

How Are Ski Areas Graded?

The Ski Area Environmental Scorecard [grades](#) western U.S. ski resorts on their environmental policies and practices. The grades of the scorecard are based on a point system of individual criterion. The criterion is grouped together into four categories: Habitat Protection, Protecting Watersheds, Addressing Global Climate Change, and Environmental Practices and Policies, which then form an overall grade.

The Ski Area Environmental Scorecard is a service of the Ski Area Citizens' Coalition (SACC), which is comprised of Rocky Mountain Wild, Friends of the Inyo (California), Save Our Canyons (Utah), The Sierra Nevada Alliance (California) and others. These non-profit conservation organizations are familiar with the environmental policies of ski resorts and their impacts to the environment. Volunteers and staff of participating organizations are themselves skiers, and recognize skiing as a valid use of public lands.

Numerous surveys, and the ski industry itself, repeatedly inform us that skiers are an environmentally inclined group. Skiers consider the environment a higher policy priority than the general public. Unfortunately, the ski industry itself is not a great source of information about individual ski areas' environmental practices and policies. In comments on the White River National Forest plan revision, the EPA noted, regarding sections of forest zoned for developed skiing, that "...no other land management prescription on the Forest directly results in more stream-water depletion, wetland impacts, air pollution, permanent vegetation change, or permanent habitat loss... more wetland impacts and stream depletions resulted from ski area expansion and improvement than from all other Forest management activities combined, including many direct and indirect impacts that are permanent (irreversible and irretrievable)". After all, once you are outside riding up the chairlift over a snow covered mountain, who is thinking about the carbon emissions of running the chairlift, or the amount of grading and de-vegetation it took to build the ski slope or the chairlift you're riding on.

In August 2004, George Washington University Professor Jorge Rivera and University of Denver Professor Peter de Leon published a study of ski industry environmental impacts and the National Ski Area Association's Sustainable Slopes program. Not only did their results validate the criticisms that the conservation community has had of the ski industry's voluntary environmental program for years, but the researchers didn't have any qualms about the validity of the Ski Area Environmental Scorecard as an accurate and useful third-party tool to gauge ski resorts' environmental policies and management. In fact, they used the Scorecard as the basis in determining the legitimate environmental performance of ski resorts.

The Ski Area Environmental Scorecard strives to differentiate between those ski areas that truly engage in environmentally sound practices versus those that merely claim to do so. While there will always be environmental impacts from creating and operating a ski resort, the intent of the Scorecard is to rate ski areas on their current environmental performance, allowing for ski areas to regain lost points over a period of five years in consideration of development and expansions. The categorical criteria, from which the scores are based, are clearly defined so that ski resorts have the chance to improve their environmental performance. The ski industry's business thrives on mountain ecosystems, and it is necessary for them to be active stewards of the land. The

Scorecard will hold ski resorts accountable to preserve, maintain and improve the mountain environments that draw skiers and outdoor recreation enthusiasts in the first place.

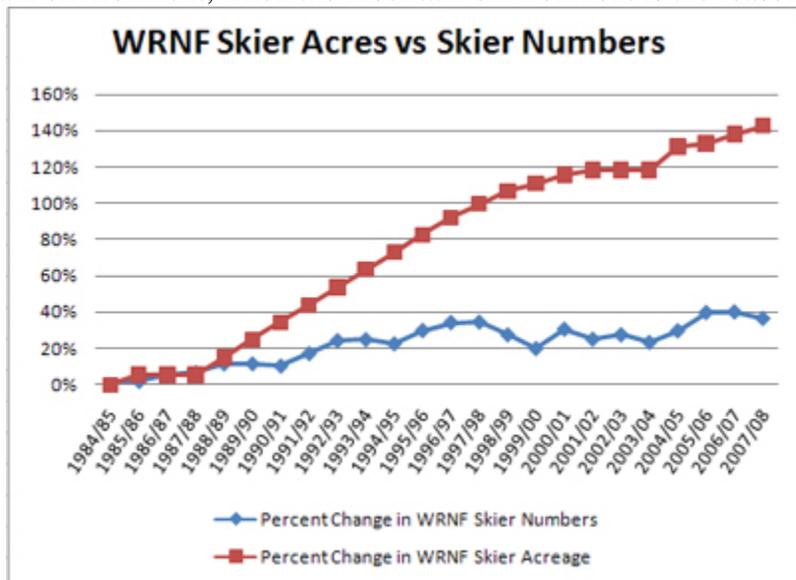
Ski resorts concentrate on recreational use, permitting tremendous numbers of people to enjoy and learn about delicate mountain environments in a safe manner. When undertaken in an environmentally sensitive manner, ski resorts can minimize their impacts on the land, while maintaining or improving business.

