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REGULATION OF OFF-ROAD VEHICLES

Gary A. Rosenberg*

Introduction

A meteoric rise in the use of the off-road vehicle (ORV)—the snowmobile, trailbike, dune buggy, all-terrain vehicle, and any other motorized means of transportation whose value begins where the regular public roads end—has intensified the pervasive conflict between environmental interests and advancing, but polluting, technology. The explosion in ORV use has been well documented, with snowmobiles being by far the most popular means of off-road travel.

Besides their obvious recreational attributes, ORVs have had a significant economic impact for their manufacturers, as well as for certain communities. For instance, many sleepy snowbelt towns which had failed to capture the skiing trade have had their economies strengthened by being transformed into winter snowmobile resorts.² The popularity of ORVs may also be linked to their great utility in aiding land managers, public utility and emergency per-

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¹ Of the five million ORVs owned as of 1972, approximately one-half are snowmobiles. See N.Y. Times, Feb. 20, 1972, § IV, at 12, col. 1; id., March 3, 1974, § III, at 15, col. 1. Annual snowmobile sales in 1964-1970 jumped from 8,000 to over 500,000 vehicles. M. Baldwin, The Off-Road Vehicle and Environmental Quality 7 (1970), cited in Snowmobiles—A Legislative Program, 1972 Wis. L. Rev. 477 n.1 (hereinafter cited as Wis. Comment). All-terrain vehicle sales increased from 2,000 in 1967 to 18,000 in 1971. M. Baldwin and D. Stoddard, The Off-Road Vehicle and Environmental Quality (The Conservation Foundation, 1973) cited in R. Heath, The Environmental Consequences of the Off-Road Vehicle: with profiles of the industry and the enthusiast 17 (Friends of the Earth, 1974) (hereinafter cited as Heath). The actual number of ORVs is difficult to estimate because many motorcycles and four-wheel drive vehicles have off-road capabilities, thereby increasing the number of ORVs above the number of reported ORV sales or registrations.

² For example, during one weekend competition in 1970, Eagle River, Wisconsin grossed approximately \$1,000,000. Capital Times (Madison), Feb. 8, 1971, at 31, col. 2, as cited in Wis. Comment, supra note 1 at 478 n. 8.

sonnel, physicians, and others to reach previously inaccessible areas.³

On the other hand, the costs of ORV use to the environment, other recreationers, and private landowners can be great and, in general, are not borne by the ORV users themselves. For instance, trailbike noise and air pollutants can have serious impacts upon bird and wildlife habitats such as bogs and swamps. They can also damage forest soil by displacing topsoil and leaves and compressing the underlying soil, thereby encouraging erosion. Snowmobiles, by compacting the snow, cause a lowering of ground temperatures, creating an impediment to the movement of small burrowing animals and disturbing delicate bacterial decomposition mechanisms. Young, brittle saplings partially exposed above the snow are also prime victims of careless snowmobile use. The list of environmental damage could extend almost indefinitely. ORV use, if left unregulated, has the potential to cause grave, irreparable, environmental harm

In terms of total recreational use, ORVs are inefficient in that they cause serious user-conflicts. That is, one ORV operator can effectively restrict a large public area to his own use through the emission of loud engine noise, obnoxious smoke, gas and oil odors and dangerously high speeds. Whereas previously many persons of all ages and wealth could observe the beauty of unspoiled land, now a single ORV can reign supreme.

Furthermore, widespread ORV use can cause inconvenience and distress to private landowners. The indiscretion of some ORV users on private lands has resulted in a serious impediment to landowners' quiet enjoyment of their property.

In view of the ORVs many benefits and the large number of ORV owners, total prohibition of its use is politically impractical. On the other hand, the numerous environmental injuries inflicted by ORVs

³ D. Dunn, Motorized Recreation Vehicles... On Borrowed Time, PARKS AND RECREATION, July, 1970, in Hearings on S1216 and S681 Before the Senate Committee on Interior and Insular Affairs, 92d Cong., 1st Sess. 114 (1971) (hereinafter cited as NEPA Hearings).

⁴ These areas, although unsuitable for agricultural or residential development, provide valuable homes for unique plants and animals and resting places for waterfowl. S. Bennett, *Trail Riding and the Environment*, The New England Trail Riders, May, 1971 in pamphlet published by the New England Trail Riders Ass'n, West Newbury, Mass. (hereinafter cited as Bennett).

⁵ *Id*.

⁶ Heath, supra note 1, at 7-12.

⁷ Wis. Comment, supra note 1, at 497. Several states, recognizing this problem, have prohibited any snowmobile activity in fragile reforested or nursery areas. See text at note 101, infra.

make some form of regulation essential. In designing an effective regulatory scheme, several initial problems must be addressed. For example, which level of government is best equipped to regulate ORVs—federal, state, or local, or some combination thereof? Should lands be presumed to be "closed" to ORV use unless specifically designated by the regulatory authority as "open," or should they be presumed "open" unless specifically "closed?" Since each tract of land is unique and must be evaluated independently for ORV use, what should the criteria guiding such an evaluation be and how should they be chosen?

Assuming that these questions can be satisfactorily answered, however, the regulating authority will be faced with enforcement problems that are unique to ORVs. ORVs generally travel in secluded, "backwoods" areas, making enforcement of statutory provisions such as muffler requirements or speed limits extremely difficult.⁸

Until recently, state and federal agencies followed traditional multiple-use policies which allowed public lands to be used by many types of recreationers. Unprepared for the sudden increase in ORV use, these agencies possessed no existing framework through which to develop adequate regulatory programs. The frequent result of this inaction was that these all-purpose areas came to be used exclusively by ORVs.

Subsequent efforts by federal and state governments have attempted to solve the problems caused by ORVs, and have resulted in varying degrees of success. In 1972, the President issued Executive Order 11644, 10 which articulated federal policy in regard to ORV use and established guidelines through which federal agencies could implement this policy. State legislatures, in some instances, also have enacted laws attempting to regulate ORVs. In analyzing certain of these efforts, this article will first examine the scope and effectiveness of the regulations promulgated pursuant to the Executive Order by the federal government's Bureau of Land Management (BLM), 11 the National Park Service, 12 and the United States

⁸ See text at note 142, infra.

⁹ Heath, supra note 1, at 4-5.

¹⁰ Exec. Order 11644, Feb. 9, 1972, 3 C.F.R. 332 (1974), 42 U.S.C. §4321 (Supp. III, 1974).

[&]quot;The Bureau of Land Management has the responsibility of classifying, managing, and disposing of the public lands and their related resources. The Onyx Group, Inc., Environment, USA 9 1974 (hereinafter cited as Environment, USA). It administers, as of 1973, 473,994,847 acres, or approximately one-fifth of the land area of the U.S., approximately 60% of all federally-owned land in the U.S., and over 80% of the federal land under the administra-

Fish and Wildlife Service, ¹³ (all under the auspices of the Department of the Interior) and the United States Forest Service, ¹⁴ located within the Department of Agriculture. Next the article will examine the effectiveness of state regulation of ORVs; in order to simplify the analysis, such examination will concentrate on the regulations of the New England states (a fairly representative cross-section of existing state ORV legislation). The article will further examine the problem of state ORV regulation on private land. After discussing the many weaknesses in existing legislation and determining that changes in ORV regulation are in order, the article will conclude by examining proposals which better attempt to accommodate reasonable ORV use with sound environmental policy.

I. General Federal Authority to Regulate ORVs

The authority to regulate or prohibit harmful activities on certain federal lands has been held by various federal land managers for many years. However, these powers had not been specifically applied to ORVs¹⁶ until the Fish and Wildlife Service promulgated

tion of the Department of the Interior. Statistics supplied by the Bureau of Land Management, Wash., D.C. and United States Public Land Law Review Commission, One Third of the Nation's Land 19 (1970) cited in Managing Federal Lands: Replacing the Multiple Use System, 82 YALE L. J. 787 at n. 1 (1973).

¹² The National Park Service regulates over 280 units of national parks, historic sites, monuments, and recreation areas, totaling 4,781,091 acres. Besides protecting the natural environment of the area, the Park Service assists state and local governments in establishing and preserving the natural environment. Statistics supplied by the National Park Service and Environment, USA, *supra* note 11, at 21.

¹³ Administering approximately 34 million acres, the United States Fish and Wildlife Service assists state fish and wildlife agencies, provides technical assistance in preserving waters for sport fishing, and directs the National Wildlife Refuge System. The System includes 329 refuges and game ranges that provide a home for migratory birds and protect endangered species, besides allowing public enjoyment of natural resources. Environment, USA, *supra* note 11, at 20.

¹⁴ The U.S. Forest Service supervises the National Forest System, cosisting of 155 national forests and 19 national grasslands, a total of 187 million acres. About 14.5 million acres of forest are reserved as wilderness and primitive areas. The Forest Service seeks to protect and improve the quality of air, soil, water and natural beauty and foster optimum forest landownership patterns. *Id.* at 9.

¹⁵ For instance, the authority to regulate harmful activities on lands such as those under the jurisdiction of the National Wildlife Refuge System was granted in 16 U.S.C. § 668dd (1970). See also, National Wilderness Preservation System, 16 U.S.C. § 1131 (a) (1970); the National Parks Organic Act, 16 U.S.C. § 1 (1970); and the National Forest Service Act, 16 U.S.C. § 551 (1970).

