

Report for Congress

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Snowmobiles: Environmental Standards and Access to National Parks

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Summary

On September 13, 2002, EPA Administrator Christine Todd Whitman signed regulations limiting air emissions from nonroad engines, including those in snowmobiles. Until now, snowmobiles have not been subject to emission standards. Under the new regulations, a first set of limits requiring a 30% reduction in emissions will be phased in, beginning in 2006, with more stringent standards effective in 2010 and 2012. The 2012 standards will reduce emissions from new snowmobiles about 50% below current levels. Uncontrolled snowmobiles emit significant quantities of pollution. In one hour, a typical snowmobile emits as much hydrocarbon as a 2001 model auto emits in 24,300 miles of driving. Snowmobiles also emit 30 times as much carbon monoxide (CO) as a current model auto.

Emissions and noise from snowmobiles have been the subject of controversy largely in the context of their effects on national parks. The National Park Service has permitted access by snowmobile to 44 units of the park system, in many cases in apparent violation of Executive Orders from the Nixon and Carter years. Outside of Alaska (where snowmobiles are permitted in most national parks by law), the most popular national park for snowmobiling has been Yellowstone, which saw more than 76,000 snowmobile visits in the 1999-2000 winter season. Under the Clinton Administration, the National Park Service decided that the emissions and noise from snowmobiling were incompatible with its mission to protect the park, and promulgated rules that would ban snowmobiles from Yellowstone beginning in the 2003-2004 winter season. The Bush Administration has revisited these rules in settlement of a lawsuit filed by the snowmobile manufacturers and the State of Wyoming, and is expected to announce modifications in March 2003.

The principal concerns at Yellowstone have been carbon monoxide and noise. CO concentrations have substantially exceeded air quality standards at the West Yellowstone park entrance, and park rangers stationed there have donned respirators in response. Noise is also an issue: according to the Park Service, snowmobile noise is essentially continuous during the winter at key locations in Yellowstone.

Efforts to reduce snowmobile emissions and noise have resulted in both the new EPA standards and some revisions to National Park Service access rules, but the subject remains contentious. Environmental groups argue that standards are inadequate and that EPA has failed to require the "greatest degree of emission reduction achievable" as required by the Clean Air Act. They note that machines emitting less than EPA will require in 2012 are already available, and that such machines would lead to lower lifetime operating costs. Snowmobile manufacturers, on the other hand, argue that new regulations are not necessary to achieve air quality, that the costs of compliance have been underestimated, and that tighter standards will restrict consumer choice.

This report discusses snowmobile access to the parks, snowmobile emissions, and the new EPA standards, and concludes with a discussion of legislative proposals introduced in the 107th Congress. It will be updated as events warrant.

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Snowmobiles: Environmental Standards and Access to National Parks

Proposals by the National Park Service to enforce long-standing policy that regulates the use of snowmobiles in national parks have raised a number of questions regarding the current and potential regulation of such vehicles. National parks account for only 3.26% of the land mass of the United States and possess few trails and roads suitable for snowmobiles, compared to areas available on other federal lands; but – for both proponents and opponents – the question of snowmobile access to the parks has taken on a far greater importance. To the snowmobile industry and to many in communities neighboring national parks, “Snowmobiling is an important part of the economic engine that supports northern communities, winter tourism.”¹ To environmental groups, snowmobiling “is one of the most environmentally devastating recreational activities permitted by the Park Service ... resulting in adverse impacts to Park wildlife, air and water quality, vegetation, Park ecology, and Park users.”² Underlying the debate are broader questions concerning regulation of emissions and noise from the vehicles and the degree to which restrictions may serve as a precedent or stigma affecting snowmobile and motorized recreation³ use more generally.

Snowmobile Use in National Parks

In recent years, snowmobiles have been allowed access to 44 units of the national park system, including such major parks as Yellowstone, Grand Teton, Rocky Mountain, Acadia, Zion, Mount Rainier, and Sequoia. While numerous parks have allowed such access, recreational use of snowmobiles is not widespread in the park system as a whole. The National Park Service (NPS) administers 385 units (parks, seashores, monuments, etc.). Of these, 341 (89%) have not been open to snowmobiles. Many units are located in climates unsuitable for them or are too small to be used for such recreation. Others (e.g., Glacier National Park and Yosemite) have banned snowmobiles since the 1970s. According to the National Park Service, use of snowmobiles outside of Alaska is mostly concentrated in five units of the park system:

¹ Statement of Ed Klim, President, International Snowmobile Manufacturers Association, at U.S. EPA Public Hearing, Washington, D.C., October 24, 2001.

