



# Sustainability Report

## Introduction 2011-12

This was a big year for Stevens Pass for many reasons. With persistent effort, after eight years of permitting and planning, we managed to open a new mountain bike terrain park, served by the Hogsback lift. Under very tight fiscal constraints, we had to crowd-source the initial start-up costs, and it worked! Then in November 2011, we were sold by our local owners to a national resort consortium, and had to learn to operate under a new set of protocols. In February 2012, the entire mountain community was rocked by the tragic loss of three monumental figures in Pacific Northwest skiing due to an avalanche accident in the out-of-bounds next to the resort. One of the original instigators behind the launching of our environmental program, Marketing Director Chris Rudolph, was among the victims. Perhaps this made winning the National Ski Area Association's top environmental award in May 2012 that much more of poignant victory. Chris would have been extremely proud.

We still reckon that protecting and restoring the natural resources that have provided us our livelihood is the least we can do. Over the past four years we have dramatically expanded our company-wide focus on sustainability and on reducing our carbon footprint. The many programs now in place range from the simple (motion switches) to the complex (electric car chargers), but all contribute to our effort to live lighter on the fragile landscape.

This second annual report documents our continued efforts to do the right thing, and seek ever more sustainable operations, while focusing on the triple bottom line.

Ross Freeman  
Environment & Sustainability Mgr

## Purpose

This document describes our environmental philosophy, quantifies our annual impacts and consumption, identifies goals, and celebrates achievements big and small. Last year's report covered only winter operations, but with the opening of our mountain bike park late in the summer of 2011, we're now tracking data year-round, July 1-June30. To learn more about our sustainability work, visit [www.StevensPass.com/Environment](http://www.StevensPass.com/Environment)

## Our Environmental Mission

*To enrich the mountain environment for generations to come by living and working in a sustained, healthy manner that does as little harm as possible while providing a rewarding alpine recreational experience.*

## Awards

For three consecutive years, 2009, 2010, and 2011, Stevens Pass was named one of just three national finalists out of 325 competitors for the National Ski Areas Association [NSAA] [Golden Eagle Award for Overall Environmental Excellence](#). Finally, in May 2012, we won that award outright, bringing it to WA for the first time ever, and back to the PNW for the first time since 1994. To add to accolades this year, we received fantastic evening news coverage in December on Western Washington's NBC affiliate KING 5, with a full 2-minute slot all about our sustainability program (viewable online here: <http://www.king5.com/news/environment/Stevens-Pass-135801083.html> ).

This came on the heels of a very strong grade in the annual environmental performance report card issued by the non-profit advocacy group [Ski Area Citizens' Coalition](#). Based on extensive surveying and public records research, the Coalition ranked Stevens Pass #8 in the country; every other resort accompanying us in the Top Ten was nationally-known. Finally, in the spring of 2012, we were named [Recycler of the Year](#) by the WA State Recycling Association for our exemplary resource recovery and composting programs, under their Recreation Category.

## Climate Change & Mitigation

We are seeing ever-greater climate variability in the PNW, with a growing number of extreme, and unprecedented, weather events. Sometimes this works in our favor, and other times it doesn't. As a low-elevation resort, increasing shoulder-season precipitation often means rain, not snow.

Although the last two winters have ended with above average snowfall totals, in general we know what the latest climate research says: the April 1 WA snowpack is expected to decrease 28% by 2020; the average PNW temperature rose 1.5°F between 1920 and 2003, and will rise another 2°F by 2020; 53 North Cascades glaciers have disappeared over the past 50 years.

While the rest of the country experienced a record-breaking hot summer in 2011, ours started off exceptionally cool and damp in WA, leading to the latest meltout ever recorded up at the Pass of July 1<sup>st</sup> (since the UW

Meteorology Dept began tracking in 1981). Around the New Year we saw two all-day rain events, followed by 115" of snow January 15-30. How can a ski resort plan around this kind of unpredictability? Unable to expand into higher terrain, we must look at other options (such as expanding summer operations), and adaptation.

We must also do all that we can to reduce or mitigate our climate impacts from transportation and energy use. Stevens continues to help expand access to clean energy for all, by paying for carbon offsets that represent 100% of our annual electricity and propane use. By funding solely windpower development, we prevent 7,980,000 pounds of global warming pollution from entering the atmosphere yearly. Every season, hundreds of our guests buy voluntary carbon offsets too. The following table shows our major emissions.