¹⁶ This situation is a good example of the "administrative unresponsiveness to environmental claims" discussed in D. Large, *Is Anybody Listening? The Problem of Access in Environmental Litigation*, 1972 Wis. L. Rev. 62. A major part of the environmental legislation problem, according to Large, is too much power in the hands of administrative agencies who, in

regulations in 1973 greatly curtailing access to Back Bay National Wildlife Refuge in Virginia for most vehicles.¹⁷ The regulations were issued pursuant to the general statutory mandate of the Migratory Bird Conservation Act, which granted to the Secretary of Interior the power "to conserve and protect migratory birds... and to restore or develop adequate wildlife habitat." Limitations on ORV use were deemed necessary to curtail the damage to dunes and the disturbance of feeding migratory birds, shore-resting birds, crabs, turtles, and other wildlife, which had resulted from the increasing number of ORVs using the Refuge beach as an access route to summer home developments to the south. These regulations were upheld by the Fourth Circuit Court of Appeals in Coupland v. Morton as a valid exercise of authority under the Migratory Bird Conservation Act.

II. Specific Federal Guidelines to Regulate ORVs—Executive Order 11644

As a result of this general statutory authority (approved in *Coupland*) not being widely used, and because ORVs posed an increasingly serious threat to the environment, further control was necessary. Therefore, the President issued Executive Order 11644²² which explicitly acknowledged the problem as follows:

the widespread use of [ORVs] 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.²³

turn, are too cooperative with private industry. To see the ORV industry pressures at work, see 5 Env. L. Rep. 10148.

¹⁷ 38 Fed. Reg. 5339 (1973). Exempted from this prohibition were vehicles owned by year-round residents and emergency, school, public utility and service trucks.

¹⁸ 16 U.S.C. § 715i (a) (1970).

¹⁹ Heath, supra note 1, at 18-19.

²⁰ Judge MacKenzie cites the statistics on page 3 of his lower-court opinion in Coupland v. Morton, Civil No. 145-73-N (E.D. Va. Feb. 26, 1975), aff'd per curiam (4th Cir. July 7, 1975). [hereinafter cited as Coupland]. Both court decisions are printed in 5 Env. L. Rep. 20504, 20507. In the 1950's, only a "nominal car or so per day" passed on the hard beach. "With the advent of four-wheel drive automobiles," came "an increase in vehicular use" on the beach. By the mid-1960's, beach traffic greatly increased and a survey made on June 6, 1971 "showed 1,000 cars moving along the beachfront through the [Wildlife Refuge] passing the check point at the rate of 150 per hour."

²¹ Id

²² Feb. 9, 1972, 3 C.F.R. 332 (1974), 42 U.S.C. § 4321 (Supp. III, 1974).

²³ Id.

The Order generally directs the Secretaries of Interior, Agriculture, and Defense and the Tennessee Valley Authority to develop their own administrative frameworks for designating specific areas and trails on all public lands within their respective custody and control upon which ORV travel may or may not be permitted,²⁴ and for administering ORV use thereon. Section 3(a) of the Order defines those environmental criteria which shall be considered in the designating of land as open or closed to ORV use:

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.²⁵

The Order further recognizes the unique value of certain federal lands and therefore affords to them greater protection from ORV use:

(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.²⁶

This section creates a presumption against ORV use on these specified lands unless the agency head determines, using his own criteria, that ORV use is acceptable. No such presumption is created as to other lands.

Section 3(b) of the Order provides for public participation both

²⁴ Id. § 3(a).

²⁵ Id. Some critics feel that even the criteria set forth in the Executive Order are too weak, since they only call for "minimizing" and not "eliminating" wildlife harassment and damage to soil. See N.Y. Times, Feb. 20, 1972 § IV, at 12, col. 1.

²⁶ Feb. 9, 1972, 3 C.F.R. 332 § 3(a) (1974), 42 U.S.C. § 4321 (Supp. III, 1974).

in the drafting of regulations and in the designation of areas and trails.²⁷ Section 4 mandates the Secretaries' promulgation of specific guidelines concerning ORV operating conditions on public lands, the regulations to be directed at "protecting resource values, preserving public health, safety, and welfare, and minimizing use conflicts."²⁸ Section 5 of the Order, the "Public Information" section, calls for "well-marked" ORV areas and trails and provides for the public distribution of agency regulations.²⁹

Executive Order 11644 does not totally eliminate the use of ORVs on federally-controlled lands.³⁰ In fact, environmentalists may complain that the Order provides only a bare minimum of environmental protection. The Order, however, does provide a foundation for vigorous environmental protection. Unfortunately, the appropriate agencies have not taken full advantage of the opportunity provided to construct environmentally sound and effective ORV regulatory schemes.

A. Operating Conditions

As mentioned above, § 4 of the Executive Order directs the federal agencies to issue protective ORV operating regulations.³¹ Such regulations have been adopted by four of the largest land-controlling agencies: the Bureau of Land Management (BLM), the Fish and Wildlife Service, the National Park Service, and the Forest Service.³² Notwithstanding the "unified Federal policy" goal set forth in the Order, the operating regulations which these agencies have adopted vary widely. The agencies have provided for differing amounts of environmental protection in some areas and no protection at all in others.

Two common causes of accidental environmental injury have been recognized and prohibited by all four agencies. The agencies are in agreement as to the prohibition of ORV operations on land within their jurisdiction while the driver is under the influence of

²⁷ Id. § 3(b).

²⁸ Id. § 4.

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. Id. § 5.

³⁰ But it does ban such use in Wilderness and Primitive Areas. See text at note 26, supra.

³¹ See text at note 28, supra.

³² The secretaries charged with implementing Executive Order 11644 opted to delegate the regulatory powers to the expertise of the relevant administrative agencies.

drugs or intoxicating liquor.³³ Each agency also requires that any ORV used at nighttime be equipped with operating headlights and taillights.³⁴

The weaknesses of the federal agency regulations are obvious in several areas. For example, agency muffler requirements merely demand a muffler in "good working order,"³⁵ or require ORVs to conform to the laws of the state as long as they do not produce "unusual or excessive noise."³⁶ The regulations of each agency also are lax in requiring only "proper" or "operable" braking systems.³⁷ In fact, the National Park Service places no braking requirement at all on snowmobiles even though they are allowed to travel at speeds of up to 45 mph. Furthermore, only the Park Service has any requirement for ORV operators to yield the right-of-way to others.³⁸

Similarly, although ORVs are recognized as polluting,³⁹ a lack of regulation of air pollution emissions exists, notwithstanding the agencies' apparent authority to control air emissions by virtue of the Executive Order's language directing agency operating regulations to "preserve public health." This failure to impose exhaust emission controls is compounded by the exemption of ORVs from EPA requirements established pursuant to the Clean Air Act, which

³³ BLM-43 C.F.R. § 6295.2(c) (1975); Fish and Wildlife—50 C.F.R. § 28.7(c) (1975); Forestry Service—36 C.F.R. § 295.6(e) (1975); Parks Service—36 C.F.R. § 4.6 (for all motor vehicles), 36 C.F.R. § 2.34 (f) (1975) (for snowmobiles).

³⁴ BLM—43 C.F.R. § 6295.2 (e) (1975); Fish and Wildlife—50 C.F.R. § 28.7(j) (1975); Forestry Service—36 C.F.R. § 295.6(k) (1975); Parks Service—36 C.F.R. § 4.19(e) (1975).

³⁵ BLM—43 C.F.R. § 6295.3(a) (1975); Forestry Service—36 C.F.R. § 295.6(e) (1975); Parks Service—36 C.F.R. § 4.12(a) (1975) (motor vehicles), 36 C.F.R. § 2.34 (d)(1) (snowmobiles).

³⁶ Fish and Wildlife-50 C.F.R. § 28.7 (i) (1975).

³⁷ BLM—43 C.F.R. § 6295.3(a) (1975) (brakes); Fish and Wildlife—50 C.F.R. § 28.7(j) (1975); Forestry Service—36 C.F.R. § 295.6(j) (1975); Parks Service—36 C.F.R. § 4.21 (1975) (brakes, applies to motor vehicles only).

^{38 36} C.F.R. § 4.16 (1975) (right of way for motor vehicles) states:

⁽a) The operator of any vehicle, when being approached from any direction by any authorized emergency vehicle giving an audible or visual signal, shall yield the right of way to the emergency vehicle.

⁽b) Pedestrians, saddle horses, pack trains, and horse-drawn vehicles have right of way over motor vehicles.

³⁶ C.F.R. § 2.34(h) (1975) (right of way for snowmobiles) states:

⁽h) Right-of-way. The operator of a snowmobile shall slow his vehicle to a reasonable and prudent speed and shall yield the right-of-way, when overtaking or traveling near any person who is not within a snowmobile.

One can only wonder how the National Park Service can expect a snowmobiler traveling at 45 mph to slow the vehicle and yield the right of way when approaching a pedestrian if no requirements exist for any physical means of doing so.

³⁹ Heath, supra note 1, at 30, and Bennett, supra note 4.

⁴⁰ See text at note 28, supra.

^{41 42} U.S.C. § 1857f-1 et seq. (1970).

defines a motor vehicle as ". . . any self-propelled vehicle designed for transporting persons or property on a *street or highway*" (emphasis added).

In order to adequately protect the environment, the appropriate agencies must issue operating regulations which contain more stringent rules than those currently in effect. Braking mechanisms which meet strict requirements should be mandatory on all ORVs. ORV operators should be required to yield the right-of-way to any person or animal. In keeping with the spirit of Executive Order 11644 all regulations should attempt to minimize damage or disturbance and not merely to prevent excessive damage to plants or wildlife. Additionally, strict air emissions levels should be adopted by the federal agencies which, besides placing limitations on ORV air emissions on federal lands, hopefully will demonstrate to Congress the need for pollution controls on all lands and therefore will include recreational vehicles within the jurisdiction of the Clean Air Act.

