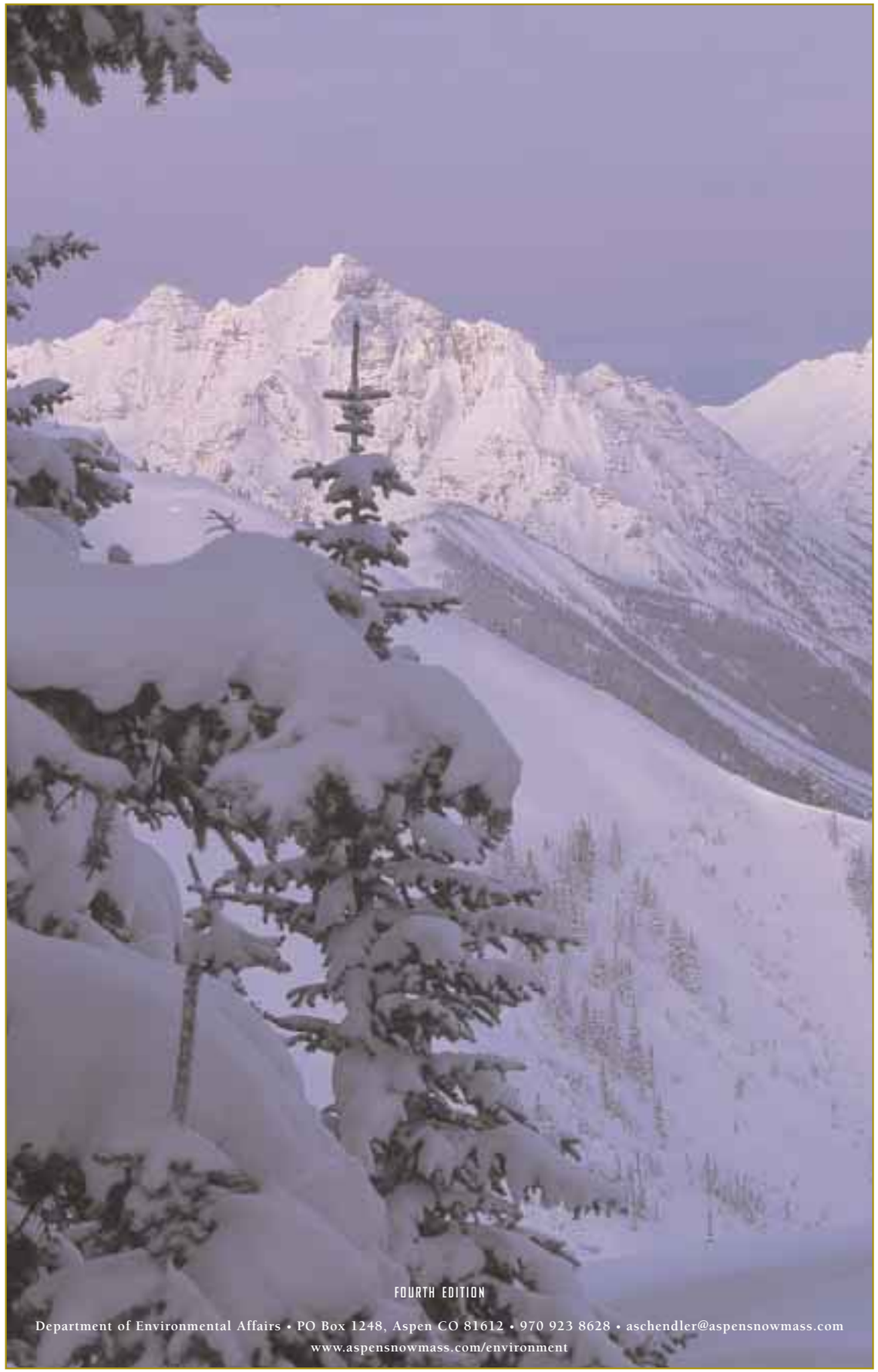
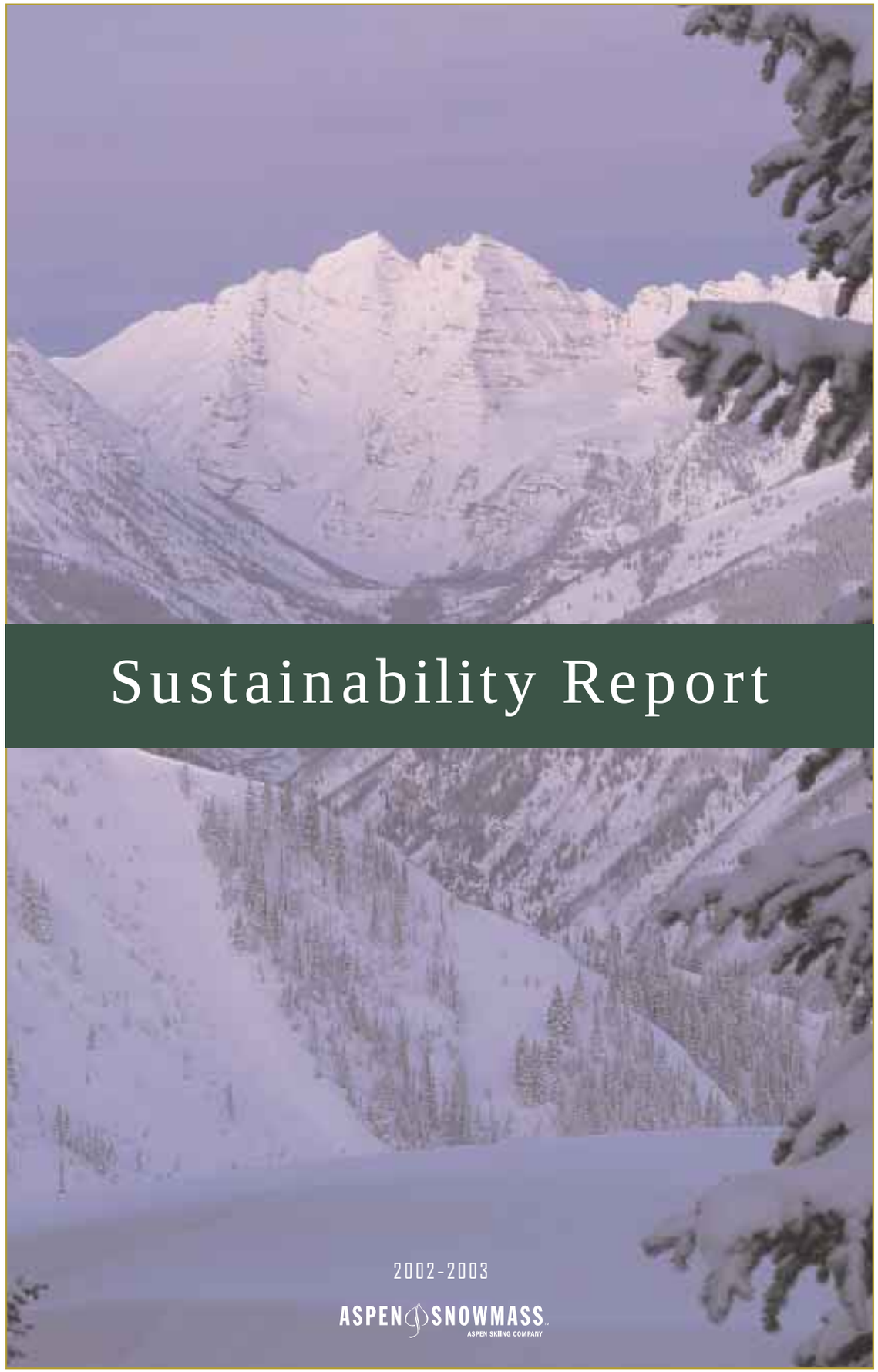


FOURTH EDITION

Department of Environmental Affairs • PO Box 1248, Aspen CO 81612 • 970 923 8628 • aschendler@aspensnowmass.com
www.aspensnowmass.com/environment



Sustainability Report

2002-2003

ASPEN SNOWMASS
ASPEN SKIING COMPANY

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“The problems to be faced are vast and complex, but come down to this: 5.5 billion people are breeding exponentially. ...