Annual CO <sub>2</sub> Emissions July 1 2011–June 30 2012								
392,940 Visitors (includes Downhill, Nordic, Summer)								
Resource Category	Cost	Amount	Unit	Per Guest	CO <sub>2</sub> Tons		CO <sub>2</sub> Per Guest	
					2011-2012	2010-2011	2011-2012	2010-2011
Fuel Gas	\$63,623	16,776	Gals	0.28	164	121	.0031	.0031
Fuel Diesel <sup>1</sup>	\$380,467	95,469			1068	1031		
Electricity <sup>2</sup>	\$212,784	5,591,976	kWh	14.23	797	690	.0020	.0019
Propane <sup>3</sup>	\$211,593	105,875	Gals	0.27	644	659	.0016	.0018
Water <sup>4</sup>	\$80,429	4,705,885	Gals	11.98	n/a	n/a	n/a	n/a
<b>TOTALS &gt;&gt;</b>					<b>2673<sup>5</sup></b>	<b>2501</b>	<b>.0067</b>	<b>.0068</b>

**Notes:** <sup>1</sup> Free employee bus transit = 15% of total diesel use; <sup>2</sup> Most of WA electricity is hydropower; <sup>3</sup> Stevens Pass has no Natural Gas service; <sup>4</sup> Potable Water from our on-site water plant; does not include non-potable (used for fire & toilets). <sup>5</sup> Higher total due to year-round tracking.

**CO<sub>2</sub> Conversion Factors:**  
 Propane = 12.17lbs/gal;  
 Gasoline = 19.6lbs/gal;  
 Diesel = 22.38lbs/gal;  
 Electricity (WA avg.) = 0.285lbs/kWh.

Other ways that we minimize impacts involve our extensive recycling, composting, and reuse/surplus programs with impacts summarized below; we're always looking for new initiatives to try out.

Annual Waste & Recycling FY2011–12						
Resource Category	Cost	Quant.	Unit	Per Guest		
				2011-2012	2010-2011	
Garbage <sup>1</sup>	\$3,052 SP \$13,388 WM	30.8 SP 112 WM	tons tons	.727lbs	.768	
Construction Waste	\$2,896	17.82	tons	.091lbs	.083	
Food Compost	\$3,785	23.3	tons	.119lbs	.138	
Mixed Recycling	\$7,387	30.15	tons	.153lbs	.165	
Cardboard Recy. <sup>2</sup>	-\$1,300	15.03	tons	.077lbs	.086	
Rubber Recy. <sup>3</sup>	\$300	264	items	<.001	n/a <sup>6</sup>	
Scrap Metal <sup>2</sup>	-\$2,308	13.6	tons	.069lb	n/a <sup>6</sup>	
Cooking Oil <sup>4</sup>	\$0	780	gal	.002gal	.002	
Hazmat Liquids	\$1,268	1285	gal	.003gal	.002	
Hazmat Light Bulbs	\$140	249	bulbs	<.001	<.001	
Hazmat Batteries	\$332	587	lbs	.001lbs	<.001	
E-waste <sup>5</sup>	\$59	66	items	<.001	<.001	

**Notes:** <sup>1</sup> Collected weekly by Waste Mgmt, while Stevens Pass covers surplus volumes; <sup>2</sup> We sell our recycled cardboard & scrap metals; <sup>3</sup> Includes tires & chairlift wheels; <sup>4</sup> Waste cooking oil is collected for free by a biodiesel refiner; <sup>5</sup> Large electronics, computers, TV's, etc; <sup>6</sup> n/a = not tracked previous report.



Clockwise from top left, some sample recycling programs: Garbage/compost separation; a car-full of E-waste (every 3 months); rubber sheave liners; chairlift haul rope (most years we recycle one); battery collections resort-wide; scrap metal adds up fast each summer.

## Winter 2011-2012 Sustainability Goals:

- 1) Implement better fuel use and energy-tracking software.
- 2) Explore the feasibility of a demonstration wind or solar pilot project.
- 3) Launch greater operational energy efficiencies.
- 4) Procure our first electric vehicle to test or purchase.
- 5) Issue our first full carbon footprint inventory.

## Winter 2011-2012 Accomplishments

According to our tracking (see tables page 2) we managed to just slightly reduce our CO<sub>2</sub> emissions per guest compared to last year, and garbage per guest dropped 5%. This is decent progress given that we saw 23,500 more guests this year, and we're now tracking impacts year-round, not just for the winter. We added food waste composting to our Deli restaurant, but this has not expanded total volumes, requiring investigation. We made a big step in the right direction on Goal 1, with the installation of new fuel pump tracking software; next we will add an analysis module that can highlight excessive use by specific vehicles or drivers. For Goal 2, we installed a small demonstration solar project at the top of the mountain, on our largest patrol shack. This is the first step in assessing solar for all future lift shack remodels, allowing them to pay for their remodeling and eventually have positive income through State and Utility rebates. We continue to work on Goal 3 with an initiative to include additional Departments in Director-level meetings, so that efficiencies can more easily be identified. We delayed on the completion of Goal 4 until summer 2013, awaiting a new model year, and a more-informed assessment of the needs of our mountain bike park. Now that our sustainability tracking is year-round, Goal 5 is addressed in a rudimentary way by footprint data presented in this report.

