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sustainability 2015 report



The Trees Speak

This summer Alta Ski Area partnered with the USDA Forest Service—Forest Health Protection, Ogden Field Office and Friends of Alta (FOA) to conduct a forest health assessment of National Forest lands, Alta private lands and FOA's conservation easement areas. Forest data was collected over a three week period with a mixed crew from each partner covering tree stand density, species, health and biomass. In addition to this data spectrum, fuel data was collected to help determine fire potential, intensity, spread and impact.

Now that the data collection period is complete comes the compilation, analysis and report. This is expected to take the winter to organize and special attention will be made to allow for an update to the ski area's Vegetation Management Plan. With a growing concern of fire and climate change within urban forests this assessment is meant to help address these issues to allow for earlier response and guide conservation management efforts into the future.

Empowering Alta with Renewables

The completion of our solar photovoltaic system brings greater commitment and momentum in harnessing the potential power of natural energy, including water. This summer with the help of [Applegate Group, Inc.](#) we completed a feasibility study, phase I of a III part microhydro power project. The economic and environmental analysis determined a beneficial outcome in utilizing the existing snowmaking infrastructure. With a few scenarios to consider over the winter and the ski area's next steps, we are looking at a minimum of 110,000 kWh generated through microhydro during the runoff season. In pursuing our carbon reduction goal this project would potentially cut our annual footprint by over 116 tons of CO₂e.

The principal function of this project is the utilization of the ski area's existing snowmaking lines from Cecret Lake with minimal footprint additions to the powerhouse at Wildcat Base. Overall we are looking at a very exciting endeavor that seeks to expand our energy portfolio through a triple-bottom-line process—realizing a positive impact on the environment, economics, and social well-being of our community and ski industry.



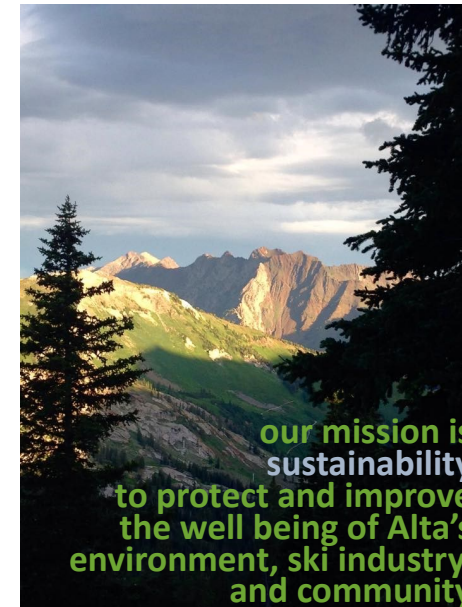
Sustainable Events of the Season

Adventure learning is a continuous journey and we hope it never ends. The following are our top sustainability events this winter.

- **Spring TBD—Skiing & Trees:** Alta is pleased to host TreeUtah and our skiing patrons for a morning of sliding down the mountain, environmental awareness, and great company. For more info please contact environment@alta.com.
- **April 8—Alta Gala:** Support and celebrate ACE, Friends of Alta, and the Alta Historical Society—it's a ball! Learn more at altagala.org.
- **April 16—Alta Earth Day:** An annual community event building awareness and celebrating the environment. For more info email environment@alta.com.
- **Monthly—Bird Surveys:** Join Tracy Aviary the 2nd Monday each month to get know Alta's feathered friends. For more info email environment@alta.com.
- **Monthly—Snowshoe with a Naturalist:** Take a short break from skiing and join Cottonwood Canyons Foundation for a winter-land tour. For more info contact info@cottonwoodcanyons.org.
- **Weekends & Holidays—Ski with a Ranger:** A tour through Alta's natural history and wild side. For more visit alta.com/the-mountain/ski-with-a-ranger.



2015 - 2016 season endeavors



our mission is
sustainability
to protect and improve
the well being of Alta's
environment, ski industry,
and community

level. What Alta has learned from this challenge is that each of the three requirements are equally important. As we pursue a GHG reduced world through policy it is more pertinent than ever to practice an energy lean day-to-day life. Here are Alta's efforts last season in pursuit of their 20% reduction goal of 1,235 tons CO₂e and will add to the overall cumulative Climate Challenge reduction effort of over 4,000 tons CO₂e as of 2014.

