaho Code 67-7401).

4.2. Equipment. ATVs, motorbikes, UTVs and other types of OHVs that are used on public highways must meet the applicable equipment standards in Idaho's motor vehicle code, including requirements for features such as brake lights, headlights, taillights, mirrors, and horns (Idaho Code 49-901 et seq.). Every ATV, motorbike, and UTV that is registered for off-road use must be equipped with an exhaust system in good working order and in constant operation, and is subject to a noise limitation standard; such vehicles also must have a spark arrester device to lower the risk of starting fires accidentally (Idaho Code 67-7125). During fire season (May 10 through October 20), operators of motorbikes, ATVs, and other such vehicles may start warming fires or campfires outside developed campgrounds only if they carry a shovel at least 24 inches in overall length with a 6-inch or wider blade and a water container with capacity of one gallon or have either a restricted vehicle license plate or a regular vehicle license plate depending on where the motorbike is used. If the owner of such a motorbike uses it on public highways that would otherwise be restricted, then the owner must purchase a regular license plate like other motor vehicles operated on highways and does not have to purchase a restricted vehicle license plate (Idaho Code 49-402 and 67-7122(3)). The cost for the regular license plate registration is $9 per year (Idaho Code 49-402(3)). To operate off highway, the owner of such a motorbike also must purchase the $10 per year off-road registration sticker.
more (motorcycle crash helmets qualify) (IDAPA 20.04.01.100.03).

Snowmobiles are required to have lighted headlights and taillights between the hours of dusk and dawn, when crossing or using any public highway, and when otherwise required for safety (Idaho Code 67-7110). Snowmobiles also are required to have either a hand- or foot-operated brake and an "adequate" muffler (Idaho Code 67-7110).

4.3. Operation. There are a few Idaho laws specific to OHV operations identified below. Some laws, such as trespass laws (Idaho Code 18-7008) apply to all forms of trespass, not just OHVs.

Helmets are required for ATV, motorbike, and UTV operators and passengers under 18 years of age, except when such vehicles are operated on private property or used as an implement of husbandry (Idaho Code 49-666). It also is illegal to operate an ATV, motorbike, UTV, or snowmobile on or off road under the influence of alcohol, drugs or any other intoxicating substance (Idaho Code 67-7114).

When ATVs, motorbikes, and other OHVs are operated on public highways, the operational rules of the road apply (Idaho Code 49-601 et. seq.) and the operator must have a valid driver's license (Idaho Code 49-301). A motorcycle license endorsement is required for motorbike operation on public highways (Idaho Code 49-301).

Snowmobiles are not allowed to operate on public highways except:

• to cross a highway,
• during loading and unloading,
• when a highway is so covered with snow that it is impassible to other motor vehicles,
• on the portion of highway right of way that is not maintained or utilized by conventional motor vehicles, or
• on highways specifically designated by local authorities as open to snowmobiles (Idaho Code 67-7109).

It also is unlawful to operate a snowmobile:

• at a rate of speed greater than reasonable and prudent under the existing conditions;
• in a negligent manner so as to endanger the person or property of another, or to cause injury or damage to either, or to harass, chase or annoy any wild game animals or birds or domestic animals; or
• upon a public roadway or highway without a valid motor vehicle operator's license, unless the public roadway or highway is closed to other motor vehicle travel (Idaho Code 67-7110).

If a snowmobile operator is involved in an accident resulting in injuries or death to someone or property damage of $200 or more, law enforcement must be notified immediately and a report filed within five days (Idaho Code 67-7111). The operator and/or owner of a snowmobile is responsible and held accountable to the owner of any lands where trees, shrubs or other property have been damaged as the result of travel over their premises (Idaho Code 67-7113).

5.0. What are Idaho landowners’ and managers’ current policies regarding OHV use?

Federal, state, and private landowners all have roles in managing OHV recreation. About 63% of the land in Idaho is managed by federal agencies, 5% is managed by the state of Idaho, and the remaining 32% is managed by private landowners, Tribes, counties, and municipalities (Idaho Department of Commerce 2006). Several federal and state land management agencies are responsible for areas where OHV recreation takes place. State agencies manage wildlife affected by OHV use. State agencies and counties administer OHV registration. Some private landowners also have policies specific to OHV use. More specific examples follow.

5.1. U.S. Forest Service. In November 2005, the U.S. Forest Service (USFS) adopted new rules for OHV management on national forests (70 Fed. Reg. 68264, 36 CFR 212). Under USFS definition, OHVs include snowmobiles. OHV use is now included as part of “travel management” planning. The new rules were adopted, in part, to provide consistency in OHV management across the National Forest System lands that represent more than eight percent of the nation's lands.
The new National Forest System rules adopt a closed-unless-open approach to OHV access. Each national forest must identify roads, trails, and areas designated for motor vehicle use, including any restrictions on class of vehicle and time of year. After these roads, trails, and areas have been designated, motor vehicle use not in accordance with the designations is prohibited.

In designating roads, trails, and areas for motor vehicle use, managers must consider the effects of motorized use on natural and cultural resources, public safety, provision of recreational opportunities, access needs, conflicts among uses of national forest lands, and the need and availability of resources for maintenance and administration. In addition, specific criteria for designation of trails and areas include minimizing:

- damage to soil, watershed, vegetation, and other forest resources;
- harassment of wildlife and significant disruption of wildlife habitats;
- conflicts between motor vehicle use and existing or proposed recreational uses of national forests or neighboring federal lands; and
- conflicts among different classes of motor vehicle uses.

Except for emergency closures, public notice is required when designating or revising designations of roads, trails, and areas for motorized use. National forest managers also are required to coordinate with other appropriate federal, tribal, state, county, and local governmental entities.

Designated roads, trails, and areas must be identified on a motor vehicle use map that must be made available to the public at the national forest headquarters and ranger district offices. Also, as soon as practical, the motor vehicle use map must be made available on the national forest's website.

National forests nationwide are in the process of updating their travel management plans to conform with the new rules. The USFS expects all national forests to be in compliance with the new travel management rules by 2009. (See BlueRibbon Coalition (2008) for status updates for each national forest.) The USFS also is updating its internal directives (i.e., Forest Service Manual and Forest Service Handbook) to be consistent with the new travel management rules (72 Fed. Reg. 10632).

5.2. U.S. Bureau of Land Management. Federal regulations governing OHV use on lands managed by the U.S. Bureau of Land Management (BLM) were adopted in the 1980s (43 CFR 8340 et seq.). However, the agency has updated its management direction through its National Management Strategy for Motorized Off-Highway Vehicle Use on Public Lands (BLM 2001) and its Comprehensive Travel and Transportation Management (CTTM) planning process (BLM 2007a).

The BLM designates its lands as either open, limited, or closed to OHVs. All designations are based on protecting the land's resources, promoting safety for all users of the lands, and minimizing conflicts among various uses of the lands. On closed areas and trails, the operation of OHVs is prohibited. Limited trails and areas are restricted at certain times and/or to certain types of OHVs. On those areas and trails designated as open, the operation of all types of OHVs is permitted at all times. The criteria for locating areas and trails open to OHV use include:

- minimizing damage to soil, watershed, vegetation, air, or other resources;
- minimizing harassment of wildlife or significant disruption of wildlife habitats, with special attention to protect endangered or threatened species and their habitats; and
- minimizing conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands.