The problem of noise pollution levels demonstrates a problem other than the weakness of the federal regulations, that is, their non-uniformity. An example of this latter problem is illustrated by the previously mentioned requirement of some agencies that ORVs need only conform to the noise level of the particular state wherein they are located. The resulting non-uniformity unfairly imposes hardship upon ORV owners who must attempt to comply with the individual noise requirements of each state or area in which they desire to operate their vehicle. Even more importantly, less rigid standards in one state may negate the environmental efforts of a neighboring state in situations of interstate ORV use. Thus, noise emission levels should be made uniform by some nationwide authority.

Congress has recognized this problem and attempted to eliminate the fluctuating noise standards. The Environmental Protection Agency has been authorized by the Noise Control Act of 1972⁴⁵ to establish performance noise emissions standards for recreational vehicles which have been identified as a "major source of noise"⁴⁶ and for which noise emission standards are "feasible."⁴⁷ The Act prohibits any state or local regulation of noise emissions from ORVs

⁴² Id. at § 1857f-7.

⁴³ BLM—43 C.F.R. § 6295.2(d) (1975); Forestry Service—36 C.F.R. § 295.6(f) (1975).

[&]quot; Fish and Wildlife—50 C.F.R. § 28.7(i) (1975); Forestry Service—36 C.F.R. § 295.6 (1)(2) (1975).

^{45 42} U.S.C. § 2901 et seq. (Supp. II, 1972).

⁴⁶ Id. § 4904(b)(1).

⁴⁷ Id. § 4905(a)(1).

that is not identical with standards adopted by the EPA.⁴⁸ Violation of the standards by ORV manufacturers could result in fines, imprisonment, or both.⁴⁹ Unfortunately, these noise levels have yet to be established, in spite of the fact that ORVs are often cited as being a major source of irritation and that technology exists to lessen noise levels without reducing the power of the machine.⁵⁰

The non-uniformity of regulations is present in other areas as well. For example, all regulations call for vehicular speed limits, but they vary from the BLM's and Forestry Service's demand for compliance with the established state speed limits to Fish and Wildlife's 35 mph limit to the National Park Service's 45 mph maximum.⁵¹

B. Land Designation Criteria, Public Participation, and Notification—BLM regulations and National Wildlife Federation v. Morton

The Executive Order directed the federal agencies to promulgate not only ORV operating conditions regulations, but also procedural regulations regarding land designations.⁵² The Order further directed the agencies to allow public participation in the land designation procedures⁵³ and to notify the public of all agency decisions

The real insanity of this problem lies in the fact that noise is totally unnecessary. Motorcycles can be muffled to a very quiet level as BMW has proven, while the Saab automobiles as well as the new dual muffler bikes have shown that the two cycle is just as amenable to muffling as a four stroke.

Bennett, supra note 4.

Unlike four stroke combustion engines, muffling will not diminish the power or increase the cost of a snowmobile engine. See Hearings on Snowmobiles and Other Off-Road Vehicles Before the Subcomm. on Parks and Recreation of the Senate Comm. on Interior and Insular Affairs, 92d. Cong., 1st Sess. 27 (1971), cited in Wis. Comment, supra note 1 at 493 & note 78.

Some commentators believe that the ORV user *likes* the loud machine (since it makes them feel more adventurous) and that, as a result, quiet vehicles do not sell as well. *Heath, supra* note 1 at 5. Such a proprietary purpose, if true, could hardly justify the lack of certain, uniform noise levels. American machismo notwithstanding, the fact remains that the EPA has failed to introduce through regulations the much needed uniformity.

⁴⁸ Id. § 4905(e)(1).

⁴⁹ Id. § 4910(a).

⁵⁰ E.g. Heath, supra note 1, at 4, 15, 30, 31. See also Wis. Comment, supra note 1, at 491-93. Most ORV operators recognize the problem and are in favor of reducing the noise levels.

^{. . .} Beyond clear-cut cases of ecological damages, noise is highly obnoxious to all but the maker, a fact which does not endear trail riders to those who must listen to our machines.

⁵¹ BLM—43 C.F.R. § 6295.2(b) (1975), in conjunction with 43 C.F.R. § 6295.1(a) (1975); Fish and Wildlife—50 C.F.R. § 28.7(e) (1975); Forestry Service—36 C.F.R. § 295.6(d) (1975); Parks Service—36 C.F.R. § 2.34(g) (1975) (snowmobiles), 36 C.F.R. § 4.17(a)(3) (1975).

⁵² Feb. 9, 1972, 3 C.F.R. 332 § 3 (a) (1974), 42 U.S.C. § 4321 (Supp. III, 1974).

⁵³ Id. § 3(b).

through maps, notices, and the marking of trails.54

In National Wildlife Federation v. Morton, 55 the United States District Court for the District of Columbia found that such regulations enacted pursuant to the Executive Order by the BLM were invalid, inter alia, in that they created a "subtle, but nevertheless real, inertial presumption in favor of ORV use" and that they "significantly diluted the standards emphatically set forth in Executive Order 11644." 57

Analysis of Executive Order 11644 and the BLM regulations concerning land designations for ORV use clearly demonstrates that the regulations did not protect the environment on public lands administered by the BLM which the Order had contemplated. For example, the BLM regulations state: "The authorized officer may designate any public lands as restricted or closed to off-road vehicle use. Public lands not so designated shall remain open to off-road vehicle use and are hereby designated as open use areas and trails . . ." (emphasis added).58 Although this method of "open-use designation by default" would save the BLM the inconvenience of evaluating all areas and of informing irate ORV operators of changes, it is directly contradictory to the Executive Order. The Order speaks in terms of evaluating all public lands and of designating specific areas as open or closed to ORV use. 59 The President clearly intended that his criteria be used in making an independent evaluation as to each individual tract of land. Although the BLM regulations provided that land originally designated "open" may at a later date be designated "closed" or "restricted," this possibility was not enough, in the court's view, to save the regulations. This designation scheme created an invalid presumption favoring ORV use, requiring an affirmative act to change a classification to ensure the mandated environmental protection, whereas the Order impliedly intended an affirmative act to create the classification initially.

The BLM designation method also was found wanting by the court as violative of the Executive Order's requirement of public participation in the original designation of an area as open or closed. 60 The BLM open-use designation allowed public participa-

⁵⁴ Id. § 5.

^{55 393} F.Supp. 1286 (D.D.C., 1975) [hereinafter cited as National Wildlife Federation].

⁵⁶ Id. at 1292.

⁵⁷ Id. at 1295.

^{58 43} C.F.R. § 6292.2(a) (1975).

⁵⁹ See text at note 24, supra.

⁶⁰ See note 27, supra.

tion only on the question of whether a specific area or trail should be changed from "open" to "restricted" or "closed," but not on the original evaluation itself.

Apart from its land designation procedures, the BLM's criteria for designation substantially failed to conform to the standards mandated by the Executive Order and in fact greatly weakened them. ⁶¹ As the court points out, ⁶² where the Order calls for areas and trails to be located to minimize damage to the environment, the BLM regulation calls merely for consideration of the ability of land to withstand ORV impact. Where the Executive Order emphatically directs land designation to be in accordance with minimizing harassment of wildlife, the BLM requires only consideration of the need to minimize harassment of wildlife. ⁶³

In addition to weakening the original criteria, the BLM added a substantive criterion of its own—"the need for public use areas for recreation use." The Executive Order is very specific and unambiguous in its language defining the criteria to be used in designating trails and areas open or closed for ORV use. It calls for minimizing conflicts between off-road vehicles and other existing or proposed recreational uses of the same or neighboring public lands but does not require consideration of the public's need for recreational facilities.

By striking down the BLM's regulations as violative of the Executive Order, the district court in *National Wildlife Federation* evidenced a determination to strictly construe Executive Order 11644 and to ensure that the various sets of regulations promulgated thereunder adequately protect those environmental interests enumerated in the Order ⁶⁵

C. Applying National Wildlife Federation to Other Agencies

In determining whether the ORV regulations of other agencies will survive similar judicial scrutiny, one should note that none of them

⁶¹ See text at note 25, supra.

^{62 393} F.Supp. 1286, 1295 (D.D.C., 1975).

^{63 43} C.F.R. § 6292.3 (1975).

⁶⁴ Id. § 6292.3(c) (1975).

so Surprisingly, the court invalidated all of the BLM regulations governing the use of ORVs on public lands under their administration. No mention was made of the substantive BLM regulations concerning "Operating Regulations" and "Vehicle Standards" as violating Section 4 of the Order and presumably these regulations fulfilled the Order's directives. Thus, the operating conditions need not have been invalidated and could have been in force in the interim, imposing some restrictions on ORV use, while new land designation regulations were being formed.

call for the type of wholesale land designation in which the BLM engaged. Rather, each individual tract of land will be designated as open or closed to ORV use based upon the application of the Order's criteria to the area's unique characteristics. The agencies do, however, vary widely in their methods of designation and marking of use/non-use areas and trails.

1. National Park Service

In natural and historic areas, the National Park Service regulations strictly prohibit use of any motor vehicles outside of established public roads or parking areas. 66 In National Park recreational areas. ORV use is prohibited except where designated by the area superintendent. 67 The superintendent, in making such designations. is to be guided by the specific criteria of §§ 3 and 4 of the Executive Order. 68 Although the Park Service regulations list ten additional factors to be considered in making the use/non-use decision. 69 these regulations will not be struck down for adding evaluative criteria (as were the BLM regulations) because, as mentioned previously, § 3(a)(4) of the Executive Order recognized the uniqueness of National Park system lands. Because of this recognition, National Park lands are presumed closed unless the agency head determines that ORV use would not adversely affect "the natural, aesthetic, or scenic values" of the land. 70 In making the decision, the agency head may use any additional criteria he or she believes relevant.