² Petition to Prohibit Snowmobiling and Road Grooming in National Parks, submitted to the National Park Service January 21, 1999 by Bluewater Network and 60 other environmental groups. A copy of the petition is attached to testimony of Sean Smith, Public Lands Director, Bluewater Network, to Subcommittee on National Parks, Historic Preservation and Recreation, Senate Energy and Natural Resources Committee, May 25, 2000.

³ Motorized recreation includes all-terrain vehicles, off-road motorcycles, and personal water craft, in addition to snowmobiles.

Table 1: National Park Use by Snowmobiles, Winter 1999-2000

Park Service Unit	Location	Number of Snowmobiles Entering the Park
Yellowstone National Park	Wyoming	76,571
Voyageurs National Park	Minnesota	35,000
Rocky Mountain National Park	Colorado	27,000
Pictured Rocks National Lakeshore	Michigan	26,000
John D. Rockefeller Memorial Parkway	Wyoming	23,399

Sources: National Park Service, National Parks Conservation Association

Yellowstone National Park, Voyageurs National Park, Rocky Mountain National Park, Pictured Rocks National Lakeshore, and the John D. Rockefeller Memorial Parkway (see Table 1).

Park Service Policy on Snowmobile Access

Although recreational access by snowmobiles has been permitted in these units of the park system, the Park Service in recent years has concluded that such use has generally been in violation of Executive Orders 11644 and 11989, issued by Presidents Nixon and Carter. The Nixon Order directed that use of off-road vehicles on public lands “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.”⁴ It specified that off-road vehicle “areas and trails shall be located in areas of the National Park system ... 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,” and it directed the Park Service to “monitor the effects of the use of off-road vehicles” and to rescind or limit this use “as necessary to further the policy of this order.”

In January 1999, the Park Service received a rulemaking petition from the Bluewater Network and 60 other environmental organizations seeking a ban on snowmobiles from all units of the National Park Service. In response, the Service surveyed units of the park system to assess the extent to which they were complying with the Executive Orders. According to Interior Department testimony: “The results graphically demonstrated that the National Park Service was not complying with its

⁴Executive Order 11644, “Use of Off-Road Vehicles on the Public Lands,” 37 Federal Register 2877, February 9, 1972.

statutory and regulatory mandates.... Consequently, maintaining the status quo with regard to snowmobiling was simply not an option.”⁵ On April 27, 2000, the Department of the Interior and the National Park Service announced that “snowmobiling for general recreational purposes will be prohibited throughout the Park System, with a limited number of narrow exceptions.”⁶ By July 2000, the Department had backed away from its strict enforcement stance with a clarification: there would be no snowmobile ban in park units pending a formal rulemaking and public comment period, and snowmobile practices prior to the April 2000 announcement (i.e., access to more than 40 parks) would continue in place through the 2000-2001 winter season.⁷

Since then, the focus has been on Denali National Park in Alaska and the Yellowstone/Grand Teton area. Both of these areas had been considered exceptions subject to special consideration even under the April 2000 policy announced by the Park Service. Whether snowmobile access to these parks will be allowed to continue has generated substantial public interest.

Denali National Park. In Alaska, vast distances, lack of roads, abundant snow cover, and small dispersed populations make snow machine use ubiquitous. In general, national parks in Alaska allow snowmobile access under the provisions of the Alaska National Interest Lands Conservation Act (ANILCA, P.L. 96-487). However, access to the 2 million acres formerly known as Mt. McKinley National Park (now the core of Denali National Park) has been an issue. Prior to passage of ANILCA (1980), snowmobiles had been banned from this park. In 1999, the Park Service reinstated this policy, banning snowmobiles first on a temporary and later on a permanent basis.⁸ Litigation regarding access to Denali was initiated by snowmobile user groups, but was withdrawn in June 2001, on the assumption that legislation would be introduced to address the issue. This legislation (H.R. 4677 / S. 2589), introduced in the spring of 2002, would allow access to some portions of the old Park, while continuing the ban elsewhere. As of September 2002, no action had been taken on the bills.