Making matters worse, we are in the middle of a once-in-a-billion-year blowout sale of hydrocarbons. They are being combusted into the atmosphere at a rate that will effectively double-glaze the planet within the next fifty years, with unknown climatic results. ...

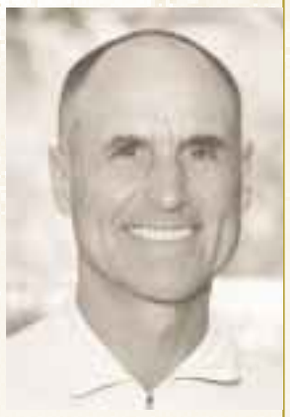
From this perspective, recycling aluminum cans in the company cafeteria and ceremonial tree plantings are about as effective as bailing out the Titanic with teaspoons. While recycling and tree planting are good and necessary ideas, they are woefully inadequate. ... The problem isn't the half measures, but the illusion they foster that subtle course corrections can guide us to a good life that will include a "conserved" nature and cozy shopping malls.”

PAUL HAWKEN, *The Ecology of Commerce*

Aspen

Skiing Company’s Sustainability report, at the age of four, is now an institution. Last year, in a burst of environmental zeal we published it only electronically. But we then realized we were missing out on numerous opportunities to hand the report out at conferences, around town, and in person. So we’re printing a few copies this year as well as making it available online. We’ve made other changes. Look for new “SNAFU” boxes, which highlight things we’re not doing so well. The point is to hold ourselves accountable in future years, and to ensure that this reports stays honest, not just a list of what we’re doing right, but also what we’re doing wrong. You’ll find more pictures this year, scattered throughout the report, highlighting exceptional people and projects. As always, please visit www.aspensnowmass.com/environment for the latest news.

Message from the President / CEO



The most important environmental action ASC took recently was to sign a piece of paper.

That may sound odd, given the scope of environmental challenges we face in our own business, from energy and water use, to solid waste, sprawl, impacts on habitat, fish, wildlife, air quality, and on and on. But the fact that a signature stands out above and beyond these important issues speaks to an evolution of our environmental philosophy.

The piece of paper was a letter, signed by 36 ski resorts, in support of the McCain-Lieberman climate stewardship Act. ASC, in collaboration with The National Ski Areas Association and The Natural Resources Defense Council, created a coalition in support of this bill, which would for the first time address American greenhouse gas emissions. Its importance is obvious for the ski industry, for environmentalists, and for the country.

Aspen Skiing Company has historically focused on improving the environmental performance of its operations: buying more wind power, greening buildings, using biodiesel. True, in the past, we have taken controversial political positions like supporting the White River National Forest Plan Alternative D, which prioritized biodiversity over human uses, or supporting Rep. Diana Degette's Colorado Wilderness Act. But those were cursory to our main work. Now, we're increasingly certain that our main work *is* public policy.

Why? Because given the environmental issues we face today, getting our own house in order is simply not enough. We will continue to strive to be a model of sustainable business, but we need to recruit government, industry, and individual support or all our work will be for naught. In Late 2002, we entered into a partnership with the Natural Resources Defense Council to work on climate issues. We'll be teaching guests about the impacts of climate change though signage on our ski hills, our website, and on our local television station. You'll read about our emissions reduction work in this report.

McCain-Lieberman was just a start. The senate vote was close, 55 to 43, sending a strong signal to lawmakers. Now, it seems like government action on this issue is inevitable.

Particularly if we have anything to do with it.

Sincerely,

Pat O'Donnell
President/CEO

"The penalty good people pay for not being interested in politics is to be governed by people worse than themselves."

PLATO

I. Company Profile

Aspen Skiing Company (ASC) attracts 1.3 million visitors each winter to almost 5,000 acres of skiable terrain on four mountains—Snowmass, Aspen Mountain, Buttermilk and Aspen Highlands—and year-round visitors to 15 restaurants and two hotels. We employ 3,400 people in winter.

ASC ENVIRONMENTAL AWARDS:

2003 Mountain Sports Media Silver Eagle Awards for Excellence in Stakeholder Relations

2002 Mountain Sports Media Silver Eagle Awards for Excellence in Energy and Water Conservation

2002 Recognized as a BEST Practices Company by the Conference Board's Business Enterprises for Sustainable Travel Program

2002 Accepted into Colorado Department of Health and Environment's Environmental Leadership Program

2001 ASC Environmental Programs Recognized in the Congressional Record by Rep. Mark Udall

2001 Colorado Pollution Prevention Champion

2001 Mountain Sports Media Golden Eagle Award

2000 Pat O'Donnell Recognized in Tomorrow Magazine's Environmental Leadership Award Issue

2000 ASC Environmental Programs Recognized in the Congressional Record by Rep. Diana Degette

2000 Mountain Sports Media Silver Eagle Awards for Excellence in Energy and Water Conservation

2000 U.S. Green Building Council Leadership in Energy and Environmental Design Bronze Certification for the Sundeck Restaurant on Aspen Mountain

2000 Travel Industry Association of America Odyssey Award, Environment Category

1999 British Airways Tourism for Tomorrow Award for Eco-tourism

1999 National Environmental Education & Training Foundation Award

1999 Times Mirror Golden Eagle Award for Overall Environmental Excellence and Silver Eagle Award for Environmental Education

1998 Times Mirror Golden Eagle Award for Environmental Excellence in the Ski Industry and the Silver Eagle Environmental Excellence Award for Community Outreach and Wildlife Habitat Protection

1994 Silver Eagle Award for Excellence in Environmental Education

In 2002, ASC was a finalist for the Colorado Ethics in Business Award and the Social Accountability International Corporate Conscience Award. In 2004, we will apply for LEED gold certification for the Snowmass golf clubhouse.

II. Environmental Policies and Management

CEO Pat O'Donnell described ASC's action on the McCain-Lieberman Act in his letter on page 7. The following editorial was part of that effort and ran in the Denver Post on Thursday, October 23, 2003.

"I'm impressed with the reluctance of society to confront certain issues, and the ingenuity people show in developing a rhetorical defense against controversial concerns."

GARRETT HARDIN

SKI RESORTS CAN RECLAIM THE ENVIRONMENT

By Auden Schendler ©Writers on the Range

Because ski resorts are beautiful in winter and green in summer, they have long been considered good environmental citizens. But in the last few years, that perception has begun to erode. First there was the Earth Liberation Front's terrorist attack on Vail's Two Elk Lodge in 1997 to protest expansion into Lynx habitat. Later, books like "Downhill Slide" and "Powder Burn" detailed impacts ski resorts have on communities and the environment.