The National Park Service regulations provide for thirty days of public comment on proposed land designation regulations for snow-mobiles, 71 as well as for other motor vehicles. 72 This procedure satisfies Executive Order requirements of adequate opportunity for public participation in the land designation decisions. 73

The Park Service regulations, however, may have failed to fulfill the "Public Information" requirement of § 5 of the Executive Order "that areas and trails where off-road vehicle use is permitted are

^{66 36} C.F.R. § 4.19(a) (1975).

^{67 36} C.F.R. § 4.9(b)(1) (1975); 36 C.F.R. § 2.34(c)(1) (1975).

⁶⁸ Id.

⁶⁹ Id

The Exec. Order 11644, Feb. 9, 1972, 3 C.F.R. 332 (1974), 42 U.S.C. § 4321 (Supp. III, 1974).
See text at note 26, supra.

^{71 36} C.F.R. § 2.34(c)(1) (1975).

⁷² Id. § 4.19(b)(1) (1975).

⁷³ Exec. Order 11644 § 3(b), Feb. 9, 1972, 3 C.F.R. 333 (1974), 42 U.S.C. § 4321 (Supp. III, 1974).

well marked."⁷⁴ This requirement is subject to two interpretations. The first and arguably better interpretation of "well-marked" is that actual signs must be posted to identify those areas and trails open for ORV use, all other land being off-limits. Interpreted a second way, § 5 requires only that the trail itself merely be well-defined (i.e., easy to follow) and leaves all trail and area markings to maps or notices. By calling for either sign posting or for marking on available maps, ⁷⁵ the Park Service has adopted the second interpretation. Surely, this latter method of public notification is more conducive to having ORV operators stray from the ORV trail than would be the case if all trails were clearly posted with highly visible signs.

2. Forest Service

The Forest Service regulations do provide an opportunity for public participation in designations of areas and trails relating to ORV use. 76 However, the criteria to be used by the Forest Service when evaluating land for ORV use are a diluted form of those set forth in the Executive Order and thus suffer from the deficiencies which were fatal to the BLM regulations. Where the directive explicitly demands a minimization of damage to soil, watershed and vegetation, and minimization of disruption of wildlife habitats,77 the Forest Service regulations provide for mere consideration of impacts on soil, watershed, vegetation, and habitat disruption.78 Moreover, the catch-all sentence that expresses the Service's goals—"protection of the natural and historic resources, promotion of safety for all users, minimization of use conflicts''79—will not save the regulations from being held violative of the Executive Order. An almost exact provision⁸⁰ in the invalidated BLM regulations was not even mentioned by the court in National Wildlife Federation.

⁷⁴ Id. § 5.

 $^{^{75}}$ 36 C.F.R. § 2.34(c)(1) (1975) (snowmobiles); 36 C.F.R. § 4.19(b)(1) (1975) (motor vehicles).

^{78 36} C.F.R. § 295.3 (1975).

 $[^]n$ Exec. Order 11644 3(a)(1), Feb. 9, 1972, 3 C.F.R. 333 (1974), 42 U.S.C. \S 4321 (Supp. III, 1974). See text at note 25, supra.

⁷⁸ Analysis and evaluation of off-road vehicles uses will take into consideration factors such as noise, safety, quality of the various recreational experiences provided, potential impacts on soil, watershed, vegetation, fish, wildlife, fish and wildlife habitat, and existing or proposed recreational uses of the same or neighboring lands. 36 C.F.R. § 295.3 (1975).

⁷⁹ Id.

The objective of these regulations is to provide procedures to control and direct the use of off-road vehicles on public lands 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. 43 C.F.R. §§ 6290.0-2 (1975).

The Forest Service's regulations also appear to be violative of § 5 of the Executive Order, assuming that a court accepts the preferred interpretation of "well marked" previously discussed.81 The first deficiency, similar to that found in the National Park Service regulations, is that the Forest Service fails to require trail markings. Instead it allows wide latitude as to whether marking will be accomplished through posting or by maps and brochures.82 The second deficiency concerns the Executive Order requirement of marking of areas and trails where ORV use is permitted. The Forest Service permits the marking of either open or closed areas and leaves open the possibility for the elimination of all signing whatsoever.83 While they represent a significant improvement from earlier Forest Service regulations requiring the signing of closed areas, the regulations fail to respond to the following environmental arguments underlying the Order's mandate of open area marking.84 First, if signing was limited solely to open-use areas, less signing would be done, since less area would be open to ORVs than would be closed. Also, the impact of unsightly signing would be lessened if limited to those open areas where less emphasis is placed on aesthetics. Finally, enforcement would be simplified if signing was limited to designating open lands. because vandalism to signs in a "closed-area" signing system would effectively negate the closure, since enforcement without the signs would be questionable. The closed-area without signs would thus be converted into "open" land, resulting in a potential for harm to fragile, "closed" areas.

3. Fish and Wildlife Service

The Fish and Wildlife Regulations state that public recreation will be allowed in wildlife refuge areas only when such recreational use is practicable and consistent with the area's primary objectives and not disturbing to wildlife. 85 Priority is given to the development of those facilities and services that enhance those recreational uses associated with wildlife in its habitat, such as sightseeing, nature observation, and photography. 86 Those activities not directly related

⁸¹ See text at note 75, supra.

 $^{^{82}}$ "Areas and trails may be marked with appropriate signs. . ." (emphasis added). 36 C.F.R. § 295.5 (1975).

⁸³ "Areas and trails may be marked with appropriate signs. . ." (emphasis added). *Id*. ". . . allows latitude as to the signing of either open or closed areas or the use of maps and

[&]quot;. . . allows latitude as to the signing of either open or closed areas or the use of maps and brochures and the possible elimination of all signing." 38 Fed. Reg. 26723 (1973).

⁸⁴ Id.

^{85 50} C.F.R. §§ 28.17-28.20 (1975).

⁸⁶ Id. § 28.18.

to the primary function of wildlife refuge areas (e.g., ORVs) will be limited to designated portions of wildlife refuge areas at specific times least disturbing to wildlife and its habitat.⁸⁷

Although they fail to include any of the Executive Order's land designating criteria, the Fish and Wildlife regulations do not violate the Order because, as noted in the discussion of the Park Service regulations, the Executive Order leaves certain land designation determinations, including those concerning lands of the National Wildlife Refuge System, to the discretion of the particular agency head.⁸⁸

The Fish and Wildlife regulations, however, may be found faulty for allowing notification of "open" areas by methods other than sign posting, 89 a possible violation of the Executive Order as previously discussed. 90 The regulations also violate § 3(b) of the Order, in that they offer no opportunity for public participation in the land designation procedure. 91 Although the Executive Order allows the agency head to use his own criteria in land designations, it does not permit such action without public comment.

E. Summary of Federal Regulations

Clearly the regulations established by the four agencies examined fall far short of the level of environmental protection contemplated in Executive Order 11644 even though that level is easily attainable through the powers delegated. The operating regulations lack the stringency, uniformity, and comprehensiveness needed to attain that minimum of control over ORV use as desired in the Executive Order. As to evaluative criteria, providing for public input, or establishing an effective system for public notification, not one of the agencies examined has fulfilled all of the President's directives of four years ago.

⁸⁷ Id. § 28.20.

^{**} Exec. Order 11644 § 3(a)(4), Feb. 9, 1972, 3 C.F.R. 333 (1974), 42 U.S.C. § 4321 (Supp. III, 1974), text at note 26, supra.

^{89 50} C.F.R. § 28.27 states:

^{. . .}the public will be notified by one of the following methods, all of which supplement this subchapter:

⁽¹⁾ Official signs posted conspicuously at appropriate intervals and locations;

⁽²⁾ Special regulations issued under the provisions of this subchapter;

⁽³⁾ Maps available in the office of the refuge manager; and

⁽⁴⁾ Other appropriate methods which will give the public actual or constructive notice of the permitted public access, use, or recreational activity.

⁹⁰ See text at notes 75 and 81, supra.

⁹¹ See note 27, supra.

III. STATE REGULATION OF ORVS92

While examining the effectiveness of the New England states' ORV statutes, particular attention will be paid to areas such as speed limits and noise levels to determine whether the state statutes have filled those voids left by the federal agencies' failure to set their own standards. While the majority of states now have some form of ORV legislation, the statutes vary in comprehensiveness, including the type of vehicles regulated. As is true with the schemes promulgated by the federal agencies already discussed, a complete, detailed sensible program for controlling ORV use does not as yet exist.

A. Operating Conditions

1. Plant and Wildlife Protection

Despite wide public recognition of the severe impact of ORVs upon animals, plants, and soil, the New England states have not provided sufficient levels of environmental protection. The initial criticism of the state programs is that none of them sets a maximum speed limit for operation. For a trailbike ride along a winding forest trail clearly calls for a different speed than a snowmobile hurtling across a level field. Since it is the very nature of ORVs, however, that they operate on land other than paved, engineered and regulated highways, they are conducive to spills and emergency stops. The lives of wildlife may depend upon limiting the operating speeds. The lack of requirements for braking mechanisms only

⁹² Several survey articles have been devoted to state regulation of snowmobiles. See, e.g., Wis. Comment, supra note 1, which includes a comprehensive Model Snowmobile statute. See also Snowmobiles and the Environment, 82 YALE L. J. 772 (1973) [hereinafter cited as Yale Comment].

⁹³ See text at notes 36 and 51, supra.