- Housing LED Lighting Upgrade - saves over 8,500 kWh a year
- Paperless Paystubs - saved over 300 lbs of waste annually
- Variable Frequency Drive Pump for Snowmaking - 10% kWh savings
- Advocacy—supported an air quality act to the state of Utah, the EPA Power Plant Rule, and joined the Climate Declaration with [BICEP of Ceres](#)

Department Highlight—Building Maintenance, By Shawn Jensen

In the summer of 2014, we upgraded the Building Automation System for the Cat Shop building. With this upgrade we wanted to achieve three goals: allow the building occupants easier access to viewing the systems; enable Building Maintenance Technicians remote access to setpoints, heating schedules and trendlogs; and ultimately reduce energy consumption.



2014 - 2015 season accomplishments

A Climate Challenge

Since 2012 Alta Ski Area has worked with National Ski Areas Association (NSAA) on the [Climate Challenge](#) program along with a growing number of fellow ski areas. The challenge in words is simple, to reduce a ski area's carbon footprint. Implementing this goal is not so simple. First task is to tackle the low-hanging-fruit—lighting upgrades, high efficiency boilers, recycling, etc. After some years it's time to bring the ladder out and then the risk increases around cost and efficient carbon reduction. Now it's time to work smarter not just harder—this is the challenge.

The Climate Challenge program is set up to help with this process by providing the ski areas with the needed guidance, team setting, and tools. The process is well-rounded utilizing a *people-planet-profit* strategy. Participants must 1) develop and pursue a reduction goal; 2) track and report their carbon footprint annually; and 3) “advocate the national reduction of GHG [greenhouse gas emissions] through legislative measures”—thus allowing overall GHG emissions reduction for the ski area at a source



Trendlogs are a key component to improving the system. They are the history of setpoints, valve positions, or space temperatures of the building. Analyzing these values over time is the basis for any future schedule or programming changes. It's these changes that help achieve reductions in energy consumption.

In November of 2014, we used 480 dekatherms (Dth) of natural gas, while the ten year average for November is 704 Dth. The results for five of the seven winter months saw similar reductions. Colder or snow-filled months saw less of a decline.

Last year was not an average heating season, which helped us achieve such large reductions in energy usage. During extremely cold or snow-filled winters, the savings might not be as great. But through improvements in the Building Automation System, we hope to continue this trend in reducing energy consumption.



Citizen Science Birding Project

In partnership with Tracy Aviary, Friends of Alta, and the Rocky Mountain Bird Observatory this summer marked the start of a three year comprehensive bird monitoring project. It’s purpose to create a baseline bird breeding inventory throughout Alta. With the committed help of over 10 citizen science volunteers and many hours of training, hiking and surveying, the project so far is a success.

As a result the breeding bird species list grew to 83 (increased by 19 species from general observations) and 4,259 individual birds were recorded. The breeding surveys are conducted only in the spring, but we will be continuing the monitoring throughout the winter on skis! For more information on this project visit alta.com/alta-environmental-center/research-education/bird-survey-project.

Catching Some Rays

This past year Alta Ski Area completed a comprehensive solar energy plan with [Dwelltek](#), a Park City [B-Corporation](#). The opportunity struck and we received a Rocky Mountain Power Solar Incentive to install a 20 kW system. For this install we found it best to split the allowable watts to three different sites. A 2.75kW system at the Patrol Dispatch building atop Collins Lift, a 1.71kW system at the Buckhorn facilities at Wildcat Base, and the remaining 20.52kW on the roof of the Vehicle Maintenance Shop (Cat Shop) at Albion Base. The entire install is estimated to decrease our carbon footprint by about 39 tons of CO2e.

These installations will allow Alta to better understand the maintenance and practicality of solar pv systems in a mountainous area; monitor the energy saved; support the renewable energy industry; continue to decrease our carbon footprint and work towards our climate challenge goal.