Yellowstone/Grand Teton. The other exception to the Park Service’s general policy was the Yellowstone/Grand Teton National Park area. The Park Service had

⁵ Statement of Donald J. Barry, Assistant Secretary for Fish and Wildlife and Parks, U.S. Department of the Interior, before the House Committee on Resources, Subcommittee on National Parks and Public Lands, and the Senate Committee on Energy and Natural Resources, Subcommittee on National Parks, Historic Preservation, and Recreation, May 25, 2000.

⁶ U.S. Department of the Interior, Office of the Assistant Secretary, “National Park Service Puts the Brakes on Escalating Snowmobile Use in the National Park System,” Press Release, April 27, 2000, p. 2. In addition to Alaska parks and the three Yellowstone area units discussed below, Voyageurs National Park in Minnesota was also exempted because of its enabling legislation.

⁷ Statement of Denis P. Galvin, Deputy Director, National Park Service before the Subcommittee on National Parks and Public Lands, House Committee on Resources, Oversight Hearing on General Issues Involving Access to National Parks, July 20, 2000, p. 2.

⁸ The temporary closure was instituted on February 3, 1999. The permanent closure was finalized June 19, 2000, at 65 Federal Register 37863.

been sued in May 1997 by groups who alleged that the Service was violating the National Environmental Policy Act, the Endangered Species Act, the National Park Service Organic Act, and the Yellowstone Act in allowing use of snowmobiles in the two parks and on the Rockefeller Memorial Parkway (which links them). The lawsuit was settled within months when the Service agreed to conduct an Environmental Impact Study (EIS) of winter use of the parks. Upon completion of the study, the Clinton Administration promulgated a final rule in January 2001, banning snowmobiles from Yellowstone, Grand Teton, and the Rockefeller Parkway beginning in the winter of 2003-2004.⁹

Snowmobile manufacturers, represented by the International Snowmobile Manufacturers Association (ISMA), have suggested that “cleaner, quieter” snowmobiles – a phrase not defined – be allowed continued access to the parks. Their suggestion appears to have found a receptive audience in the Bush Administration. On June 30, 2001, the Administration responded to a suit filed by ISMA and the State of Wyoming by agreeing to reopen the decision to ban the vehicles from the three Yellowstone area units. The Park Service agreed to prepare a Supplemental EIS and reach a new Record of Decision by November 15, 2002 (a deadline subsequently extended to March 15, 2003). The agreement gave rise to speculation that the Service would allow snowmobiles meeting emission standards to be promulgated by EPA in 2002 to have access to the parks.

A draft version of the Supplemental EIS was released in March 2002. The draft examined three alternatives to the ban adopted (but not implemented) under the Clinton Administration, two of which would allow continued snowmobile access, with some limits placed on the emissions and noise from the vehicles and the total number of machines allowed to enter.¹⁰ In a meeting to discuss this draft, the Park Service indicated that it would likely propose limited access for snowmobiles in Yellowstone, Grand Teton, and the Rockefeller Parkway.¹¹

Within the Executive Branch, however, there has not been unanimity on reversing the ban. EPA’s Region 8 (which includes Wyoming and Montana) submitted comments on the draft Supplemental EIS on April 23, 2002. In these comments, the regional office stated objections to each of the new alternatives identified by the Park Service and indicated its continued agreement with the conclusion of the original EIS, i.e., banning snowmobiles in the three Yellowstone area units.¹²

⁹ Special Regulations, Areas of the National Park System, 66 Federal Register 7260, January 22, 2001.

¹⁰ The alternatives are laid out in the National Park Service’s Draft Supplemental Environmental Impact Statement, Winter Use Plans, Yellowstone and Grand Teton National Parks, John D. Rockefeller, Jr. Memorial Parkway, Volume 1, Summary, pp. xiii - xvi, available at [<http://www.nps.gov/grte/winteruse/seis/vol1.htm>].

¹¹ See “Park Service Retreats from Full Ban on Snowmobiles in Yellowstone, Grand Teton,” *Daily Environment Report*, June 27, 2002, p. A-2.

¹² Letter of Max H. Dodson, Assistant Regional Administrator for Ecosystems Protection and Remediation, U.S. EPA, to Steven F. Jobst, Assistant Superintendent, Grand Teton National Park, April 23, 2002. Also, “EPA Wants Snowmobiles Banned from Yellowstone,

Legislation to resolve the Yellowstone / Grand Teton issue has also been introduced. It is discussed below in the “Legislative Issues” section.

