



Aspen Skiing Company

# Sustainability Report

1999 - 2000





Aspen Skiing Company

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“The best way to predict  
the future is to invent it.”

Alan Kay, Apple Computer



**Welcome** to Aspen Skiing Company's first Sustainability Report. It's an outgrowth of work that has occurred since the inception of the Environmental Affairs department three years ago. We have been inspired by environmental reporting at other businesses and are convinced that the best way to improve our environmental performance is to establish a credible baseline. The report has two components: an analysis of our natural resource usage accounts for what we "take, make and waste" (to quote Paul Hawken); the remainder of the report describes how we've reduced pollution resulting from that resource use and addressed other environmental issues. Because we believe responsible corporations should disclose their environmental impacts, we will publish an annual report on our progress toward sustainability.



# Letter from the CEO

We are aware that Aspen Skiing Company (ASC) has major environmental impacts on our small mountain valley. We affect wildlife, traffic patterns, streamflows, landfills — virtually every part of the local environment, from elk herds to the night sky. While this may not be news to anybody — we are, after all the valley's largest employer — it is difficult for me to say. I have worked for over 30 years in the ski industry, but I consider myself first and foremost an environmentalist. My ethic comes from an extensive background in mountaineering, but also from experience as President of Yosemite National Institutes — one of the premier environmental education centers in the country — and CEO of the clothing company Patagonia.

For years, ski resorts were perceived as environmentally benign. Since they were outdoors and generally attractive, people thought they must not be a problem. But as my knowledge of the ski business grew, I came to understand its impacts. And yet, I've always believed our jobs don't have to conflict with our ethics. That sentiment led to a company-wide process to develop guiding principles for ASC. The goal: a set of mutually agreed upon values to guide our business. The lengthy development process — which involved all employees — made clear that one of those values, held dear by ownership and employees alike, is environmental stewardship.

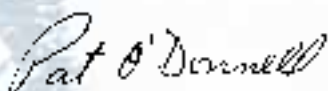
Next steps were obvious. We created the ski industry's first Environmental Affairs Department, and to emphasize the seriousness of the commitment, we made it an integral part of senior management. A top priority was to respond to strong employee interest in creating an Environment Foundation — a unique nonprofit enterprise founded and run by ASC employees. The Foundation supports local environmental groups through employee contributions matched by the company and again by the Aspen Valley Community Foundation. The Environment Foundation rapidly grew to over 1,000 members. In only three years it has donated more than \$250,000 to local environmental projects.

The Environmental Affairs department then really took off, finding big-picture ways to green our entire company. We built one of only eleven certified green buildings in the U.S., deconstructed and recycled entire buildings and composted what wasn't salvageable, improved our recycling program, powered an entire ski lift and part of a restaurant with windpower, donated ski clothing to Kosovar refugees, and saved water and dollars by using efficient washing machines. We were the first to identify climate change as a major business concern to the ski industry, and then take action. We're currently retrofitting the lights in the Little Nell hotel garage — this will prevent the emission of 300,000 pounds of CO<sub>2</sub>, the primary greenhouse gas, each year. All of this and more is detailed on the industry's first environmental website: [www.aspensnowmass.com/environment](http://www.aspensnowmass.com/environment).

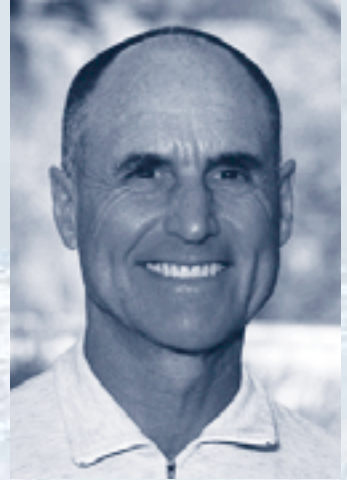
We've received recognition for our work internationally, in newspapers and magazines, in the U.S. Congress, on British Television, and through numerous prestigious awards, including two Times Mirror Golden Eagle awards for overall environmental excellence in our industry and the internationally renowned British Airways Tourism for Tomorrow award.

Our business depends on natural beauty, clean air, and good snow; a healthy environment is integral to success. Are we perfect? Absolutely not. Will we ever be sustainable? Probably not. But we will continue to make the best possible effort. It's the right thing to do.

Sincerely,



Pat O'Donnell  
President/CEO



# 1. Company Profile

Aspen Skiing Company attracts 1.3 million visitors each winter to almost 5,000 acres of skiable terrain on four mountains — Snowmass, Ajax, Buttermilk and Highlands — and year-round visitors to 15 restaurants and 3 hotels with 260 rooms. We employ 3,400 people in winter. Our environmental programs have won numerous awards, listed below.

2000 Tomorrow Magazine Special Mention of CEO Pat O'Donnell in the "Environmental Leadership" Issue

2000 Travel Industry Association of America Odyssey Award, Environment Category

2000 U.S. Congressional Record, Noted for Innovative Environmental Programs

2000 Times Mirror Silver Eagle Award for Excellence in Energy Conservation

2000 Times Mirror Silver Eagle Award for Excellence in Water Conservation

1999 U.S. Green Building Council Leadership in Energy and Environmental Design Certification for the Sundeck Restaurant

1999 British Airways Tourism for Tomorrow Award for International Eco-tourism

1999 National Environmental Education and Training Foundation Award

1999 Times Mirror Golden Eagle Award for Overall Environmental Excellence in the Ski Industry

1999 Times Mirror Silver Eagle Award for Excellence in Environmental Education

1998 Times Mirror Golden Eagle Award for Overall Environmental Excellence in the Ski Industry

1998 Times Mirror Silver Eagle Award for Excellence in Community Outreach

1998 Times Mirror Silver Eagle Award for Excellence in Wildlife Habitat Protection



# and Management

## ASC conducts business by a set of guiding principles:

- Sustain the “Aspen Idea” based on the concept of the complete life where mind, body and spirit are enriched
- Promote excellence in outdoor recreation and athletic achievement
- Deliver exemplary hospitality
- **Practice responsible stewardship of our mountain environment**
- Ensure the financial success of Aspen Skiing Company

## This mandate from the highest level is fundamental to the company’s greening efforts and has spawned other policy initiatives. These include:

- Green development principles for all new construction, adopted as policy in early 2000. The principles are described in detail in the manual “Building Sustainable Resorts: Guidelines for Sustainable Design and Construction of Aspen Skiing Company Buildings.” This document, unique in the industry, guides all staff and contractors involved in development.
- A green purchasing policy, designed to change the way the company buys goods and services.
- A pollution-prevention plan, developed as part of the Colorado Department of Health and Environment’s Environmental Leadership program.
- A hazardous-waste protocol.
- Expansion of compliance-related activities such as Department of Transportation/Resource Conservation and Recovery Act hazardous-waste training programs, reduction of hazardous chemicals, and radical improvements in labeling, storage, and safety.
- An employee “Conservation Council” designed to establish an environmental contact and watchdog in every company location. The council’s first mission: to improve recycling company-wide. After that, they’ll focus on energy use.
- A community environmental advisory committee, discussed in more detail in the Community Participation and Accountability section.