The designation and redesignation of OHV trails and areas is accomplished through the BLM's resource management planning process (43 CFR 1600). Prior to making designations or redesignations of OHV trails and areas, BLM managers are required to consult with interested user groups, federal, state, county and local agencies, local landowners, and other parties. Public notice of designation or redesignation is also required. The approval of a resource management plan, plan revision, or
plan amendment constitutes formal designation of OHV use areas.

The BLM’s National Management Strategy for Motorized Off-Highway Vehicle Use on Public Lands (BLM 2001) is designed to help BLM field managers implement on-the-ground solutions to OHV issues, protect public land resources, make more effective use of existing staff and funding, and identify the additional funding and staffing needed to improve overall OHV management. The strategy looks to accomplish five objectives:

• Protect public land resources, promote safety for all public land users, and minimize conflicts among the various uses of the public lands.
• Prescribe actions that can be taken at the national level to identify, review, and clarify policy, and if needed, to work toward revising regulations.
• Provide guidance to the BLM state and field offices regarding existing regulatory authorities and requirements.
• Identify staffing and resource needs at the BLM’s state and local levels in order to improve overall OHV management.
• Use the experiences of the BLM staff and the public’s concerns, comments, and willingness to participate in management activities expressed during the development of the strategy (BLM 2001).

The BLM has moved the national strategy forward through its CTTM planning process (BLM 2007a). The BLM recently provided extensive, detailed guidance to its field offices for the integration of CTTM into its land use planning process (BLM 2007b). The guidance affirmed that continued designation of large areas as open to unregulated cross-country travel is not a practical management strategy. Instead, field offices are directed to focus OHV travel on designated roads and trails (Bisson 2008).

The BLM is in the process of moving more areas from the open classification to the limited and closed classifications. In Idaho, since 1998 there has been a 55% reduction in BLM acres classified as open, a 154% increase in acres classified as limited, and a 22% reduction in acres classified as closed (T. Heslin, personal communications).

5.3. Idaho Department of Lands. The Idaho Department of Lands does not have specific regulations regarding OHV access to its lands, but does have broad authority to manage the state’s 2.5 million acres of endowment lands to protect the trust land assets for the trust beneficiaries (Idaho Constitution Article IX Section 8, Idaho Code 68-106). Protective regulations include those related to fire hazard reduction and OHV use. The department has the authority to suspend road and trail access to its lands when conditions create unusually high fire danger (Idaho Code 38-115). Idaho law also requires that ATVs, motorbikes, and UTVs operated on public lands be equipped with a spark arrester (Idaho Code 67-7125). In addition, if OHV users light campfires or warming fires outside of developed campgrounds, they must have a shovel and a water container (IDAPA 20.04.01.100.03).

5.4. Idaho Department of Parks and Recreation. The Idaho Department of Parks and Recreation (IDPR) oversees the OHV off-road and snowmobile registration programs (see Section 4.1) and distribution of the resulting funds (Idaho Code 67-7101 et seq.). The IDPR also is responsible for adopting administrative rules that implement the OHV noise abatement statute (Idaho Code 67-7125). In addition, the IDPR offers educational courses on OHV and snowmobile safety (IDPR 2008). The funds generated by OHV off-road registration are placed in a state "motorbike recreation account" (Idaho Code 67-7126). Up to 15% of the funds in the motorbike recreation account may be used to administer the program, and the remainder is used for:
• leasing or purchasing land for OHV recreational activity;
• construction, development, or maintenance of OHV trails on state and federal lands;
• financing an off-road rider education program; and
• when applicable, federal matching funds (Idaho Code 67-7127).

The IDPR also administers funds in the "off-road motor vehicle account" that are used to acquire, improve, repair, and maintain OHV
facilities and areas on public or private lands and to assist with law enforcement related to OHV use (Idaho Code 57-1901). The account is funded with a portion (66% of 1.28%, or 0.8448%) of state motor vehicle fuel taxes (Idaho Code 63-2412). The account also can be funded with gifts, grants, and other funds from both public and private sources (Idaho Code 57-1901 and 67-4228).

The IDPR also oversees the distribution of snowmobile registration funds. The owner of a snowmobile has the opportunity to designate the registration fees to the county snowmobile program of his or her choosing (see Section 5.6). Fifteen percent of the registration fee goes for administrative costs, and IDPR sends the remaining 85% to the county specified by the snowmobile owner (Idaho Code 67-7103). If no county is specified or a county does not have a snowmobile program, the registration fee goes into the state snowmobile fund and is available to the IDPR for snowmobile-related expenses (Idaho Code 67-7106). One dollar from each snowmobile registration is credited to the state snowmobile search and rescue fund (Idaho Code 67-7106), which helps defray the costs of snowmobile search and rescue operations that are conducted by county sheriff offices (Idaho Code 67-2913A). Nonresidents also may designate their certificate fees to the county snowmobile program where they primarily ride (Idaho Code 67-7104).

In addition to its OHV and snowmobile administrative roles, the IDPR also manages Idaho’s 30 state parks, covering more than 43,000 acres (IDPR 2007c). Motorized vehicle use in state parks is permitted only on established roadways and parking areas except for trails and areas which are clearly identified by signs for off-road use (IDAPA 26.01.20.150). Snowmobile access on plowed or unplowed roads or trails is permitted only when authorized by a park manager (IDAPA 26.10.20.150.04).

The Idaho Park and Recreation Board oversees the IDPR (Idaho Code 67-4222) and is responsible for appointing a 9-member off-road motor vehicle advisory committee (Idaho Code 67-7128). The duties of the committee include representing the interests of OHV users and advising the IDPR on: proposed projects, how funds can be used to rehabilitate areas on public or private lands, how it can assist in the enforcement of laws and regulations governing OHV use Idaho, and matters relating to the use of moneys in the motorbike recreation account.

5.5. Idaho Department of Fish and Game. The Idaho Department of Fish and Game (IDFG) is involved in OHV management because of its role in protecting and managing the state's wildlife and the resulting laws and regulations about hunting with the aid of motor vehicles and OHVs. Hunting from motor vehicles is prohibited, except for holders of a valid handicap motor vehicle permit. Furthermore, it is unlawful to use any motorized vehicle to harass, stir up, rally, or drive in any manner any game animal or bird (Idaho Code 36-1101). In some areas of southern Idaho, OHVs may not be used to access hunting sites or otherwise aid in the hunt (IDAPA 13.01.07.101, 13.01.08.411-412, 13.01.09.302).