Clean Air Act and Noise Control Act Regulation

The Clean Air Act gives EPA authority to regulate emissions from mobile sources of pollution, including off-road sources such as snowmobiles; but snowmobiles, until now, have not been subject to any federal or state emission regulations. Nor are they subject to noise regulations. EPA has authority under Section 6 of the Noise Control Act of 1972 to regulate noise from “transportation equipment (including recreational vehicles and related equipment).” But the Agency’s Office of Noise Abatement and Control was disbanded in 1982, and EPA has not issued any regulations under the statute in the two decades since then.

Snowmobile Emissions

Unregulated snowmobiles generally run on two-stroke engines – the type of engine that traditionally has powered outboard motors and lawnmowers. In a two-stroke engine, fuel enters the combustion chamber at the same time that exhaust gases are expelled from it. As a result, as much as one-third of the fuel passes through the engine without being combusted.¹³ This causes poor fuel economy and high levels of emissions, particularly hydrocarbons and carbon monoxide. In one hour, a typical snowmobile emits as much hydrocarbon as a 2001 model automobile emits in 24,300 miles of driving.¹⁴ In a day of use, a snowmobile may emit as much hydrocarbon as an automobile emits in 8-10 years of operation.

In preparing the 2000 Environmental Impact Statement for the decision on snowmobile access to Yellowstone, the National Park Service measured emissions from snowmobiles and compared them to other emission sources in the park. The Service also estimated ambient levels of carbon monoxide (CO) and particulate matter (PM) and compared them to air quality standards. The EIS concluded that the 8-hour maximum concentration of carbon monoxide at the West Yellowstone entrance to the park would exceed the National Ambient Air Quality Standard for CO by nearly 70%

¹²(...continued)

Grand Teton,” Associated Press, April 29, 2002. The letter is available at [http://www.epa.gov/region8/compliance/nepa/nepadocs/winteruse_DSEIS.pdf].

¹³ In a four-stroke engine (used in automobiles and some newer outboard motors and lawn mowers, but not generally used in snowmobiles) the combustion chamber takes in fuel, compresses it, ignites it, and exhausts it in separate cycles, leading to far more complete combustion and lower emissions, even before the application of emission controls.

¹⁴ U.S. EPA, Office of Air and Radiation, *Draft Regulatory Support Document: Control of Emissions from Unregulated Nonroad Engines*, September 2001, p. I-25, available at [<http://www.epa.gov/otaq/regs/nonroad/proposal/cleanrec.htm#rsd>]. A snowmobile emits as much carbon monoxide in an hour as a 2001 model auto does in 1,520 miles of driving. The impact of these emissions on ambient air quality (as described below) is of at least equal concern as that of hydrocarbons because of the tendency for atmospheric accumulation of CO in winter.

(a concentration of 15.15 parts per million vs. the standard of 9).¹⁵ The analysis also concluded that snowmobiles accounted for 97.9% of the carbon monoxide at West Yellowstone during winter months.

Noise is also an issue. Opponents of allowing snowmobiles in Yellowstone and other national parks argue that the parks are special places whose remoteness, beauty, and quiet inspire reflection and awe. The noise of engines is incompatible with this atmosphere, they argue. Snowmobile enthusiasts counter that the parks cover vast areas and that snowmobiles are restricted to a few roads – the same roads traversed by cars, recreational vehicles, and buses in summer. Park Service studies indicate that the sound of snowmobiles can be heard for significantly greater distances than that of automobiles, however, and is essentially continuous during the winter at key locations in Yellowstone: snowmobile noise can be heard 95% of the time by visitors at Old Faithful and 87% of the time at the Grand Canyon of the Yellowstone.¹⁶

EPA's New Regulations

Regulations for snowmobile and other non-road engine emissions were signed by EPA Administrator Whitman September 13, 2002.¹⁷ EPA had proposed the rule in substantially similar form on October 5, 2001.¹⁸ Public hearings on the proposal were held near Washington, D.C. October 24, and in Denver October 30, 2001, and a public comment period lasted until January 18, 2002.