## ECOSTARS: A Management Tool to Encourage Environmentalism

To encourage employee participation in environmentalism, and to solicit new ideas, ASC created the Eco-Star Performer program, which awards employees for improving the environmental performance of the company. Winners receive a pin, a gift certificate and a letter from the CEO. Below, a sampling of recent Eco-Stars, and their accomplishments:

**DON MUSHET**, of the Buttermilk vehicle shop, for helping to install aqueous parts washers, and creating a model hazardous-waste storage area.

**JOHN SALE**, for masterminding the deconstruction of two buildings and organizing a salvaged materials sale.

**BJORN SUTTON**, of the ski school, for being the ultimate role-model by carrying his own utensils to avoid using plastic.





## **SNOWCAT HYDRAULIC LINE SPILLS: A UBIQUITOUS PROBLEM**

All snowcats are powered by hydrostatic drives, a kind of propulsion system that uses hydraulic oil to move the wheels. Occasionally, a hose will break, emptying the entire oil reservoir onto the slope. Not only are blown lines an environmental problem, but they're costly. Between the repairs, wasted time, ungroomed slopes, and cleanup, ASC's not just hemorrhaging oil, but cash.

On Ajax, Buttermilk and Highlands, there were a few blown lines in the winter of 1998. Such spills are so common that most ski areas consider them a fact of life. While the spills aren't regulated, and even though hydraulic oil tends to be very clean, they're clearly bad for the environment. Concerned about this impact (and unhappy about early-morning phone calls to repair cats), Don Mushet took a new tack. Last summer, he inspected all the hydraulic lines on his cats, and replaced parts that seemed worn. This winter, there were no blown lines. An ounce of prevention eliminated gallons of spilled oil, saved money, and helped grooming operations run like, well, a well-oiled machine.

“If you think about it, pollution is fundamentally a manifestation of economic waste. It involves incompletely using a resource, throwing a resource away, or burning something. The opportunity to lower cost by eliminating pollution, then, seems anything but rare.”

— Michael Porter, Harvard Business School

## Summary Totals of Cost and Equivalent CO<sub>2</sub> per Category

CATEGORY	MEDIA	COST	COST PER CATEGORY	UNITS	UNITS PER CATEGORY	UNIT TYPE	CONVERSION	CO <sub>2</sub> (TONS)
VEHICLES	FUEL-SM	128,317		149,635	111505	GAL DIESEL	.0113 TONS CO <sub>2</sub> /GAL	1,260
					38130	GAL GAS	.00988 TONS CO <sub>2</sub> /GAL	377
	FUEL-AH	41,165		45,603	37486	GAL DIESEL	.0113 TONS CO <sub>2</sub> /GAL	424
					8117	GAL GAS	.00988 TONS CO <sub>2</sub> /GAL	80
	FUEL-AM	75,688		88,881	76802	GAL DIESEL	.0113 TONS CO <sub>2</sub> /GAL	868
					12079	GAL GAS	.00988 TONS CO <sub>2</sub> /GAL	119
	FUEL-BM	80,577		84,361	33941	GAL DIESEL	.0113 TONS CO <sub>2</sub> /GAL	384
					50,420	GAL GAS	.00988 TONS CO <sub>2</sub> /GAL	498
SUB-TOTAL			\$325,748		368,480	GALLONS		4,009
SNOWMAKING	ELECTRIC-ASC	559,683	559,683	6,909,663	6,909,663	KWH	1.99 LBS CO <sub>2</sub> /KWH	6,875
	WATER-AM	96,201		49,845,000			.000006308 TONS CO <sub>2</sub> /GAL	31
	WATER-AH	7,500		15,000,000				0
	WATER-BM	0		28,981,500				0
	WATER-SM	29,745	\$133,445	59,489,000	153,315,500	GALLONS		0
SUB-TOTAL			\$693,128					6,907
BUILDINGS	ELECTRIC-ASC	197,185		2,816,924				
	ELECTRIC-AM&AI	72,283		1,204,724				
	ELECTRIC-SMC	150,526		2,150,370				
	ELECTRIC-TLN	197,927	\$617,921	2,827,522	8,999,541	KWH	1.99 LBS CO <sub>2</sub> /KWH	8,955
	WATER-ASC	42,430		21,214,780				
	WATER-TLN	41,359		20,679,555				
	WATER-SMC	47,023		23,511,390				
	WATER-AM&AI	17,038	\$147,850	8,519,180	73,924,905	GALLONS	.000006308 TONS CO <sub>2</sub> /GAL	47
	NAT. GAS-SMC	3,064		6383.25				
	NAT. GAS-ASC	136,680		284,749				
	NAT. GAS-TLN	61,889		128,936				
	NAT. GAS-OTHER	271,158	\$472,790	564,912	984,979	THERMS	1MILL.BTU/.059TONSCO <sub>2</sub>	5,811
	PROPANE	3,457	\$3,457	3,842	3,842	GALLONS	.00637 TONS CO <sub>2</sub> /GALLON	24
SOLID WASTE	265,763	\$265,763		4367	TONS	2.1759 TONCO <sub>2</sub> /TON WASTE	9,502	
SUB-TOTAL			\$1,507,781					24,339
LIFTS	ELECTRIC-ASC	690,371	\$690,371	10,304,038	10,304,038	KWH	1.99 LBS CO <sub>2</sub> /KWH	10,253
MISC	ELECTRIC-ASC	1,279	\$1,279	18,270	18,270	KWH	1.99 LBS CO <sub>2</sub> /KWH	18
<b>TOTAL</b>		<b>\$3,218,306</b>						<b>45,525.84</b>
<b># OF SKIERS: 1,205,266</b>		<b>\$2.67 PER SKIER</b>					<b>TONS CO<sub>2</sub> PER SKIER 0.038</b>	

The electric ASC data was dated Feb 99 through Jan 00  
 The electric AM&AI, TLN, and SMC data was dated Jan 99 through Dec 99  
 Fuel SM and AH data was dated Jan 99 through Dec 99  
 Fuel AM and BM data was dated Dec 98 through Nov 99  
 Natural Gas SMC was only purchased in Dec 99  
 Natural Gas ASC data was dated Feb 99 through Jan 00  
 Natural Gas TLN and Other data was dated Jan 99 through Dec 99  
 Propane All data was dated Feb 99 through Dec 99  
 Snowmaking AM data was dated Feb 99 through Jan 00  
 Snowmaking AH, BM, & SM data was for the 99/00 season  
 All water data was dated Jan 99 through Dec 99  
 The # of skiers data was dated Nov 99 through Apr 00