Conservation officers of the IDFG perform law enforcement functions and are empowered to enforce the OHV- and snowmobile-related laws by the recreation section (Title 67 Chapter 71) of Idaho Code (Idaho Code 67-7133 and 36-1301). IDFG officers also can enforce motorized vehicle restrictions that protect wildlife or wildlife habitat on lands where the department has entered into a cooperative agreement with the owner of the land under terms set out in Idaho Code 36-104(b)10, which include that the lands must be within or adjacent to National Forest System lands. Currently, this authority is limited to Memoranda of Understanding with all national forests in Idaho. These agreements allow IDFG officers to enforce national forest travel management plans where travel is restricted for reasons of protecting wildlife and wildlife habitat (Groen, review; Tripp, review).

The IDFG also manages more than 187,000 acres in 32 state Wildlife Management Areas (IDFG 2008). Within these areas, motorized vehicles, including snowmobiles, are allowed only on established roads, and may be prohibited from established roads that have been posted with signs prohibiting such use (IDAPA 13.01.03.100.01).
5.6. Counties. Counties in the state of Idaho have several responsibilities related to off-highway vehicle (OHV) and snowmobile recreation. The county assessor's office in each of Idaho's 44 counties handles off-road sticker registration and restricted vehicle licensing for the Idaho Department of Parks and Recreation and the Idaho Transportation Department, respectively (see Section 4.1). Counties also have the authority to close sections of highways under their jurisdictions to ATVs, motorbikes, and UTVs (Idaho Code 49-426(3)). Counties may establish their own snowmobile programs funded with 85% of the snowmobile registration fee going to the county that the snowmobile owner designates (Idaho Code 67-7103). The county commissioners of any county may appoint a snowmobile advisory committee to advise them about the establishment and maintenance of parking and snowmobile unloading areas on public and private property, and expenditure of the county snowmobile fund (Idaho Code 67-7107). County commissioners are authorized to spend the county snowmobile fund for the maintenance and operation of snowmobile trail groomers and signs on snowmobile trails, as well as plowing parking lots and maintaining warming shelters (Idaho Code 67-7107). Counties also have the authority to decide whether registered ATVs are allowed to use snowmobile trails in the county (Idaho Code 67-7112).

County sheriff departments often have the largest and most visible law enforcement presence in a county. Sheriffs are empowered to enforce state OHV- and snowmobile-related laws (Idaho Code 67-7133). Many counties or their sheriff's departments also have contracts, cooperative agreements, or memoranda of understanding with federal land management agencies enabling county enforcement of travel management rules on federal lands within the county.

5.7. Private landowners. Private landowners’ policies regarding OHV and snowmobile use on their lands may range from complete prohibition to open access. Some landowners charge an access fee. Idaho’s laws regarding trespass, and thus access, do not address posting requirements to allow or prevent specific activities, such as OHV or snowmobile use. Private landowners who wish to prevent all recreational access must meet trespass posting requirements (Idaho Code 18-7008). Private landowners who allow OHV and snowmobile use by the public on their property without charge are covered by Idaho’s limited liability for recreational use statute (Idaho Code 36-1604).

In this section, we feature Potlatch Corporation’s policies because of its large land holdings in Idaho and managed recreational access program. Potlatch Corporation owns 840,000 acres of timberland in north central Idaho. In April 2007 the company introduced a fee-based recreational access program for its lands (Potlatch Corp. 2007). All recreationists using Potlatch lands must purchase an annual permit. The cost varies by the type of vehicles used and number of recreationists. The fee for ATVs, motorbikes, and snowmobiles is $25 per year for each vehicle (Potlatch Corp. 2007).

Potlatch allows permitted ATVs on its lands, but only on existing roads and trails (Potlatch Corp. 2007). The company prohibits permit holders from building new ATV trails, abusing existing roads, or driving off roads. The speed limit on Potlatch roads is 25 miles per hour, unless otherwise posted, and applies to all vehicles including ATVs, motorcycles and snowmobiles. ATV users must abide by all Idaho laws with regard to the use of ATVs. Permit holders agree to:

- not damage or destroy trees, crops, buildings, fences, roads, gates, or other improvements located on Potlatch’s property;
- use every precaution to protect wildlife, timber, trees, forest products and Potlatch property from poaching, theft, fire, or other damage;
- repair any damage they cause at their expense;
- not cut standing trees (live or dead);
- not drag weeds that may release seeds;
- not construct or erect permanent structures, including ATV trails; and
- leave all gates as originally found (Potlatch Corp. 2007).
Snowmobilers must avoid tree plantations where snow compaction and clipping of tree tops can damage young trees under the snow. In addition, UTVs are not allowed off roads, on closed roads, or behind gates and barriers. Potlatch maintains the right to exclude from its lands any person, including valid recreation permit holders, for conduct which, in Potlatch’s opinion, is in violation of the terms of the permit (Potlatch Corp. 2007). The effectiveness of Potlatch’s recreational access program has not been evaluated at this time, and such a task is beyond the scope of this report.

**6.0. What are the management challenges of OHV and snowmobile recreation?**

The management challenges posed by OHV and snowmobile recreation are difficult to put into distinct categories because of their interrelationships. For example, damage to resources may be connected to a lack of law enforcement that may be connected to lack of funding that may be connected to a lack of public support for user fees, and so on. In the following section, we briefly outline some of the major challenges and issues, without attempting to be all-inclusive or exploring all the potential interrelationships among these issues.

**6.1. Providing opportunities.** One challenge for land managers is providing OHV and snowmobile recreation experiences to an increasing number of OHV and snowmobile recreationists (see Section 3.0; BLM 2006, USFS undated). Issues arise from a tension between a) opening more areas to OHV and snowmobile travel and b) reducing the number of open areas in order to concentrate and manage impacts on smaller areas (LSRD RAC 2003). Land managers see area closures as an effective tool to address adverse impacts of OHV and snowmobile use (Chavez and Knap 2006), whereas many OHV and snowmobile users express concern about closure of areas they currently use and generally have a preference for opening more areas (Achana 2005, Parrish et al. 1996, Sanyal 2002).

**6.2. Trespass.** Unauthorized access, or trespass, by OHV and snowmobile recreationists is a management challenge. Two issues can result in unauthorized access: a) areas are not mapped, signed, or marked clearly as open or closed; or b) recreationists ignore designations. Differences in access policies can be confusing for OHV and snowmobile recreationists traveling across lands managed by different entities and this confusion can lead to unintentional trespass. Nationwide there is a longstanding problem with effectively communicating to the public OHV area designations on public lands (GAO 1995). On private lands, trespass laws in general are difficult to administer and enforce (Church 1979, Sigmon 2004).

**6.3. Cross-country travel.** Unauthorized cross-country travel is a subset of trespass or unauthorized access issues. The U.S. Forest Service and other land managers have been confronted with a proliferation of trails arising from repeated unauthorized cross-country travel by OHV traffic (USFS undated, Chavez and Knap 2006). These unauthorized trails cause much of the natural resource damage and some of the public safety concerns on national forests (USFS undated). Although cross-country travel by snowmobiles may be less damaging than cross-country travel by OHVs, snowmobiles can have negative effects, such as breaking the tips of young tree seedlings.