As shown in Table 2, the new regulations will reduce both carbon monoxide and hydrocarbon emissions from new snowmobiles a little more than 30% starting in 2006 and an average of 50% by 2012, with an intermediate step in 2010. According to the Agency, the 2006/2007 reductions can be achieved without major changes in technology, in part because they apply to the average of a manufacturer's fleet emissions, rather than to individual machines. This will allow manufacturers to provide a range of models, some with advanced emission controls and others without: "While some advanced technologies such as two-stroke direct injection and four-stroke engines, would be found in some models, many models would still be equipped with two-stroke engines with relatively minor engine modifications resulting in minimum

¹⁵ U.S. Department of the Interior, National Park Service, *Winter Use Plans, Final Environmental Impact Statement for the Yellowstone and Grand Teton National Parks and John D. Rockefeller, Jr., Memorial Parkway*, Volume 1, Chapter 4, p. 224, available at [<http://www.nps.gov/planning/yell/winterfinal/>]. Ambient air quality standards were not exceeded elsewhere in the park.

¹⁶ National Park Service, Proposed Rule, Special Regulations, Areas of the National Park System, 65 Federal Register 79026, December 18, 2000.

¹⁷ U.S.EPA, Control of Emissions from Nonroad Large Spark-Ignition Engines, and Recreational Engines (Marine and Land-Based), Final Rule, available on EPA's website at [<http://www.epa.gov/otaq/whatsnew.htm>]. The rule is expected to appear in the Federal Register by October 11, 2002.

¹⁸ 66 Federal Register 51098, October 5, 2001.

emission reductions, while some models may not even have any emission controls.”¹⁹ EPA estimates the cost of these Phase 1 controls at \$73 per snowmobile. Vehicles meeting the standards will be more fuel-efficient, resulting in an average reduction in operating cost of \$57, thus offsetting most of the initial cost increase.

The 2010 and 2012 standards, which also are fleet averages, can also be met without eliminating two-stroke engines, according to the Agency. Because two-stroke engines produce more power than similar size four-strokes and are easy to start in cold weather, the Agency expects the industry to continue to manufacture mostly two-stroke engines even in 2012, although many would be modified with direct injection technology to reduce emissions. According to the Agency, “A potential scenario for meeting these standards could be a mixture of 50 percent direct injection, 20 percent four-stroke engines, and 30 percent with engine modifications.”²⁰

Table 2: EPA’s New Snowmobile Emission Limits

Year	Carbon Mono-oxide (CO)	% Reduction	Hydrocarbons (HC)	% Reduction
current average	397 g/kW-hr		150 g/kW-hr	
2006/2007*	275 g/kW-hr	30.7%	100 g/kW-hr	33.3%
2010	275 g/kW-hr	30.7%	75 g/kW-hr	50%
2012**	200 g/kW-hr*	49.6%	75 g/kW-hr*	50%

g/kW-hr = grams per kilowatt-hour.

* Half of snowmobiles sold in 2006 must comply with the standards. With a few exceptions, all snowmobiles sold in 2007 must comply.

** The 2012 standards allow manufacturers to trade additional reductions in HC for increases in CO emissions, provided that CO emissions are reduced at least 30%, HC emissions are reduced at least 50%, and the total of HC+CO emissions sums to 100%. Thus, for example, HC reductions of 60% and CO reductions of 40% would satisfy the requirement, as would HC reductions of 70% and CO reductions of 30%.

¹⁹ Notice of Proposed Rulemaking: Control of Emissions from Nonroad Large Spark Ignition Engines and Recreational Engines (Marine and Land-based), Preamble, p. 134. Further discussion, including the cost estimates, is found on p. 171. The proposal was published at 66 Federal Register 51098, October 5, 2001, and is available on EPA’s website at [<http://www.epa.gov/otaq/nonroad.htm>]. The preamble to the final standards says that one scenario for meeting the 2006/2007 standards would be 15% four-stroke engines, 15% direct injection two-strokes, 60% conventional two-strokes with improved carburetion, enleanment strategies, and engine modifications, and presumably the other 10% having no modifications at all. Control of Emissions from Nonroad Large Spark-ignition Engines, and Recreational Engines (Marine and Land-based), Final Rule, as signed September 13, 2002, Preamble, p. 93, available at [<http://www.epa.gov/otaq/regs/nonroad/2002/preamble.pdf>].

²⁰ Ibid., p. 94.