Vehicles	\$325,747.72
Snowmaking	\$693,128.05
Buildings	\$1,507,780.86
Lifts	\$690,370.54
Misc	\$1,278.92

Date	# of Skiers
Nov 99	12,170
Dec 99	178,457
Jan 00	260,523
Feb 00	310,959
Mar 00	354,504
Apr 00	88,655
Total	1,205,266

SM = Snowmass, AH = Highlands, AM = Ajax, BM = Buttermilk, ASC = Aspen Skiing Company, AM&AI = Aspen Mountain & Aspen Institute, SMC = Snowmass Club, TLN = The Little Nell

## Solid-Waste Generation

1998	1999
Total solid waste: 4367 tons	Total solid waste we're assuming, is the same as the previous year: 4367 tons
Total Recycled: <b>457 TONS</b>	Total Recycled: <b>465 TONS</b>
<b>10.5% diversion rate.</b>	<b>10.6% diversion rate.</b>

The tipping fee per cubic yard is: \$21.30. The density of the waste is assumed at 700 pounds per cubic yard.

Getting a handle on solid waste generation has been extremely difficult: these numbers, unfortunately, are only estimates. The problem is that the company is scattered over four mountains and has several waste haulers. In some cases, ASC-owed operations share dumpsters with other businesses. Even with the assistance of a solid waste consultant who spent six months analyzing billing data, ASC was still unable to get definitive numbers. We hope that by next year's report we will have more accurate data.

## Assumptions and Data Sources

Energy data was compiled by Judy Dorsey and associates at the Brendle Group, Inc., Ft. Collins, CO, as part of ASC's pollution prevention partnership.

### ELEC-ASC

The spreadsheet titled ELEC-ASC was provided by Aspen Skiing Company — Auden Schendler  
The electric ASC data was dated Feb 99 through Jan 00

The cost per kWh for each category is:

Lifts	0.067
Snowmaking	0.081
Buildings	0.07
Misc	0.07

### ELEC-SMC, ELEC-TLN

The category is buildings and the cost per kWh used is 0.070. The spreadsheets were generated from copies of invoices sent by Auden Schendler.  
The electric AM&AI, TLN, and SMC data was dated Jan 99 through Dec 99

### FUEL-SM, FUEL-AH, FUEL-AM, FUEL-BM

All gas and diesel use is assumed to be for vehicles. This spreadsheet was compiled from spreadsheets sent from Auden Schendler.  
The electric AM&AI, TLN, and SMC data was dated Jan 99 through Dec 99  
Fuel SM and AH data was dated Jan 99 through Dec 99  
Fuel AM and BM data was dated Dec 98 through Nov 99

### NAT. GAS-SMC, NAT. GAS-ASC, NAT. GAS-TLN, NAT. GAS-OTHER

All natural gas is assumed to be use for heating buildings and costs \$0.48 per therm on average according to Auden Schendler.  
The spreadsheets were generated from invoices sent by Auden Schendler.  
Natural Gas SMC was only purchased in Dec 99  
Natural Gas ASC data was dated Feb 99 through Jan 00  
Natural Gas TLN and Other data was dated Jan 99 through Dec 99

### PROPANE-ALL

All propane is assumed to be used in buildings and costs \$0.90 per gallon.  
The spreadsheet was generated from copies of invoices sent by Auden Schendler. Propane All data was dated Feb 99 through Dec99.

### SNOWMAKING-AJAX

Snowmaking water costs \$1.93/1,000 gallons according to a fax to Auden Schendler from Aspen Water Dept.  
Snowmaking AM data was dated Feb 99 through Jan 2000.

### SNOWMAKING-HIGHLANDS

The approximation of 15 million gallons used is by Ron Chauner, Mountain Manager for Highlands and Buttermilk.  
The cost is assumed to be \$0.50/1000 gallons. Snowmaking AH data was for the 99/00 season.

### SNOWMAKING-BUTTERMILK

According to Lyle Oliver, Buttermilk Snowmaking Manager, the use was 28,981,500 gallons at no cost.  
Snowmaking BM data was for the 99/00 season.

### SNOWMAKING-SNOWMASS

According to Auden Schendler, the use was 59,489,000 gallons at a cost of \$0.50/1000 gallons. Snowmaking SM data was for the 99/00 season.

### WATER-SMC, WATER-TLN, WATER-SM, WATER-ASC, WATER-AM&AI

Assumes that the cost is .2 cents per gallon. The spreadsheets were generated from invoices from Auden Schendler.  
All water data was dated Jan 99 through Dec 99.

### SUMMARY-CATEGORY

The CO<sub>2</sub> conversions were provided by Lucinda Smith from the City of Fort Collins.  
Water conversion was provided by Phil Ostrander from Aspen Water Utility.

The # of skiers data was dated Nov 99 through Apr 00  
The # of skiers data was obtained from a file from Aspen titled 9900days

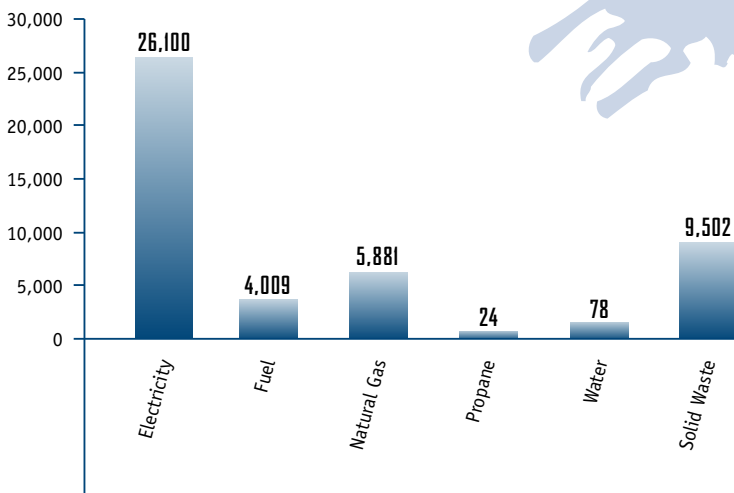
The tipping fee per cubic yard is: \$21.30 per cu. Yd.  
The density of the waste is assumed at 700 pounds per cubic yard

SM = Snowmass, AH = Highlands, AM = Ajax, BM = Buttermilk, ASC = Aspen Skiing Company, AM&AI = Aspen Mountain & Aspen Institute, SMC = Snowmass Club, TLN = The Little Nell