And in 2000, a group called the Ski Areas Citizen's Coalition created an environmental "report card" for ski areas. Many resorts received grades of F and the industry was increasingly perceived as environmentally evil. Although the negative perception is wrong, the stage was set, and environmentalists had staked out the high ground.

It's true that ski resorts use enormous amounts of energy and have significant, if localized, impacts on wildlife and wild land. But we have, for the most part, been good environmental stewards, perhaps even excellent ones when compared to most industries. In the big picture, resorts are vital to their mountain communities, providing the tax base that enables environmental protection like land preservation, support for environmental nonprofits, and water quality protection.

Still, being an economic driver and having good intentions and profound concern for a place is not enough in this era of global environmental challenges. It's time for ski resorts to reach the next level of environmental stewardship and sound business management by taking a strong political stand on the most pressing environmental issue of all, climate change. The industry can do this today by publicly supporting legislation making its way through the Senate: the McCain-Lieberman Climate Stewardship Act.

This comprehensive bipartisan bill would effectively freeze global warming emission levels in 2010. It also creates a market-based pollution control system that rewards the most innovative companies, and lowers the overall costs. The Senate is scheduled to vote on it by the end of October.

Ski industry involvement in public policy on climate change is important for two reasons. First, there's simply no longer any debate about global warming. Scientists the world over agree the planet is warming, and pollution from fossil fuels is most likely the cause. In fact, it was the certainty of the science that led to McCain Lieberman.

Second, the best scientific models suggest that as warming continues, we'll see increased extreme weather events (both droughts and storms), warmer nights, wetter shoulder seasons, and reduced weather predictability. All of these changes are bad news for skiing. The 90s were the warmest decade on record. Global average temperatures have already risen one degree over the 20th century and, based on projected emission trends, scientists predict global temperatures will rise another 2.5° to 10.4°F over the coming century.

Aspen Sustainability Associates
ASC is launching a consulting practice to support other businesses trying to pursue sustainable development. The practice, which offers such services as assistance with LEED certification, management education, and pollution prevention, is run out of the Environmental Affairs Department. A brochure is available at www.aspensnowmass.com/environment.

McCain Lieberman doesn't threaten the ski industry with onerous regulation, because the bulk of a ski resort's global warming emissions come from purchased electricity, which is not covered by the bill. And while the pollution limits in the bill are expected to increase electricity and gasoline prices slightly, electricity expenses for most ski resorts account for just two to three percent of operating budget.

Moreover, energy efficiency measures that will accompany the bill will reduce overall energy costs. In other words, resorts will have access to government and utility support for efficiency measures that will cut energy bills. An example of such support might be a rebate for replacing outdated compressors in snowmaking equipment.

Because this industry, so dependent on climate, has the most to lose, ski resorts need to act now, publicly, to support McCain-Lieberman. Many are already doing so: in fact, 29 ski areas, in collaboration with the Natural Resources Defense Council and the National Ski Areas Association, have signed on to a letter of support for the bill as of today, and the list is growing.

This stand is what the consultants call a win-win-win. Skiers will appreciate resorts taking action to protect the sport we all love. Resort managers will be praised by shareholders for intelligent long-range business planning to ensure corporate sustainability over the long term. And ski resorts will reclaim their rightful mantle as environmental leaders.

A list of resorts supporting McCain Lieberman and the letter of support can be found at: http://www.nsaa.org/nsaa2002/environ_charter/climateS139finalletterns.pdf

A TREE FOR A TREE

"In your lifetime," longtime Snowmass Ski patroller Hal Hartman's father used to tell him, "they'll be planting trees back on the ski slopes." While Hal Sr. was talking about the industry's long-term prospects, his prediction is coming true, for other reasons.

In honor of Earth Day 2003, Aspen Skiing Company (ASC) and the Aspen Ranger District are unveiling a unique "Tree for a Tree" program on ASC-operated mountains or in parts of the Roaring Fork Valley in need of revegetation. Any tree with a diameter of more than six inches cut down during the course of summer operations will be replaced with a native seedling. ASC and the Forest Service will share costs and provide labor.

The program is a radical departure for the ski industry, away from "environmentalism" that makes bad impacts less severe, and towards a restorative business model. Since many trees cut down may be old or dying, the hope is that the program will actually increase the number of on-mountain trees. Says mountain planner Victor Gerdin, who came up with the idea: "Improving and developing trails requires removing some trees, but our goal is to ensure the planet has a net gain of new trees as part of the process." ASC can do more than minimize its impacts, now, it can start to actively do good.

In the summer of 2003, ASC funded the planting of 350 lodgepole seedlings and 75 willow seedlings on independence pass through the Independence Pass Foundation.

ASC JOINS STEERING COMMITTEE OF ROCKY MOUNTAIN CLIMATE ORGANIZATION

The Rocky Mountain Climate Organization is a new group whose mission is public education on climate change, its likely impacts in the Rocky Mountain region, and what can be done to reduce and adapt to that change. RMCO is interested in the potential impacts of climate change on skiing, and wants to work closely with our industry in cooperative public education efforts. RMCO will have officers and partners representing a broad range of businesses, local governments, and other organizations, enabling Colorado ski resorts to be more effective on climate change issues than if we operated alone.

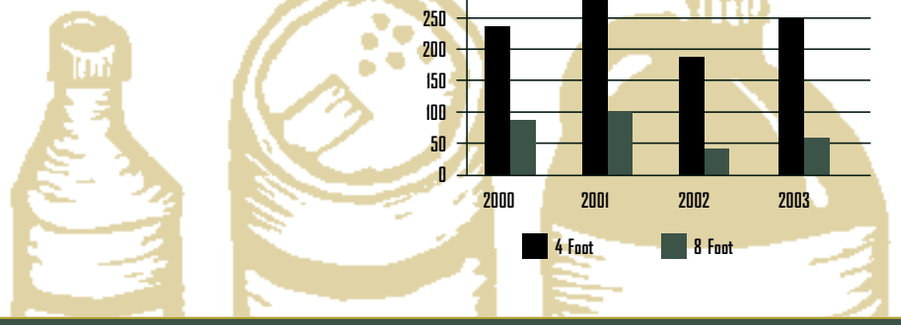
III. Compliance and Hazardous Waste Management

HAZARDOUS WASTE

- Hazardous waste is approaching zero thanks to our "no waste" policy. In fact, in 2003 we generated no hazardous waste at all! While we expect some wastes to accumulate in 2004 (particularly paint thinner), we're definitely on the right track.
- This year, ASC also revised all on mountain Spill Prevention Control and Countermeasure Plans in advance of changes to federal regulation, working with the **Walter Group** from Grand Junction. **(www.thewaltergroup.com)**
- An SPCC Plan is a detailed, facility-specific, written description of how a facility's operations comply with the requirements in the federal oil pollution prevention regulation. These requirements include such measures as secondary containment, facility drainage, dikes or barriers, sump and collection systems, retention ponds, curbing, tank corrosion protection systems, and liquid level devices.
- We choose to work with local consultants to reduce travel impacts and to support the local economy. (The last time we revised these plans, the consultants came from Texas.)
- The Little Nell shipped off two truckloads of computer waste for recycling at Guaranteed Recycling Experts in Denver. Equipment shipped included: 25 IBM monitors and 3 desktop laser jet printer. ASC also shipped eight large servers to our local landfill, which will be taking a large load to be recycled.
- ASC has switched to non-chlorinated solvents at Buttermilk, Aspen and Highlands in refillable spray bottles, eliminating hazardous can waste. We're currently testing Trichloroethylene (TCE)-free solvents (non chlorinated solvents) at Snowmass and planning a switch if mechanics approve it.

