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OHV's And The Regulation Of Public Land

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by

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Abstract

This project, driven by a personal desire for further explanation, set out to analyze the reasons for the recent implementation of rules, restrictions, enforcement, and limitations of our public lands to Off-Highway Vehicle (OHV) user groups. In recent years I personally witnessed the elimination, and what I thought to be the excessive enforcement of many existing public trail systems I had been using. This project analyzes the cause of all this attention from an environmental perspective, with a realistic outlook on the actual effects of Off-highway Vehicles on the environment, and how these effects compare to other public land users. The project concludes that the future of OHV use is primarily in the hands of the users themselves, and years of abuse has lead officials to react in a movement to preserve the environment.

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Chapter 1 - Background

Introduction:

In recent years much attention has been focused on Off-Highway Vehicle (OHV) use by local, state, and federal governments. This attention has resulted in many laws and policies being written to limit, control, and monitor the use of OHV's and the land they are used on. As a result, OHV users finally have to react with efforts to keep their sports, and hobbies from extinction. I myself use OHV's off-road, but I also am an activist for environmental protection. After having a few encounters with environmental enforcement officials I became concerned as to what actually is the reason for all of this increased attention. The effect of OHV use on public land to me, especially already existing roads, and trails, seemed to be a trivial matter. I was always courteous to other land users, always used existing trails, and aside from a small beaten path on the existing trail basically left the land as it was after I passed through. The reasons officials gave me for pursuing OHV use were not enough for me to stop using the land, and I felt that I still had the right to use the land. At one point I was fined and warned to never use this one trail again. A few weeks later a logger was stripping 5 acres of pine trees bordering the trail I was using. This was the turning point in my quest for a better understanding of what was really going on with our public lands.

Purpose:

To analyze the development and growth of OHV use over the years with a primary focus on the actual effects on public land, and the policies implemented as a result of these changes. In the end I hope to have a better understanding as to why OHV use has become the center of attention, and what can be done to preserve OHV use.

Types of OHV's

The many types of OHV's are primarily divided into summer use, and winter use. Although some OHV's fall into both categories they have very different environmental concerns, and require different attention. Examples of both types are listed below, but due to the magnitude of analyzing both uses, only on land summer use OHV's will be analyzed. Figure 1 shows a few examples of common summer OHV models.

Summer Use OHV's

- 2-Wheel Off-Road Motorcycles (Dirt Bikes)
- 3 & 4-Wheel Off-Road Motorcycles (ATV's)
- Sport-Utility Vehicles (SUV)
- Trucks
- Multiple Person Watercraft
- Personal Watercraft (Jet-Ski's)

Winter Use OHV's

- Snowmobiles
- ATV's
- Sport-Utility Vehicles
- Trucks

Figure 1:

Chapter 2

Environmental Problems:

The potential environmental problems caused by summer use OHV's are divided into five categories listed below.

- Habitat Fragmentation
- Noxious Weed Dispersal
- Air & Noise Pollution
- Water Pollution
- Soil Compaction & Erosion

Habitat fragmentation can be characterized as a break up of a continuous landscape containing large patches into smaller, usually more numerous and less-connected patches (Montana, 1.8). The making of trails for OHV use either by cutting them, or continually passing through the same location causes the fragmentation (1.8). Although not as damaging as an Interstate Highway System, or a lumber stripped forest, OHV's still play a role in the damage that can be caused by fragmentation.

Noxious Weed Dispersal is the spreading of noxious weeds due to the bare soil that is exposed by OHV's providing the ideal habitat for aggressive, invasive weeds. OHV's also are the perfect source of transportation for the weed seeds (BLM, 24). The disrupted air caused by the OHV passing through can lift the seeds into the air and spread them across very wide areas.

Air and noise pollution has always been an issue for all engine driven machines. All engines naturally emit damaging products of combustion into the air, which have adverse environmental effects (Montana, 1.10). Carbon dioxides, carbon monoxides,

nitrous oxides, and hydrocarbons are the primary concerns due to the varying effects they have on our atmosphere. The noise pollution caused by these engines varies in loudness, and frequency, and is also emitted by the release of the exhaust from the engines. This noise is an issue not only on the minds of the people that can hear it nearby in their homes or in the peacefulness of the woods. It is also a concern for the animal habits that hear it (Montana, 1.8). Animals are very susceptible to loud noises, and depend on their sensitive hearing for survival. Loud noises can cause these animals to loose their sense of direction, and orientation. Research has shown that some animals have abandoned their offspring due to noise pollution caused by passing OHV's (Montana, 1,10).

Due to the various fuels, oils, and lubricants needed to operate OHV's water pollution is also a concern (BLM, 1). Because some OHV's are capable of carrying large amounts of fuel, gasoline/diesel fuels are the primary concern. These fuels can cause extreme damage to animals, and vegetation depending on the water. If released these fuels could even pollute human water supplies from wells, and watershed areas. Oils and lubricants contained in the engines, and drivelines of OHV's can also be released unexpectedly. The effects of these petroleum-based chemicals on water supply are not new to the environmental protection arena. Disrupting the bottoms of streams and adding turbulence also adversely effects water quality (OHV, 12). Not to mention the ruts caused by OHV's can affect water quality by concentrating water flows (GSENM, 2.20).