Unauthorized cross-country travel issues are challenging because OHV and snowmobile recreationists may not view cross-country travel as negatively as land managers. A significant proportion of OHV and snowmobile recreationists prefer to travel off trails (Table 6-1) and spend most of their time riding there (Table 3-2). The IDPR 2005 ATV/Motorbike User Survey found that Idaho OHV users rated as very low the "resource impact [of] OHV-user-created cross-country trails in recreation areas on public lands" and more than half of Idaho OHV users saw very little or no resource impact of user-created trails on public lands" and more than half of Idaho OHV users saw very little or no resource impact of user-created trails on public lands where they regularly recreated (Achana 2005). In the same study, Idaho OHV users rated the reasons they think unauthorized cross-country travel occurs. The top-rated reason was "some people think they should be free to go anywhere," followed by a lack of enough designated places to ride (Achana 2005).
6.4. Resource damage. Estimates vary on the percentage of OHV users who cause damage to natural resources by thoughtless or irresponsible behavior. Some OHV user groups have characterized problems associated with unauthorized cross-country travel and OHV recreation in general as "a few bad apples," but some groups opposed to OHV use have challenged this characterization because a significant proportion of OHV recreation takes place off roads or trails (see Tables 3-2 and 6-1 herein; Nelson 1996, IDPR 2002). One study of Idaho hunters found that 45% of those who use their ATVs or motorbikes during a hunting trip observe intentional damage to the land caused by ATV or motorbike riding (Sanyal 2002). The same study found that 75% of hunters who do not own an ATV or motorbike observe intentional damage.

Resource damage can occur with either unauthorized or authorized access, and can be either intentional or unintentional. Regardless, resource impacts and damages often have financial implications because resource damage repair and prevention efforts are costly. For example, the Idaho Department of Lands estimates a cost of $1.5 million annually for damage and maintenance due to OHV recreation (Bacon 2007). The department receives no funding to offset the cost of such damage to state endowment trust lands, and the loss directly impacts revenue available for distribution to the trust beneficiaries.

Efforts to prevent resource damage can be challenging for several reasons. Idaho does not have requirements for OHV or snowmobile operator education like some other states do. A lack of adequate funding for OHV management and enforcement programs is problematic (USFS undated). OHV recreation is dispersed over large areas that are often remote, making personal contact difficult and costly for either educational or enforcement purposes (USFS undated). Unintentional damage may be difficult to prevent because education and training programs regarding how to reduce damages may not reach many OHV recreationists. For example, the IDPR 2005 ATV/Motorbike User Survey found that only 10% of OHV recreationists had received training on either land ethics (reducing resource impacts) or trail ethics (reducing conflict) (Achana 2005).

6.5. Conflict between user groups. Managers face the challenge of conflict between user groups, both other recreationists and other types of users (Achana 2005, Chavez and Knap 2006, BLM 2006). For example, a study of hunters and ranchers in Montana identified driving off roads and trespassing as two of the top three conflict problems between them (Swensson and Knight 1998).

Even within a group of similar type recreationists, such as hunters, OHV use can be a source of conflict (Sanyal 2007). In Idaho, hunters who use ATVs or motorbikes during a hunting trip were found to have different views of ATV’s and motorbike’s impacts and conflicts than those who did not use ATVs or motorbikes (Sanyal 2002). In a survey of Idaho mule deer hunters, the most frequently mentioned comments about reasons for dissatisfaction with the hunting experience were concerns with too many ATVs or their improper use (Coombs et
Many mule deer hunters find ATV and motorbike use by other hunters disturbing and have sought out hunting locations where they encounter fewer ATVs and motorbikes (Sanyal et al. 2007).

6.6. Safety. Safety is a management challenge with OHV and snowmobile recreation. As the number of ATVs has risen so has the number of injuries and deaths involving ATV use (Consumer Product Safety Commission 2007, Dowd 2008). National forest OHV recreation managers in California identified OHVs going too fast, lack of safetywear (e.g., helmets), and alcohol use as three of the top behavioral management issues (Chavez and Knap 2006). Risks to children's safety from OHV equipment and use also have received increased attention (e.g., Natural Trails and Waters Coalition et al. 2002, 2003; Dowd 2008).

6.7. Law enforcement. Enforcement of laws presents an interesting challenge. Land managers and law enforcement personnel find OHV recreation to be a significant law enforcement problem (BLM 2006, Chavez and Knap 2006, Rangers for Responsible Recreation 2007). For example, in FY 2005, the BLM had more than 5,100 OHV law enforcement actions nationwide, the highest number (72%) of incidents in any of the agency’s action classifications (BLM 2006). In Idaho, OHV registration compliance rates are estimated to be only 60% to 70% (LSRD RAC 2003), although the rates may be improving in some regions (IDFG 2007b). Also in Idaho, between 2005-2007, the IDFG detected and documented 1,267 OHV violations, which was 6.8% of all violations detected and documented by IDFG enforcement personnel during that period (Groen, review). Specific violations were as follows: 40 relating to safety, 467 related to violations of Idaho's recreation statutes (i.e., Idaho Code Title 67 Chapter 71), 552 violations of national forest travel plans, 63 violations of IDFG Wildlife Management Area restrictions, and 145 violations for using a motorized vehicle as an aide to hunting (Groen, review).

Jurisdictional challenges for law enforcement exist. For example, as mentioned earlier (Section 5.5), the ability of IDFG officers to enforce OHV and snowmobile travel restrictions is limited. IDFG officers can enforce motorized vehicle restrictions only to protect wildlife or wildlife habitat and only on lands where the IDFG has entered into a cooperative agreement with the owner of the land under terms set out in Idaho Code 36-104(b)10, which include that the lands must be within or adjacent to National Forest System lands.

The large area over which OHV and snowmobile recreation takes place is also a challenge for law enforcement. Law enforcement personnel are stretched thin. For example, across the U.S., the BLM deploys only 195 law enforcement rangers and 56 special agents across its lands, about one law enforcement officer for every 1.2 million acres (Bisson 2008).

Equitable funding challenges for law enforcement also exist. Law enforcement personnel of the Idaho State Police and IDFG, authorized employees of IDPR, and sheriff’s departments and their deputies are charged with enforcement of OHV- and snowmobile-related statutes (Idaho Code 67-7133). Not all of these agencies receive funding specifically for OHV- and snowmobile-related enforcement despite the increased need as OHV and snowmobile recreation has increased.

Funding for OHV-related law enforcement is available through grants from the off-road motor vehicle account administered through the IDPR (Idaho Code 57-1901), but OHV law enforcement activities must compete with other OHV program and facility requests, and the sum total of grant requests always exceeds available funding. Up to 15% of each county's snowmobile program funds may be used for snowmobile-related law enforcement purposes (Idaho Code 67-7106), but we do not have information about how each county uses its snowmobile funds. Currently, 90% of the fines for registration violations of ATVs, motorbikes, and snowmobiles, and use of winter recreation parking are apportioned to the general fund of the county or city whose law enforcement official issued the citation and 10% to the state treasurer, of which 86% is deposited in the state general fund and 14% is deposited in the state peace officers' standards and training fund.
(Idaho Code 19-4705). State law enforcement agencies are not included in the apportionment.