The cost of these changes would average an additional \$131 per snowmobile in 2010, according to EPA, but the costs would be offset by \$286 in fuel savings and improved performance, so that lifetime costs would actually be \$155 lower. The same is true of the 2012 standards: the added cost of \$89 per snowmobile is offset by \$191 in fuel savings and improved performance, according to EPA, for a net savings of \$102 per vehicle.²¹

The costs of each of the three phases are incremental. Thus, when fully implemented, the standards would cost an additional \$293 per snowmobile, according to the Agency; lifetime operating costs, however, would decline by \$534. Combining these two factors, the standards would decrease total costs by \$234 per snowmobile when fully implemented.

As compared to the standards EPA proposed in 2001, the final standards were weakened or made more flexible in three respects, and strengthened in two. First, the 2006 standards will be phased in, with only 50% of 2006 model snowmobiles required to meet the standard, and full compliance delayed until the 2007 model year. Second, the 2010 standard for carbon monoxide remains at the 2006 level of 275 grams per kilowatt-hour; in EPA's original proposal, it would have been reduced to 200. Third, in 2012, manufacturers will have to meet the standards originally proposed for 2010, but, within limits, they will be allowed to trade reductions in CO for additional reductions in hydrocarbons. Thus, reductions of CO may not reach the 50% level originally proposed; if they don't, however, the extra CO emissions would be offset by additional reductions in hydrocarbons.

The standards were also strengthened in two respects. First, EPA added a permeation emission standard for fuel tanks and hoses. Fuel evaporates through hoses and through the walls of plastic containers (such as those used as fuel tanks on snowmobiles). The tank and hose standards require an 85% reduction in plastic fuel tank permeation emissions and a 95% reduction in fuel system hose permeation beginning in 2008, in order to lower hydrocarbon emissions from evaporation. The cost of this standard is estimated at \$7 per vehicle, with cost savings of \$11.²²

Another, relatively minor, strengthening was the addition of a cap on emissions of nitrogen oxides (NO_x) in 2012. The NO_x cap is set at approximately the current level of emissions. It was added because some of the technologies that might be used to lower HC and CO could simultaneously increase NO_x. To prevent that, the Agency added a cap at current levels.²³

The proposal does not include noise standards. While acknowledging that the Agency has the authority to set such standards, the proposal stated that "at this time we do not have funding to pursue noise standards for nonroad equipment that does not

²¹ See Preamble to the Final Rule, previously cited, Table IX.B-1, p. 179.

²² Ibid.

²³ Ibid., p. 73.

have an existing noise requirement.”²⁴ An Agency source confirmed that the proposed standards would have essentially no impact on noise.²⁵ Despite receiving comments from a number of organizations that the standards should address noise, the Agency restated in its response to public comments that it would not address the issue, adding that Congress would need to provide appropriations for the Agency to begin any noise control initiative.²⁶

Reaction to the EPA Standards

Both environmentalists and the snowmobile industry have reacted negatively to EPA’s new standards. The International Snowmobile Manufacturers Association (ISMA) argued that EPA grossly underestimated the costs of compliance, and that the standards would lead to the elimination of entry-level snowmobiles from the market. Cleaner, quieter machines can be made, according to ISMA, but they cost more, are heavier, and can only be ridden on groomed roads. ISMA estimates that the cleanest four-stroke engines cost an additional \$1,700 (about 30% more than current average prices). Even modest improvements to two-stroke engines will cost \$350-\$400 per machine, according to the Association.²⁷

Bluewater Network, on the other hand – the environmental group most identified with snowmobile issues – feels the rules should be much stronger.²⁸ In comments submitted to EPA, Bluewater encouraged the Agency to set standards “that can only be met using the best available technology, which we believe to be four-stroke engines with particle traps and three-way catalysts.”²⁹ They also want mandatory emission labels for the machines, and are disappointed that the Agency chose not to set noise standards.

Bluewater points to the Clean Snowmobile Challenge, an annual design contest open to college engineering students and sponsored by the Society of Automotive Engineers, as demonstrating that machines far cleaner than EPA’s proposed standards are feasible. The winning entry in the 2001 Challenge reduced CO 78.8% and

²⁴ Ibid., p. 135.

²⁵ Personal communication, John Mueller, U.S. EPA Office of Transportation and Air Quality, September 28, 2001.

²⁶ U.S. EPA, Office of Air and Radiation, *Summary and Analysis of Comments: Control of Emissions from Unregulated Nonroad Engines*, September 2002, p.II-78, available at [<http://www.epa.gov/otaq/regs/nonroad/2002/r02023.pdf>].