GLYCOL WASTE

While antifreeze—ethylene or propylene glycol—isn't a hazardous waste, it is regulated, so it can't go in the trash or down the drain. And though propylene glycol is actually food grade, ethylene glycol is highly toxic. Regardless of toxicity, disposing of old antifreeze costs a fortune. In 2003, Snowmass vehicle shop manager Donnie Popish found a deal on a glycol recycler, and bought it. He'll begin using it in the winter of '04. Like motor oil, glycol's molecular structure doesn't degrade with use, it just gets dirty. So if you can filter it onsite, you get a product that's as good as new, for free. So you reduce new purchase fees and eliminate disposal fees.



ASC HAZARDOUS-WASTE GENERATION (GALLONS)

FLUORESCENT BULB RECYCLING

IV. Natural Resource Consumption and Pollution

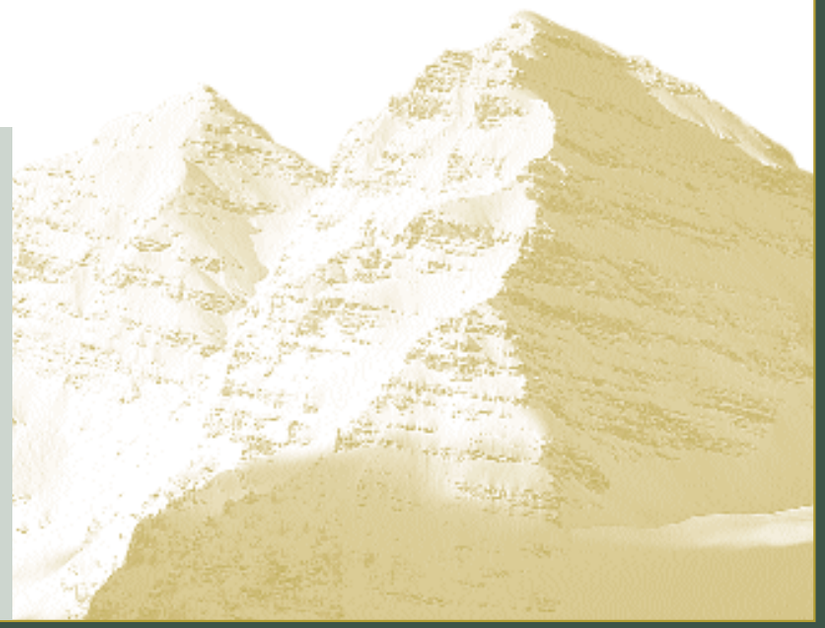
ASPEN SKIING COMPANY 2002-2003 CONSUMPTION BASELINE/CO_2 EMISSIONS

CATEGORY	MEDIA	COST	UNITS	UNIT TYPE	CONVERSION	CO_2 (TONS)
FUEL						
(GAS+DIESEL)	FUEL-SM	$194,538.30	145,048			1,450
	FUEL-AH	$45,043.15	34,508			345
	FUEL-AM	$70,844.77	54,524			545
	FUEL-BM	$99,157.65	69,010			690
SUB-TOTAL		**$409,583.87**	**303,090**	**GALLONS**	**.01 TONS CO_2/GAL**	**3,031**
SNOWMAKING						
	WATER-AM	$92,000.00	46,000,000			29
	WATER-AH	$9,000.00	18,000,000			11
	WATER-BM	-	45,182,183			29
	WATER-SM	$32,000.00	64,000,000			40
SUB-TOTAL		**$133,000.00**	**173,182,183**	**GALLONS**	**.0000006308 tons CO_2/gal**	**109**
ELECTRICITY						
	ELECTRIC-ASC	$1,279,927.00	17,724,746			17,636
	ELECTRIC-SMC	$90,645.00	1,689,446			1,681
	ELECTRIC-TLN	$188,963.00	3,992,761			3,973
SUB-TOTAL		**$1,559,535.00**	**23,406,953**	**KWH**	**1.99 LBS CO_2/KWH**	**23,290**
MUNICIPAL H20						
	WATER-ASC	$61,853.00	30,926,500			19
	WATER-TLN	$19,157.00	9,562,000			6
	WATER-SMC	$32,648.00	16,324,000			10
SUB-TOTAL		**$113,658.00**	**56,812,500**	**GALLONS**	**.0000006308 TONS CO_2/GAL**	**36**
NATURAL GAS						
	NAT. GAS-ALL ASC: AM GAS	$384,227.00	54,346			3,206
	NAT. GAS-ALL ASC: KN ENERGY	$278,820.00	39,605			2,337
SUB-TOTAL		**$663,047.00**	**93,951**	**MMBTU**	**1MILL.BTU/.059TONSCO_2**	**5,543**
PROPANE						
SUB-TOTAL	PROPANE	**$11,921**	**12,517**	**GALLONS**	**.00637 TONS/GALLON**	**79**
TOTAL		$2,890,744.87				32,085
# OF SKIERS: 1,205,266		**$2.40 PER SKIER**				**TONS CO_2 PER SKIER 0.027**

WATER ASC = City of Aspen + SM Water and San. Does not include Aspen consolidated sanitation which is sewer.

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

Architect and Project Manager Gert Van Moorsel played a crucial role in all our green projects, from the Sundeck to the Snowmass Club to the Hydro plant.



SNAFU DEPARTMENT

This year we've started the SNAFU Dept. to highlight things we're not doing so well. This will help us benchmark, on a year to year basis, what we need to do better.

RECYCLING AT THE SUNDECK

Despite the best efforts of Sundeck Engineer Peter Olsen, we still struggle with recycling at the Sundeck. The main problems are purity of the waste stream coming from customers, and reliable delivery of recyclables when they reach the bottom of the mountain. The problem comes in large part from the way recyclables are transported (by snowcat) and space and time constraints at the base. We are currently working to address these problems.

SOLID-WASTE GENERATION

2003

WASTE

	Tons	Cost	Cost/Ton
BFI	149	$23,224	$156
WMI	470	$48,082	$102
Pitkin Landfill	29	$4,155	$143
Town of Snowmass	710	$36,859	$52
TOTAL:	**1358**	**$112,320**	**$83**

RECYCLING

	Tonnage	Cost	Avg. Cost/Ton
TOSV	461	-	-
Wally's	349	$20,795	$60
TOTAL:	**810**	**$20,795**	**$26**

Diversion Rate:	37%
Cost Savings/Ton Recycling:	$57
Total Diversion Savings:	$46,218

Assumptions:

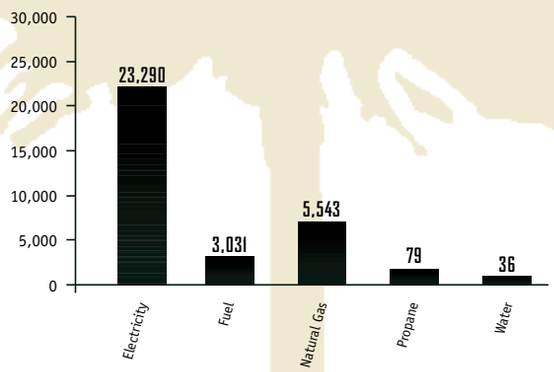
Compacted trash = 700 lbs/yard
Loose trash = 200 lbs/yard
Compact cardboard = 540 lbs/yard