## Media Summary Data Chart

MEDIA	COST	UNIT NUMBER	UNIT TYPE	CO <sub>2</sub> (TONS)	AVE COST/UNIT
Electricity	\$1,869,253	26,231,512	kWh	26,100	\$0.071
Fuel	\$325,748	368,480	gallons	4,009	\$0.884
Natural Gas	\$472,790	984,979	therms	5,811	\$0.480
Propane	\$3,457	3,842	gallons	24	\$0.900
Water	\$281,295	227,240,405	gallons	78	\$0.001
Solid Waste	\$265,763	4,367	tons	9,502	\$60.857
<b>TOTAL</b>	<b>\$3,218,306</b>			<b>45,526</b>	

## CO<sub>2</sub> Emissions by Media (Tons)



# Hazardous Waste Management

## IV. Compliance and

ASC is subject to relatively few environmental regulations, because unlike manufacturers, **the company has few toxic emissions, and does not handle large amounts of hazardous chemicals.**

ASC complies with state and federal regulations regarding asbestos and aboveground and underground storage-tank regulations (including Spill Prevention Control and Countermeasure plans for each mountain). ASC also complies with Occupational Health and Safety Act (OSHA) regulations, Resource Conservation and Recovery Act and Department of Transportation regulations for hazardous waste, and each year holds RCRA/DOT training for all staff that might use or handle hazardous waste. In addition to training manuals, ASC has a company protocol for hazardous-waste management. As a conditionally exempt, small-quantity hazardous-waste generator, ASC produces the following hazardous and non-hazardous (but regulated) wastes:

- Used motor oil
- Old paint and paint solvent
- Antifreeze (Ethylene Glycol)
- Diesel/water mixture
- Oily rags and absorbants
- Fluorescent bulbs
- Oil separator sludge
- Safety Kleen Premium 150 Solvent



### SOLVING THE SOLVENT PROBLEM

Since the industrial revolution, mechanics have faced an enduring problem — dirty machine parts. Historically, they scrubbed bearings, bolts and brakes in a bucket of hazardous solvent. But that's changing. ASC shops have converted to new, environmentally friendly "parts washers."

While solvent does a great job of cleaning, it's nasty stuff — bad to breathe, and worse to soak in. Since it's also a hazardous waste, disposal is costly. What's needed is, quite literally, a new solution. That solution is water. Relatively new "aqueous parts washers" work like dishwashers, using detergent and hot water in place of solvent. According to testers at the Buttermilk shop, they clean just as well. The washers produce two wastes: dirty water, which is either evaporated off or poured down the drain, and an oily sludge that is disposed of at licensed facilities. Fortunately, a typical washer generates only a fraction of one barrel of this sludge each year, significantly less waste than solvent tanks produce.

In 1999, the Buttermilk vehicle shop and Snowmass and Ajax lift operations switched to aqueous washers, adding a total of eight new machines. A major perk of the new washers is that they save money. Since there's no scrubbing required, mechanics can just toss dirty parts into the machine instead of hand-cleaning each bolt. Reduced labor, solvent disposal, and maintenance will save roughly \$4,000 annually per washer! Savings might then be used to pay for other environmental initiatives.

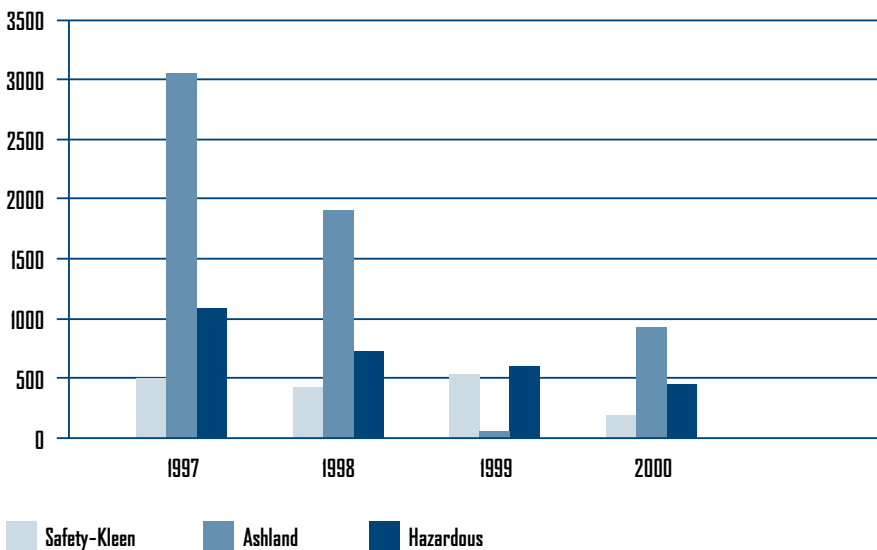
ASC has two regulated waste streams: Safety Kleen, which maintains our remaining solvent-based parts washers, and other waste generated throughout the company. In 1999, we disposed of 540 gallons of Safety Kleen Premium 150 solvent. This solvent is classified as “non-hazardous,” and tests of the dirty solvent showed it to be non-hazardous as well. Regardless, by 2001, ASC plans to have phased out all solvent-based parts washers. ASC shipped no hazardous or regulated wastes from other sources within the company in 1999. This statistic may be misleading, since we did ship waste early in 2000. Through September of 2000, ASC shipped the following via Ashland Chemical:

- One 55-gallon drum of old paint (hazardous)
- Two 55-gallon drums of latex paint (non-hazardous)
- Four 55-gallon drums of oil separator sludge (non-hazardous)
- One 55-gallon drum of ethylene glycol (non-hazardous)
- Two 55-gallon drums of 50% sludge and old paint (hazardous)

Since the inception of the environmental affairs department three years ago, the company has consolidated wastes from the four mountains, and disposed of numerous barrels, many of which were unidentifiable and had been in the same place for years. Since the cleanup, waste production has dropped each year. And during the last year, we’ve been working with the Colorado Department of Health and Environment, supported by an EPA grant, to look at ways of reducing our hazardous waste further, and possibly eliminate it altogether.

## Regulated Waste Generation (Gallons)

Last year, ASC received the first-ever Environmental Protection Agency surprise inspection of its hazardous waste-management practices. ASC received no fines and was not cited for any violations.



Safety-Kleen data is through November 15, 2000.

## MAD ABOUT BULB RECYCLING

Remember the Mad Hatter from Alice in Wonderland? You know: “Twinkle, twinkle, little bat, how I wonder what you’re at,” and all that? The Hatter — like many of his fellow tradesmen in the 1800s — went mad from exposure to mercury, a toxic metal used in the hat-making process. Unfortunately, the same poison exists in fluorescent bulbs, albeit in very small quantities. When those bulbs go to Pitkin County’s unlined landfill, the mercury can seep into groundwater, and eventually reach you...