7.0. How does OHV and snowmobile recreation affect the land, its flora and fauna, and other recreation experiences?
All recreational activities result in complex interrelated effects on the environment in which the recreation takes place (Liddle 1997). OHV and snowmobile recreation are not unique in having effects, but the types and magnitudes of the effects may be. The effects of OHVs and snowmobiles on the environment and other recreationists are well recognized (e.g., Webb and Wilshire 1983, Havlick 2002), but research often has been narrowly focused on a specific geographic region, ecosystem, species, or vehicle type (Stokowski and LaPointe 2000). In general, regardless of vehicle type, research shows similar effects with differences in effect levels due to intensity of use, or use characteristics, in combination with the level of fragility of the affected environment (Stokowski and LaPointe 2000). Idaho has a diverse range of ecosystems, from desert canyons to dense forests to alpine mountains, and although much of the research cited in the following section did not take place in Idaho, our review covers studies that represent the range of effects that are possible in Idaho.

7.1. Effects on soil, vegetation, and water. The effects of OHVs on soil, vegetation, and water often are addressed together in the research literature because of their interconnections. The area disturbed and the severity of effects are dependant on a variety of factors including soil and vegetation type, field conditions such as moisture, and OHV weight, dimensions, and dynamic properties (Li et al. 2007). For example, impacts to soil and vegetation are greater on wet soils than on dry soils, and are most evident in desert soils or other easily eroded soil types such as granitic soils (USFS undated).

The primary effects of OHVs on soils are compaction and displacement (Li et al. 2007, Meyer 2002, Stokowski and LaPointe 2000). Compaction and displacement occurs from the pressure of an OHV rolling over the soil, and effects increase with vehicle weight and number of passes. Compaction may result in alterations in hydrologic patterns as well as decreases in soil productivity (Li et al. 2007). Displacement is particularly prevalent on loose soils, when soils are wet, and during turning movements (Li et al. 2007). Displacement can lead to erosion, which may result in increased sedimentation into waterways (Stokowski and LaPointe 2000, Meyer 2002).

The primary direct impacts of OHVs to vegetation are a) the bending or flattening of plants at slower speeds due to the weight of the vehicle and b) the removal of plants from the soil at moderate to high speeds during turning movements due to scraping action (Li et al. 2007). In addition, OHVs can damage larger plants through actions such as breaking limbs and scraping bark. Vegetation damage may open the door to invasive plant species (Liddle 1997, Li et al. 2007, USFS undated). In turn, changes in vegetation types may lead to effects on wildlife that depend on native vegetation (Munger et al. 2003).

OHV use near water bodies can contribute additional sediment loading (Chin et al. 2004, Riedel 2006), so riparian areas and riparian and aquatic species are particularly vulnerable to effects from OHV use (USFS undated). OHV use can increase the amount and frequency of water runoff and erosion by decreasing soil porosity, infiltration capacity, effectiveness of surface stabilizers, and hydraulic resistance to overland flow. These effects are long-lasting and may occur even when the use of OHVs is slight (Iverson et al. 1981).

7.2. Effects on wildlife. Research literature indicates that the sensitivity of wildlife species to the noise and disturbance attributable to OHV and snowmobile use varies by species. For example, elk appear to respond at relatively long distances to ATVs, and the probability of flight is higher when elk are closer to ATV routes, even when the distance to an ATV is large (Preisler et al. 2006, Wisdom et al. 2004). On the other hand, some wildlife, such as deer, adapt to the noise disturbance of OHVs, and over time may no longer be displaced by the activity (Stokowski and Lapointe 2000, Wisdom et al. 2004, USFS undated).
It is not only large wildlife that are affected by OHVs. Birds, reptiles, and other fauna have been found to experience effects from OHV recreation (e.g., Hayward 2007, McGowan and Simons 2006, Munger et al. 2003, Reed 2007, Thomson et al. 2007). OHVs can affect many aspects of animals’ lives including breeding, foraging, dispersal, and survival.

Studies of the impacts of snowmobiles on wildlife are relatively rare. One reason is because some wildlife are more difficult to detect in winter conditions (Manley 2004). One study found that experts in the field of wildlife were uncomfortable passing judgments on whether snowmobiles adversely affect wildlife (Hall et al. 2001). Many of the experts felt that insufficient data exist, and even with sufficient information, the question of when an impact becomes serious enough to warrant taking action is a subjective value judgment. Only for ungulates were some scientists willing to say data are adequate (Hall et al. 2001). The concern with large ungulates, including elk and moose, is that stress caused by displacement during winter can deplete energy reserves needed for survival (Hall et al. 2001, Olliff et al. 1999, Stokowski and LaPointe 2000, USFS undated).

Other studies have found that snow compaction caused by snowmobiles affects the survival and activities of small mammals living under the snow layer (Stokowski and LaPointe 2000). Because of the number and diversity of wildlife species, much is still unknown about the effects of OHV and snowmobile use on wildlife, but studies continue across a variety of species at different trophic levels in different habitats (e.g., Farrington 2004, Pacific Southwest Research Station 2007).

7.3. Effects on other recreationists.

OHV and snowmobile use often conflicts with non-motorized uses, such as hiking and cross-country skiing. The conflicts usually arise because of differences in recreationists' attitudes about noise and intrusion of the modern world (e.g., machines) into nature, and the environmental effects of motorized use that reduce the pleasure of non-motorized visitors, and sometimes results in their displacement (Stokowski and LaPointe 2000). For example, in response to many Idaho hunters who requested that something be done about the increase in off-road travel, particularly by ATVs during hunting season, the Idaho Department of Fish and Game adopted rules limiting off-road use of motorized vehicles to access certain hunting areas (IDAPA 13.01.07.101, 13.01.08.411-412, 13.01.09.302). The rules are an attempt to reduce conflict between hunters by limiting off-road travel (IDFG 2007a).

Inherent characteristics of OHV and snowmobile operations tend to create motorized versus non-motorized user conflicts that are difficult for land managers to contend with. OHV and snowmobile users generally travel farther using vehicles that are relatively loud compared to other recreational users (Stokowski and LaPointe 2000). Many OHV users find their own noise is not enjoyable (Achana 2006). Activities and noise levels that are acceptable in developed or urban areas commonly are less acceptable to non-motorized recreational users in a natural setting (USFS undated). Trail erosion, compaction and widening caused by OHVs also reduces the quality of recreational trails for other users (Stokowski and LaPointe 2000, Meyer 2002).

Public land managers have observed that OHV users may displace other recreational users, thus adding to the complexity of managing user conflicts. Some users do not want to share facilities with OHV and snowmobile recreationists because of the impacts of noise on their recreational experiences. Some users are demanding that managers establish separate zones for motorized and non-motorized activities (USFS undated).