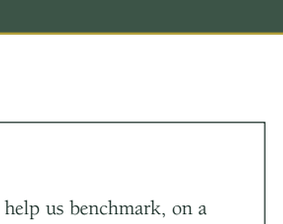
Loose cardboard = 300 lbs/yard
Loose recyclables = 520 lbs/yard

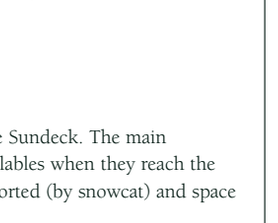
MEDIA SUMMARY DATA CHART

MEDIA	COST	UNIT NUMBER	UNIT TYPE	CO_2 (TONS)
Electricity	$1,559,535	23,406,953	KWH	23,290
Fuel	$409,584	303,090	GALLONS	3,031
Natural Gas	$663,047	93,951	MMBTU	5,543
Propane	$11,921	12,517	GALLONS	79
Municipal H20	$113,658	56,812,500	GALLONS	36
TOTAL	$2,757,745	80629011		31,979

CO_2 EMISSIONS BY MEDIA (TONS)







Ron Chauner, Mountain Manager at Aspen Highlands, and Mac Smith spearheaded the construction of a new green patrol headquarters. The building features an R60 roof and insulation made from recycled jeans, composting toilets and recycled rubber flooring. Cabinets and countertops were salvaged from the trash.

HAVING A GAS IN THE COAL MINES

What business does ASC have in a coal mine? Here's a hint: we're not trying to sell package deals. On May 6, 2003 Auden Schendler and representatives from Holy Cross Energy, CORE, the City of Aspen, and several coal mines in Somerset near Paonia met to discuss coal mine methane. Here's the deal: many coal mines are contaminated with high concentrations of methane gas, which they vent into the atmosphere for safety reasons. Unfortunately, not only does the methane (commonly known as natural gas—the same stuff you cook with) go to waste, but it is an extremely potent greenhouse gas, much more effective than CO_2 at trapping heat. Why not use the gas to run a turbine and generate electricity? Each kilowatt-hour produced would represent a 15-fold reduction in associated greenhouse gas emmissions over standard coal-fired electricity. And if ASC bought some of that power, we could offset all our carbon emissions for a relatively small price—on the order of $50,000 annually. The idea is still in its infancy, but if successful, ASC would become the first ski resort to entirely offset its carbon emissions. **Stay tuned.**

CORE

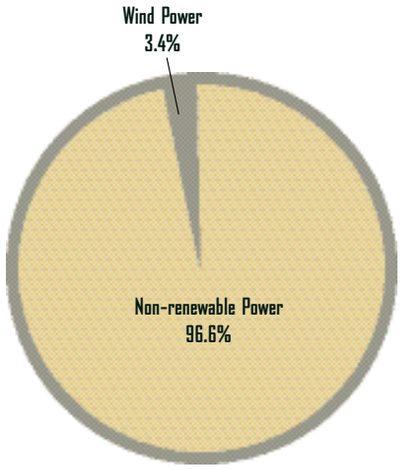
A Two Stroke Sled

Last year, ASC demoed an efficient four stroke snowmobile at Snowmass. At 40 horsepower, it was, according to ski patrollers, "Gutless." This year, we've purchased one new 60 horsepower Ski-doo model for each mountain, continuing our commitment to eventually switch to four stroke machines.

V. Resource Efficiency and Renewables

This year, we've added "Renewables" to this section heading, since we haven't historically had a place for this subject. After bringing corporate renewable energy purchases to 6% in 2002-2003 thanks the wind powered gondola program, renewables dropped back to 2% when the one-year program ended. However, in 2003 ASC will be powering the new Snowmass Golf Clubhouse entirely with wind (accounting for 150,000 kwh annually) and bringing ASC total wind purchases up to 3.4%, assuming our hydro system produces 200,000 kwh next year. In the broad picture, ASC hopes to reach 10% wind power by 2010 to meet our commitment of reducing our greenhouse gas emissions by 10% by that date. But we'll be happy if we can increase our renewable supply by 1 percentage point a year, as we have been doing.

ASC ELECTRICITY SUPPLY



Total kwh electricity usage: 23,406,953 kwh
805,350 of total is wind

Doug Graybeal is one of the usual suspects when it comes to green building design at ASC. His firm, Cottle Graybeal and Yaw (www.cgyarchitects.com) designed the Sundeck, the Snowmass Golf Clubhouse, and the Santuary, ASC's three major green development projects.

Snowmass General manager Doug Mackenzie has been crucial in the weed control program, the hydro project, the halfpipe revegetation, and almost any other green program at Snowmass.

WINDER X GAMES

What better way to power an unconventional sporting event than with unconventional power? Thanks to a unique partnership among **Aspen Skiing Company, Holy Cross Energy, ESPN, the City of Aspen, and the Community Office for Resource Efficiency,** the X Games went renewable in 2003. In fact, World Cup, 24 Hours, and the Gondola, for the entire season, were all wind powered. The program cost $25,000, most of which came from sponsors.

"This is the first time that X Games or World Cup has been run entirely on renewable energy," says Event Marketing Director John Rigney, who came up with the idea of the wind-powered Gondola. "Having ESPN as a sponsor of this ensures that we'll reach a national audience with this message."

How does wind power work? Our local utility, Holy Cross, buys it from a wind farm in Eastern Colorado. We then change our billing structure to reflect the increased cost of wind. Because of our purchase, wind power is being produced. Had we not bought the wind, coal-fired plant would be making dirty electricity instead. This program kept a million pound of pollutants out of the air (and your lungs) last winter. Interested? Visit www.holycross.com.

ONE OF THE GREENEST BUILDINGS IN COLORADO

Think about your energy bills. Electricity is say, fifty bucks a month. Gas, in the winter, might be $125. Water, at least in Basalt, is thirty bucks. Now imagine you could cut those bills by 60%. You would save hundreds, and the environment would benefit from reduced resource use. That's what ASC has done at the new Snowmass golf clubhouse. The building, now virtually complete, is one of the greenest commercial buildings in the state, beating local energy codes by more than 60%. In fact, we're gunning for LEED (Leadership in Energy and Environmental design) Gold certification through the same program used at the Sundeck. (For info on LEED: www.usgbc.org.) Keep your fingers crossed: The Sundeck got a Bronze rating; Gold is bold. Note that there are only two LEED buildings in Colorado, and the Sundeck is one.

The building achieves such a high energy efficiency rating by using relative warmth or "coolth" from a nearby pond to heat and cool the building. (Coils used in the system are show, being installed, below.) In addition, the building features a roof with an insulation rating of 55.5 (your roof has a rating of 37); certified sustainably harvested wood in both building structure and cabinets; recycled and recyclable carpet; 100% wind power; radon control; low VOC paints and sealants; super efficient showerheads, and toilets with a low and high volume flush option (so that the whole building beats water efficiency codes by 30%); and much, much more. The project could not have happened without the Don and the Dutchman: Don Schuster and Gert VanMoorsel.

SNOWMASS CONDOS (SANCTUARY) AIN'T SO BAD EITHER

While the 90 fractional ownership luxury condos near the golf clubhouse are not quite as green as the clubhouse, they are still a model of energy efficiency. They too are heated by ground source heat pumps. ASC specified efficient compact fluorescent wall sconces and interior lighting to save energy and wrapped the building in foam insulation so we could downsize the heating system. The luxury rooms, which passed muster even when reviewed by the most extreme style critics we know, prove that efficient technology and high style can go hand in hand.