Creating and maintaining developed ski areas is an intensive use of land that has significant environmental impacts. These impacts include logging, erosion from disturbances on steep slopes, damage to wetlands from construction and maintenance, etc. These actions can compromise values such as the peace, solitude and the feeling of being in touch with the natural environment in which many mountain visitors seek. Unfortunately, some ski companies choose to engage in practices that degrade the environmental integrity that brings business and visitors in the first place. There are some ski companies that are obviously putting more emphasis into their bottom line than the mountain environment, when the mountain environment is the reason they have a business at all.

Since the 1978/1979-ski season, skier numbers nationally have increased less than 2% over 23 seasons, or less than 1/10th of 1% per year.

In fact, many ski areas showed a decline in the number of skier visits by between 4-6% during the 2008/2009 ski season. Yet many ski area terrain expansions are being or have been undertaken in an effort to attract the limited pool of skier dollars nationwide. The construction and expansion cycle

creates pressure on other ski areas to also expand in order to retain their market share and/or lure the limited number of skiers from other resorts. Ninety percent of ski areas in the western United States are on public lands administered by the Forest Service; it is not sound public policy for the Forest Service to continue to approve terrain expansions, which feed the expansion cycle without regard to public recreation needs, or environmental impacts of doing so. In the White River NF for example, home to ski resort icons such as Vail, Aspen, Breckenridge, and Copper Mountain, skier numbers have increased 28% since 1985, yet skier acreage has more than doubled (a 107% increase).



Ski resorts are evolving at an increasing rate from local or regional recreation facilities to urbanized destination resorts. Rather than concentrating on recreation needs for the public, many ski resorts are aggressively involved in very lucrative real estate development. Urban-type commercial and residential real estate developments by ski resorts compound habitat

fragmentation impacts of ski runs and lifts. Such developments adversely impact roadless areas, wetlands, habitats and or other environmentally sensitive lands.

Public, federal, state, or locally owned land is meant for the benefit of all the public, as well as to protect our natural heritage for future generations. Some business corporations within the ski industry (such as sister development companies and retail chains) purchase land, or engage in land exchanges with the Forest Service to obtain parcels of land adjacent to their ski areas. They then propose ski lifts on these lands, which then increases their value for development of ski-in/ski-out condominiums, residential units, or retail outlets. An example of this kind of land trade for commercial and residential use is stated in the Vail Resorts 1997 annual report, which clearly outlines these intentions:

“To facilitate real estate development, Vail Resorts Development Corporation (VRDC) invests significant capital for on-mountain improvements, such as ski lifts, trails, and snowmaking. These improvements enhance the value of the company’s real estate holdings... Following this strategy, VRDC invested significant capital to develop the Bachelor Gulch ski terrain. This investment... also allowed VRDC to contract to sell 101 ski-in / ski-out homesites adjacent to the Bachelor Gulch ski terrain for an average of \$750,000 per homesite.”

Expansions driven by the lure of real estate development profits are counter to the public interest. These practices impact not only public lands, but also private forest holdings that often go unstudied with impacts subsequently unmitigated.

A growing number of ski areas have been able to develop commercial and residential real estate through land exchanges with the U.S. Forest Service or Bureau of Land Management. The Ski Area Environmental Scorecard does not analyze the potential loss or benefit to the public through land exchanges. Our primary concern is the direct and cumulative impacts from resort development on undisturbed land in alpine environments.