A basic need of resource management agencies is to understand the types and characteristics of motorized and non-motorized uses and users, and the ways in which these users define their activities, values, and ties to the land (Brehm and Eisenhauer 2006, LSRD RAC 2003, Sanyal 2007, Silberman and Andereck 2006, Stokowski and LaPointe 2000, Warneke 2006). Recreationists may have significantly different perceptions about the impacts of OHV and snowmobile use. For example, participation in OHV recreation affects
perceptions of its effects, with those who engage in it perceiving effects of OHV recreation to be less harmful than those who do not participate (Priskin 2003).

8.0. What roles are public, private, and cooperative efforts playing in the management of OHV and snowmobile use?

A variety of cooperative efforts to manage OHV and snowmobile recreation are underway. In Idaho the major public land and recreation management agencies have formed the Idaho Interagency OHV Coordinating Committee comprised of representatives from the Idaho Department of Parks and Recreation, Idaho Department of Fish and Game, Idaho Department of Lands, U.S. Bureau of Land Management, and U.S. Forest Service. The committee attempts to address issues common to all its member organizations in a consistent manner. One of the committee's efforts is the Idaho OHV Outreach Project, which uses outdoor billboards, radio advertising, a website, direct mail and other support products to promote the responsible use of OHVs on Idaho's public lands. The main goal of the campaign is to raise public awareness that cross-country travel is inappropriate and that riders should stay on designated or established roads and trails (Idaho OHV Outreach Project 2007).

Law enforcement agencies and personnel cooperate on enforcing OHV- and snowmobile-related laws. For example, the Idaho BLM has large tracts of public lands and one of the smaller law enforcement programs in the agency, and thus relies heavily on assistance from sheriffs' departments to help patrol public lands. In FY 2005, there were 30 active law enforcement agreements totaling $286,500 to reimburse local agencies for their assistance with enforcement of all laws on BLM lands, not just OHV laws (BLM 2006). In FY 2005, the Idaho Falls District of the BLM funded a $25,000 challenge cost share agreement with the Fremont County Sheriff's Office to patrol public lands, in particular to combat alcohol- and safety-related violations at St. Anthony Sand Dunes OHV Area. The BLM's Office of Law Enforcement and Security funded an additional $10,000 for the sheriff's department's help and purchased two ATVs so rangers could patrol the area more efficiently. BLM rangers work hand-in-hand with county deputies. The county and the BLM have reported that the area is now less of a "party" spot and more of a family OHV destination (BLM 2006).

Many national, private groups are involved in OHV and snowmobile issues in Idaho. Groups representing a wide range of positions are participating in travel management planning processes on both U.S. Forest Service and BLM managed lands (e.g., Thomson et al. 2007, Hicks 2007).

Tread Lightly!, Inc. is a national nonprofit organization that works to protect recreation access and opportunities, including OHV use, through education and stewardship initiatives (Tread Lightly!, Inc. 2007). Tread Lightly! is funded by donations from individual members, corporations, dealerships, clubs, retailers, and other organizations; federal partners include the National Park Service, USFS, BLM, Bureau of Reclamation, and U.S. Army Corps of Engineers.

American Trails is a national, nonprofit organization that works on behalf of all trail interests, including hiking, bicycling, mountain biking, horseback riding, water trails, snowshoeing, cross country skiing, trail motorcycling, ATVs, snowmobiling and four-wheeling (American Trails 2008). The organization's goal is to find common ground and promote cooperation among all trail interests.

The BlueRibbon Coalition, based in Chubbuck, Idaho, is a national non-profit coalition of organizations, businesses, and individuals that is "dedicated to defense and enhancement of recreational access, via motorized, mechanized, and non-mechanized means, to public lands, and to the protection of the environment, including the preservation of natural resources and natural values in concert with opportunities for humans to gain access to and interact directly with their physical environment" (BlueRibbon Coalition 2007). The coalition takes numerous policy positions on various aspects of OHV use, including private lands, route designation, environmental
protection, user fees, vehicle sound, safety, and law enforcement (Blue Ribbon Coalition 2007). The coalition participates in legal actions defending OHV uses, and helps fund research about OHV effects on the environment (e.g., Hayward 2007).

The National Off-Highway Vehicle Conservation Council (NOHVCC) is a publicly supported education foundation organized to develop and provide a wide spectrum of programs, materials, and information, to individuals, clubs, associations and agencies "in order to further a positive future for responsible OHV recreation" (NOHVCC 2007). The organization's education efforts include printed materials, workshops, and consulting services. It also maintains a library of research on OHV administration, management, environmental impact, human dimensions, and other OHV-related topics.

Several state-level private organizations are involved in OHV and snowmobile management efforts. The Idaho All-Terrain Vehicle Association works to "foster, promote and enhance the use of ATVs for recreational purposes in the state of Idaho" (Idaho ATV Association 2007). The association works closely with the IDPR, USFS, and BLM to maintain existing ATV trails and develop new ones.

The Idaho Trail Machine Association (1997) focuses specifically on the off-highway use of motorbikes. It is an affiliation of local motorbike groups from throughout Idaho, and works with public and private land, resource, and recreation managers, trail bike riders, other motorcycle groups, and the general public to promote and preserve the sport of trail bike riding in Idaho.

The American Council of Snowmobile Associations (ACSA) is a national organization comprised of state snowmobile associations (ACSA 2008). The council keeps snowmobilers across the country informed about national policy issues that affect snowmobiling, such as access to public lands. The council has adopted a snowmobiler code of ethics that addresses responsible riding behaviors (ACSA 2005).

The Idaho State Snowmobile Association promotes safe, courteous, lawful and responsible use of snowmobiles, educates snowmobilers about safety and good land stewardship, and protects the development and maintenance of trails and other facilities that support snowmobiling (Idaho State Snowmobile Association 2008). The association's members include snowmobile dealers, distributors, manufacturers, resort owners, snowmobile clubs, and individuals. The association is a member of ACSA and works with public land managers to identify needs, problems and opportunities, and conducts free safety classes for snowmobilers.

All of the private organizations listed above focus on OHV and snowmobile management while advocating for and protecting motorized access to public lands. There are also private organizations that look less favorably on OHV and snowmobile recreation in general and advocate more restrictive off-road policies for public lands. Some are identified below.

The Natural Trails and Waters Coalition (2008) works to protect and restore public lands from damage caused by OHVs using a variety of legislative, administrative, legal, media, and grassroots strategies targeted at state and federal land managers and decision makers. The coalition is directed by a nine member steering committee, with representatives from: American Hiking Society, American Lands Alliance, Bluewater Network, Colorado Mountain Club, Great Old Broads for Wilderness, Sierra Club, Southern Utah Wilderness Alliance, The Wilderness Society, and Wildlands CPR. Some of these organizations are national in scope (e.g., Sierra Club) while others are more regional in scope (e.g., Southern Utah Wilderness Alliance). Some of the member organizations have missions that are broader than OHV issues (e.g., The Wilderness Society), while others focus specifically on OHV issues. For example, Wildlands CPR (2007) is a national group that specifically targets off-road vehicle abuse of public lands.