Soil compaction is the compression of soil on trails caused by the weight of the passing OHV's (BML, 48). This can inhibit infiltration of water, and increase runoff during heavy rains. Soil erosion is the destruction of the soils structure caused by the passing OHV's. This greatly increases the vulnerability of the soil to wind, and water

erosion (GSENM, 2.20). Soil compaction generally occurs on parts of trails were speeds are constant. This generally means the trail has no grade, or turns at these points. Soil erosion generally occurs on parts of trails were OHV's are climbing, or descending on grades, or slowing and accelerating around changes in direction of the trail. Particularly steep grades are of concern because the eroded soil caused by OHV's is more susceptible to washing out during rains. I have provided personal pictures of soil damage in a nearby forest, which are shown in Figure 2-3 below.

Figure 2:

Figure 3:

These photos clearly display the terrible environmental damage that OHV's cause. It is also evident that once the damage is done it is irreversible in a short period of time.

Chapter 3

OHV Use Is Expanding

According to the Bureau of Land Management (BLM) OHV use on public lands "has increased substantially in recent years" (BLM, 1). Of course along with OHV use, other user groups have grown also. Many factors contribute to the growing popularity of OHV use. Some of these factors are (BLM, 1):

- Greater public interest in unconfined outdoor recreational activities
- Rising disposable income
- Advances in vehicle technology that enable OHV users to reach areas previously inaccessible
- Rapid expansion of cities and suburbs has brought people closer to remote lands
- A population with an increasing median age with changing outdoor recreational interests

The increase in popularity is evident because OHV sales are at a rate of 1500 units per day nationwide, with nearly one-third of them being sold to first time buyers. (BLM, 2) A survey taken by the Montana Chapter Of The Wildlife Society, in the mildly populated state of Montana, showed that OHV recreation has been growing consistently over the past decade. As a matter of fact OHV use has nearly doubled in the past decade

in Montana alone (Montana, 1,6). Growing from approximately 7500 users in 1990 to 19000 in 1998.

In general the fast growing West has been the scene of most OHV expansion (BLM, 1). This is due to the various terrains the West has to offer in comparison to other parts of the country. Varying from deep forests to the flats, and dunes of the deserts the West has always been a calling ground for outdoor activity. The magnitude, and quantity of government reserved public land is also far greater than the eastern side of the U.S (BLM, 2). As a result western public lands have been the main center of attention for environmentalists, and government action. This is not to say that the eastern part of the U.S. has not focused on OHV use. Being an OHV user for over a decade in Connecticut, Massachusetts, and Rhode Island I have seen a considerable increase in the amount of OHV's I see on the trails. Along with more OHV's I have seen a considerable increase in enforcement by the Department Of Environmental Protection, Department Of Motor Vehicles, and the local authorities.

Even though increased public interest for unconfined outdoor recreational activities has resulted in the expansion of OHV use, OHV users are a minority in comparison with other public land users. Public lands have also seen increases in hiking, mountain biking, horseback riding, hunting, and other public land recreational activities. A survey of the public land use at Gallatin National Forest in Montana, where nearly all the trails are opened to OHV's, demonstrated that the majority of people using the trails want a non-motorized experience (Silent Majority, 3). The survey showed that 8% of trail use was motorized. The majority of trail use was more traditional, quiet recreation such a watching wildlife/birds (84%), hiking (59%), or cross-country skiing (17%)

(Silent Majority, 6). This trend seems to be consistent nationwide. Of course, certain terrain attracts more OHV use, while other terrain attracts hikers, etc. Overall, it seems understandable that most public lands are not primarily used by OHV's. However, The Wildlife Society (TWS) does recognize that other, non-motorized forms of recreation can also have substantial impacts on wildlife because of the sheer numbers of participants today (ex. hiking, mountain biking, horseback riding, wildlife viewing, hunting) (Montana, 1.2). Nonetheless, the most visual impacts to natural resources by human use are mainly from OHV activities. The potential for damage far surpasses that of other activities (BML, 1).

Chapter 4

Changes in OHV Technology

Due to the increase in demand for OHV's many technological changes have resulted. Many of these changes have changed OHV use forever, and can be divided into the positive, and negative effects of these developments on the environment.

Technological advances that have a positive effect on the environment have the ability to minimize emissions, sound output, protect from fire, and loss of fluids. Today all motorized vehicles have to meet exhaust emissions standards set by the Environmental Protection Agency (EPA). This has resulted in more efficient, cleaner burning engines. Larger engines are required to have catalytic converters to further reduce emissions. Smaller engines, like those used in OHV's, have undergone extensive technological changes to meet these standards. High-tech materials, and new age machining practices have made it possible for four-stroke engines to meet the performance levels of two-

stroke engines and greatly exceed the poor emissions produced by 2 stroke engines. Standards placed on OHV's have required certain sound level outputs. Changes in muffler technology, and engine design have also made it possible for OHV's to meet these standards, and retain performance. Quieter four-stroke engines are replacing the two-stroke engine, which produces a high frequency, high velocity sound that travels further than the lower frequency sound of a four-stroke engine. Spark Arresters are required by the National Forest Service under 43CFR8340, and must trap or destroy 80 percent or more of the exhaust particles to which they are subjected. New-age machining practices, and improved sealants have also reduced contaminating oil-leakage problems associated with older engines. The use of plastic fuel tanks over steel has minimized the potential for rupturing in extreme conditions. The use of environmentally friendly non-toxic anti-freeze/coolant has also become common practice for OHV manufacturers, and users. These technological changes have greatly reduced the environmental risks associated with OHV use in sensitive areas.