⁹⁴ Me. Rev. Stat. Ann. tit. 12 §§ 1971 et seq. (Supp. 1974) and Vt. Stat. Ann. tit. 31 §§ 801 et seq. (Supp. 1975) deal solely with snowmobiles. Mass. Gen. Laws Ann. ch. 90B §§ 16 et seq. (Supp. 1975) and Gen. Laws of R.I. §§ 31-3.2-1 et seq. (Supp. 1974) deal with snowmobiles as well as all types of recreational vehicles. Perhaps a good indication of the growing concern of the ecological impact from all types of recreational vehicles are the recent Connecticut and New Hampshire amendments to legislation to include all off-road vehicles, as well as snowmobiles, in the regulations. Conn. Gen. Stat. Ann. §§ 14-379 et seq. (Supp. 1975) and N.H. Rev. Stat. Ann. §§ 269C:1 et seq. (Supp. 1973), repealing ch. 269-B.

⁹⁵ Conn. Gen. Stat. Ann. § 14-387(2) (Supp. 1975); Me. Rev. Stat. Ann. tit. 12 § 1978(4) (Supp. 1974); N.H. Rev. Stat. Ann. § 269-C:6 (III) (Supp. 1973), and Gen. Laws of R.I. § 31-3.2-7(2)(a) (Supp. 1974); all have similar "reasonable and prudent speed for the existing conditions" requirements. Vermont and Massachusetts set no limitations.

⁹⁶ "A correlation between high-powered machines and accident frequency has been observed." N.Y. DEPARTMENT OF MOTOR VEHICLES, SNOWMOBILE ACCIDENTS 26 (1970), cited in

serves to compound this problem.97

Inadequate protection of plants and wildlife are found in many other areas of the statutes as well. Although all six states have specific prohibitions against operating ORVs while intoxicated or under the influence of drugs, 98 two states make no provision to use the definition provided in the motor vehicle codes as to the standards of intoxication or the measurement thereof.99 Effective enforcement is quite dubious if no such established legal definition exists. Additionally, only four states specifically prohibit ORV operation which harasses wildlife, 100 and only Massachusetts and Rhode Island have specific provisions protecting certain delicate plantlife, such as reforested areas, from ORV operation. 101

A final example of the states' failure to defend natural resources and wildlife is the limited use of monetary fines to enforce ORV regulatory provisions. ¹⁰² Although the courts have upheld the imposition of criminal liability for violations of ORV statutes, such as riding an ORV on a highway shoulder, ¹⁰³ escalating fines are gener-

Wis. Comment, supra note 1, at 487 n. 46.

Should legislatures decide that a specific limitation upon operating speeds is required, consideration should be given to demanding a speed governor on each machine, making enforcement more effective since the vehicles would be incapable of exceeding the established speed limit. See Wis. Comment, supra note 1, at 487.

⁹⁷ Only N.H. Rev. Stat. Ann. § 269-C:1 (Supp. 1973) ("adequate brakes in good working order"); Conn. Gen. Stat. Ann. §14-387(6) (Supp. 1975) ("properly operating"); and Mass. Gen. Laws Ann. ch. 90B §24 (Supp. 1975) ("capable of decelerating in a reasonable manner") provide for means of stopping. Gen. Laws of R.I. § 31-3.2-7(f) (Supp. 1974) and Mass. Gen. Laws Ann. ch. 90B §26 (Supp. 1975) also require the wearing of protective headgear for all persons on ORVs.

^{**} Conn. Gen. Stat. Ann. § 14-387(4) (Supp. 1975); Mass. Gen. Laws Ann. ch. 90B § 26 (Supp. 1975); Me. Rev. Stat. Ann. tit. 12 § 1978(2) (Supp. 1974); N.H. Rev. Stat. Ann. § 269-C:8 (Supp. 1973); Gen. Laws of R.I. § 31-3.2-7(2)(c) (Supp. 1974); Vt. Stat. Ann. tit. 31 § 806(8) (Supp. 1975).

⁹⁹ Massachusetts and New Hampshire.

¹⁰⁰ CONN. GEN. STAT. ANN. § 14-387(7) (Supp. 1975); MASS. GEN. LAWS ANN. ch. 90B § 26 (Supp. 1975); N.H. REV. STAT. ANN. § 269-C:24(x) (Supp. 1973); Vt. Stat. Ann. tit. 31 § 806(b)(6) (Supp. 1975).

¹⁰¹ Mass. Gen. Laws Ann. ch. 90B, § 26 (applies to "reforested or planted area"); Gen. Laws of R.I. § 31-3.2-7(e) (Supp. 1974) (applies "in any tree nursery or planting").

¹⁰² CONN. GEN. STAT. ANN. § 14-388 (Supp. 1975) (up to \$250 for each offense); MASS. GEN. LAWS ANN. ch. 90B § 34 (Supp. 1975) (\$20 to \$100, unless violation of § 25 "operation on public ways" or § 29 "directors rules and regulations" which carries a fine of \$50-\$300 or imprisonment for 60 days or both); ME. REV. STAT. ANN. tit. 12 § 1984 (Supp. 1974) (fine not less than \$20 nor more than \$500 and costs, or imprisonment not more than 90 days); N.H. REV. STAT. ANN. § 269-C:14 (Supp. 1973) (\$10 to \$100 for each offense); GEN. LAWS OF R.I. § 31-3.2-10 (Supp. 1974) (up to \$100 or 90 days imprisonment); VT. STAT. ANN. tit. 31 § 807-(a) (Supp. 1975) (not more than \$100 for each offense).

¹⁰³ In State v. Johnson, 289 Minn. 196, 183 N.W.2d 541 (1971), the court, in rejecting a "necessity" defense, upheld a conviction for riding on the left-shoulder of a highway in

ally not imposed for such major operating violations as operating while intoxicated or harassing game.¹⁰⁴ Thus, specific prohibitions imposed by the states do not carry much weight in effecting rigorous enforcement of the law.

2. Pollution Control

a. Noise

Recognizing that noise is a major problem resulting from ORV use and one that is relatively easy to resolve, most states, unlike the federal government, have provided for specific maximum noise emission levels. ¹⁰⁵ While all states strive for some concept of reasonable noise levels, however, the levels vary widely from state to state. This variation makes it difficult for the individual or the manufacturer to comply unless the individual is willing to limit his travels to within one state or the manufacturer is willing to construct all of his vehicles so as to comply with the most stringent state standard. As noted, the easiest solution to the problem would be the promulgation of uniform EPA guidelines. ¹⁰⁶

b. Air

ORV exhaust is highly polluting.¹⁰⁷ Surprisingly, no statute sets a specific emission standard to be observed—only Massachusetts makes any type of reference to the air emission problem: "No snow vehicle and no recreation vehicle shall be operated which... emits obnoxious fumes." ¹⁰⁸ All ORVs emit "obnoxious fumes" to some degree—therefore, this section could possibly be used to ban any

violation of a "no highway operation" regulation. In People v. Sowle, 68 Misc. 2d 569, 327 N.Y.S. 2d 510 (1971), the Appellate Court, taking judicial notice of the location of highway boundary lines, affirmed a conviction for the violation of a statute forbidding snowmobile operation on public highways without being registered. See 45 A.L.R. 3d 1438.

¹⁰⁴ Several states outside the scope of this study do provide for escalating fines as the severity of the violation increases. See Wis. Comment, supra note 1, at 494 n. 87.

of All noise levels in the statutes are measured in units known as decibels on the A scale at 50 feet (dbA) Conn. Gen. Stat. Ann. § 14-387(6) (Supp. 1975) subjects recreational vehicles to provisions of § 14-80 (1974:90 dbA; 1975:88 dbA; 1977:86 dbA); Mass. Gen Laws Ann. ch. 90B § 24 (Supp. 1975) pertains to snowmobiles only (July, 1972: 82 dbA; July, 1975: 78 dbA); Me. Rev. Stat. Ann. tit. 12 § 1978-(6) (Supp. 1974) (Oct. 1973:82 dbA; Feb. 1975: 78dbA); N.H. Rev. Stat. Ann. § 269-C:9(I) (Supp. 1973) snowmobiles (July, 1973: 82dbA; July, 1978: 73dbA; July, 1983: 70dbA), other ORVs (Jan. 1975: 86dbA; Jan., 1983: 78dbA); Gen. Laws of R.I. § 31-3.2-8 (Supp. 1974) allows director to set specifications; Vt. Stat. Ann. tit. 31 § 805(b) subjects snowmobiles to regulation by the commissioner, with a maximum of 82dbA.

¹⁰⁶ See text at notes 45-50, supra.

¹⁰⁷ Heath, supra note 1, at 30.

¹⁰⁸ Mass. Gen. Laws Ann. ch. 90B § 24 (Supp. 1975).

ORV use at all. Obviously, this interpretation does not accurately represent the legislative intent behind the passage of the statute, but it does exemplify the need for specific air emissions standards to be promulgated at the federal level to facilitate manufacturer compliance. As mentioned previously, this solution would merely require a Congressional amendment to the Clean Air Act to include recreational vehicles under its purview.¹⁰⁹ So far, ordinary street motorcycles are the only recreational vehicles for which specific air emissions levels have been proposed.¹¹⁰

Even strict air and noise levels may not be enough, since emission control devices could be tampered with once the vehicle leaves the retailer. Therefore, mandatory, yearly state inspections could be required to ensure that air pollution (noise and exhaust) devices, as well as all equipment requirements (speed governors, headlights, brakes, etc.) were being complied with.¹¹¹

B. Environmental Protection on Private Property

ORV trespass on private property is a problem exclusively for state legislatures since the federal agencies are concerned only with public lands. The six New England states all have criminal provisions concerning this situation. 112 Once again, however, examination reveals a wide range of legislative response. In Vermont 113 and Connecticut, 114 written permission is normally needed by the operator from the owner of the private property on which the vehicle is being operated. This requirement is more stringent than that of the common law of trespass, which merely demands an owner's permission and allows the user-defendant the defense of oral consent. 115 However, this scheme subjects both ORV users and those landowners who permit ORV operation to great inconvenience.