There have been a number of interesting benefits from the ground source option.

1. Because the system was smaller, we could downsize the boilerroom in the condos. This freed up enough space for an additional employee housing unit. (Yes, it's right next to the boilerroom, but read on to see why that's not as bad as you might think.)

2. Unlike normal boilerrooms, the ground source heat pumps don't get hot, and they're quiet. So instead of the standard hot, noisy boilerroom, our is whisper-quiet and room temperature.

3. To heat two 400 gallon hot water tanks to 130 degrees F. took only 45 minutes. It would have taken hours with a standard gas boiler.

CEO Pat O'Donnell started ASC's Environmental Affairs Department in 1997. Planner Victor Gerdin is responsible for on mountain revegetation, habitat issues, new trail stewardship, and played a major role in the hydro project.

LET THERE BE LIGHT! (AT THE ABG)

Remember gym class? When they turned on those big overhead lights, it took forever for them to light the room. Then they hummed. Those were 400 watt metal halide lamps. They're big, they're hot, they're inconvenient, and they're inefficient. And until recently, that's what lit the ABG warehouse in Basalt.

That is, until warehouse manager Ernie Yates suggested that since it was hard to see in there anyway, the ABG might be a good retrofit target.

Environmental Affairs found a fluorescent lamp fixture made in Texas that would cut energy use (and cost) in half for ASC, while providing Ernie with higher intensity light. After installation, completed in early August, Ernie said the light was both whiter and brighter, making his job easier.

http://www.mor-lite.com/index.html

The retrofit will keep 13,018 lbs. of carbon dioxide, the primary greenhouse gas, out of the atmosphere every year, as well as preventing the emission of 95 lbs. of sulfur dioxide, and 50 lbs. of nitrogen oxides. The payback on the $3,000 investment is 3.5 years, a ROI of 29%.

MINIRETROFIT, LIVE

At the Snowmass Club, there's a long hallway with a recessed fluorescent fixture the length of the corridor. The fixture consists of thirteen sets of two inefficient T-12 bulbs. Convinced that this fixture would provide just as much if not better, light with one efficient T8 bulb, and needing to get out of the office, Environmental Affairs Director Auden Schendler recruited property services staff Gregor Keran and Bryan Smith to help retrofit the fixtures. Gregor, who wears measuring tape suspenders and Carhart pants, insisted on doing the retrofit with live wires. When asked why, he said: "Because you're a weenie if you don't." We survived, though Auden short-circuited the entire hallway at one point.
The light quality is excellent, and the project saves $112 annually, or 1600 kilowatt hours, which translates to 3200 lbs. CO_2. It cost ASC $400 to do the retrofit. Savings will be $372 annually, almost a 100% ROI.

The new dirt halfpipe at Buttermilk will save 4 million gallons of water and $15,000 in electricity. The dirt pipe at Snowmass saves similar amounts.

VI. Community Participation and Accountability

2002 EMPLOYEE ENVIRONMENT FOUNDATION GRANTS

The Environment Foundation was established by Aspen Skiing Company employees five years ago to protect the places they live, work and play. Unique in the industry, the foundation raises money from employees through a payroll deduction that is matched by Aspen Skiing Company's Family Fund and again by Aspen Valley Community Foundation.

The foundation helped Computers for Kids recycle old computers, keeping heavy metals our of our landfill, and watershed.

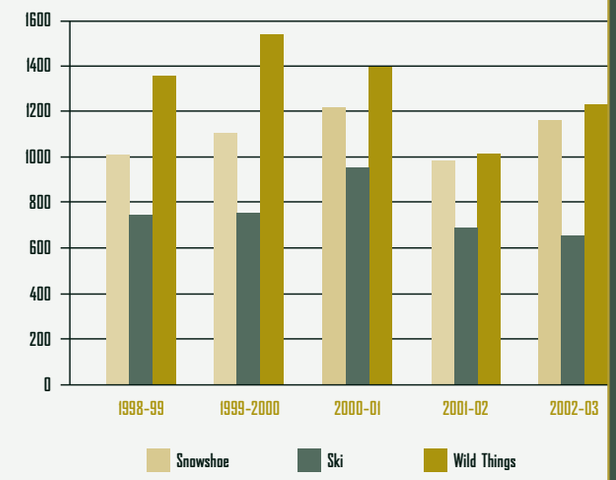
As of this writing, the foundation has donated more than $550,000 to local environmental causes. In 2002, the Environment Foundation donated $96,250:

APRIL 2002	
Aspen Valley Land Trust Ghost Town of Independence	$10,000
City of Glenwood Springs Student Buspass Program	$2,000
Computers for Kids Computer Recycling	$2,000
Trout Unlimited Roaring Fork River Cleanup	$1,500
Aspen Center for Environmental Studies Hallam Lake Turnpike/Op. Support	$6,000
Aspen Wilderness Workshop Mountain Watchdog Program	$6,000
Roaring Fork Conservancy Operational Support	$5,000
Science Outreach Center JASON Kids Teaching Kids	$5,000
City of Aspen Parks Wetlands Education Sign	$2,500
Boulder Energy Conservation Center Green Building Website	$2,000
Central Rocky Mountain Permaculture Institute Weed Video Distribution	$2,400
Roaring Fork Outdoor Volunteers Red Hill and Grottos Trailwork	$5,000
Solar Energy International Solar Potluck	$850
Roaring Fork Transit Authority Rio Grande property rehab, Carbondale	$5,000
TOTAL	$56,250
DECEMBER 2002	
Mountain Folks for Global Justice "Buy Local" campaign/Speaker Series	$1,450
Western Colorado Agricultural Heritage Fund Burry Ranch	$5,000
Rock Bottom Ranch Field Study Center/Supplies	$5,000
The Trust for Public Lands High Elk Corridor Project	$7,000
White River National Forest Carnivore Study	$2,050
White River Interpretive Association Forest Stewards Program	$5,000
Roaring Fork Transportation Agency Public forum on Green transportation	$6,000
Independence Pass Foundation hydroseeding	$1,500
Aspen Wilderness Workshop Forest Watchdog Program	$5,000
Colorado Rocky Mountain School Sustainable Master Plan	$2,000
TOTAL	$40,000
SUBTOTAL	$96,250

ENVIRONMENTAL EDUCATION UPDATE

In addition to its winter work detailed in the bar chart, in 2002-2003 ACES led 1,777 summer tours and 103 moonlight walks on Aspen Mountain, taught winter classes to 432 schoolchildren from Aspen to Rifle. ACES also has 10,000 other visitor contacts on ASC mountains annually. ASC is part of a partnership that supports environmental education at the Maroon Bells, Snowmass, and Ashcroft with 20,000 contacts per year.