²⁷ Personal communication, Ed Klim, President, ISMA, September 27, 2001.

²⁸ Personal communication, Sean Smith, Bluewater Network, September 27, 2001. Also see “Bush Administration Fails to Protect Public Health, Folds to Industry Interests,” Press Release, September 13, 2002, available at [http://www.bluewaternet.org/press_releases/pr2002sep13_pl_eparule.pdf].

²⁹ Bluewater Network, “Comments on the Environmental Protection Agency’s Advanced Notice of Proposed Rulemaking, Docket A-2000-01,” p. 2.

unburned hydrocarbons 97.6% and significantly reduced noise, at a cost of \$600.³⁰ “If college students are able to build cleaner and quieter machines, surely the billion-dollar snowmobile industry can do as well,” says Bluewater Public Land Director Sean Smith.³¹

Both Bluewater and the snowmobile manufacturers argue that EPA has misinterpreted the legal authority on which the new standards rely. Bluewater (as well as other environmental groups and the association representing state air pollution program administrators) argues that EPA is promulgating standards that are less stringent than the law requires. Section 213(a)(3) of the Clean Air Act requires the Agency to promulgate standards that “achieve the greatest degree of emission reduction achievable... giving appropriate consideration to the cost ... and to noise, energy, and safety factors....” Four-stroke engine technology, achieving greater emission reductions than the Agency proposed, is already available, they note – machines using this technology are on the market. Cost, noise, and energy factors cannot be used as arguments against adoption of this technology: the lifetime cost of such engines would be lower than that of current engines, according to the Agency’s own analysis; the technology uses far less energy, and could be substantially quieter than current engines. Thus, according to these groups, the Agency’s standards do not meet the requirements of the Act.

Snowmobile and other nonroad-vehicle manufacturers, on the other hand, focus on Section 213(a)(2) of the Act, which ties the Agency’s authority to regulate nonroad engines to a finding by the Administrator that emissions from such engines or vehicles “are significant contributors to ozone or carbon monoxide concentrations in more than 1 area which has failed to attain the national ambient air quality standards for ozone or carbon monoxide.” EPA addressed this issue before beginning the process of developing regulations: on June 17, 1994, the Agency made an affirmative determination that emissions from nonroad engines and vehicles are significant contributors to ozone, CO, and particulate matter in more than one nonattainment area.³² On December 7, 2000, the Agency issued a finding that recreational vehicles (including snowmobiles) are among the specific categories of nonroad vehicles that contribute to such pollution.³³ In its October 5, 2001 Federal Register notice, which proposed the snowmobile standards, the Agency identified 7 areas in Alaska, Washington, Colorado, Oregon, and Montana that have significant populations of snowmobiles and have failed to attain the air quality standard for CO.³⁴

³⁰ See “ ‘Clean’ Snowmobile Produces Lower Emissions than the Average Car at SAE Clean Snowmobile Challenge 2001,” Press Release, April 10, 2001.

³¹ Personal communication, Sean Smith, Bluewater Network, September 27, 2001.

³² 59 Federal Register 31306, June 17, 1994.

³³ 65 Federal Register 76790, December 7, 2000.

³⁴ 66 Federal Register 51105-51107, October 5, 2001. The Preamble to the final rule revised the list of 7 areas, identifying 6 nonattainment areas in which the Agency believes snowmobiles are significant contributors to CO concentrations; the Agency added that there are 6 additional areas that have not been classified nonattainment, but where air quality monitoring indicates a need for CO control. See Preamble to the Final Rule, previously

(continued...)

Manufacturers of snowmobiles and other nonroad vehicles note, however, that carbon monoxide concentrations have declined [chiefly as a result of auto emission standards] and that none of the 7 areas identified by the Agency has exceeded the CO standard in recent years, even if they are still formally classified as nonattainment. CO nonattainment today is essentially a problem in urban “hot spots,” according to manufacturers, and snowmobiles make no contribution to that problem.³⁵

Legislative Issues

Members of Congress, particularly from western states, have expressed an interest in whether there will be continued snowmobile access to national parks. Four hearings have been held on these issues since the 106th Congress, and a provision was attached to the FY2001 Consolidated Appropriations Act (P.L. 106-554) to block the Park Service from reducing snowmobile use in any units of the National Park system during the 2000-2001 or 2001-2002 winter seasons.³⁶

In the first session of the 107th Congress, two bills addressing snowmobiles were introduced: Senator Thomas’s S. 365, to require the National Park Service to allow continued access to snowmobiles; and Representative Holt’s H.R. 1465, with the opposite intention – to codify proposed NPS restrictions. Both bills were drafted in advance of EPA’s proposed regulations, but they embody opposite approaches to the standards EPA developed.