Grading Methodology

To determine a ski area’s score, a set of criteria are employed with each criterion worth a specified number of points proportional to the criterion’s affect on the environment. All criteria apply to every ski area, though some resorts are not capable of losing points through certain criteria. For instance, a ski area not adjacent to or near a roadless area will automatically receive these points for criterion #4c. Likewise, some ski areas do not have adjacent private land available for real-estate development, thus will receive points for criterion #2a: Real Estate Development. Consequently, ski areas in and adjacent to more environmentally sensitive mountain regions must be more responsible yet also have a greater opportunity to demonstrate care for the environment. Scores are calculated in the following manner:

$$\text{Numerical Score} = \frac{\text{Total points attained}}{\text{Total points}} * 100\%$$

Letter Grade:

- A = 77.9 - 100%**
- B = 67.9 – 77.9%**
- C = 57.9 - 67.9%**
- D = 39.9 – 57.9.9%**
- F = Less than 39.9%**

Criteria used to judge ski areas' environmental practices are weighted to give significant consideration to the preservation of natural mountain environments. Through intensive review of a wide body of pertinent documents including, scientific literature and case studies, such as Environmental Impact Statements for Master Development Plan revisions, expansion proposals, Forest Plan revisions; formal biological opinions prepared by the U.S. Fish and Wildlife Service; as well as marketing, economic, and operational studies prepared by the ski industry, it is clear that [development on undisturbed forest lands is the single most damaging ecological impact a ski area can undertake.](#)

A good score means that ski areas both demonstrate environmentally beneficial policies and practices. Simultaneously, the SACC has provided government or scientific documentation for all environmental issues that result in less than full scores being granted. To this end, [surveys](#) were mailed to each ski area in the western U.S., followed by phone calls and emails to each ski area. Freedom of Information Act requests were filed with the appropriate land manager (i.e. Forest Service, county government, etc.) to identify additional ski area policies or practices. All of the documents used to determine a ski area's score are posted on the Ski Area Citizens' Coalition website

Criteria Summary

A. Habitat Protection (104 Points)

1. [Maintaining Ski Terrain Within the Existing Footprint](#) (30 points)
2. [Preserving Undisturbed Lands from Development](#) (31 points)
3. [Protecting or Maintaining Threatened, Endangered, Sensitive, or Candidate Species and Their Habitat](#) (22 points)
4. [Preserving Environmentally Sensitive Areas](#) (21 points)

B. Protecting Watersheds (35 Points)

5. [Protecting/Preserving Wetlands](#) (9 points)
6. [Protecting Water Quality](#) (12 points)
7. [Water Conservation](#) (14 points)

C. Addressing Global Climate Change (50 Points)

8. [Conserving energy by avoiding new snowmaking.](#) (10pts)
9. [Renewable Energy](#) (17 points)
10. [Energy Efficiency](#) (14 points)
11. [Transportation](#) (9 points)

D. Environmental policies and practices (41 points)

12. [Environmental Policy Positions and Advocacy](#) (17 points)
13. [Waste Stream Management](#) (9 points)
14. [Purchasing](#) (8 points)
15. [Environmental Reporting and Accountability](#) (5 points)
16. [Community Sustainability](#) (2 points)

Total Possible = 230 points

Criteria Details

A. Habitat Protection (104 Points)

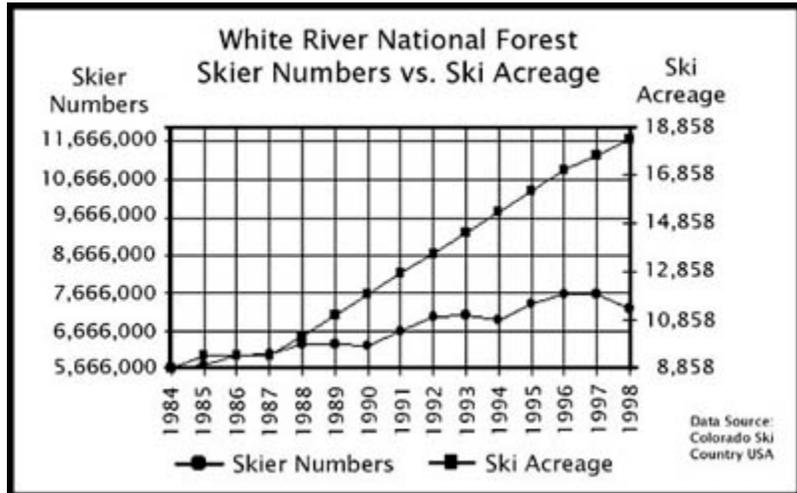
1. Maintaining Ski Terrain Within the Existing Footprint (30 points)