ACES/ASC On-Mountain Nature Tours

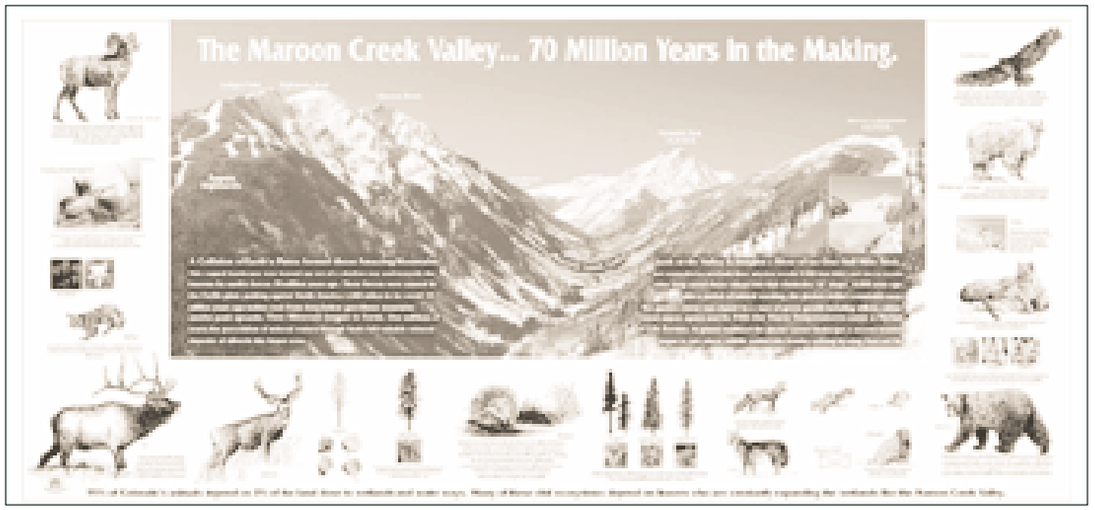


MAPLINKS

ASC has pioneered ski industry use of "Maplinks," trailmaps installed on ski lift safety bars. The maps provide better customer service, reduce map use (76% of guests said they don't feel the need to use a paper map as often as they used to and cut map litter on the mountain) enabling us to print fewer. They also provide opportunities for environmental education. At right, a sample of an educational sign on the maplinks.

For exhaustive detail on "greening" the planned Snowmass base village, visit www.aspensnowmass.com/environment, click on "green development," then on "Snowmass base village."

A sample maplinks advertisement.



The new educational sign at Buttermilk.

ASC DONATES OPEN SPACE, MAKES UP FOR SNAFU

By Scott Condon
Aspen Times Staff Writer

The Silver Queen gondola gets to stay put even though one of her legs was planted in the wrong spot. The Aspen Skiing Colorado and Aspen Valley Land Trust discovered a few years ago that when the gondola was constructed in 1986, lift tower No. 3 was built on the Millionaire Lode, a patented mining claim near the base of Aspen Mountain. The problem was, the Skico didn't own or lease the mining claim. It was the property of the Aspen Valley Land Trust.

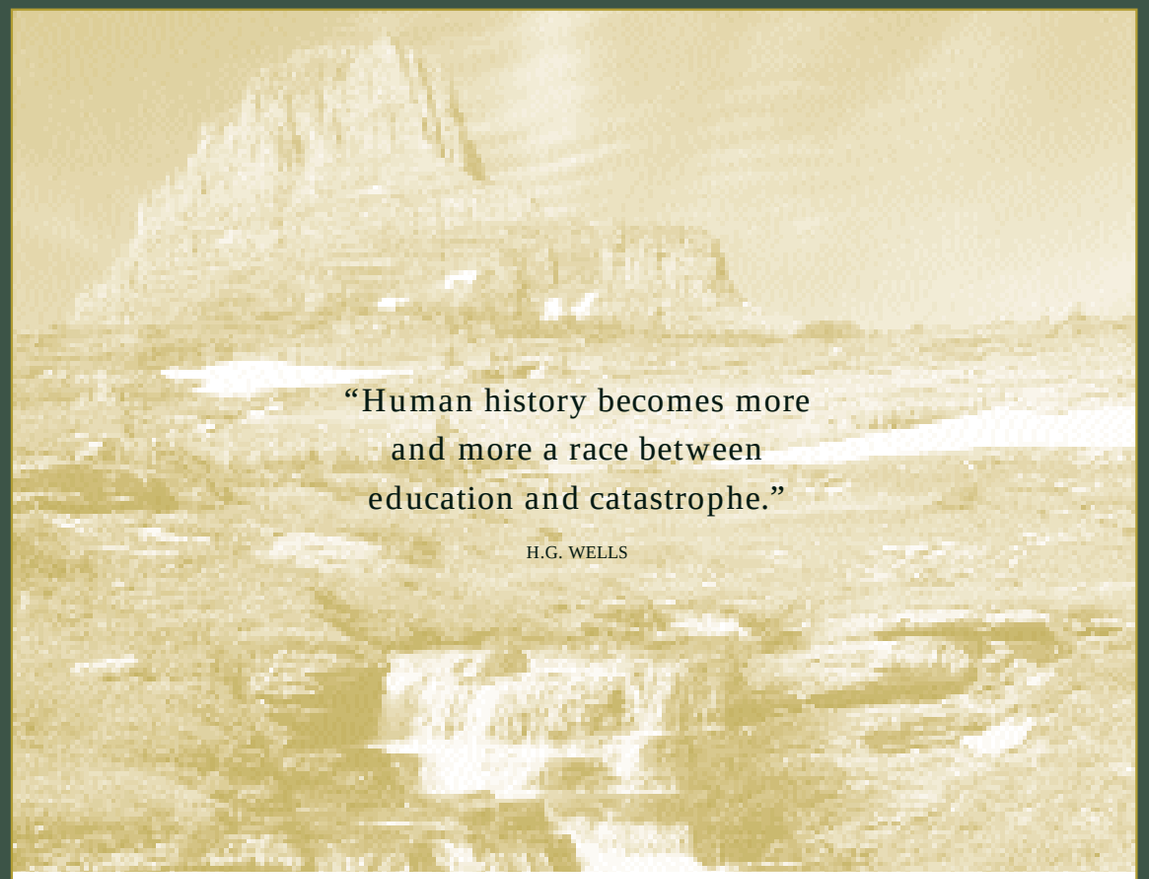
AVLT wasn't too belligerent about the boo-boo. It didn't threaten to make the Skico move the tower, pay rent or even give its board of directors a bunch of free lift tickets, according to AVLT Executive Director Martha Cochran. Instead it worked with the Skico on a deal that would compensate the land trust for the Skico's use of the property. The deal was recently completed. The Skico will continue to use the 1.5-acre Millionaire Lode. In return it is giving conservation easements to AVLT on about 195 acres in Snowmass Village, according to Cochran and Bill Kane, Skico vice president of development. The conservation easements restrict development.

ASC revegetated the Snowmass Halfpipe again this year because the original seed never took. Some 90 students and teachers from Colorado Rocky Mountain School volunteered for the project. In return, Aspen Snowmass Company donated $2,000 to the students for any project or charity of their choice.

"The Skico didn't have to do this much. It was a generous offer," said Cochran. Kane said the land the Skico is sterilizing from development was among 600-plus acres the company bought when it acquired the lucrative Base Village land a few years ago. The Skico gave easements on three parcels. The largest—the 145-acre Wildcat Ridge—is located on the steep slope behind the Snowmass Center. The Rim Trail, popular with hikers and bikers, runs through that land.

Another 25 acres or so is in the stream bottom along Brush Creek, from the Divide Subdivision to the Snowmass Conoco, according to Kane. The remaining 25 acres is adjacent to the Ridge Run subdivision. "This is good land," said Cochran, confirming that the deal removes some threat of development and affects lands that are worth protecting. "This is an important deal for Snowmass." It also boosts AVLT's light presence in the Snowmass Village area. The deal also assures that the gondola can operate without moving a tower. Kane said no one is certain how the gondola tower was placed on the wrong property. Perhaps a survey was misread. Aspen Mountain is a mishmash of ownership, hanks to the multitude of mining claims and fractional ownership interests dating back to the silver-mining heyday. Kane said about 87.5 percent of the roughly 700 acres in the ski area permit area is controlled by the Skico—either through ownership or lease.