Technological advances that have a negative effect on the environment are of the types that allow OHV users to attack terrain previously unreachable. As a result highly sensitive lands are now at the mercy of these OHV users.

The recent SUV craze of the late 90's, along with an increase in outdoor interests, has lead many to drive their SUV's off-road. Many people have modified these vehicles to further increase their performance off-road. They vary from mild use to extreme. Mild users generally pursue dirt roads, and existing trails. Extreme users pursue highly sensitive land that is unreachable, and difficult to maneuver, such as sand, hill climbs, water crossings, mud holes, dunes, etc. Some of the more common modifications are

larger and wider tires, increased clearance and suspension travel, and improved power output. Less common modifications include extremely oversized tires, excessively noisy exhaust systems, and large suspension travel. The less common modifications are aimed at off-road use only, and have the highest impact on the environment. The picture in Figure 1 shows a mildly modified SUV with a mild clearance increase, and oversized tires. In comparison to factory SUV's seen on public highways, one could easily imagine the potential for environmental damage by such a vehicle. Figures 2 & 3 show some ruts, which could have also been created by SUV's. As mentioned above the ruts, and tracks these SUV's leave behind have detrimental effects on the land.

Due to a constantly increasing demand for performance, today's ATV's are capable of maneuvering previously unreachable terrain. These vehicles are of high concern because due to their compact size, and ability to attack difficult terrain they can penetrate deep into sensitive habitats. Sensitive habitats previously unexposed to man's machines. The development of 4-wheel drive ATV's has nearly multiplied this concern. As a result of 4-wheel drive, these machines have the ability to cut their own trails, climb the steepest of grades, and cross the wettest of lands. Hunters in search of deep forests with minimal effort commonly use them. Figure 4 below shows one such machine attacking a mud hole effortlessly. The potential for serious environmental damage by these machines is evident.

Figure 4:

Chapter 5

New Policies Control And Enforce OHV Use

The outcry concerning OHV use on public land has resulted in policies being implemented in order to control and enforce their use. Many parks, and management areas have already had policies in place limiting use in accordance with Executive Orders 11644 (1972), 11989 (1978), and 43 CFR 8340. Due to the recent growth of OHV use, the Bureau of Land Management (BLM) has written a general set of guidelines focusing on OHV use called "National Management Strategy for Motorized Off-Highway Vehicle Use on Public Lands". These guidelines are contained in Appendix A. BLM managed lands use these guidelines as a base for OHV management, and make adjustments to suit there needs.

The Executive Orders 11644 (1972), and 43 CFR 8340 are a set of rules and regulations written defining OHV use issues. Appendices A and B contain excerpts from these orders. These orders define OHV use areas, set regulations governing use, and set standards for OHV design. Also mentioned is the use of enforcement to ensure policy compliance. The combination of a growing population of OHV users, and an increased demand for environmental protection has questioned the effectiveness of the above policies.

The BLM identified OHV use as a "national management issue" after discussions with other federal agencies, state agencies, county governments, the general public, and BLM staff (BLM, 1). The BLM guidelines are a first step in developing a pro-active approach to determine and implement better on the ground motorized off-highway vehicle management solutions. They are designed to conserve soil, wildlife, water

quality, native vegetation, air quality, heritage resources, and other resources while providing for appropriate motorized recreational opportunities. The BLM provides stewardship for 264 million acres of public land resources (BLM, 1). The purpose of this strategy is to help BLM field managers implement on the ground solutions to motorized OHV use by creating a framework for resolving OHV related issues. These issues include current motorized OHV designations, regulations, resource issues, special areas management, monitoring, education, law enforcement, and budget planning. This strategy is in full compliance with Executive Orders 11644 (1972), 11989 (1978), and 43 CFR 8340. It does not redefine regulations set by the previous executive orders, but does suggest a review of them.

The BLM strategy, identical to that of the Executive Orders, establishes management areas as Open, Limited, or Closed to OHV use. Definitions of each land designation are provided below as seen in the BLM manual.

Open: The BLM designates areas as "open" for intensive ORV use where there are no compelling resource protection needs, user conflicts, or public safety issues to warrant limiting cross-country travel.

Limited: The agency designates areas as "limited" where it must restrict ORV use in order to meet specific resource management objectives. This might restrict the number or types of OHV's, limiting time or season of use, permitted or licensed only, existing roads or trails only.

Closed: The BLM designates areas as "closed" if closure to all vehicular use is necessary to protect resources, ensure visitor safety, or reduce user conflicts.

