Sustainability Report

Introduction 2012-13

This year saw winter visitor numbers rise above 400,000 for the first time in a decade, and total summer visits exceed Nordic guests. We completed the second full summer at our growing mountain bike terrain park, and crews continue to add a wider range of trails.

We may also have entered a new era of weather variability. After witnessing an exceptionally long, hot, dry summer in 2012, we started the following winter with a bang. The December snowfall total of 207 inches was over double the 30-year average (97in), leading to some great holiday skiing, but then a normal spring. We ended the season planning for our largest construction project in many years: the high-speed upgrade to the Jupiter Chair on the backside.

For the first time this year, we also built numerical environmental targets right into the annual budgeting process, next to the conventional visitation and earnings goals.

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 five years we have dramatically expanded our company-wide focus on both a reduced our carbon footprint and on sustainability. We've tackled a lot of the simple, easy stuff and now set our sights on bigger projects with a larger upfront cost, but greater rewards environmentally. We still aim tirelessly to live lighter on the fragile landscape.

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

Environment & Sustainability Mgr

Purpose

This document describes our environmental philosophy, quantifies our annual impacts and consumption, identifies goals, and celebrates achievements big and small. Data are tracked by fiscal year: July 1-June30. To learn more about our sustainability work, visit 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

Last year, Stevens Pass became the first-ever Washington state winner of the National Ski Areas Association's [NSAA] Golden Eagle Award for Overall Environmental Excellence. This year, we are pleased to build on that with an even stronger grade in the annual environmental performance survey by the non-profit advocacy group Ski Area Citizens' Coalition. Based on extensive surveying and public records research, the Coalition ranked Stevens Pass #2 in the country: we had the highest score in all of the PNW, and beat the nearest Washington competitor by 10 percentage points. Finally, in the fall of 2012, we were named to Seattle Business Magazine's annual "Green 50," and outright winner of their Hospitality Category, for our exemplary sustainability programs.

Climate Change & Mitigation

If we thought last year presented an unfamiliar sequence of weather events, we saw even more unprecedented behavior this year. The summer of 2012 witnessed the longest dry spell ever recorded in state history, and 2012 was also the hottest year ever nationally. But fast-forward a few months, when we received an amazing 48" of snow in just 24 hours on December 8.

The trends are clear and well-documented in the scientific literature: 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; and 53 North Cascades glaciers have disappeared over the past 50 years. 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 also buy their own vehicle emission carbon offsets through a voluntary program. The following table summarizes our major emissions.

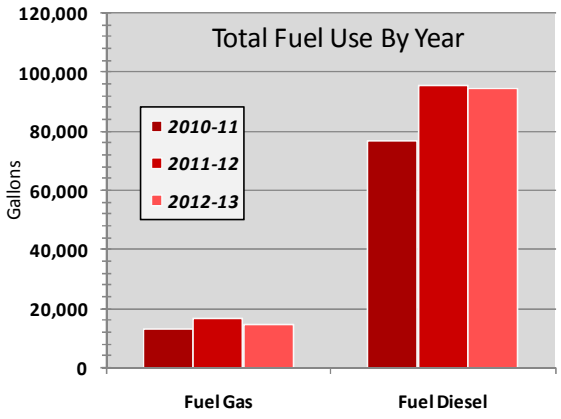
Annual CO_2 Emissions July 1 2012–June 30 2013

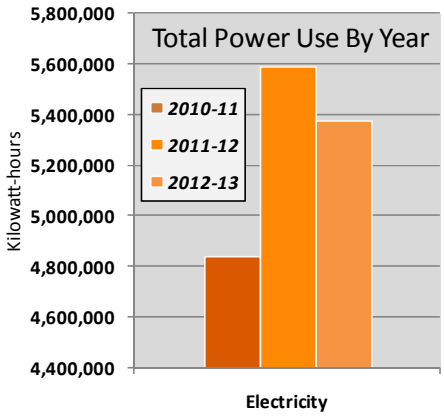
412,616 Visitors (includes Downhill, Nordic, Summer) (Ski season = 146 days)