Massachusetts, Maine, New Hampshire, and Rhode Island¹¹⁶

¹⁰⁹ See text at notes 41-42, supra.

¹¹⁰ Proposed rules, 40 Fed. Reg. 49499, Oct. 22, 1975.

¹¹¹ See e.g., N.H. Rev. Stat. Ann. §269-C:10 (Supp. 1973).

 ¹¹² CONN. GEN. STAT. ANN. § 14-386(b) (Supp. 1975); MASS. GEN. LAWS ANN. ch. 90B § 33 (Supp. 1975); Me. Rev. STAT. ANN. tit. 12 §1978(7) (Supp. 1974); N.H. Rev. STAT. ANN. §269-C:16 (Supp. 1973); GEN. LAWS OF R.I. § 31-3.2-9 (Supp. 1974); Vt. STAT. ANN. tit. 31 §806(b)(3) (Supp. 1975).

¹¹³ VT. Stat. Ann. tit. 31 §806(b)(3) (Supp. 1975). Note, however, that oral consent will suffice in Vermont if the operator has proof of membership of a club or association to which such consent has been orally given. *Id*.

¹¹⁴ CONN. GEN. STAT. ANN. §14-387(8) (Supp. 1975), which states that written permission is needed on private property only on fenced agricultural or posted land.

^{115 87} C.J.S. Trespass § 49(a).

¹¹⁶ Mass. Gen. Laws Ann. ch. 90B § 33 (Supp. 1975); Me. Rev. Stat. Ann. tit. 12 § 1978(7)

merely require the vehicle operator to stop and identify himself upon the request of the landowner and to remove the vehicle from the premises if so requested. This approach leaves the landowner very little protection, making the action of ORV operators criminal only after the landowner has already attempted to have the vehicle removed.

Clearly, some provision for prior landowner permission should be included in any statutory scheme in order to prevent repeated disturbances of a property owner's right to enjoy his land. Such regulation should allow the landowner to give advance permission to a club or by appropriate signing as well as by written permission. This scheme, while protecting private property interests, would eliminate the inconveniences to both the landowner and to the ORV operator occasioned by the strict "written permission" rule.

C. Land Designations

Other factors which may be considered in evaluating the environmental protections afforded by state legislation, besides operating conditions or protection of private property, include the formulation of public land designation plans. These plans, analogous to those discussed concerning federal agencies, 118 are used by the various states to establish those areas of public lands which will be open or closed to ORV use.

1. Presumption of Closed State Land

Vermont and Connecticut appear to have the most environmentally-minded land designation programs. The former closes all public property (public land, body of water, or natural area) to snowmobiles unless otherwise designated by the appropriate state official, while the latter forbids ORV use on government-owned land without the written permission of the agency under whose control such land falls (either state or municipality). ¹²⁰ In these states, tight control and ORV use are compatible. For example, the Connecticut Department of Environmental Protection has determined that it is safe to open at least six trailbike routes on state land and several

⁽Supp. 1974); N.H. Rev. Stat. Ann. §269-C:16 (Supp. 1973); Gen. Laws of R.I. § 31-3.2-9 (Supp. 1974).

¹¹⁷ See e.g., Vt. Stat. Ann. tit. 31 § 806(b)(3) (Supp. 1975).

¹¹⁸ See notes 56-70, 76-80, 85-88, supra.

¹¹⁸ Vt. Stat. Ann. tit. 31 § 806(b)(4) (Supp. 1975). These provisions pertain only to snow-mobiles, with no restrictions placed upon other ORVs.

¹²⁰ CONN. GEN. STAT. ANN. § 14-387(8) (Supp. 1975).

more are nearly ready.¹²¹ This method of presuming land closed except where able to withstand ORV activity is the best means of ensuring protection of environmental interests (short of prohibiting all ORV use on all lands).¹²²

2. Presumption of Open State Land

The other New England states take an opposing view. They create a general presumption of lawful ORV use on all public lands, other than highways, except where specifically prohibited. The "specifically prohibited" areas are, moreover, quite limited. In New Hampshire, for example, ORV operators may use any frozen surface of any body of public water at their own risk, unless the commissioner of safety decides to temporarily close the surface of the frozen waters to motor vehicles. 123 The other New Hampshire regulations merely limit operation of an ORV closer than one hundred-fifty feet to a fishing hole or shanty on a lake or pond used by ice fishermen, 124 or closer than fifty feet to any occupied dwelling. 125 They also provide that operation in state parks and forests shall be subject to fees. rules, and regulations of the directors. 128 However, even this last "restriction" is subject to one qualification: "All trails . . . so far as possible and consistent with their primary functions, shall be made available for use by [ORVs] 127 (emphasis added). Consequently, closure of land to ORV use will be very rare.

The Rhode Island and Maine statutes also have few provisions regarding the designation of certain lands for non-ORV use. The Rhode Island statute only prohibits snowmobiles or motorized recreational vehicles from being used on the Woonsocket reservoir property. The Maine statute makes unlawful operation of a snowmobile within two hundred feet of any dwelling, hospital, nursing home, convalescent home or church, subject to reasonable exemptions. ¹²⁹ Clearly, in these states with limited land use restrictions,

¹²¹ New England Trail Rider Association Newsletter, July, 1975.

¹²² Note the similarity between this method and the federal closed-land presumption on National Park or Wildlife Refuge lands. Exec. Order 11644 §3(a)(4), Feb. 9, 1972, 3 C.F.R. 332 (1974), 42 U.S.C. § 4321 (Supp. III, 1974).

¹²³ N.H. Rev. Stat. Ann. § 269-C:4 (Supp. 1973).

¹²⁴ Id. § 269-C:5.

¹²⁵ Id. § 269-C:24(viii).

¹²⁶ Id. § 269-C:26.

²⁷ Id.

¹²⁸ GEN. LAWS OF R.I. §31-3.2-7(2) (Supp. 1974).

¹²⁹ ME. REV. STAT. ANN. tit. 12 §1978(13) (Supp. 1974).

ORVs will operate subject only to the weak operating regulations outlined above. 130

e. State Official's Power to Regulate ORVs

Although operating requirements without the critical land designations provide almost no protection to delicate wildlife habitats or soil, some hope for supplementary regulatory action may exist in the legislative delegation of regulatory powers to various state officials and to the localities themselves. New Hampshire, Massachusetts, Rhode Island, and Connecticut all allow state officials to make appropriate rules concerning snowmobiles and other recreational vehicles.¹³¹

In Massachusetts, the authorized officer has used this authority to extend additional protection to environmental interests, including an ORV "yield right-of-way" provision and a prohibition against ORV operation on any ocean beach or sand dune so as to destroy any beach or dune grass or break down any dune. 132

The delegation of regulatory authority in other states, however, does not lend itself to environmental protection, since no mention is made in these statutes of environmental interest. In Connecticut, the state officer may only make regulations necessary for public safety.¹³³ In Rhode Island, the officer's rules and regulations are to be promulgated "[w]ith a view of achieving maximum use of snow-mobiles and/or recreational vehicles."¹³⁴ The New Hampshire official may adopt and amend rules and regulations with regard to:

- (a) Safety equipment,
- (b) Registrations,
- (c) The safety of operators, passengers and other persons, and
- (d) The protection of property. 135

These delegations to state officials are not designed to protect the environment but actually provide for the avoidance of any consider-

¹³⁰ See text at notes 95-111, supra.

¹³¹ Conn. Gen. Stat. Ann. §14-389 (Supp. 1975); Mass. Gen. Laws Ann. ch. 90B § 29 (Supp. 1975); N.H. Rev. Stat. Ann. §269-C:27 (Supp. 1973); Gen. Laws of R.I. § 31-3.2-6 (Supp. 1974).

¹³² Regulations #4 and #15 of the Rules and Regulations Concerning the Use and Operation of Snow and Recreational Vehicles, filed by the Massachusetts Division of Marine and Recreational Vehicles, Feb. 1, 1972.

¹³³ CONN. GEN. STAT. ANN. § 14-389(2) (Supp. 1975). However, environmental interests are protected through the Connecticut presumption of closed state land. See text at note 120, supra.

¹³⁴ GEN. LAWS OF R.I. §31-3.2-6(1) (Supp. 1974).

¹³⁵ N.H. REV. STAT. ANN. § 269-C:27(I) (Supp. 1973).

ation of environmental interests in the making of important decisions. The legislative delegation of regulatory powers in New Hampshire and Rhode Island, when combined with their presumption of "open" public land, fail to afford even a minimal level of environmental protection.

4. Local Regulation of ORVs

The last hope for any environmental protection against damaging ORV use in many states therefore falls upon local government. Typical of statutes is that of New Hampshire: "With by-laws or ordinances any town or city may regulate the operation of [ORVs] within its limits, providing they do not conflict with provisions of this chapter." Local regulation, however, will not adequately serve to preserve the fragile natural state. For example, of two towns with irreplaceable natural qualities, the locality with a great number of ORV owners or resorts is less likely to enact strict limitations upon ORV operation because of self-interest¹³⁷ than the area with sparse ORV representation. However, it is the area of high ORV-use which may be precisely the place where a tough "no-use" rule should be enacted. The town of few ORVs is not in as much need of environmental protection rules as its ORV-loving neighbor.