Other organizations that promote more restrictive OHV policies include Rangers for Responsible Recreation (2007), a group of former public land managers and officials concerned about OHV and snowmobile
recreation who are organized as a project of the Public Employees for Environmental Responsibility. Several large national environmental organizations have also taken positions critical of OHV and snowmobile use and management on public lands (see, e.g., Higgins and Knight 2002, Lawler 2000). The Consumer Federation of America, Bluewater Network, and the Natural Trails and Water Coalition have been particularly critical of ATV manufacturers' responses to concerns about the safety of children using ATVs (Natural Trails and Waters Coalition et al. 2002, 2003).

9.0. What policy alternatives exist to address OHV and snowmobile management needs?

There are many possible actions for addressing OHV and snowmobile management needs and issues. Not all management action alternatives involve policy changes, but understanding the range of actions available to managers is a helpful prelude for discussions of policy alternatives.

Research involving OHV managers in California's national forests has led to the creation of a useful framework for categorizing OHV management alternatives (Chavez and Knap 2006). Management actions to address OHV issues can be put into four categories: indirect actions, direct actions, resource-hardening actions, and bridge-building/collaboration actions. Indirect actions include posters or signs, bulletin boards, user ethics, maps, and brochures. Direct actions include law enforcement, area or trail closure or use limits, and trail relocation. Resource-hardening actions include creating staging areas with parking facilities, installing artificial trail tread and drain dips, and specifying maximum trail grades. Bridge-building/collaboration actions include personal contacts, volunteer patrols, local OHV club meetings, and adopt-a-trail programs (Chavez and Knap 2006).

The effectiveness of each management action depends on the nature of the OHV issue being addressed (Chavez and Knap 2006). The most frequently used management actions across all management issues identified by the California OHV managers were indirect actions (posters or signs, bulletin boards, user ethics, maps, and brochures), bridge-building/collaboration actions (personal contacts, volunteer patrols, local OHV club meetings, and maintain trails with local groups and volunteers), and direct actions (law enforcement) (Chavez and Knap 2006). Policies that empower OHV and snowmobile recreation managers to use a range of appropriate management actions appear to be most effective.

9.1. Controlling access. The two basic approaches to designating OHV and snowmobile access are a) open-unless-closed, and b) closed-unless-open. Many public land management agencies have adopted the latter approach (see Section 5.0); however, the effectiveness of closed-unless-open schemes remains to be seen. Enforcing closures over large areas is difficult due to the dispersed nature of OHV and snowmobile recreation and limited law enforcement resources. Indirect or bridge-building/collaboration actions in addition to law enforcement seem likely to improve the effectiveness of closures.

For specific sensitive sites, rather than large areas, closing or restricting access may be an effective alternative. Resource-hardening actions also may help protect sensitive sites. Creating or improving facilities also may concentrate recreation effects onto smaller, more managed areas. For example, the U.S. Forest Service closed some specific trails and stream fords and rerouted other trails to reduce sediment that was affecting bull trout habitat on the Boise National Forest; simultaneously the agency converted some roads to OHV trails to increase opportunities for off-road riding (USFS 2007a).

9.2. Increased regulation, enforcement, and penalties. Opinions are divided over the importance and impact of regulation. Some groups assert that regulations do not go far enough, while others counter that more regulations would penalize the majority of OHV and snowmobile users who obey current rules (CRS 2007). OHV users themselves are divided about the appropriate amount of

Law enforcement is related to regulation. Several groups, particularly those tending to favor more restrictions on OHVs and snowmobiles, suggest that increased enforcement of current regulations is necessary to address OHV and snowmobile management issues. Among strategies suggested for making enforcement more effective are: expanding enforcement capacity (i.e., more law enforcement personnel), increasing collaboration between law enforcement agencies, targeting and intensifying patrol efforts, creating opportunities for citizen reporting of violations, incorporating remote electronic monitoring technologies, and tracking recurring problems and repeat offenders (Wildlands CPR 2007).

More cooperative law enforcement policies may be appropriate for Idaho. As mentioned earlier (Sections 5.5 and 6.7), Idaho law limits the ability of IDFG officers to enforce OHV and snowmobile travel restrictions. Some states have given enforcement officers from a wider range of jurisdictions the authority to enforce OHV and snowmobile laws. For example, Colorado recently passed a law authorizing all peace officers to enforce travel restrictions on federal lands (2008 Colorado Session Laws Chapter 54).

Currently in Idaho, most violations of Idaho OHV and snowmobile laws (Idaho Code 67-7101 et seq.) are infractions carrying a $25 fine (not including court and other fees), except snowmobiling on a closed highway which carries a $100 fine (Idaho Supreme Court 2005). Several groups suggest that current penalties for violations of OHV and snowmobile regulations and actions that damage resources need to be increased in order to act as an effective deterrent against such behaviors. Among suggestions for penalty alternatives are loss of hunting and fishing licenses, confiscation of vehicles, suspension of riding privileges for repeat offenders, consideration of resource damage in determining fines, community service, and jail time (PEER 2007, Rangers for Responsible Recreation 2007, Wildlands CPR 2007).

Some states have increased penalties for OHV and snowmobile regulation violations. For example, Colorado recently increased penalties for violations of travel management rules on federal lands (2008 Colorado Session Law Chapter 54). Violations of travel restrictions in Colorado are now misdemeanors carrying a fine of $100 outside of designated wilderness and $200 for violations within designated wilderness. Violations that occur while hunting or fishing also may lead to license suspension. The deterrent effects of the increased fines have not been evaluated.

9.3. Funding. Most management actions require funding, whether for more recreation opportunities, enforcing regulations, or other activities. Several groups have called for Congress and state legislatures to augment public land management agencies' budgets specifically for recreation-related issues. However, at the federal level most funding levels appear to be decreasing. For example, the FY2009 U.S. Forest Service budget proposes decreasing the recreation operations budget by 8% from FY2008 levels and decreasing the law enforcement budget by 12% (USFS 2008). The Bureau of Land Management's FY2009 budget request for recreation resource management is 16% less than its FY2008 appropriation, and the request for resource protection and law enforcement is 2% less than the FY2008 appropriation (BLM 2008). However, in its FY2009 budget, the BLM is proposing to redirect approximately $8 million from field offices in areas experiencing little or no population growth to field offices in or adjacent to expanding communities. Recreation and law enforcement are among the programs in which these funding shifts will occur (Bisson 2008).

One alternative to reliance on general federal appropriations is to create a dedicated source of funding to provide OHV and snowmobile recreation opportunities and fulfill management needs. A novel approach would be an excise tax on OHV and/or snowmobile equipment similar to federal wildlife and sport fish restoration programs that tax firearms, ammunition, and fishing equipment (Pittman-Robertson Wildlife Restoration Act, 16 U.S. Code 669 et seq.; Dingell-Johnson Sport
Much of the federal funding for wildlife and sport fish restoration is distributed to the states through grant programs, and a similar granting mechanism might work for OHV and snowmobile funding. We are not aware, however, of any proposals to implement such an excise tax program for OHV or snowmobile funding at the federal or state level.