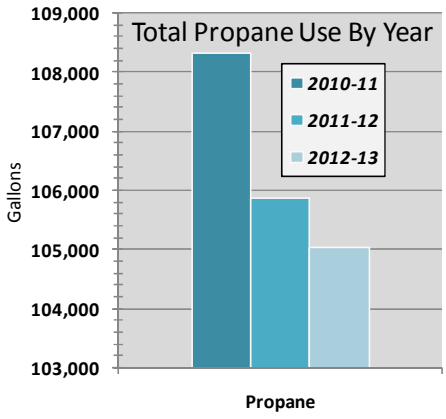
Resource Category	Cost	Amount	Unit	Per Guest	CO_2 Tons			CO_2 Lbs Per Guest		
					2012-2013	*2011-2012*	*2010-2011*	*2012-2013*	*2011-2012*	*2010-2011*
Fuel Gas Fuel Diesel[1]	$56,941 $358,147	14,882 93,482	Gals	0.26	146 1046	164 1068	121 1031	5.8	6.2	6.2
Electricity[2]	$185,128	5,374,081	kWh	13.02	766	797	690	3.8	4	3.8
Propane[3]	$144,328	105,055	Gals	0.25	639	644	659	3	3.2	3.6
Water[4]	$119,001	4,500,000*est*	Gals	xx	n/a	n/a	n/a	n/a	n/a	n/a
TOTALS >>	**$863,545**				**2597**	**2673**[5]	**2501**[6]	**12.6**	**13.4**	**13.6**

***Notes**: [1] Employee bus transit was 15% of total diesel use, but has been outsourced starting summer 2012; [2] Most of WA electricity is hydropower; [3] Stevens Pass has no Natural Gas service; [4] Potable Water from our on-site water plant); [5] Twelve-month tracking began this year; [6] In 2010-11 (our inaugural report), emissions were tracked only during the ski season.*
***CO_2 Conversion Factors**: Propane = 12.17lbs/gal; Gasoline = 19.6lbs/gal; Diesel = 22.38lbs/gal; Electricity (WA avg.) = 0.285lbs/kWh.*

Since sustainability reporting began three years ago, we have seen a steady increase in year-round visitation, rising from over 369,000 in 2010-11, to almost 393,000 in 2011-12, and then to 412,616 this fiscal year (2012-13). Although this represents a 12% increase in the number of visitors, we have managed to reduce the per guest carbon emissions by one pound. More difficult however, is decreasing the absolute amount of fuel and energy consumed, as revealed by the graphs below. New operating protocols for gas and diesel machinery may slowly have an impact, but more concerted efforts will be needed to grow visitation and revenues, while simultaneously shrinking the resort's carbon footprint. Some of the improvement is likely attributable to outsourcing our employee transit during the peak winter months.