Human Resources Director and Environment Foundation board member Pam Willis has been crucial in recruiting new foundation members and educating new staff about our environmental programs.



"Human history becomes more and more a race between education and catastrophe."

H.G. WELLS

SNAFU: REVEGETATION AND WEED ISSUES

ASC has a big weed problem, and despite a three year push on this front, it's still getting out of control, particularly on Snowmass and Aspen Mountains. At Snowmass, we thought we were getting ahead of the thistle problem, but after four years or relative drought, the problem resurfaced. (In spades). ASC has designated staff to address this problem next summer, and we're planning to purchase significant amounts of new equipment to help them out. We've also made an increased effort, in collaboration with the Forest Service, to improve our revegetation work. To this end, Snowmass Mountain Manager Rob Baxter attended a day-long training in erosion control, and became a certified Colorado Dept. of Transportation Erosion Control Certified Supervisor. Next year our goals are to target large patches of Yellow Toadflax on Aspen Mountain and thistle at Campground and at Two Creeks at Snowmass, while continuing annual maintenance work at Buttermilk and Highlands.

ECO-AUDIT
ENVIRONMENTAL BENEFITS STATEMENT

This Sustainability Report is printed on New Leaf Pax, made with 50% post-consumer waste, 25% FSC certified virgin fiber, elemental chlorine free. By using this environmentally friendly paper, Aspen saved the following resources:

TREES	WATER	ENERGY	SOLID WASTE	GREENHOUSE GASES
2 fully grown	1,270 gallons	2 million BTUs	92 pounds	221 pounds

Letter from the Director

Aspen Silver, Lester Pelton, and Sustainable Communities

You could say that the roots of skiing came from deep within the mountains themselves. Underground silver lodes drew the miners who first established Aspen. The town later drew Tenth Mountain soldiers, skiers recently home from World War II. They created a ski resort, which led to the explosion of the sport. The miners and the mining culture are mostly gone, but today, a small legacy of one miner's life is creating wealth on a level equal to what the miners were pursuing. The legacy is called a Pelton wheel. It was invented almost 150 years ago by a California miner. And the bounty it is creating can be measured in dollars, in health, in hope, and in the air.

Around 1864, Lester Pelton noticed that miners used wheels spun by jets of water to provide mechanical power. As the technology evolved, millwrights replaced wooden slats with metal cups, which turned the wheel faster. One day Pelton observed a broken water wheel: the water jet was hitting the edge of the cup instead of the center. The wheel turned faster than others. Based on his observations, Pelton developed a more efficient design.

That design became the key component of hydroelectric turbines. A Pelton wheel looks like an industrial flower, or a blacksmith's rendition of the universe. It is a beautiful and timeless tool, a reminder of human ingenuity, one that can often be found on display in parks in old mining towns. (There's a Pelton wheel by the river in Ouray, Colorado). Pelton wheels have brought great affluence to the world (through the sale and use of electricity) and great environmental damage, thorough the construction of dams. But the first wheel that Lester Pelton put to practical use ran his landlady's sewing machine, where she sewed clothes for miners. The most recent wheel in Mr. Pelton's legacy is helping to stitch together the fabric of a sustainable community near Aspen. To understand how, you need to understand electricity use in ski towns, and its impacts.

Every time you plug in a weed wacker, a blowdrier or a reading lamp, you're burning coal, because that's where most of our electricity comes from in Colorado. When you burn coal, you create global warming pollution in the form of carbon dioxide. In fact, the average American household is responsible for 22,468 lbs. of carbon dioxide annually, much of that from electricity use. In short: there are enormous environmental impacts from electricity use. Now try plugging in a ski resort.

Aspen Skiing Company, which operates four ski mountains and several hotels, is responsible for 37,000 tons of greenhouse gas pollution every year, 22,500 tons of that from electricity use. One of the only ways to address this impact is to buy renewable energy from our utility, and we do that. But buying wind power is expensive, hard to understand, and abstract. People often ask why we don't have wind turbines on our mountains, or solar panels on our buildings to generate clean energy onsite.

The answer is that weather conditions here are too rough for wind turbines: we get both 100 mile per hour winds and "rime events" that coat trees with ice. In more sheltered areas, there's not enough wind. Photovoltaic panels are a good option, but they're expensive, especially for the quantity of power we'd like to generate. There is, however, one source of renewable energy on our mountains that is plentiful, economical, and readily at hand: water.

TOP: The SM powerhouse under construction.
BOTTOM: An old pelton wheel.

People have long tapped the energy in small mountain creeks through microhydroelectric systems and small dams. Early Aspen was all hydropowered. Unlike dams, microhydro plants take some of the water out of a creek but don't block the flow. Such systems can generate electricity from relatively small water flows, even seasonal streams: you don't need to rebuild the Hoover Dam. The water runs through a pipe to a turbine, then back into the creek downstream. The biggest expense of any microhydro system is the "penstock" or pipe that runs from high elevation to low, creating pressurized water that can spin the Pelton wheel. The economics of installing a penstock can often kill a project. Unless, of course, you have such a system already in place. Here in Aspen, we call it a snowmaking system.

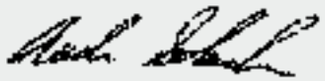
Snowmaking pipes run everywhere at ski resorts. So we asked: "If we already have half a hydroelectric system, why not just add a turbine and start making power?" We determined we could generate renewable energy at a tenth the cost of using solar panels. And the return on investment, if we were lucky, would be as low as 6 years.

So we built a small powerhouse on a beginner slope called Fanny Hill at Snowmass Mountain, with a 115kw turbine attached to a 10 inch snowmaking pipe that drains water from a storage pond eight hundred feet further up the mountain. Come spring, we'll start making power: some 250,000 kwh annually, we estimate, enough to power 40 homes while preventing the emission of half a million pounds of carbon dioxide. The project is so exciting that it has attracted news coverage and partnerships. Donors to the project include the Colorado Office of Energy Management and Conservation; the Community Office for Resource Efficiency; Canyon Industries, the turbine manufacturer; and the StEPP Foundation. Partners include Holy Cross Energy, the Town of Snowmass, and Snowmass Water and Sanitation District.

Think about the possibilities: there are hundreds of ski resorts with snowmaking systems in America. On our four mountains alone, we've got half a dozen more good opportunities for hydro. If we had five or ten turbines running, we'd be generating an enormous amount of renewable energy in the valley—enough for say, 400 homes—contributing to clean air, stable climate, and the long term sustainability of the ski industry and the town.

Inside each of those turbines you'd find a Pelton wheel, a tool so elegant it meets Einstein's design criteria that everything should be made as simple as possible, but not simpler; a device whose origins are tied to the origins of this town, and now, a device tied to its future as well.

Sincerely,



Auden Schendler
Director of Environmental Affairs

A schematic of hydrosystem.
www.microhydropower.net

Auden Schendler recently published an article on ASC's green business practices in the Yale/MIT Journal of Industrial Ecology. The article is available for free at
http://mitpress.mit.edu/catalog/item/default.asp?ttype=4&tid=32

“A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise.”

ALDO LEOPOLD