For this reason, ASC began voluntarily recycling its used fluorescent bulbs in the summer of 1999. Preliminary estimates suggest the program will keep some 750 bulbs each year out of the landfill. ASC receives reports from the recycler verifying that the mercury has been recovered.



# V. Resource Efficiency



## Green Development, Deconstruction, and LEED

Since instituting a policy of “green” or environmentally responsible development as standard corporate practice, ASC has put its money where its mouth is in a number of ways:

### Deconstruction

The company deconstructed and recycled the Sundeck Restaurant and the Snowmass Lodge and Club, keeping an astounding 84% of the buildings out of the dump. That’s 8,000 cubic yards, or an additional 3 months on the life of the landfill. The approach was to run the construction process in reverse — salvaging anything of value, and then grinding unsalvageable wood and sheetrock into compost. This process reduces tipping fees at the landfill, (whose manager takes the compost for free!) and also reduces truck trips, since the volume of the waste decreases fivefold. Best of all, the old buildings will come back — reincarnated in flower beds (as compost) and reused in houses. We even salvaged the Sundeck’s fireplace — donating the rocks to the Aspen Historical Society, which auctioned them to raise \$25,000. Meanwhile, ASC sold salvaged materials at a huge yard sale, where almost everything sold in less than four hours — 100 sliding glass doors, 80 windows, a few 40-foot beams, dozens of fir closet doors, among many other items — even a dumpster full of plywood and TGI beams. Aspen Skiing Company made \$10,000, which it applied to the additional labor cost of deconstruction.



### Building a LEED-Certified Sundeck

Aspen Skiing Company’s Sundeck Restaurant on Ajax has become one of the first ten buildings in the United States to achieve environmental certification through the U.S. Green Building Council’s Leadership in Energy and Environmental Design (LEED) program.

LEED is the first-ever national certification process for “green,” or environmentally friendly, buildings. The U.S. Green Building Council, which developed and administers LEED, is a coalition of organization from all segments of the building industry, established to foster environmentally friendly construction. Part of Aspen Skiing Company’s role as a LEED

pioneer was to help the U.S. Green Building Council trouble-shoot and refine the process. The LEED program will certify a new set of buildings each year.



LEED certified buildings must meet stringent standards for energy efficiency, indoor air quality, occupant recycling, and a host of other environmental issues. The Sundeck incorporated a number of unique features, including, but not limited to, the following:

- A 3,700-square-foot deck made from recycled materials
- Elimination of CFCs in refrigeration systems, insulation and carpet pads to protect the ozone layer
- Renewable wind power for 30% of the building’s energy needs
- Energy-efficient lighting design that exceeds California’s stringent Title 24 standards
- Windows, shades, and outside walks designed to reduce light pollution
- Lead-free and high-efficiency plumbing fixtures
- Landscaping with native vegetation to reduce water use
- On-site employee housing to reduce transportation impacts
- Low-toxicity paints, glues and sealants to protect indoor air quality



## Pollution Prevention

### Partnership with Colorado Department of Public Health and Environment

Thanks to a \$175,000 EPA grant through President Clinton's Climate Change Action Plan, ASC has partnered with the Colorado Department of Public Health and Environment to develop a pollution-prevention strategy for the ski industry. When the three-year project is done, every ski area in the U.S. will receive a guide to energy and water efficiency and waste reduction. The project is now in its second year.

## Energy- and Resource-Efficient Office Equipment

All new computers and printers purchased at ASC are Energy Star compliant. In 2000, we began purchasing exclusively remanufactured toner cartridges for printers, and bought five combination photocopier/printers, with sleep modes and automatic shut-off.

## Uniforms to Kosovo

On October 1, 1999, Aspen Skiing Company, in collaboration with Ben Mares of Refugee Direct Aid, a Denver-based not-for-profit relief organization, shipped 189 boxes of uniforms to Kosovo. The boxes contained roughly 5,000 sweaters, pants and jackets, fleece outfits, and insulated Gore-tex parkas that ASC turns over every six years or so in the course of normal operations. On October 22, ASC made a second shipment of 3,000 pieces to Hungary, where floods have left many villagers destitute and homeless.



## Electricity Use Reduction

A switch to a new electricity rate plan allowed ASC to get a better handle on its energy use at Snowmass. This led to the installation of automatic switches in lift shacks and related equipment, meaning lights and heaters that might have run all night now get turned off promptly.

For 2001, ASC has planned numerous lighting retrofits. One, at the Snowmass Villas (a project managed by ASC) will save 98,600 kilowatt-hours over a five-year period. That means savings of 197,200 pounds of CO<sub>2</sub>, the primary greenhouse gas. By the way: the return on investment will be 275%. That's because the 15-watt replacement bulbs use 25% of the energy of the previous 53 watt bulbs, and they last 12 times as long, cutting maintenance costs. Other retrofits that will be documented in the 2000-2001 report include The Little Nell garage, Sam's Knob and Spider Sabich Restaurant.



## Paper

In 2000, we switched all our brochures to 100% recycled, 50% post-consumer, chlorine-free paper with vegetable-based inks. This saved 216 trees, 19,566 pounds of solid waste, and 35,568 pounds of greenhouse gases. We also reduced the size of the brochure, eliminating 4.8 million sheets of paper and their associated environmental impacts. (The environmental benefits of cutting paper volume dwarfed the benefits of using recycled paper!)

## Electronic Phone Books

Historically, each employee with a desk job has received a 75-page phonebook. In 2000, ASC created an entirely electronic option.



# V. Resource Efficiency, Cont'd.



Construction of the Marolt Wetlands, a project funded by the Environment Foundation.

## Water

Aspen Skiing Company recognizes that snowmaking is one of its biggest environmental impacts. The company takes a two-pronged approach to reduce that impact: first, we look at efficiency opportunities that save money, energy and water. Second, we look for opportunities to reduce withdrawals from local streams at critical times, typically by using retention ponds. Our most recent efficiency improvement was the installation of a \$10.5 million snowmaking system at our largest mountain, Snowmass. The system utilizes technologies that reduce both water and energy consumption relative to conventional setups. In 2000, we will be testing an even more efficient system on Ajax.