Aside from environmental damage the prescribed strategy takes into careful consideration all the various user types of public land. It seems that the purpose of the strategy is not to just ban and control all OHV use and allow only environmentally friendly use. The strategy is aimed at the separation of conflicting users for an improved outdoor experience for all users. Of course, due to the smaller population of OHV users in relation to other user groups, there is a price to pay for this type of implementation. After reading the goals of the strategy I felt that they plan to balance all of the considerations as fairly as possible to best suit the land, and the users. This new implementation has lead officials to try to create OHV play areas designated for OHV use only. After all, hikers have hiking only trails, and equestrians have their trails, but the fact that there is an overall lack of OHV only areas pushes users to use other land.

Enforcement

As a result of the growth of OHV use an increase in demand for enforcement has resulted. In the past OHV enforcement was basically non-existent. Today OHV laws, and policies are enforced by Department Of Environmental Protection, Department Of Motor Vehicles, and the local authorities to just name a few. They serve as tools to enforce laws and policies, monitor OHV growth, educate land users, and implement necessary changes.

OHV management is aimed at all OHV types, not just ATV's, or dirt bikes. It is not believed that just one arena of summer OHV users threaten the environment. Summer OHV's can be split into registered, and unregistered. Depending on state policies dirt bikes, and ATV's do not have to be registered, while trucks, and SUV's must be registered in all fifty states. Trucks and SUV's are registered as highway use vehicles.

This makes using registration as a monitoring tool for areas they are used in difficult. On the other hand, dirt bikes, and ATV's are registered as off-road, or ATV vehicles. This gives states the ability to use registration as a measuring tool for many variables. To name a few, the concentration of OHV use in areas, growth over time, and policy effectiveness along with a means of identification for enforcement. Many states are now requiring registration, and have increased enforcement as a result. I spoke with a U.S. Forest Service official from a state park in Massachusetts closed to all OHV use, which requested to remain anonymous, but did say, "Registration of OHV's is half the battle". This park is known for impounding "unregistered OHV's". This leads me to believe that they release registered OHV's. A Connecticut Department Of Environmental Protection Officer, who requested to remain anonymous, said, "If I see a dirt bike with registration I take the numbers, and encourage the rider to use the land with respect". It is obvious that monitoring OHV use on existing trails is a primary concern in some states, not banning them.

The BLM has also called out for more funding in its new management strategy. This strategy identifies critical funding and staffing needs throughout the agency, to adequately address motorized OHV management. The public identified the need for increases in law enforcement capability. The public supported an increased law enforcement presence as an important component in the OHV management arena. Without actual personnel patrolling public lands it would be difficult to enforce them. Currently, each ranger patrols an average of 1.76 million acres of public remote lands (BLM, 16). New plans for educational programs, signing and mapping, inventory and monitoring, maintenance and construction, and development of partnerships and

volunteer programs will assist motorized law enforcement efforts. The new strategy has created two management goals listed below aimed at improving the effectiveness of enforcement (BLM, 16).

Management Goal I: *A strengthened ranger workforce.*

Action 1: Determine specific law enforcement needs, including new rangers and resources. Hire additional law enforcement rangers and locate positions, on a priority basis, to field offices with the greatest needs.

Action 2: Strengthen existing or develop new law enforcement agreements with state and local law enforcement agencies wherever feasible.

Management Goal II: *Opportunities for greater public involvement in OHV enforcement issues.*

Action: Explore establishing, wherever feasible, a system of 1-800 numbers to give citizens a convenient and timely method for reporting motorized OHV use concerns.

According to public concern the use of penalties and fines for OHV related violations should also be more effective. In the past many enforcement officials did not issue fines. As of recently, I have been issued fines in trails that I have been using for over 10 years. The use of fines for enforcement has obvious implementations, but the effectiveness of this strategy is at question.

Chapter 6

Analysis

The threats of the increasing OHV population, combined with a natural tendency for environmental damage give understandable reasoning for the recent attention from local, state, and federal governments. One can no longer argue that OHV's do not have negative effects on public lands. The onset of increased regulation could actually save our sport by minimizing the damage that could have someday lead to the banning of OHV's. Some policies will inevitably close some of our favorite trails, but these policies are geared towards providing us with appropriate motorized recreational activities and in turn will create new trails. The fact that OHV users are a minority amongst other outdoor activities, but a majority when it comes to those that can damage public land puts them in a difficult position. As a result we have to make our presence known. If other groups show more interest in our lands these areas will be taken away from us.

It would be reasonable to assume that a great deal of effort is put into keeping OHV's out of previously unused lands, or lands that have not seen much OHV use. These lands are especially vulnerable to OHV's. This leaves one to ask the question "Does opening existing trails and roads previously exposed to OHV use pose a threat to the land?" The answer is "Yes it does pose a threat, as we already know, but what is the big deal right now after all, these roads are already there, and for the most part have been used by OHV's since they were built". These trails, and roads have already been exposed to OHV's and would not be as effected by the continued use as new trails. At this point one could argue that keeping already existing areas open would reduce the concentration of OHV use in other areas that could be exposed to too much use. This is also dependent

on the terrain, and the population of other user groups. If there has been a road there for a hundred years, but the terrain is very sensitive it would be unacceptable to allow continued use there. If other less threatening groups also use the terrain one would also have a difficult time defending it. Even if the terrain were hard, packed, rocky, and flat one would still have to deal with potential sensitive habitats. It is evident that such a decision would be left to the discretion of the land management based on your argument. Maybe the thing to do would be to open the trails with certain limitations. Limiting speeds, OHV size, tire size, engine size, and sound output to a level that would have minimal effects on the land, but would be difficult to enforce.