The [ski area](#) is not proposing, undertaking, nor has undertaken terrain expansion on currently undisturbed land, on a progressive basis with 100% of points docked for proposals made or still in place, approved, or implemented in the last year (based on the calendar year), 80% between one and two years ago, 60% between two and three years ago, 40% between three and four years ago, 20% between four and five years ago, and 0% before five years. Similarly, the ski area has not sought National Forest management prescriptions or local zoning for additional terrain expansion outside currently disturbed areas. Zoning expansions are worth 25% of acreage values. Points based on acreage of expansion or zoning request:

- No expansion: 30 points
- Up to 50 acres: 25 points
- 51 - 100 acres: 20 points
- 101 - 150 acres: 15 points
- 151 - 200 acres: 10 points
- 201 – 300 acres: 5 points
- 301+ acres: 0 points

Ski area upgrades and improvements that take place within already impacted ski area boundaries, as opposed to expansions into undisturbed terrain, have less damaging impacts on wildlife and the environment.

Every ten to fifteen years, the Forest Service is required to revise its management plan for each forest, basically zoning sections of forest for future developed skiing, logging, wildlife habitat protection, or other uses. Ski area expansion proponent's claim they only seek to have additional sections of forest zoned for developed skiing. However, once a region of forest is zoned for ski area expansions it is practically guaranteed that those sections of forest will eventually be developed for downhill skiing were the ski area to request permission for expansion. Tellingly, no amount of scientific evidence or public opposition has ever empowered the White River NF in Colorado – home to 63% of Colorado's skier visits – to deny an expansion request. Meanwhile, many states and/or municipalities require zoning for privately owned lands. Some ski areas on non-federal land must obtain proper zoning for ski area expansion terrain from local and/or state governments.



Ski area upgrades and improvements that take place within already impacted ski area boundaries, as opposed to expansions into undisturbed terrain, have less damaging impacts on wildlife and the environment. [In a Dec. 30, 1999 letter](#) to the White River National Forest for instance, the Colorado Department of Natural Resources noted that:

“...greater density at existing ski areas would have far less impacts on wildlife than a new ski area, or expansion into undeveloped terrain... A principal rule in wildlife protection is that impacts should be concentrated rather than dispersed.”

Upgrades and improvements on already impacted terrain, such as upgrading a lift from a two person chair to a high speed quad, is encouraged and therefore does not incur loss of points.

2. Preserving Undisturbed Lands from Development (31 points)

2a. Maintaining Real Estate Development Within Currently Disturbed Lands. The ski area is not proposing, undertaking, nor has undertaken residential development, commercial ventures, or other construction (excluding employee housing) on undisturbed lands, by year on the progressive basis outlined under criterion #1. Construction denudes an area of vegetation, exposes excessive soil for sediment run-off in streams and requires associated sewer lines, power lines, etc. Parking lot construction denudes an area of vegetation, exposes excessive soil for sediment run-off in streams and creates oil and anti-freeze concentrations that can affect water quality. Similarly, the ski area has not sought zoning for such development. Remodeling, expanding existing facilities, or construction on previously disturbed lands are granted full credit. Zoning requests are worth 25% of point values.

- No development outside currently disturbed lands: 20 points

- Up to 10 acres: 15 points
- 11-25 acres: 10 points
- 26-50 acres: 5 points
- 51+ acres: 0 points

2b. The ski area is not proposing, undertaking, nor has undertaken road construction on previously undisturbed lands, by year on the progressive basis outlined under criterion #1. Road construction denudes an area of vegetation, exposes excessive soil for sediment run-off in streams and creates oil and anti-freeze concentrations that can affect water quality. 8 points based on mileage of request.