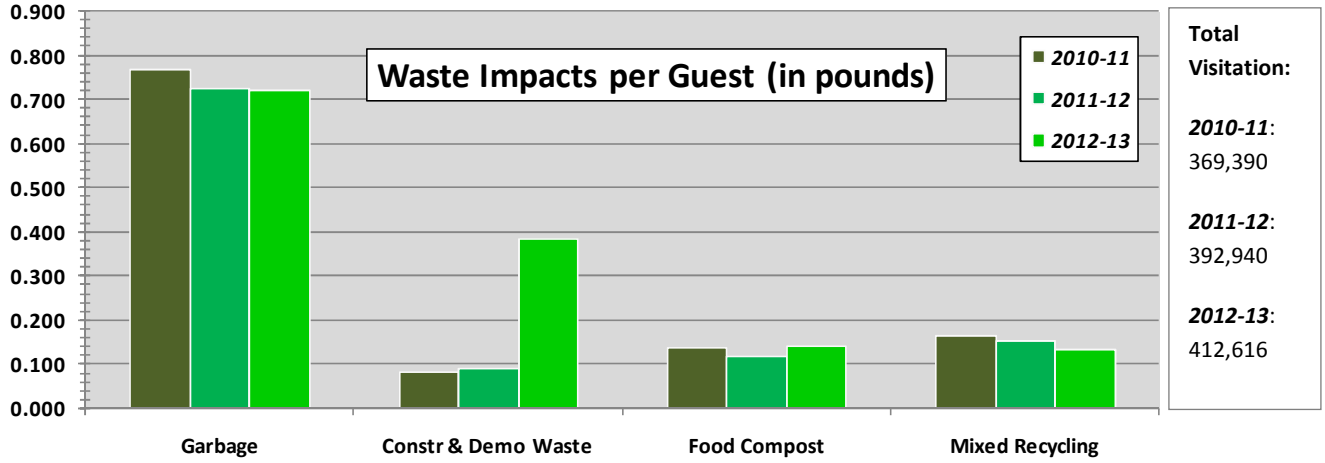






Note that the differences in annual consumption depicted by the electricity and propane graphs are actually quite small because the vertical axes do not begin at zero. In the case of the first two graphs, fuel and power use in fiscal year 2010-11 was tracked only during the ski season; for the following two years, year-round consumption was tracked. This was also the case for propane consumption, but since almost no propane is used in summer months, all three years of data can be reasonably compared.

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



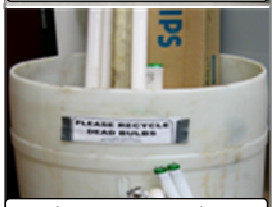
Again, the story is somewhat mixed: total garbage produced per guest is slightly down, while total compost per guest is improved over last year – both good signs. Meanwhile, more perplexing is the drop in per guest recycling volumes despite expansions of the program and additional capture locations; this bears further scrutiny. The total amount of construction and demolition waste generated is also way up in 2012-13, but this is explained by a variety of employee housing overhauls, involving large-scale removal of unrecyclable materials (especially foam-backed concrete panels from a dilapidated dorm roof).

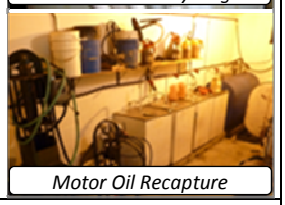
Annual Waste & Recycling FY2012–13

412,616 Visitors (includes Downhill, Nordic, Summer) (Ski season = 146 days)

Resource Category	Cost	Quant.	Unit	Per Guest		
				2012-2013	*2011-2012*	*2010-2011*
Garbage[1]	$19,209	149	tons	.722lbs	.727lbs	.768lbs
Construction Waste	$8,740[2]	79.36	tons	.385lbs	.091lbs	.083lbs
Food Compost	$4,163	29.65	tons	.144lbs	.119lbs	.138lbs
Mixed Recycling	$6,413	27.97	tons	.136lbs	.153lbs	.165lbs
Cardboard Recy.[3]	-$1,064	14.43	tons	.070lbs	.077lbs	.086lbs
Rubber Recyling[4]	$100	412	items	.001	<.001	n/a[6]
Scrap Metal[3]	-$2,308	14.86	tons	.072	.069lb	n/a[6]
Cooking Oil[5]	$0	600est	gal	XXgal	.002gal	.002gal
Hazmat Liquids	$1,200	495	gal	.001gal	.003gal	.002gal
Hazmat Light Bulbs	$74	107	bulbs	<.001	<.001	<.001
Hazmat Batteries	$150	144	lbs	<.001lbs	<.002lbs	<.001lbs
E-waste[7]	$540	79	items	<.001	<.001	<.001


Mixed Recycling Rolloff


Fluorescent Recycling

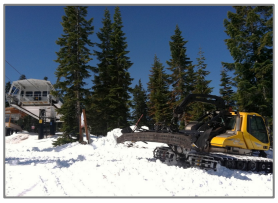

Motor Oil Recapture

Notes: *[1]Collected weekly by Waste Mgmt year-round, while SP covers surplus volumes; [2]Includes 52tons from several large construction & demolition projects; [3]We sell our recycled cardboard & scrap metals; [4]Inludes tires & chairlift wheels; [5]Waste cooking oil collected for free by a biodiesel refiner; [6]n/a = not tracked previous report;[7]Large electronics, computers, TV's, etc.*

Fiscal Year 2012-2013 Sustainability Goals:

1) Install a full-scale solar array up on the mountain
2) Continue energy efficiency retrofits via higher budget projects (w/compelling ROI's)
3) Install additional water meters to track potable usage across the resort
4) Insert sustainability performance measures into the master budget and guest-service criteria used to evaluate the company's fiscal performance.