Other interests such as hiking, horseback riding, mountain biking, wildlife viewing, and hunting seem to have an advantage over OHV users. These interests are seen as natural, quiet, non-polluting forms of recreation that belong in the natural, quiet, clean public lands. These groups do have some negative effects upon the environment. Horses for instance pollute trails with manure. Manure, in addition to being an inconvenience to hikers, has been proven to pollute water supplies in areas where horseback riding is common (Horses, 1). Horses also cause soil compaction, and erosion in sensitive environments (Horses, 1). Mountain biking also causes soil compaction, and erosion. And some argue that the sounds of hunting have negative effects upon sensitive habitats. One thing is true; the potential for damage by OHV use far surpasses that of other interests. As stated before these other interests are generally far more populated than OHV users. Since trail designation is based upon the relationship of OHV use to other interest groups these other groups play a major factor in the preservation of our sport.

There are already many regulations placed on OHV designs, and technology prior to their sale to the general public. Exhaust emissions, tire size, ride height, and sound regulations are some of the primary regulations upon OHV's. The one problem with this is that many people modify their OHV's to levels exceeding those set by government standards after they purchase them. As stated above these regulations control the potential for environmental damage caused by OHV's. Once these OHV's are modified there is no way no monitoring and limiting where they can go without closing sensitive areas. Creating power output limitations would reduce environmental damage. This is a system implemented on many lakes today. Lake Alexander in Danielson, Connecticut has a limit of 10-horsepower on the lake. Enforcing this type of policy would be much more difficult on land than on water and would require strict enforcement. Perhaps creating gates at trailheads that allow only certain types of OHV's based on size, and width to pass through. If only 2-wheeled motorcycles were permitted then only they could pass. Or gates would only allow hikers, or bicycles to pass through into more sensitive lands. Basically only physical characteristics could be limited without increasing enforcement. An increased law enforcement presence is basically the only way of regulating what is on our trails.

Chapter 7

Conclusion

The future of OHV use is in the hands of the users. The increasing OHV population will continuously challenge our sport due to careless users, and the natural tendency for environmental damage. Listed below is what we should be aware of, and ultimately follow.

- The way in which we use our OHV's on public land will ultimately be the deciding factor in preserving legal OHV use for future generations.
- Due to the small population of OHV users we have to join together and be heard in order to protect our lands.
- We can join organizations such as TREAD Lightly, an organization focused on the responsible use of public and private lands. Or you can write to local officials, and state senators asking for more open OHV land.
- When on trails we must respect others. If we see horses, or hikers we should pull off to the side, shut off the engine and let them pass.
- Keep your OHV's quiet, as loud OHV's make enemies for all OHV users.
- Most of all stay on trails and in areas opened to OHV use, and minimize impacts on public land.

Sources

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Appendix A

EXECUTIVE ORDER NO. 11644

< Feb. 8, 1972, 37 F.R. 2877, as amended by Ex. Ord. No. 11989, May 24, 1977, 42 F.R. 26959; Ex. Ord. No. 12608, Sept. 9, 1987, 52 F.R. 34617 >

USE OF OFF-ROAD VEHICLES ON PUBLIC LANDS

An estimated 5 million off-road recreational vehicles--motorcycles, minibikes, trail bikes, snowmobiles, dune buggies, all-terrain vehicles, and others--are in use in the United States today, and their popularity continues to increase rapidly. The widespread use of such vehicles on the public lands--often for legitimate purposes but also in frequent conflict with wise land and resource management practices, environmental values, and other types of recreational activity--has demonstrated the need for a unified Federal policy toward the use of such vehicles on the public lands.

Now, Therefore, by virtue of the authority vested in me as President of the United States by the Constitution of the United States and in furtherance of the purpose and policy of the National Environmental Policy Act of 1969 (42 U.S.C. 4321) [this chapter], it is hereby ordered as follows:

Section 1. Purpose. It is the purpose of this order to establish policies and provide for procedures that will ensure that the use of off-road vehicles on public lands will be controlled and directed so as to protect the resources of those lands, to promote the safety of all users of those lands, and to minimize conflicts among the various uses of those lands.

Sec. 2. Definitions. As used in this order, the term:

(1) "public lands" means (A) all lands under the custody and control of the Secretary of the Interior and the Secretary of Agriculture, except Indian lands, (B) lands under the custody and control of the Tennessee Valley Authority that are situated in western Kentucky and Tennessee and are designated as "Land Between the Lakes," and (C) lands under the custody and control of the Secretary of Defense;

(2) "respective agency head" means the Secretary of the Interior, the Secretary of Defense, the Secretary of Agriculture, and the Board of Directors of the Tennessee Valley Authority, with respect to public lands under the custody and control of each;

(3) "off-road vehicle" means any motorized vehicle designed for or capable of cross-country travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or other natural terrain; except that such term excludes (A) any registered motorboat, (B) any fire, military, emergency or law enforcement vehicle when used for emergency purposes, and any combat or combat support vehicle when used for national defense purposes, and (C) any vehicle whose use is expressly authorized by the respective agency head under a permit, lease, license, or contract; and

(4) "official use" means use by an employee, agent, or designated representative of the Federal Government or one of its contractors in the course of his employment, agency, or representation.