- No road construction: 8 points
- Up to .5 mile: 4 points
- .5-.9 mile: 2 points

1 mile+: 0 points

2c. The ski area is not proposing, undertaking, nor has undertaken parking lot construction on previously undisturbed lands, by year on the progressive basis outlined under criterion #1. Parking lot construction denudes an area of vegetation, exposes excessive soil for sediment run-off in streams and creates oil and anti-freeze concentrations that can affect water quality. 3 points based acreage of request.

- No parking lot construction: 3 points
- Up to 2 acres: 2 points
- 2-5 acres: 1 point
- 5+ acres: 0 points

3. Protecting or Maintaining T&E Species and Their Habitat (22 points)

Habitat for federal and/or state threatened, endangered, sensitive or candidate animal species. Specie impact determinations by the Fish and Wildlife Service, or analogous determinations by the Forest Service or state wildlife agency, by year on the progressive basis outlined under criterion #1, as follows:

“Protecting or Maintaining Sensitive, Candidate, Threatened or Endangered Species and Their Habitat (The following determinations are found in government agency analysis documents.)

- 'Beneficial' or 'No effect': 22 points,
- 'May affect/impact individuals of a population' -one species: 21 points,
- 'May affect/impact individuals of a population' -two species: 19 points,
- 'May affect/impact individuals of a population' -three species: 17 points,
- 'May affect/impact individuals of a population' -four species: 15 points,
- 'May affect/impact individuals of a population' -five species: 13 points,
- 'May affect/impact individuals of a population' -six species: 11 points,
- 'May affect/impact individuals of a population' -seven species: 9 points,

- 'May affect/impact individuals of a population' -eight species: 7 points,
- 'May affect/impact individuals of a population' -nine species: 5 point,
- 'May affect/impact individuals of a population' -ten species: 3 points,
- 'May affect/impact individuals of a population' -eleven species: 2 points,
- 'May affect/impact individuals of a population' -twelve species: 1 point,
- 'Likely to adversely affect population viability,' or 'Jeopardy' determination or 'May affect/impact individuals of a population' -13 species+: 0 points

4. Preserving Environmentally Sensitive Areas (30 points)

Ski runs are essentially permanent clear cuts; development paves over land making it completely unavailable for most species. Studies indicate that logging ski runs enhances the extirpation of declining interior forest species, such as the golden crowned kinglet and the three-toed woodpecker. Logging for additional ski runs in undisturbed forests, building roads, grading slopes with bulldozers or blasting to moderate slope inconsistencies, or covering over wetlands entails significant long-term environmental impacts. They sever the habitat and migration corridors of forest interior species such as lynx, and often result in the loss of old growth forest and wetlands. Creating new ski runs generally entails significantly greater impacts than ski runs cut in areas previously logged or altered.

The Ski Area Environmental Scorecard does not compensate the destruction of wildlife habitat or wetlands for the implementation of mitigation measures. Sacrificing known quality wildlife habitat or a functioning wetland for development in return for questionably viable habitat through mitigation is unacceptable to the Ski Area Citizens Coalition. References to historic failures of mitigation measures include:

“Many mitigation projects have, in fact, failed due to one or more of the following reasons: poor siting and project design; inadequate monitoring programs; lack of adequate maintenance or remedial activities; and in some cases, failure of permittees to comply with the conditions of their permits.”

“Based on over a decade of survey results, the cumulative record of past mitigation projects remains undeniably poor overall, with disappointingly few examples of success.”

The “sober reality [is] that under present mitigation policies and practices ‘losses are likely to be uncompensated for and that what we call mitigation has a high chance of failure.’”

In cases where significant scientific controversy exists as to the extent of impacts resulting from actions proposed, approved, or undertaken by the ski area, protection of natural resources is granted the benefit of the doubt. The ski area is not proposing, undertaking, nor has undertaken an expansion, land alteration, or development in known environmentally sensitive areas, by year on the progressive basis outlined under criterion #1. Similarly, the ski area has not sought National Forest management prescriptions or local zoning for terrain alteration in

environmentally sensitive areas. The ski area receives points for not disturbing:

4a. Protecting/Preserving Old Growth

- No old-growth disturbed: 9 points
- Up to .5 acres: 6 points
- .5+ to 1 acre: 3 points
- 1.01 - 1.99 acres: 1 point
- 2 or more acres: 0 points