## Efficiency Overview: Aspen Skiing Company Snowmaking Facility at Snowmass

### Summary

Snowmaking Season:	Oct 16 — Dec 31 = ~75 days
Average seasonal projected usage:	40-45 million gallons
Average actual usage per season:	~45 million gallons
Snowmass snowmaking system: 1 ft-acre of snow:	~120,000 gallons @100% effic.
Conventional systems: 1 ft-acre of snow:	~186,000 gallons @lower effic.
Water Savings due to efficiency:	~66,000 gallons
<b>Seasonal savings from efficiency gains:</b>	<b>4.5-6.3 mil. gallons</b> <b>(10-14% over conventional system)</b>

### Costs to ASC for Snowmass System

Administrative	~\$1.5 million
Cap cost/labor	~\$9 million
Operating	~\$350,000
Water	@\$.25/1000 gallons, ~\$12,000 per season
<b>TOTAL COSTS:</b>	<b>~\$10.5 MILLION</b>

## Other Measures

Beyond snowmaking, ASC has a number of other water-saving initiatives. In two of our hotels, Aspen Meadows and the Snowmass Lodge and Club, guests are given the option to use towel and linen for more than one night. Our green building guidelines require the use of efficient fixtures, and native landscaping, which requires limited irrigation. At the new Sundeck Restaurant, we planted native grasses instead of sod.



## ENVIRONMENTAL SCHOLARSHIPS

Aspen Skiing Company's Environmental Scholarship program began in 1999. Each year, it rewards five local high-school seniors for demonstrating outstanding environmental stewardship. The purpose of the \$5,000 scholarship is to foster creative environmentalism among young people, encourage related work in college and beyond, improve and protect the environment, and draw attention to important causes. 1999-2000 winners were:

**HEIDI OVERBECK**, of Glenwood, who researched the hazards of paint waste and worked to set up a paint-storage and reuse depot.

**ELLIE PIFFER**, of Carbondale, who organized a cleanup day on the Roaring Fork River.

**MOLLIE MEREDITH**, of Basalt, who organized a Waldorf School class to pull weeds and learn about weed control at Rock Bottom Ranch.

**SARABETH BERK**, who wrote an extensive research paper on water issues in the West.

## Adopt-a-Highway

Each year, a hearty bunch of ASC employees drives up to a two-mile stretch of Independence Pass to pick up trash. This year, on October 25, a crew of roughly three dozen turned out. The yield: about 20 bags half-filled with fluorescent bulbs, beer cans, tires and cigarette butts. Key finds included a leaking mini lava-lamp and an intact muffler system.

## Internship Program

ASC's environmental internship program is open to college or graduate school students. The internship increases the impact of Environmental Affairs, while providing valuable training and work experience for young environmentalists entering the workforce. We consider it part of our mission to educate and train future environmentalists — each intern we "graduate" is better equipped for the real world battles he or she will face. Our 2000 intern was Greg Stiles, a graduate student in environmental management at Rensselaer Polytechnic Institute. Our 1999 intern was Dana Armanino, a graduate student at U.C. Santa Barbara.

## Community Environmental Advisory Board

ASC's approach to environmental management reaches beyond managerial staff. In 1999-2000, we convened a community environmental advisory board, made up of local environmental experts, to advise the company on its operations. The group — which includes representatives from the Forest Service, Aspen Wilderness Workshop, Roaring Fork Conservancy, Rocky Mountain Institute, the Community Office for Resource Efficiency, and local government — meets with CEO Pat O'Donnell and the Environmental Affairs Department quarterly.

## The Environment Foundation



Environment Foundation  
founded by employees of Aspen Skiing Company

The Environment Foundation is a nonprofit, employee-funded, -founded and -directed organization, which has awarded more than \$220,000 to 50 local environmental projects

since its inception in December 1997. Over 930 ASC employees contribute to the foundation directly from their paychecks. Their donations are matched by ASC and the Aspen Valley Community Foundation, tripling the impact of each employee's dollars. Funded programs include open-space preservation, wetlands restoration, renewable energy, environmental education and wilderness assessments. The foundation is unique in the industry. (At least for now! Numerous ski areas have contacted us hoping to copy it. We're happy to provide advice.)

## Grants Disbursed in Our Most Recent Cycle

### March 2000

Independence Pass Foundation Revegetation of Independence Pass	\$3,000
Windstar Land Conservancy Upland Slope Restoration	\$5,000
Community Office for Resource Efficiency's Reudi Creek Hydropower Installation and Solar Hot Water Rebate Program	\$5,000
U.S. Forest Service Study of Nitrates in High-Altitude Lakes	\$4,000
Roaring Fork Conservancy River Experience Program	\$5,628
Aspen Center for Environmental Studies Habitat Restoration — Hallam Lake Nature Preserve	\$1,730
Central Rocky Mountain Permaculture Institute Natural Weed-Control Education Project	\$7,500
Roaring Fork Outdoor Volunteers Hay Park Trail Restoration	\$8,500
Aspen Wilderness Workshop, Summer 2000 Roadless Area Field Inventory	\$3,000
<b>TOTAL PROJECTS FUNDED THROUGH APRIL 2000</b>	<b>\$220,000</b>

## RIDING A GREEN LAUNDRY WAVE

ASC installed two super-efficient horizontal-axis washers and dryers in the Heatherbed Employee housing building. What makes the new washers so efficient? Unlike top-load machines, front-loaders don't need to be completely filled with hot water. Instead, they rotate clothes through two-thirds less water, saving water and heating energy. The machines also use less detergent, saving money on that end. And since the detergent is more concentrated, the clothes get cleaner. But wait — there's more! Since the machine spins clothes much faster than normal, drying time is reduced, saving energy AND making clothes last longer. Granted, two washers and two dryers isn't much. But the Environmental Affairs Department is working to make the purchase of efficient washers (and copiers, computers, refrigerators, etc.) standard practice for all of ASC. Maytag calculates the payback on the washers as roughly a year. After that, ASC will reap the benefits of savings every day. Including water, electricity or gas, and sewer costs, yearly savings can reach \$250. That doesn't even count savings from reduced detergent and drying time.



Through a partnership with the Aspen Center for Environmental Studies (ACES), a local non-profit, ASC offers a variety of on-mountain educational programs at all four mountains. On ski and snowshoe tours, guests follow naturalists down ski runs or along Richmond Ridge on Ajax, learning about alpine ecology. Winter Wild Things is a similar program for children. The Wapiti Warming Hut and Wildlife Information Center at Snowmass features photographs and information about the various animal inhabitants of the high-alpine environment, along with displays of pelts and stuffed animals provided by the Colorado Division of Wildlife.

## Participation

WINTER	97/98	98/99	99/00
Skiing Tours	1136	758	768
Snowshoe Tours	1307	1016	1106
Winter Wild Things	849	1355	1502
SUMMER	97/98	98/99	99/00
Nature Tours	3888	1686	2243
Kid's Day	281	198	
TOTAL	7461	4815	5817

## The Greenletter

First produced in January of 1998, our intra-company environmental newsletter heightens environmental awareness among employees. The Greenletter highlights employees who are making a difference, provides updates on current environmental issues, and solicits employee participation in improving our environmental performance. It's short, to the point, and designed to be posted at coffee-makers and water coolers to give busy employees a 30-second update.