Sec. 3. Zones of use. (a) Each respective agency head shall develop and issue regulations and administrative instructions, within six months of the date of this order, to provide for administrative designation of the specific areas and trails on public lands on which the use of off-road vehicles may be permitted, and areas in which the use of off-road vehicles may not be

permitted, and set a date by which such designation of all public lands shall be completed. Those regulations shall direct that the designation of such areas and trails will be based upon the protection of the resources of the public lands, promotion of the safety of all users of those lands, and minimization of conflicts among the various uses of those lands. The regulations shall further require that the designation of such areas and trails shall be in accordance with the following—

(1) Areas and trails shall be located to minimize damage to soil, watershed, vegetation, or other resources of the public lands.

(2) Areas and trails shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats.

(3) Areas and trails shall be located to minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands, and to ensure the compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors.

(4) Areas and trails shall not be located in officially designated Wilderness Areas or Primitive Areas. Areas and trails shall be located in areas of the National Park system, Natural Areas, or National Wildlife Refuges and Game Ranges only if the respective agency head determines that off-road vehicle use in such locations will not adversely affect their natural, aesthetic, or scenic values.

(b) The respective agency head shall ensure adequate opportunity for public participation in the promulgation of such regulations and in the designation of areas and trails under this section.

(c) The limitations on off-road vehicle use imposed under this section shall not apply to official use.

Sec. 4. Operating conditions. Each respective agency head shall develop and publish, within one year of the date of this order, regulations prescribing operating conditions for off-road vehicles on the public lands. These regulations shall be directed at protecting resource values, preserving public health, safety, and welfare, and minimizing use conflicts.

Sec. 5. Public information. The respective agency head shall ensure that areas and trails where off-road vehicle use is permitted are well marked and shall provide for the publication and distribution of information, including maps, describing such areas and trails and explaining the conditions on vehicle use. He shall seek cooperation of relevant State agencies in the dissemination of this information.

Sec. 6. Enforcement. The respective agency head shall, where authorized by law, prescribe appropriate penalties for violation of regulations adopted pursuant to this order, and shall establish procedures for the enforcement of those regulations. To the extent permitted by law, he may enter into agreements with State or local governmental agencies for cooperative enforcement of laws and regulations relating to off-road vehicle use.

Sec. 7. Consultation. Before issuing the regulations or administrative instructions required by this order or designating areas or trails as required by this order and those regulations and administrative instructions, the Secretary of the Interior shall, as appropriate, consult with the Secretary of Energy and the Nuclear Regulatory Commission.

Sec. 8. Monitoring of effects and review. (a) The respective agency head shall monitor the effects of the use of off-road vehicles on lands under their jurisdictions. On the basis of the information gathered, they shall from time to time amend or rescind designations of areas or other actions taken pursuant to this order as necessary to further the policy of this order.

(b) The Council on Environmental Quality shall maintain a continuing review of the implementation of this order.

Sec. 9. Special protection of the public lands. (a) Notwithstanding the provisions of Section 3 of this Order, the respective agency head

shall, whenever he determines that the use of off-road vehicles will cause or is causing considerable adverse effects on the soil, vegetation, wildlife, wildlife habitat or cultural or historic resources of particular areas or trails of the public lands, immediately close such areas or trails to the type of off-road vehicle causing such effects, until such time as he determines that such adverse effects have been eliminated and that measures have been implemented to prevent future recurrence.

(b) Each respective agency head is authorized to adopt the policy that portions of the public lands within his jurisdiction shall be closed to use by off-road vehicles except those areas or trails which are suitable and specifically designated as open to such use pursuant to Section 3 of this Order.

RICHARD NIXON

Appendix B

CODE OF FEDERAL REGULATIONS
TITLE 43--PUBLIC LANDS: INTERIOR

PART 8340--OFF-ROAD VEHICLES

Subpart 8340 – General

Subpart 8341 – Conditions of Use

Subpart 8342 – Designation of Areas and Trails

Subpart 8343 – Vehicle Operations

Subpart 8344 – Permits

AUTHORITY: 43 U.S.C. 1201, 43 U.S.C. 315a, 16 U.S.C. 1531 *et seq.*, 16 U.S.C. 1281c, 16 U.S.C. 670 *et seq.*, 16 U.S.C. 460*l*-6a, 16 U.S.C. 1241 *et seq.*, and 43 U.S.C. 1701 *et seq.*

SOURCE: 44 FR 34836, June 15, 1979, unless otherwise noted.

SUBPART 8340--GENERAL

§ 8340.0-1 Purpose.

The purpose of this part is to establish criteria for designating public lands as open, limited or closed to the use of off-road vehicles and establishing controls governing the use a operation of off-road vehicles in such areas.

§ 8340.0-2 Objectives.