4b. Protecting/Preserving Unique Geological Formations

- No geologic alteration: 3 points
- Up to .5 acre: 2 points
- .5 - 1 acre: 1 point
- 1+ acres: 0 points

4c. Protecting/Preserving Roadless Areas

- No disturbance: 9 points
- Up to 1 acre: 6 points
- 1+ – 10 acres: 3 points
- 10+ acres: 0 points

B. Protecting Watersheds (35 Points)

5. Protecting/Preserving Wetlands (9 Points)

The ski area is not proposing, undertaking, nor has undertaken an expansion, land alteration, or development in known wetlands, by year on the progressive basis outlined under criterion #1. Similarly, the ski area has not sought National Forest management prescriptions or local zoning for terrain alteration in known wetlands. The ski area receives points for not disturbing:

- No disturbance: 9 points
- Up to .5 acres: 6 points
- .5+ to 1 acre: 3 points
- 1.01 - 1.99 acres: 1 point
- 2 or more acres: 0 points

6. Protecting Water Quality (12 points)

The ski area will receive points if it is not engaged in activities that have resulted in water quality violations, by year on the progressive basis outlined under criterion #1.

- No violations: 12 points
- One violation: 6 points
- Multiple violation/repeat offender: 0 points

Construction activities create large areas of exposed soil in the mountain environment, which create the potential for large sediment movements during spring run-off and rain events, in addition on-site storage of gas, oil, anti-freeze, solvents, etc. can leak and can contaminate surface and ground water. These activities as well as others can lead to water quality violations as cited by a state water board, the EPA or Army Corp of Engineers. Mountain streams can often be tainted with heavy metals pollution from historic mining operations. Snowmaking utilizing water of lower quality than the ambient downstream receiving waters including that from treated sewer systems, can have a negative affect on the watershed, its aquatic habitats and downstream users. Polluted snow melting into drainages undisturbed from mining can spread heavy metals pollution to clean creeks. In other cases, drawing water from clean streams that serve as a dilution source for other joining streams with mining pollution can worsen water pollution problems downstream.

7. Water Conservation (14 points)

7a. Conserving water by avoiding new snowmaking. (10pts) Snowmaking frequently requires withdrawal of waters when streams and aquatic life need it the most – in the low flow times of the year (fall and early winter). Snowmaking also uses vast quantities of energy that, to some degree, exacerbate global warming. Given the varied laws and regulations on minimum instream flows and water withdrawals throughout the western U.S., and the lack of availability of water withdrawal data, the Ski Area Citizens’ Coalition estimates the impacts of water withdrawals through proposed additions to existing snowmaking. New snowmaking utilizing reservoirs that recharge exclusively during high flow times (late spring and early summer) are not counted toward this criterion. 20 points based on acreage of new snowmaking proposed, approved, or implemented, by year on the progressive basis outlined under criterion #1:

- No new snowmaking (sans from reservoir that withdraw during spring): 10 points
- Up to 50 acres: 7.5 points
- 51 - 100 acres: 5 points
- 100+ - 200 acres: 2.5 points
- 200+ acres: 0 points

Since the 1978/1979-ski season, skier numbers have increased less than 2% over 21 seasons, or less than 1/10th of 1% per year. Yet many ski area snowmaking expansions, as with acreage expansions, are being undertaken in an effort to attract the limited pool of skier dollars nationwide. Doing so fuels a cycle whereby other ski areas feel pressure to expand snowmaking or acreage in order to retain their market share and/or lure the limited number of skiers from other resorts. Ninety percent of ski areas in the western United States are on public lands administered by the Forest Service. It is not sound public policy for the Forest Service to continue to approve snowmaking expansions, which feed this cycle encouraging ski area expansions without regard for public recreation needs.

Artificial snowmaking requires vast amounts of energy. It often depletes streams when fish and other wildlife need it the most – in the fall and winter when flows are at their lowest. Depleting streams to minimum required stream flows, if they exist at all, could destroy a stream’s ability to support fish populations, which in turn adversely impacts larger wildlife such as bald eagles, grizzly bear, and osprey.