## Enviro-Cards

Our Enviro-Cards are a simple, easy way to educate guests about environmental actions they can take here in the Roaring Fork Valley, and back home.



## PSAs

ASC researched and wrote eight environmental public service announcements that were broadcast four times daily for a week each on local radio stations. A sample:

*Did you know you can power your house with wind? For less than the cost of a six-pack of Coke a month, you can buy 100 kilowatt-hours from your local utility, thanks to a new wind farm in northeastern Colorado. According to Holy Cross Energy, buying one block of wind power had the same effect on the environment as planting half an acre of trees, or not driving a car 2,400 miles. How do you sign up? Look for information with your utility bills, or call your utility and say you want to be a wind power pioneer!*

## Website

ASC created the ski industry's first (and most comprehensive) environmental website, [www.aspensnowmass.com/environment](http://www.aspensnowmass.com/environment). It receives more than 25,000 hits annually.

## Training

Each ski season, ASC trains all new staff in recycling and company environmental policy, and educates them on all of our programs. Returning staff also receive environmental training through annual "Snowfairs." Every employee handbook includes environmental information.



## A WIND-POWERED LIFT

The Cirque lift at Snowmass is the only wind-powered ski lift in the state. Not burning fossil fuels keeps 40,000 pounds of carbon dioxide — the primary greenhouse gas — out of the atmosphere. That's like planting 17 acres of trees, or not driving 95,000 miles. In fact, the Cirque lift began green. To protect wildlife, the lift was built between animal mating and nesting periods. To protect the tundra, workers drove backhoes only on snow, and carried equipment up the mountain on foot. No mechanical equipment ever touched the tundra. Workers carried dirt and rock off the mountain on their backs.

# VIII. Habitat/Wildlife/Open Space

## WHAT'S YOUR LOCAL BEEF?

The Roaring Fork Valley owes a debt to local cattle ranchers: they preserve open space and provide beautiful vistas free of charge, even though their land is increasingly valuable. They maintain working examples of the valley's agricultural heritage, making this place unique among growing Colorado valley communities. Yet, for almost a decade now, ranchers have been fighting an uphill battle against depressed beef prices, increasing expenses, and encroaching development. At roughly 70 cents per pound, the wholesale market for beef won't allow producers to break even. As a result, many have chosen to sell or develop their land and leave the valley. When this happens we lose more than a few cows — we lose history, community, and sense of place; some would say we lose our soul.

So what's the solution? Some land trusts have been successful in purchasing development rights or buying land outright, but too often ranchers end up subsidizing the local good at a steep discount over what developers would pay. Though the land-trust approach is a critical component of open-space preservation and allows ranching to continue, it doesn't address the inherent

ASC implements natural resource management plans on all four mountains. At Snowmass, the Wildlife Enhancement and Management Plan focuses on alleviating the effect of human activities on flora and fauna, and improving wildlife habitat to form an ecological continuum that protects and enhances the ecological resources within Snowmass. The plan won the 1998 Times Mirror Silver Eagle Award for Environmental Excellence in Wildlife Habitat Protection.

At Snowmass and Highlands, ASC developed Natural Resource Management Plans to address long-term management direction, sustainability of the ecosystems, and implementation guidelines to provide vegetative diversity, forage production for wildlife, and opportunities for non-motorized recreation.

## Stream Team

As part of ASC's "Stream Team," employees Rob Baxter, Doug Mackenzie, Melissa Stanley, and Jeannie Wilder volunteer to help monitor local water quality with the nonprofit Roaring Fork Conservancy.

## Swordfish Ban

To protect Atlantic swordfish, which at present rates of depletion will become commercially extinct by 2005, ASC implemented a company-wide boycott of the fish in its restaurants. ASC will continue the boycott until a satisfactory federal recovery plan has been implemented, or until swordfish populations have adequately recovered.

## Preserving Open Space

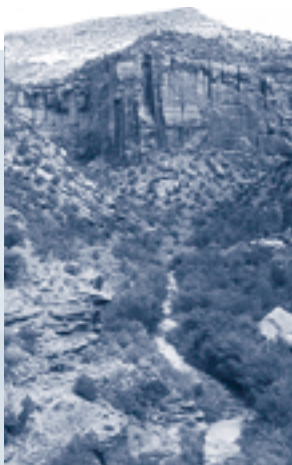
During the fall of 1997, ASC donated \$50,000 toward the acquisition and preservation of the 10-acre Hummingbird Ranch. This beautiful land offers hiking, mountain biking, camping, hunting, and fishing.

## Wilderness Preservation and Support of White River Forest Plan Alternative D

On Earth Day, 1999, ASC joined the Colorado Wilderness Network, a coalition of more than 125 organizations supporting protection of Colorado public lands, particularly canyon country. The project originated with the "Citizens' Wilderness Proposal for BLM Lands," drafted by conservationists in 1994 after years of study. The proposal — recently introduced as the 1999 Wilderness Act in the U.S. Congress — aims to

preserve 1.4 million acres through wilderness designation. Partners in this project include the Sierra Club, the Wilderness Society, the Colorado Environmental Coalition, the Colorado Mountain Club, and Western Colorado Congress.

ASC was also the only ski area in the state to support the direction of White River National Forest Plan's Alternative D, which places biodiversity above human and corporate interests. We did it because we're convinced a healthy environment is good for the state economy.



# Protection



## Transportation

Recognizing transportation as one of our most significant impacts, ASC subsidizes bus passes for employees, and provides the option to ride in company vanpools. Each year,

free resort shuttles transport more than 300,000 people between the four mountains. The \$1.2 million cost — a 100-percent subsidy of the bus system by ASC — helps reduce traffic, improve quality of life, and cut pollution and greenhouse-gas emissions. ASC also helped pioneer the use of clean, alternative-fuel pickup trucks (something we actually started too early — about ten years ago). The trucks didn't have enough power at high altitude, and most of the fleet has been retired. We are now looking for new alternatives and improved technologies. ASC also realizes that affordable employee housing near workplaces reduces pollution from transportation, and contributes to healthy community and happy workers. We are constantly looking to add to our employee-housing base, which now consists of more than 300 beds.

## Environmental Charter

In 1999, ASC helped the National Ski Area Association develop "Sustainable Slopes: The Environmental Charter for Ski Areas." The purpose of the document, which was signed by more than 150 resorts, (including all four ASC mountains) is to foster environmental action in the industry. In the years to come, ASC plans to remain at the forefront of turning theory to practice.



economic problems in the industry. A solution to that problem — now being explored by progressive communities like Steamboat Springs and Hotchkiss, Colorado — uses market economics to keep ranchers on the land. In a nutshell, the approach is to create a framework whereby restaurants buy beef directly from local ranchers. By eliminating the middleman and selling the beef as a premium or "boutique" product, ranchers get a higher price per pound, and local restaurants get a unique product that outsells regular beef. (The Yampa Valley Beef burger at the microbrewery in Steamboat Springs costs a dollar more and outsells the regular burger by two to one. The beef is attractive because it's local, but also because it's grass-fed and chemical- and hormone-free — this is true of Roaring Fork Valley beef as well.)