The objectives of these regulations are protect the resources of the public lands, promote the safety of all users of those lands, a to minimize conflicts among the various uses those lands.

§ 8340.0-3 Authority.

The provisions of this part are issued under Federal Land Policy and Management Act of 19 (43 U.S.C. 1701 *et seq.*); the Taylor Grazing A 43 U.S.C. 315a); the Endangered Species Act U.S.C. 1531 *et seq.*); the Wild and Scenic Riv Act (16 U.S.C. 1281c); the Act of September 1960, as amended (16 U.S.C. 670 *et seq.*); Land and Water Conservation Fund Act (16 U.S 460*l*-6a); the National Trails System Act (16 U.S 1241 *et seq.*) and EO 11644 (Use of Off-Ro Vehicles on the Public Lands), 37 FR 2877, 3 C 74, 332, as amended by EO 11989 42 FR 269 (May 25, 1977).

§ 8340.0-5 Definitions.

As used in this part:

(a) *"Off-Road Vehicle"* means any motori vehicle capable of, or designed for, travel on immediately over land, water, or other natu terrain, excluding: (1) Any nonamphibi registered motorboat; (2) any military, f emergency, or law enforcement vehicle w being used for emergency purposes; (3) vehicle whose use is expressly authorized by authorized officer, or otherwise officially approv (4) Vehicles in official use; and (5) any comba combat support vehicle when used in times national defense emergencies.

(b) *"Public Lands"* means any lands the surface of which is administered by the Bureau of Land Management.

(c) *"Bureau"* means the Bureau of Land Management.

(d) *"Official Use"* means use by an employee, agent, or designated representative of the Federal Government or one of its contractors, in the course of his employment, agency, or representation.

(e) *"Planning System"* means the approach provided in Bureau regulations, directives and manuals to formulate multiple use plans for the public lands. This approach provides for public participation within the system.

(f) *"Open area"* means an area where all types of vehicle use is permitted at all times, anywhere in the area subject to the operating regulations and vehicle standards set forth in Subparts 8341 and 8342 of this title.

(g) *"Limited area"* means an area restricted at certain times, in certain areas, and/or to certain vehicular use. These restrictions may be of any type, but can generally be accommodated within the following type of categories: Numbers of vehicles; types of vehicles; time or season of vehicle use; permitted or licensed use only; use on existing roads and trails; use on designated roads and trails; and other restrictions.

(h) *"Closed area"* means an area where off-road vehicle use is prohibited. Use of off-road vehicles in closed areas may be allowed for certain reasons; however, such use shall be made only with the approval of the authorized officer.

(i) *"Spark Arrester"* is any device which traps or destroys 80 percent or more of the exhaust particles to which it is subjected.

[53 FR 31003, Aug. 17, 1988]

§ 8340.0-7 Penalties.

Any person who violates or fails to comply with the regulations of Subparts 8341 and 8343 is subject to arrest, conviction, and punishment pursuant to appropriate laws and regulations. Such punishment may be a fine of not more than $1,000 or imprisonment for not longer than 12 months, or both.

§ 8340.0-8 Applicability.

The regulations in this part apply to all public lands, roads, and trails under administration of the Bureau.

(h) Any person who operates an off-road vehicle on public lands must comply with the regulations in this part, and in § 8341.2 as applicable, while operating such vehicle on public lands.

SUBPART 8341--CONDITIONS OF USE

§ 8341.1 Regulations governing use.

(a) The operation of off-road vehicles is permitted on those areas and trails designated as open to off-road vehicle use.

(b) Any person operating an off-road vehicle on those areas and trails designated as limited shall conform to all terms and conditions of the applicable designation orders.

(c) The operation of off-road vehicles is prohibited on those areas and trails closed to off-road vehicle use.

(d) It is prohibited to operate an off-road vehicle in violation of State laws and regulations relating to use, standards, registration, operation, and inspection of off-road vehicles. To the extent that State laws and regulations do not exist or are less stringent than the regulations in this part, the regulations in this part are minimum standards and are controlling.

(e) No person may operate an off-road vehicle on public lands without a valid State operator's license or learner's permit where required by State or Federal law.

(f) No person shall operate an off-road vehicle on public lands:

(1) In a reckless, careless, or negligent manner;

(2) In excess of established speed limits;

(3) While under the influence of alcohol, narcotics, or dangerous drugs;

(4) In a manner causing, or likely to cause significant, undue damage to or disturbance of the soil, wildlife, wildlife habitat, improvements, cultural, or vegetative resources or other authorized uses of the public lands; and

(5) During night hours, from a half-hour after sunset to a half-hour before sunrise, without lighted headlights and taillights.

(g) Drivers of off-road vehicles shall yield the right-of-way to pedestrians, saddle horses, pack trains, and animal-drawn vehicles.

[44 FR 34836, June 15, 1979, as amended at 45 FR 47843, July 17, 1980]

§ 8341.2 Special rules.