7b. Retrofitting old facilities with low flow faucets, toilets, or undertaking other water minimization practices. 1-50% of facilities:1 point, 51-100%: 2 points.

7c. Installation of low flow faucets, waterless urinals or other water minimization practices in new facilities that are not required by law. 1-50% of facilities:1 point, 51-100%: 2 points.

C. Addressing Global Climate Change (50 Points)

8. Conserving energy by avoiding new snowmaking. (10pts)

Snowmaking frequently requires withdrawal of waters when streams and aquatic life need it the most – in the low flow times of the year (fall and early winter). Snowmaking also uses vast quantities of energy that, to some degree, exacerbate global warming. Given the varied laws and regulations on minimum instream flows and water withdrawals throughout the western U.S., and the lack of availability of water withdrawal data, the Ski Area Citizens’ Coalition estimates the impacts of water withdrawals through proposed additions to existing snowmaking. New snowmaking utilizing reservoirs that recharge exclusively during high flow times (late spring and early summer) are not counted toward this criterion. 20 points based on acreage of new snowmaking proposed, approved, or implemented, by year on the progressive basis outlined under criterion #1:

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- 100+ - 200 acres: 2.5 points
- 200+ acres: 0 points

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support fish populations, which in turn adversely impacts larger wildlife such as bald eagles, grizzly bear, and osprey.

9. Renewable Energy (17 points)

Global warming brings the potential to harm the ski industry by reducing wintertime snowfall and warming mountain temperatures. The ski industry will be one, if not the first industry to be impacted by the effects of increased global temperatures.

9a. Using biodiesel fuel in any diesel equipment or vehicles. (Percentage total annual biodiesel use = $.05*(B5 \text{ gallons}) + .2*(B20 \text{ gallons}) + (B100 \text{ gallons})$)/total consumption: 1-5% of total annual diesel use:4 points, 6-10%:5 points, 11-15%:6 points, 16-20%:7 points, 21% and above:8 points

9b. Generating clean, renewable energy on-site such as wind, solar, geothermal or low impact certified hydroelectric (one piece of equipment:1 point, two pieces of equipment:2 points, more than two pieces of equipment:3 points, one building facility:4 points, two facilities:5 points, more than two facilities:6 points)

9c. Purchasing wind, solar, geothermal or low impact certified hydroelectric energy credits to off-set electrical use for ski lifts and resort energy use (1-5% of annual electricity use:1 point, 6-50%:2 points and 51-100%:3 points)

10. Energy Efficiency (18 points)

10a. Employing energy efficiency retrofits, to lighting, heating, insulation, power supply, etc. in restaurant, lodging, lift and other facilities; 1-5% of facilities:1 point, 6-20%:2 points, 21-40%:3 points, 41-60%:4 points, 61-80%:5 points, 81-100%:6 points.

10b. Replacement of old and/or energy inefficient snowmaking guns with automated systems, systems that minimize the use of compressed air, utilizing newer 3 stage centrifugal compressors and mounting guns on towers. 1-5% of facilities:1 point, 6-20% of facilities:2 points, 21-40%:3 points, 41-60%:4 points, 61-80%:5 points, 81-100%:6 points (Full credit for ski areas that do not have snowmaking.)

11. Transportation (7 points)

Travel to and within ski resort areas creates traffic stresses and air quality problems. Increased vehicles equate to increased traffic problems, which means more pollution and difficulties for residents and visitors alike. By engaging in programs within the community and region to reduce the number of vehicle miles traveled, such as efforts to promote buses, shuttles, and trains for workers and recreationists and giving special discounts for carpooling, ski areas can help ameliorate these environmental problems.

11a. Providing incentives for carpooling for guests and/or use of mass transit, such as lift ticket discounts or free or reduced parking: 3 points.

11b. Providing incentives for carpooling for employees and/or use of mass transit: 2 points.

11c. Promoting or sponsoring commuter buses and shuttles from off-mountain sites to the ski area. (Intra-mountain shuttles traveling between parking areas, base areas and lodging areas are not adequate for this criterion. 'Off-mountain sites' include down valley destination towns and park-and-ride areas: 2 points.