Furthermore, in an effort to keep land open for ORV use, the legislature in some states has not provided for municipal or political subdivision regulation at all. In fact, the Maine statute specifically prohibits any local "[o]rdinance, law or regulation dealing with the

¹³⁶ N.H. Rev. Stat. Ann. §269-C:12 (Supp. 1973). See also Conn. Gen. Stat. Ann. § 14-390 (Supp. 1975); Mass. Gen. Laws Ann. ch. 90B § 33 (Supp. 1975); Gen. Laws of R.I. §31-3.2-9 (Supp. 1974); Vt. Stat. Ann. tit. 31 § 810 (Supp. 1975).

¹³⁷ The author does not consider all ORV operators to be completely self-interested and devoid of any environmental concerns. The recreational organizations which the author has encountered, such as the New England Trail Riders Association, have appeared to be composed of mature, responsible citizens who seek to minimize the adverse impacts of their sport upon other trail users and the public in general. For example, NETRA has embarked upon a color-coded trail-marking system advising bikers:

The owner of this land requests that we ride only on the trail marked with the marker below. To preserve this privilege please cooperate with this request. or:

The owner of this land has requested that we do not ride through, as the land is being used for purposes which are adversely affected by trail bikes. Please cooperate with this request as good citizens and sportsmen.

See also Cadigan, A club's the thing for snowmobilers, The Boston Globe, Dec. 20, 1975, at 26, col. 1 [hereinafter cited as Cadigan].

However, when important decisions having tremendous environmental impacts are to be made, such as the designation of land as open or closed to ORV use, they should not be made by those having strong vested interests.

operation or registration of snowmobiles or any other subject matter of this chapter." ¹³⁸

The result is that a state such as Maine provides practically no means of protecting environmental interests. Since environmental protection is generally left to the whim of the localities in Rhode Island and New Hampshire, one-half of the six states surveyed do little to preserve irreplaceable natural resources.

IV. TOWARD MORE EFFECTIVE ORV REGULATION

A. Deficiencies of Present Regulation

Although many attempts at ORV regulation have been made, a truly comprehensive plan has not yet been enacted. Obviously, statutes should not be limited merely to snowmobiles but should include all ORVs. Unfortunately, specific standards are not set or vary greatly from jurisdiction to jurisdiction or within the same state, in spite of the fact that even manufacturers support passage of additional legislation to ensure uniformity and to provide reasonable guidelines for use. 139 Uniformity would also prevent lax regulations in one jurisdiction from defeating stricter efforts at control in another. 140 Enforcement problems could be reduced by yearly official state inspections which could require air and noise pollution devices, brakes, headlights, horns, and speed governors to be in compliance with the established standards. 141 Although enforcement of such operating equipment standards can be handled relatively easily, other enforcement situations cannot. These include irresponsible use of the ORV.

The officers charged with enforcement responsibility have many other duties and indeed often are not in a position to know when regulations are being broken. They cannot make sure, except selectively, that snow-mobiles remain in designated areas, . . . are operated so as not to harass animals, and so forth. It is the very nature of the activity—spread over vast areas of difficult terrain—that gains in compliance could have comparatively great administrative costs. 142

¹³⁸ ME. REV. STAT. ANN. tit. 12 § 1972 (Supp. 1974).

¹³⁸ See e.g. testimony of Thomas Boggs, Counsel, International Snowmobile Industry Association of Minneapolis, Minn., Snowmobile Hearings at 22, cited in Yale Comment, supra note 92, at 778 n. 27.

¹⁴⁰ E.g., Professor Yvonne Knight, president of the Maine Snowmobile Association, complains of "out-of-staters coming up here and doing what they can't do at home." Cadigan, supra note 137.

Wis. Comment, supra note 1, at 487.

¹⁴² Yale Comment, supra note 92, at 778 n. 28.

Requirements of registration¹⁴³ and easily visible identification numbers¹⁴⁴ become valueless where enforcement is unrealistic or non-existent. In sum, the present legislative programs are unable to adequately deal with these enforcement problems. Thus, alternative regulation, whether or not in the form of further legislative action, must be considered.

B. Will Self-Policing Work?

To curb irresponsible ORV use, many ORV operators favor establishing ORV trails and areas in order to regulate and direct the use of ORVs into appropriate channels and patterns. More importantly, trail users would become members of ORV clubs and the clubs would be the mechanism for possible tough self-policing. Ideally, peer pressure would end irresponsible ORV use since continued misuse of the ORVs might result in the closing of all ORV trails.

Others disagree that the final solution will be found in trail establishment and club self-policing. They argue that if land managers try to satisfy ORV owners by entering into short-term compromise agreements on marginal lands and establishing trails there, buyers will be encouraged to purchase more ORVs, thus compounding the problem. The "Dismal Cycle" is a step-by-step analysis articulated by Dr. Diana Dunn of the cyclic events in which the ORV problem will never be terminated:

- 1. [ORV] sales produce a small, identifiable group of owners of a particular vehicle displaying one common problem: no land of their own.
- 2. They begin to use public or private land, with or without permission.
- 3. The group grows, damage occurs, and initial conflict develops.
- 4. Either (A) users are prohibited completely and no alternative site is offered (return to #2), or (B) some informal agreement is reached, usually with public land managers.

¹¹³ Conn. Gen. Stat. Ann. § 14-380 (Supp. 1975); Mass. Gen. Laws Ann. ch. 90B § 21 (Supp. 1975); Me. Rev. Stat. Ann. tit. 12 §1972 (Supp. 1974); N.H. Rev. Stat. Ann. § 269-C:16(II) (Supp. 1973); Gen. Laws of R.I. § 31-3.2-2(1) (Supp. 1974); Vt. Stat. Ann. tit. 31 § 802 (Supp. 1975).

¹⁴⁴ Conn. Gen. Stat. Ann. §14-380 (Supp. 1975); Mass. Gen. Laws Ann. ch. 90B § 22 (Supp. 1975); Me. Rev. Stat. Ann. tit. 12 § 1974 (Supp. 1974); N.H. Rev. Stat. Ann. § 269-C:16(IV) (Supp. 1973); Gen. Laws of R.I. § 31-3.2-2(2) (Supp. 1974); Vt. Stat. Ann. tit. 31 § 806(b)(7) (Supp. 1975).

¹⁴⁵ Letter from David Sanderson, Executive Director of the New England Trail Rider Association, November 4, 1975.

¹⁴⁶ See note 137, supra.

¹⁴⁷ NEPA Hearings, supra note 3, at 116-17.

- 5. The existence of an approved site is publicized by the users (to friends) and by vehicle dealers (to potential customers): more sales, more users.
- 6. "Bad apples" emerge to jeopardize the initial agreement; conservationists, neighbors, other user types form a coalition which forces a "shot-gun wedding" between recreation vehicle users and the manager. More sales, more users, and more outsiders begin to come.
- 7. "Self-organization and policing" as well as explicit management controls are initiated. Subtle co-optation of public agency has occurred, and the manager feels compelled to make the "marriage" work.
- 8. Publicity about favorable features is distributed; *Equilibrium* is attained; more sales, more users.
- 9. Too many "bad apples," too much damage, too few "police," and the *Saturation Point* is reached. The anticoalition reactivates. A "final straw" event occurs.
- 10. The manager declares total elimination of [ORVs] from the area. If alternate site is offered, go to #4B; if not, go to #2 and repeat cycle. 148

In short, concessions by land managers to allow ORV operation will only exacerbate the problem by encouraging more ORV sales, thereby leading to a greater number of ORVs than can be handled satisfactorily. The "Dismal Cycle" is thought to be capable of being repeated indefinitely unless land managers halt all short-term compromises and end illegal operation through efficient enforcement.

Assuming that neither extreme point is reached—neither effective self-policing without any governmental regulation nor total elimination of all ORVs through absolute government prohibition in response to the "Dismal Cycle"—one returns to the task of finding some practical means of reducing the harmful effects of ORV use while still permitting them to be used as a form of recreation.

C. Cost Internalization 149

In considering what means are available, one subtle, inherent weakness of present attempts at ORV control stands out: they fail to be optimal because the costs of operating ORVs fall upon other recreationers and the public in general, not upon those who are causing them.¹⁵⁰ Since the costs of ORV operation are not

¹⁴⁸ Id. Dr. Dunn adds, "Camelot-like claims will no doubt besiege the editor, but the writer maintains that these claims only relate to situations where the cycle is at the *Equilibrium* state [#8]. See also Wis. Comment, supra note 1, at 501.

¹⁴⁹ This section on Cost Internalization is based in large part upon Yale Comment, supra note 92.

There are really two types of costs present with ORV operation—the environmental costs to physical property and personal injuries to other recreationers in the form of annoyance or being forced to forego their pleasures. This social costing problem

"internalized," i.e., borne by ORV users, the public is in effect providing a subsidy to those creating the social costs.

Hence snowmobiling's costs are predominantly externalized. The result is a mis-allocation of resources, because snowmobiling is cheaper than it would be if users were charged for all the scarce resources they consume. Other recreational activities that bear the brunt of the noise and annoyance become correspondingly less desirable. 152

Reduction of noise, air pollution emissions, and conflicts with other users of the same land are only reductions of ORV costs—any costs remaining are still borne by the innocents.¹⁵³

1. Framework

A basic step toward an efficient allocation of costs is to recognize that ORV-related injury is often caused by the activity in general and not by a particular user. Rather than seeking to identify the individual tortfeasor, a statutory ORV cost internalization system would seek to charge the appropriate costs to the activity as a whole. Instead of making innocent landowners or recreationers bear the cost of ORV use, the ORV operators themselves should be made responsible, thereby encouraging them to discontinue their activities where highly damaging or irritating.