(a) Notwithstanding the consultation provisions in § 8342.2(a), where the authorized officer determines that off-road vehicles are causing or will cause considerable adverse effects upon soil, vegetation, wildlife, wildlife habitat, cultural resources, historical resources, threatened or endangered species, wilderness suitability, other authorized uses, or other resources, the authorized officer shall immediately close the areas affected to the type(s) of vehicle causing the adverse effect until the adverse effects are eliminated and measures implemented to prevent recurrence. Such closures will not prevent designation in accordance with procedures in Subpart 8342 of this part, but these lands shall not be opened to the type(s) of off-road vehicle to which it was closed unless the authorized officer determines that the adverse effects have been eliminated and measures implemented to prevent recurrence.

(b) Each State director is authorized to close portions of the public lands to use by off-road vehicles, except those areas or trails which are suitable and specifically designated as open to such use pursuant to Subpart 8342 of this part.

[53 FR 31003, Aug. 17, 1988]

SUBPART 8342--DESIGNATION OF AREAS AND TRAILS

§ 8342.1 Designation criteria.

The authorized officer shall designate all public lands as either open, limited, or closed to off-road vehicles. All designations shall be based on the protection of the resources of the public lands, the promotion of the safety of all the users of the public lands, and the minimization of conflicts among various uses of the public lands; and in accordance with the following criteria:

(b) *Designation.* The approval of a resource management plan, plan revision, or plan amendment constitutes formal designation of off-road vehicle use areas. Public notice of designation or redesignation shall be provided through the publication of the notice required by § 1610.5-1(b) of this Title. Copies of such

(a) Areas and trails shall be located to minimize damage to soil, watershed, vegetation, air, or other resources of the public lands, and to prevent impairment of wilderness suitability.

(b) Areas and trails shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats. Special attention will be given to protect endangered or threatened species and their habitats.

(c) Areas and trails shall be located to minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands, and to ensure the compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors.

(d) Areas and trails shall not be located in officially designated wilderness areas or primitive areas. Areas and trails shall be
located in natural areas only if the authorized officer determines that off-road vehicle use in such locations will not adversely affect their natural, esthetic, scenic, or other values for which such areas are established.

§ 8342.2 Designation procedures.

(a) *Public participation.* The designation and redesignation of trails is accomplished through the resource management planning process described in Part 1600 of this Title. Current and potential impacts of specific vehicle types on all resources and uses in the planning area shall be considered in the process of preparing resource management plans, plan revisions, or plan amendments. Prior to making designations or redesignations, the authorized officer shall consult with interested user groups, Federal, State, county and local agencies, local landowners, and other parties in a manner that provides an opportunity for the public to express itself and have its views given consideration.

notice shall be available to the public in local Bureau offices.

(c) *Identification of designated areas and trails.* The authorized officer shall, after designation, take action by marking and other appropriate measures to identify designated areas and trails so that the public will be aware of locations and limitations applicable thereto. The authorized officer shall make appropriate informational material, including maps, available for public review.

[53 FR 31003, Aug. 17, 1988]

§ 8342.3 Designation changes.

Monitoring use. The authorized officer shall monitor effects of the use of off-road vehicles. On the basis of information so obtained, and whenever the authorized officer deems it necessary to carry out the objectives of this part, designations may be amended, revised, revoked, or other actions taken pursuant to the regulations in this part.

SUBPART 8343--VEHICLE OPERATIONS

§ 8343.1 Standards.

(a) No off-road vehicle may be operated on public lands unless equipped with brakes in good working condition.

(b) No off-road vehicle equipped with a muffler cutout, bypass, or similar device, or producing excessive noise exceeding Environmental Protection Agency standards, when established, may be operated on public lands.

(c) By posting appropriate signs or by marking a map which shall be available for public inspection at local Bureau offices, the authorized officer may indicate those public lands upon which no off-road vehicle may be operated unless equipped with a properly installed spark arrester. The spark arrester must meet either the U.S. Department of Agriculture--Forest Service Standard 5100-1a, or the 80-percent efficiency level standard when determined by the appropriate Society of Automotive Engineers (SAE) Recommended Practices J335 or J350. These standards include, among others, the requirements that: (1) The spark arrester shall have an efficiency to retain or destroy at least 80 percent of carbon particles for all flow rates, and (2) the spark arrester has been warranted by its manufacturer as meeting this efficiency requirement for at least 1,000 hours subject to normal use, with maintenance and mounting in accordance with the manufacturer's recommendation. A spark arrester is not required when an off-road vehicle is being operated in an area which has 3 or more inches of snow on the ground.

(d) Vehicles operating during night hours, from a half-hour after sunset to a half-hour before sunrise, shall comply with the following:

(1) Headlights shall be of sufficient power to illuminate an object at 300 feet at night under normal, clear atmospheric conditions. Two- or three-wheeled vehicles or single-tracked vehicles will have a minimum of one headlight. Vehicles having four or more wheels or more than a single track will have a minimum of two headlights, except double tracked snowmachines with a maximum capacity of two people may have only one headlight.

(2) Red taillights, capable of being seen at a distance of 500 feet from the rear at night under normal, clear atmospheric conditions, are required on vehicles in the same numbers as headlights.

SUBPART 8344--PERMITS

§ 8344.1 Permit requirements.

Permits are required for certain types of ORV use and shall be issued in accordance with the special recreation permit procedures under Subpart 8372 of this chapter.