As of winter 2000, all ASC restaurants that sell hamburgers are using natural and locally raised beef, purchased from the Rocky Mountain Beef co-op. "Natural" means cows have not been raised with hormones or antibiotics.

“When you have eliminated the possible and the probable, all that remains is the impossible.”

— Sherlock Holmes

In September, I took over as Director of Environmental Affairs at Aspen Skiing Company from Chris Lane. Chris did a remarkable job in his three years here. With the strong support of Pat O'Donnell who founded this department, Chris established numerous successful programs, responded to employee interest in an Environment Foundation, and enhanced the culture of the company and our relationship with the community. We owe him public thanks. Now, in this time of transition, I'd like to give the community a sense of where our company stands, and where we are heading, from an environmental perspective.

I've been told that the best thing Aspen Skiing Company can do for the environment is to shut down. The consensus seems to be that business is the source of the planet's environmental woes. That, to a large extent, is correct. In fact, our impacts are large and numerous. One statistic says it all: for each skier we host, we emit 76 pounds of CO<sub>2</sub>, the primary greenhouse gas. The benefits of closing our slopes and hotels would be profound. But there's a problem: unless every other business does the same thing, we're all still in a pickle. And if all corporations were to shut down, we'd be lacking some necessary items: readily available food, clean water, jobs, and parabolic skis, to name a few. So in fact, the source of our growing environmental problems is not business per se, it's poor business practices. If we can operate in a manner that not only protects but restores the environment, we've achieved a broader definition of environmentalism: a way of living that is sustainable and equitable. Defined as such, environmentalism isn't tree hugging and land preservation. (Though those are important parts.) It's not even resource efficiency — my favorite topic — and it goes beyond education. It encompasses politics and economics, literature and culture, health and history, friendship and community; it includes how you greet a stranger, how you treat you neighbors and your children.

Ultimately, environmentalism means living, and letting others live, dignified lives. The “others” include not just those living across the globe, but those who will live in the centuries to come. A cursory look at history shows us two things: first, that two major barriers to dignity — poverty and disease — lead to environmental degradation when people are forced to damage the environment just to subsist. We have also learned that discontent, inequity, and unhappiness leads to the ultimate environmental hazard, war. While it is possible to maintain one's dignity amidst disease and poverty and war, those of us who avoid those plagues diminish ourselves by ignoring them. We can't hope for an end to global environmental degradation without placing ourselves in a global context, and acting accordingly.

This means using our own resources sparingly so that more are available for others, and so that a transition to cleaner sources is less painful. It means acknowledging and addressing issues of global concern, such as climate change and fisheries degradation.

It means that it's not enough to close our doors — that would be too easy. We must take more than neutral action, becoming positive contributors to the environmental balance sheet. Way down the line, I think it's possible for this company to eliminate all waste, and to run entirely on renewable energy; sooner, we can insist that our suppliers — and ask that our community and guests — act as we do. We must influence politics and business, remain a role model to the rest of our industry, and always be accountable to



the public. We must become environmentally restorative, not destructive. We must be humble, publicizing both mistakes and triumphs so that others can avoid pitfalls and mimic success. We must be polite, respecting other viewpoints and assimilating criticism so that we may change. And we must not fear what is new and different. These are lofty goals, and many won't be achievable in the near future. But they serve as a guide on the path toward sustainability.

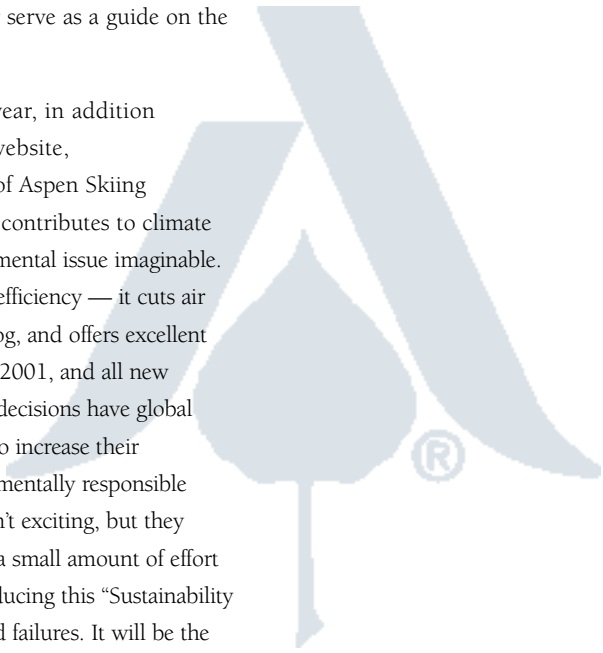
I think we've started on that path, as this report shows. This year, in addition to continuing existing programs (which you can find on our website, [www.aspensnowmass.com/environment](http://www.aspensnowmass.com/environment)), we will address some of Aspen Skiing Company's biggest environmental impacts: energy use — which contributes to climate change, and purchasing — which bears on virtually every environmental issue imaginable. Lighting efficiency is the first step toward company-wide resource efficiency — it cuts air pollution and greenhouse gas emissions, reduces acid rain and smog, and offers excellent economic returns. We have numerous lighting retrofits planned in 2001, and all new buildings will use efficient lighting from the start. Our purchasing decisions have global influence. We will be asking suppliers of both goods and services to increase their environmentally responsible offerings, and to demonstrate environmentally responsible practices themselves. Lighting retrofits and purchasing policies aren't exciting, but they represent “leverage points” — areas of company operations where a small amount of effort can produce huge change. To help gauge this change, we'll be producing this “Sustainability Report” annually, which will track our environmental successes and failures. It will be the first report of its kind in the industry.

We'll never be perfect, and we'll probably always be polluters. But we are continually moving in the right direction, taking the first steps on a long journey toward sustainability, even though that journey borders on the impossible. I'm reminded of the masthead of the North Georgia Gazette, the on-ship newspaper started by the explorer William Parry, during his search for a northern passage. The motto, in Latin, is *Per Freta Hactenus Negata*. It means “to have navigated a strait the very existence of which has been denied.” The writer Barry Lopez notes that this phrase “suggests a continuous movement through unknown waters, expressing both fear and accomplishment.” It is at this junction, Lopez says, that humanity reaches its highest expression. Want to come along?

Sincerely,



Auden Schendler  
Director of Environmental Affairs





Aspen Skiing Company

“We must be the change we hope to see in the world.”

Ghandi