Fiscal Year 2012-2013 Accomplishments

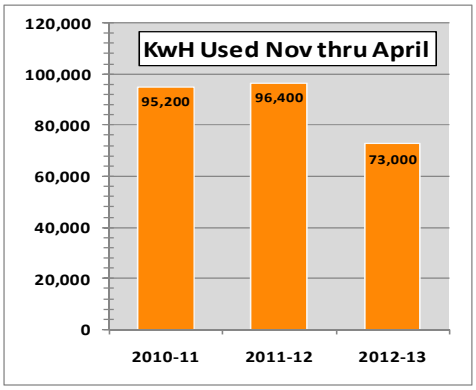


During the fiscal year, Goal 1 was partially met with solar project planning and site preparation (see photo); actual construction will be in July 2013. Goal 2: we tackled a number of significant energy-efficiency projects , including the retrofit of high-performance LED bulbs in many public eating areas, where CFL's had never been suitable; the lamps are lit for long hours and need high lifts for replacement. By choosing LED bulbs that use 80% less energy and last for 40,000 hours, we anticipate significant labor and maintenance savings. Another notable energy retrofit was the installation of dampers on the outside-air intakes of several buildings, such as the Ski School, where vents drew in cold air all night, forcing the furnace to work harder in the morning. With a little creativity, we added motorized louvers which close every evening automatically, leading to a 6-year payback. Similarly, large vents topping two elevator towers were permanently open 24-7, all year, making fantastic chimneys to waste heated indoor air. By adding louvers that open only during fires, so much energy is saved that the $5,000 project will pay back in just *twelve* months!

Work continues on Goal 3 – two parallel water systems exit our treatment plant: the potable network feeds sinks and kitchens, while a non-potable network feeds a variety of outbuildings, toilets, and fire sprinklers. Historically, we've only tracked potable water and not much else, making conservation progress difficult. In summer 2012, we installed two new meters, tracking potable and non-potable separately at long last. Finally, to address Goal 4, we added environmental targets into the annual budgeting, alongside conventional visitation and revenue goals, making sustainability performance another measure of guest-service.

2012-13 Highlight Initiative: Insulation (Energy) Retrofit

As our sustainability program matures, we're increasingly digging deeper past the simple fixes to the larger, more complex, or simply more expensive projects. To mitigate the greater cost, we seek projects with compelling Return on Investment (ROI), or situations where we can steer an existing maintenance project towards a more efficiency-oriented solution. A recent case is the rehab work at Yodelin Lodge, a 40-year old, drafty and inefficient resort building now used as an employee dorm. We phased the concrete roof replacement over two summers, ending in autumn 2012, advancing from R-3 to R-30 insulation. We also swapped all the old, cracked single-pane aluminum-frame windows, for modern double-paned Energy Star replacements.



As can be seen on the graph to the right, after project completion, energy use in the electrically-heated building dropped 25% (approx 22,000kilowatt-hours) over the six occupied winter months compared to prior years, even though the 2012-13 ski season was three weeks longer than 2010-11, leading to longer employee residence times.

Upcoming 2013-14 Sustainability Goals

In the next fiscal year, we intend to:

- Complete our solar array and power it up after permitting
- Identify additional equipment or facilities that can benefit from gauging and monitoring
- Explore the feasibility of highly-efficient LED slope lighting
- Launch our largest recycling project ever (retrofit Jupiter Chair)
- Pilot energy-performance software for large buildings
- Assess if and how we met our new environmental targets

Mistakes & Improvements

>***Carpooling***: We still need more guests to carpool (but more staff members now do it, and the HR Department piloted a coordination system).

>***Carbon Offset Sales***: The departure of a key employee left daily guest offset sales without a champion. Thankfully, season-long offset sales are increasingly selected by guests online, but ideally we want to promote both.

To learn more about our Environment & Sustainability Department, visit: www.stevenspass.com/environment