A Summer Reflection, By Marley Hill-Filben

I joined the [Environmental and Sustainability Studies Program](#) at the University of Utah my freshman year. The program requires an internship and as soon as I saw this I started checking postings right away. The one that immediately caught my eye was the Alta Environmental Center. I thought, what a perfect match for me, I love Alta and being a part of my favorite place for my internship felt right.

The fall season marks my place as a senior, the end of my first summer at Alta and the beginning of my 13th winter skiing here. Over the summer I have learned more than I ever thought I would know about the unique environment of Alta. When I started my internship at the Alta Environmental Center I was excited and nervous with everyone telling me that I had hard work ahead of me. I found this out on my first day as I was given a quick introduction to the mountain and then put to pulling weeds.

The first thing I learned was of course how to name and identify different noxious weeds. Now to me, pulling weeds is the quickest and most satisfying job; in only a couple of hours you can completely remove invasive plants from a given area. However by the end of my internship along with the bad plants I could name dozens of native flowers, shrubs and trees. I also know where to

look for moose, how to tell an ermine from a ground squirrel, and spot pikas and their haystacks. Interacting with the public was the highlight of my summer. Talking to visitors of all ages and backgrounds helped me see Alta in a new perspective and made me appreciate it even more. Knowing that so many people love and care for Alta make all the hard work rewarding because I know that what I did this summer will make a difference for years to come.

Sustainability to me is about the future, making a place better for people that haven’t even been born yet is as close to altruism as one can get. I hope to come back to Alta in 20 and 40 years from now with my future friends and family and be able to say: “See that group of trees up there? Those weren’t around when I was your age.” To me that is what environmentalism and sustainability is all about. Making a difference, one seed at a time.

Marley Hill-Filben a local Salt Lake Citier, is a student at the University of Utah, and an avid Alta skier. The AEC believes Marley will bring compassion and a caring hand to our future. Thank you Marley!



Corkscrew & Nina’s Recovery - Progress Update

Last year marked the start of a four-year restoration job between Corkscrew and Nina’s Curve runs. The widening and filling of the runs, as well as removal of a mine overburden disturbed 4.7 acres requiring soil stabilization with native revegetation. With a projected completion of 2017 we will put an equal level of revegetation efforts each year to facilitate in the native restoration of two runs and the reestablishment of a riparian area where the mine overburden once stood. To demonstrate the effort for the summers to come, the following is a rundown of the work completed this summer:

- Hand collected native seed in 2014, then grew and planted 3,000 native flowers and shrubs from the seed collected.
- Worked with over 30 volunteers to restore the riparian zone where the mine overburden once laid.
- Watered, weeded, and re-stabilized areas within the project that needed additional attention due to runoff and vulnerability as a disturbed site.
- Set up monitoring zones for long-term management guidance.



Stewardship & Education—Protecting Our Watershed

Our summer stewardship and education efforts would not be possible without the help and dedication of our partners and volunteers. Thank you to all that believe in making Alta a better place now and for the future: [ACE](#), [Cottonwood Canyons Foundation](#), Entheos Academy, [Friends of Alta](#), [Hawkwatch International](#), [Town of Alta](#), [Tracy Aviary](#), [TreeUtah](#), University of Utah, US Forest Service Salt Lake Ranger District, and Westminster College. The following features a rundown of our summer accomplishments:

- Volunteers totaled to over 250 with over 950 hours of very hard and dirty work.
- Planted 1,350 and harvested over 500 Engelmann Spruce seedlings. Planted over 1,500 native flowering plants grown from handpicked seed (over 4,500 plants including Nina-Corkscrew).
- This summer we were pleased to host over 190 students from a variety of schools incorporating stewardship—a key to assuring future stewards.
- Bird watching is an educational hit each summer with Tracy Aviary, Hawkwatch, and over 75 participants. Winter birding opportunities will continue with Tracy Aviary the 2nd Monday each month.
- Our employees and partner staff from FOA and CCF put in 100s of hours removing 100s of lbs of noxious weeds.
- We “SPLAT,” a special insecticide, over 300 limber pines throughout Alta continuing to protect them from infestation of the mountain pine beetle.

2015 summer update



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report

UNLESS someone like you cares a whole awful lot, nothing is going to get better. It's not. The Lorax