D. Environmental policies and practices (41 points)

12. Environmental Policy Positions and Advocacy (15 points)

Ski areas can earn points by their environmental policy positions as follows:

12a. Not opposing any environmentally progressive local, state, or federal policies or legislation involving forest and land management issues that impact mountain ecosystems and environments: 5 points

12b. Actively supporting environmentally progressive local, state, or federal policies or legislation involving forest and land management issues that impact mountain ecosystems and environments: 5 points

12c. Addressing climate change including, but not limited to a position statement or support letter for the Kyoto Agreement, the Mayor Climate Protection Agreement, the US-CAP Program, or other specific policies aimed at reducing greenhouse gas emissions.

12d. Adhering to a green building policy or commitment: 2 points.

13. Waste Stream Management (9 points)

13a. Recycling customer use products (bottles, cans, aluminum, plastic, newspaper, trail maps, etc.): 1-33% of waste stream by weight or volume:1 point, 34-66%: 2 points, 67-100%:3 points.

13b. Recycling non-customer use products (cardboard, oil, etc.) (1-50% of waste stream:1 point, 51-100%:2 points.

13c. Reusing or using recycled building materials: 1-50%:1 point, 51-100%:2 points.

13d. Composting food waste or other products: 2 points.

14. Purchasing (8 points)

14a. Using non-disposable products for food service, or composting food waste and other products: 1-33% of facilities:1 point, 34-66%:2 points, 67-100%:3 points.

14b. Purchasing recycled office and food service paper products: 1-33% of use by weight, volume or cost (via purchase orders):1 point, 34-66%:2 points, 67-100%:3 points.

14c. Use of cleaner burning, fuel efficient 4-stroke snowmobiles: 50% and up of snowmobile fleet 4-stroke: 2 points, 1-49%:1 point, none:0 points.

15. Environmental Reporting and Accountability (4 points)

13a. Publication of an annual or semi-annual environmental performance report that is, or can be, publicly available: 2 points.

13b. Undertaking independent 3rd party auditing of environmental practices, including but not limited to certification under ISO 14001: 2 points.

16. Community Sustainability (2 points)

16a. Providing funding or other support to a local philanthropic foundation for environmental protection/conservation/sustainability purposes: 2 points.

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- While based on thorough research, investigation, and comprehensive documentation of ski area environmental policies and practices, the grades and grading system constitute only the opinion of the Ski Area Citizens' Coalition.
 - In their comments on the White River National Forest plan revision, the EPA noted, regarding sections of forest zoned for developed skiing, that "...no other land management prescription on the Forest directly results in more stream-water depletion, wetland impacts, air pollution, permanent vegetation change, or permanent habitat loss... more wetland impacts and stream depletions resulted from ski area expansion and improvement than from all other Forest management activities combined, including many direct and indirect impacts that are permanent (irreversible and irretrievable)".
 - "Ski area" includes official policies of each ski company or their subsidiaries, as well actions of ski area management, principals, representatives or related entities.
 - Chart Data source: National Ski Areas Association (<http://www.nsaa.org/MemberUpdate/estskiervisits.htm>)
 - See chart. Data source: Colorado Ski Country USA, White River National Forest.
 - Colorado Department of Natural Resources letter to the Forest Service, 12/30/99
 - Rick Thompson, Western Ecosystems. "1992-93 Baseline Wildlife Studies for Vail Ski Area's Proposed Category 3 Expansion."
 - Congressional testimony of Michael L. Davis, Deputy Assistant Secretary of the Army for Civil Works, and Robert H. Wayland, Director of the Office of Wetlands, Oceans and Watersheds, U.S. Environmental Protection Agency.
 - Race and Fonesca, Fixing Compensatory Mitigation: What Will It Take, Ecological Applications at 97 (1996).
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 - "Is Greener Whiter? Voluntary Environmental Performance of Western Ski Areas", de Leon and Rivera, August 2004, Policy Studies Journal (Vol. 32, No. 3, 2004). The study concluded, in

part, that Sustainable Slopes “participant ski areas appear to be correlated with lower third-party environmental performance ratings... the program does not involve specific environmental standards, lacks third-party oversight, and does not have sanctions for poor performance.”