Another way to provide more resources for management of OHV and snowmobile recreation is to increase registration fees. Willingness to support increased fees may be affected by how avid recreationists are. More avid users are less supportive of higher fees (Holmes and Englin 2005). There appears to be some support for increased registration fees among Idaho’s ATV and motorbike users. The 2005 ATV/Motorbike User Survey by the IDPR found that respondents would be willing to pay an average of $12.39 more for a registration permit to improve OHV services, such as safety training and education, and area development, maintenance, and management (Achana 2005). The 2007 Idaho Legislature raised snowmobile registration fees by $10 per year, but did not increase ATV, motorbike, or UTV fees. Idaho’s current fee structure for OHV and snowmobile registration is similar that of surrounding states.

Another way to increase the funding base for OHV management is to expand the types of OHVs that are required to obtain an off-road registration. Idaho currently limits off-road registrations to ATVs, motorbikes, and UTVs (see Section 4.1). Most surrounding states require off-road registration of a wider variety of OHVs (i.e., any motor vehicle designed for or capable of off-road use) such as four-wheel drive sport utility vehicles or pickup trucks, dune buggies, and OHVs with tracks instead of tires.

User fees for OHVs or snowmobiles at specific recreation sites are also a funding alternative option. However, some studies have indicated that increased reliance on user fees to protect and restore OHV areas will not likely gain the support of the more avid OHV or snowmobile users (Holmes and Englin 2005). Administrative costs to collect fees can also decrease the efficiency of user fee programs.

Another way to increase funding for OHV and snowmobile recreation management is to increase the portion of state-collected motor fuel taxes contributed to management of those activities. Currently, Idaho apportions 66% of 1.28% (or 0.8448%) of motor fuel taxes to the off-road motor vehicle account (see Section 5.4).

Another avenue for funding in Idaho at a local level is creation and use of a recreation district that collects property taxes from within its boundaries (Idaho Code 31-4301 et seq.). The operation and maintenance of snowmobile facilities are specifically mentioned among the purposes of recreation districts. Currently, there are 33 recreation districts in Idaho collecting property taxes from local citizens to provide recreation opportunities (Idaho State Tax Commission 2007).

9.4. Communication and education. Communication and education programs can be effective ways of dealing with OHV and snowmobile management issues (Blahna et al. 2005, Chavez and Knap 2006, Nelson 2005, Swensson and Knight 1998). However, the methods of communication and the messages must be targeted appropriately to be effective.

Communication and education programs often have the goal of increasing knowledge to change attitudes and behaviors; however, increased knowledge and changes in attitudes may not lead to changes in behavior (Priskin 2003). Additionally, lack of evaluation for many communication and education programs makes it difficult to state conclusively that a program achieved lasting behavioral change or contributed in a known way to management objectives (Blahna et al. 2005). For example, Wyoming uses a unique direct communication method to discourage trespassing by including the following language on the face of its OHV and snowmobile registration decals: "Warning: trespass upon private property while operating a snowmobile [or OHV] is punishable by imprisonment up to six (6) months, a fine up to seven hundred fifty dollars ($750.00), or both under W.S. 6-3-303" (Wyoming Statute 31-2-703). The effectiveness of this warning is unknown.
In Idaho, the Internet appears to be the most popular way to communicate with both OHV and snowmobile recreationists about trail conditions, with television and radio being less preferable (Table 9-1; Strategic Intelligence, Inc. 2004). Another study found that communicating through IDFG hunting publications and website may be effective at reaching ATV and motorbike users because many hunters own and use OHVs (Sanyal et al. 2007). Another study found that the most frequently used sources of information about snowmobiling areas were previous visits to the area and information from friends, relatives, and acquaintances, and snowmobile clubs or organizations (Parrish et al. 1996). Researchers conclude that providing on-site information and brochures and maps that participants can take home to share with others are effective communication strategies.

Mandatory education requirements for OHV and snowmobile recreationists are one way to address educational needs. In Idaho, the 2005 ATV/Motorbike User Survey by the IDPR found that 74% of Idaho OHV recreationists do not see a need for a mandatory OHV education program requirement for operating an OHV on public land (Achana 2005). Nevertheless, in 2008 Oregon began phasing in a law that requires OHV operators of all ages to obtain an OHV operator’s permit that signifies completion of a designated OHV safety class, with complete phase-in by 2014 (Oregon Parks and Recreation Department 2008). Short-term effectiveness of such a policy is obviously questionable, as an operator could ride for several years without actually having the safety training.

Researchers in California evaluated five OHV communication and education programs designed to affect OHV drivers’ environmental ethics and behaviors (Blahna et al. 2005). The primary messages of the programs related to staying on trails, environmental impacts, safety, etiquette, and driver image. These researchers found that the most critical communication and education needs included: targeting high school age OHV users, developing training-the-trainer methods, improving Internet and two-way communications, and increasing the use of OHV clubs, manufacturers, and personalities in delivering educational messages (Blahna et al. 2005).

Table 9-1. Preferred communication method for informing Idaho snowmobile and ATV owners about snowmobile trailhead and ATV trail conditions, respectively, 2003.

<table>
<thead>
<tr>
<th></th>
<th>Snowmobile owners</th>
<th>ATV owners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet</td>
<td>31.4%</td>
<td>29.4%</td>
</tr>
<tr>
<td>Newspaper</td>
<td>17.9%</td>
<td>16.0%</td>
</tr>
<tr>
<td>Newsletter</td>
<td>5.1%</td>
<td>22.7%</td>
</tr>
<tr>
<td>Signs at trailheads</td>
<td>8.8%</td>
<td>12.9%</td>
</tr>
<tr>
<td>Toll-free, 800 number</td>
<td>14.6%</td>
<td>6.0%</td>
</tr>
<tr>
<td>TV</td>
<td>9.3%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Radio</td>
<td>7.1%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Other</td>
<td>5.8%</td>
<td>7.9%</td>
</tr>
</tbody>
</table>

Source: Strategic Intelligence, Inc. (2004).
9.5. Comprehensive approach. No single set of policy responses can address every situation, but a more comprehensive framework for addressing OHV and snowmobile recreation management issues may be helpful (Chavez and Knap 2006). The National Off-Highway Vehicle Conservation Council (NOHVCC) suggests a comprehensive approach that it calls the Four Es: Engineering, Education, Enforcement, and Evaluation (Crimmins 2006).

Engineering is necessary to develop trail improvement techniques and equipment modifications to reduce impacts. Education is necessary to teach recreationists about responsible riding and appropriate environmental ethics. Enforcement is necessary to manage use within acceptable impact limits. Evaluation is necessary to develop methods to document use, assess impact, and evaluate mitigation methods (Meyer 2002). In addition, encouragement to recreate responsibly, through provision of such things as trail maps and signs, may increase effectiveness (Meyer 2002).

"Enculturation"—the process of modifying behavior over time—can only be accomplished by the steady application of education, appropriate evaluation techniques, progressive engineering, appropriate enforcement, and encouragement (Meyer 2002).
References

Note: All Internet references were accessed on August 19, 2008.


Bacon, G. 2007. Panel discussion: Changes in recreation access and funding. Idaho Environmental Summit, December 12, Boise, ID. Author's notes.