The House bill makes no reference to the regulatory process or to the possibility of cleaner, quieter machines. It sets forth a general prohibition on snowmobile access to national parks, with a limited number of exceptions – for parks in Alaska, for Voyageurs National Park, for access to private inholdings for owners and their guests, and for designated routes that provide direct access to public lands open to public snowmobile use in the vicinity of a park. These restrictions would apply to all snowmobiles irrespective of their emission or noise levels.

S. 365, on the other hand, assumed that EPA’s regulations would result in cleaner, quieter machines. The bill would preserve access to the parks for current unregulated snowmobiles for a period of at least 5 years after the date of enactment, and would direct the National Park Service, at the completion of that period, to propose noise standards for snowmobile use in national parks “taking into account noise reductions achieved in conjunction with” EPA’s emission standards.

The second session of the 107th Congress has seen four bills introduced to address snowmobile issues. In response to the draft Supplemental EIS on access to Grand Teton, Yellowstone, and the Rockefeller Parkway and the Park Service’s plan to allow

³⁴(...continued)
cited, p. 18.

³⁵ Statement of Ed Klim, President, ISMA, at EPA Public Hearing, Washington, D.C., October 24, 2001.

³⁶ The text of the snowmobile provision can be found in the conference report, H. Rept. 106-1033, which contains the text of nine bills incorporated by reference in the Act.

snowmobiles access, H.R. 5044 was introduced. This bill, introduced by Representative Holt with 124 original co-sponsors, would ban snowmobile access to the three areas. An identical bill, S. 2697, was introduced in the Senate by Senator Reid.

Two bills were also introduced during the second session in response to the Park Service's closure to snowmobiles of a portion of Denali National Park, discussed previously. Representative Don Young's H.R. 4677 would open portions of the closed sections of Denali to snowmobiles, but continue to prohibit use in other portions of the closed sections; a similar bill, S. 2589, was introduced in the Senate by Senator Murkowski.

As of late September, none of the snowmobile bills had been acted on.

Conclusions

With the promulgation of EPA's snowmobile standards, the degree to which the regulations address the "cleaner, quieter" issue could play an important role in the debate over future access to the parks. The promulgation could also stimulate a broader congressional inquiry regarding the degree to which snowmobiles and other recreational vehicles should be subject to emission and noise limits generally – whether or not they are used in national parks.

For now, all sides would appear to agree that snowmobiles meeting the Agency's new standards will not in fact be quieter and will provide only some of the emission reductions that are technologically feasible. Whether that standard is good enough, whether it should be strengthened to address noise limits and provide additional emission reductions, and whether EPA's standards should influence the ongoing review of National Park Service regulations on snowmobiles are questions that may be raised in coming months. At present, based on its discussions with interested parties, a more likely approach would seem to be that the National Park Service will develop separate rules for snowmobiles used in the three Yellowstone area parks, establishing noise and emission limits for park entrance and/or limiting the number of snowmobiles to be allowed to enter.³⁷

While Congress may be asked to address some of these issues, a more likely venue for most of them is the courts. In a press release announcing Bluewater's position on the EPA standards, Russell Long, the organization's Executive Director, described the standards as "woefully inadequate," and concluded, "We're headed for the courtroom."³⁸ The courts are also likely to hear challenges to any changes in the National Park Service regulations for Yellowstone, Grand Teton, and Rockefeller Parkway. But public interest in these issues remains significant: the reopening of the

³⁷ Two alternatives are laid out in the National Park Service's Draft Supplemental Environmental Impact Statement, Winter Use Plans, Yellowstone and Grand Teton National Parks, John D. Rockefeller, Jr. Memorial Parkway, Volume 1, Summary, pp. xiii - xvi, available at [<http://www.nps.gov/grte/winteruse/seis/vol1.htm>].

³⁸ "Bush Administration Fails to Protect Public Health, Folds to Industry Interests," Press Release, September 13, 2002, previously cited.

Yellowstone area Winter Use Plan generated 350,000 public comments. As a result, Congress can be expected to retain an interest in the ultimate resolution of these issues