### 2011-12 Highlight Initiative: Green Procurement

As our sustainability program matures, we're increasingly digging deeper into pre-existing protocols to seek opportunities for improvement. One such area is the procurement of the myriad disposables used in facility maintenance and janitorial services. Another is general supply chain sustainability: what are the impacts not just from our usage of a product, but also from its manufacture and transport? We are attempting to run all purchases through a new set of filters that will help highlight potential drawbacks to the use of a particular product while also encouraging the identification of comparable substitutes. This can lead to a preference for local suppliers (to minimize transportation impacts), or a request that a vendor commit to taking back old versions of a product (for proper end-of-life disposal or recycling). Some of the procurement filters we're exploring include:

**SOCIAL:** Organic, Fair-trade, vendor's sustainability commitments

**ENVIRONMENTAL:** Made in USA, local/regional source, packaging, e-billing option, hazmat content, recycled content, compostability or recyclability, vendor or product certifications

**ECONOMIC:** Product longevity, lifecycle impacts, take-back programs, return-on-investment (ROI)



*Examples of green procurement and supply chain sustainability (L to R): As we retire our snowcats, we ensure that vendors take-back old units for parts or resale; our restroom supplies are 100% recycled content and GreenSeal certified; we source many of our most popular menu items (e.g. soups and chili) from within Washington State.*

## Selected Ongoing Programs:

### Waste Heat Capture

In the past few years, we've started to tackle some slightly more complex heat-related projects with obvious returns. One example is ducting the waste heat from the condensers above walk-in coolers and freezers into





DIY waste-heat ductwork and fans

public spaces and away from kitchen areas. This has delivered a 15°F drop in temperatures at the ceiling, fewer equipment failures thanks to reduced on/off cycling, and more comfortable working conditions. All that for a few hundred dollars, and two days of work! In another case, we finally started a long-overdue rehab project on our largest employee dorm (Yodelin). Built as a drafty and inefficient ski lodge over 40 years ago, it has suffered a few misguided overhauls, and only ever had one or two inches of roof insulation, along with cracked single-pane aluminum frame windows, and French doors. Not ideal for a location averaging 450 inches of snow per winter! We replaced half of the concrete roof this summer, increasing the insulation from a miserable R-3 to R-30; we'll tackle the second half next summer, and install new double-pane Energy Star windows.

## Specialty Recycling

We're always looking for opportunities to insert sustainability into facility overhauls: this summer the Granite Peaks Lodge received a new carpet and we were able to find a vendor willing to properly recycle the old material. Instead of ending up in the landfill, 13,238 square feet of carpet (almost 5 tennis courts) found a new life.

## Hazardous Materials Management



Following the discovery of underground leaks from decades-old fuel tanks at our Vehicle Shop, as well as contamination from an abandoned gas station along the nearby highway (but never owned by the resort), Stevens Pass opted to clean the slate. Contractors excavated hundreds of tons of fill from two parking lots, and also installed a new state-of-the-art, above-ground fuel station for use by company vehicles. Several new spill containment devices and modern operating protocols will ensure that no fuel goes astray in the future.



Contractors excavated hundreds of tons of fill from two parking lots, and also installed a new state-of-the-art, above-ground fuel station for use by company vehicles. Several new spill containment devices and modern operating protocols will ensure that no fuel goes astray in the future.

## Air Quality Upgrades

In the heart of the winter, air temperatures well below freezing can lead to extended idling times for buses as they warm-up. We installed four new outdoor outlets allowing drivers to connect block heaters and pre-heaters, and helping reduce diesel air pollution.

## Community

We are only as strong as our community of supporters, both guests and staff. We continue to work with many local non-profit groups, charity events, the Forest Service, schools, the Leavenworth Earth Day, and key groups highlighting the connection between snowsports and climate change, such as [Protect Our Winters](#).

## Upcoming 2012-13 Sustainability Goals

In the next fiscal year, we intend to: build on our solar pilot experience and install a full-scale solar array; continue energy-efficiency retrofits with higher budget projects, such as air dampers, that offer compelling ROI's; install water meters so that we can finally track usage of non-potable water, along with potable; and insert sustainability performance measures into the master budget and guest-service criteria used to evaluate the company's fiscal performance.

## Mistakes & Improvements

**>Garbage on the Slopes:** We are building a great tradition of summer slope clean-ups, with 130 volunteers in August 2011. They collected 8 Cubic Yards of garbage, 1.5 of large waste, and 15 of recycling. But we still need to do more; trail crews find incredible piles of cans and bottles at on-slope party areas.

**>Smoking in Lift Lines:** Complying with new WA State laws, we posted signage in liftlines prohibiting public smoking. However, we are still seeing a great deal of discarded butts around the base area, especially where employees take smokebreaks. This has to change.



**>More Environmental Education:** In most years, we work with several schools, colleges, and other visiting classes, explaining our environmental programs. This year, a relative lack of outreach opportunities underscored how important it is to foster these connections. We need to grow the next generation of stewards.