The objective could be accomplished by creating a statutory ORV

^{. . .} is one of both prediction and of quantification. What value can be assigned to an afternoon of cross-country skiing ruined by snowmobiles that leave tracks, make noise, frighten wildlife away and generally make the outdoors experience less pleasureable? How can we estimate environmental damage that may become apparent only in the next spring or perhaps twenty years later when the tree cover proves to be thinner than it should be? Yale Comment, supra note 92, at 779 n. 31.

¹⁵¹ The term here is used to describe minimizing the overall costs by providing an incentive to act in a less costly manner to the party who is in the best position to change his behavior. Here, that party would be the ORV operators since it is their activity which is disrupting the tranquility. *Id.* at 780 n. 33.

¹⁵² Id. at 779. For general welfare economics theory, see R. Coase, The Problem of Social Cost in 3 J. Law & Econ. 1 (1960) and Economics of the Environment (Dorfman & Dorfman, eds. 1972).

¹⁵³ Closing all land to ORV use will, of course, eliminate all social costs of ORVs. But this analysis assumes the presence of numerous ORVs whose owners exert great political pressure. For an example of these pressures at work in *Coupland v. Morton*, Civil No. 145-73-N (E.D. Va. Feb. 26, 1975), *aff'd per curiam* (4th Cir. July 7, 1975), *see* 5 Env. L. Rep. 10148.

¹⁵⁴ In those cases where the damage is attributable to an individual and he can be identified, the usual tort action will be available. This scheme of treating a whole class as one tortfeasor will be triggered only when the individual operator cannot be identified or the injury is one resulting from continual, gradual infliction. Yale Comment, supra note 92, at 781.

fund to be financed by annual payments from ORV owners, ¹⁵⁵ payments to be computed on the total estimated yearly costs of their activity and varying according to the amount of damage each user is expected to cause in view of where he or she operates ¹⁵⁶ and the kind of vehicle used. Some ORV users would therefore pay more than others. By making all owners pay into the fund, (a) they will be induced to forego their ORVs and to enjoy other, cheaper forms of recreational activity, and (b) if they do decide that the ORV experience is worth the cost, they will be compensating those who are injured by the activity. ¹⁵⁷ Thus, in areas of great ORV popularity, the social costs of ORV activity would be small. In dense, urban areas the corresponding cost would be high in the form of annoyance to the majority of the population; hence a reduced number of ORVs paying a high price.

Victims of ORV activity would collect from this fund according to the principles of strict tort liability.¹⁵⁸ The fundamental "negligence" standard would not achieve the goals of the fund because of ORV operator often is causing great environmental damage while operating as a reasonable man.¹⁵⁹

The unrecovered surplus would cover all of the injuries that are not substantial enough to warrant an individual recovery from the fund. Thus, the surplus could go to improve those public lands injured by ORV use and to compensate other recreationers by im-

¹⁵⁵ Id.

¹⁵⁶ Usually, specific cases of property damage could be assessed as under present methods of computing recovery, i.e., how much would it cost to return the victim to the state that he was in? Computing the costs in the other category of damages, that of injury to other recreational users usually in the form of annoyances, poses a few procedural problems. The basic method of computing the damages would be by letting ORV users and those injured by their use bargain with each other to determine who will be able to partake of their desired activity and where this activity will occur. This market mechanism is much too large as to make it quite impractical. Thus, the same results might instead be achieved by simply asking the other recreationers to determine how great the ORV annoyance costs are to them—i.e., how much are they willing to pay to eliminate the ORVs from being used on "their" land. Once these costs are computed, it would be up to the individual ORV owner to decide whether his activity is worth the fee to be assessed to him. Id. at 782 n. 36. But see Marshall, Environmental Protection and the Role of the Civil Money Penalty: Some Practical and Legal Considerations, 4 Env. Aff. 323 (1975).

¹⁵⁷ Yale Comment, supra note 92 at 782.

Most people would rather have peace of mind than a legal action. Hopefully, the higher cost of ORV operation will induce ORV owners to switch to other less socially expensive forms of recreation, reducing the number of ORV "injuries" to a de minimis level.

¹⁵⁸ For a discussion of insurance as a type of cost internalization, see Wis. Comment, supra note 1, at 483-84.

¹⁵⁹ Yale Comment, supra note 92, at 783.

proving facilities for their use. 160 The fund should also cover the costs of sufficient law enforcement officers to police the lands.

Several states have attempted to establish a fund of this sort by appropriating registration monies or a percentage thereof to be applied to the pool. But these funds typically are to be used for "publications, trails, easements and right of ways, [ORV] facilities and other purposes. . . "162 The proceeds are not expended to compensate those burdened by ORV use; instead, these funds tend to encourage more ORV use. An increase in trail mileage generates increased ORV sales which in turn enhances the Trail Fund, and so on. Since none of these programs place restrictions upon their expansion, they could literally result in the inundation of an area with ORV trails. 163

2. Deficiencies of a Cost Internalization Fund Program

Even assuming that an effective cost internalization scheme can be enacted, deficiencies in ORV regulation will persist. The cost internalization fund is not a complete, comprehensive program standing by itself. Specific regulations, such as those concerning operating conditions, will still be needed. A major drawback of present regulations, nonresponsiveness to interstate use, will also hinder the effectiveness of the proposed fund. Only where effective enforcement occurs will the out-of-staters be forced to contribute to the cost internalization fund of the state in which they wish to operate.

More importantly, the problem of protecting our fragile lands remains. Monetary awards are clearly inadequate to compensate for the destruction of precious land. Can one place a price on a sand dune which was created over the course of centuries? Even if fees were graduated according to the delicateness of the particular area in which ORV use was contemplated, ¹⁶⁴ certain unique cultural and environmental areas exist where ORV operation must be prevented no matter how much one is willing to pay. This absolute prohibition against operation represents the incalculable costs this activity would have on the public.

¹⁶⁰ Id. at 783-84.

¹⁸¹ Mass. Gen. Laws Ann. ch. 90B § 16 (Supp. 1975); Me. Rev. Stat. Ann. tit. 12 § 1972 (Supp. 1974) (\$5 of each nonresident registration fee); N.H. Rev. Stat. Ann. § 269-C:18(IV) (Supp. 1973) (no more than 45% of registration fees).

¹⁶² N.H. Rev. Stat. Ann. §269-C:18 (Supp. 1973).

¹⁶³ See Wis. Comment, supra note 1, for a discussion of this and other problems with Trail Funds.

¹⁶⁴ Yale Comment, supra note 92, at 782.

Thus, the fund must be coupled with some form of state environmental protection program to preserve those unique areas in which the "market mechanism" does not accurately reflect social goals.¹⁶⁵ Specific criteria must be developed so that certain areas will be closed regardless of popularity and regardless of any amount some ORV owners may be willing to pay.

3. Summary of the Cost Internalization Plan

The difficulty in using money as the great equalizer when discussing aesthetic values is obvious. It is revolting, in a way, to ask someone how much they would pay to breathe fresh air when walking through a field; or to ask one how much they would give to enjoy the birds without being run-down or having the birds scared away; or to ask a wildlife manager how much the animals would pay to have their homes restored to normal.

Unfortunately, this primitive method is the best system available to protect the majority of our interests. It really is no departure from our present system of damage compensation, which asks, "How much is a hand worth?" In terms of cost internalization, the same result is reached by asking, "How much would you pay not to lose your hand?"

The specific cost internalization scheme need not be based upon annual contributions to a compensating fund. Others have proposed strict limits on ORVs to require club-sponsored cooperative arrangements or commercial facilities¹⁶⁶ which force the ORV owner to pay the whole cost of the activity, including the cost of land. If the costs are too high, ORV popularity will decrease.¹⁶⁷ The political realities in most areas and states, however, may preclude a program which prohibits ORV use on public land. Some form of cost internalization scheme must be formulated and enacted to prevent innocent, needless injury to both people and the environment.

Conclusion

The many environmental injuries inflicted by ORVs make their regulation essential; total prohibition of ORVs, however, is politi-

¹⁶⁵ The Chinese have a similar attitude toward environmental protection, placing great emphasis on avoiding damage to unique resources even if that choice means appreciable economic loss. Myers, *China's Approach to Environmental Conservation*, 5 Env. Aff. 33 (1976).

¹⁶⁶ Wis. Comment, supra note 1, at 504.

¹⁶⁷ The result might be increased illegal use if the penalties are not high enough or strictly enforced. See the Dismal Cycle, step #2, text at note 147, supra.

cally unfeasible. As the various federal and state regulatory programs established to date illustrate, a practical means of allowing ORV use coupled with effective environmental protection is difficult to find. The federal regulations fail to reach that minimum level of environmental protection sought by Executive Order 11644, while most individual state programs do little in the way of controlling injurious ORV operation. All of the schemes are deficient for one of a variety of reasons, such as dealing only with snowmobiles, failing to prohibit harassment of wildlife, or failing to limit the areas in which ORVs can be used. Almost all statutes lack air emissions controls.

No comprehensive program has yet been formed which affords adequate protection to both the environment and other recreationers. As an ultimate solution, self-policing seems too utopian a dream—eventual prohibition of ORV use likewise seems too unrealistic a prediction. The cost internalization scheme, by charging to the ORV-operator those social costs which he or she imposes upon the environment and upon other recreationers, is a large step toward finding a better solution. Knowing the direction, however, is a far cry from heading toward it.