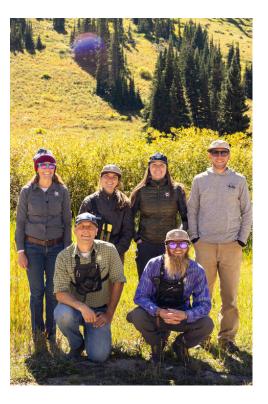
# ALTA ENVIRONMENTAL CENTER ANNUAL SUSTAINABILITY REPORT

2023

# About Us

The Alta Environmental Center is dedicated to sustainability - to protect and improve the well-being of Alta's environment, ski experience, and community. These three pillars of our foundation are there to guide and challenge Alta's operations and community to pursue greater sustainability practices in areas of common interest. It is the AEC's job to hold a high standard in project selection for the ski area, act as a resource to the community, and make concerted efforts towards conserving land, water, energy, and air quality.

A changing climate has implications not only for the planet, but for Alta as well. This pressure and uncertainty gives us an opportunity to respond and help shape what we want the future of our canyon and region to be. With our vested interests in mind, Alta is actively participating in efforts to address recreation and transportation impacts, as well as those created by Alta in its operations. We also look to our local and national communities for inspiration and ability to strengthen our efforts. Along with local partnerships that engage our community through education and stewardship events, Alta participates in the National Ski



Areas Associations Climate Challenge. This collective serves to track our yearly carbon emissions, helping us identify opportunities and create clear structures for goal-setting. We hope to track our progress accurately, lead by example, and show our support for others in the community and ski industry.

# **Guiding Pillars**

#### **Environmental Sustainability**

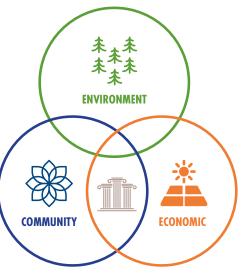
Pursue sustainability internally for Alta Ski Area through the conservation of energy, water, and land. We aim to achieve this through protecting the natural environment and meeting the needs of Alta Ski Area without compromising the availability of resources in the future.

#### **Community Sustainability**

We aim to act as a resource for our community in an effort to promote sustainable initiatives through partnerships and stewardship opportunities. Additionally, we work to foster and encourage environmental education and research through internal and third-party collaboration.

#### **Economic Sustainability**

Guide economic activities so they are being conducted in such a way as to preserve and promote long-term economic well-being and resource efficiency.



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# Land Conservation

This year marked a significant milestone for the Alta Environmental Center as we embarked on our most ambitious revegetation effort to date. Close to 13,000 plants were planted across Alta's mountainous terrain to restore areas that have been disturbed by ski area projects.

This commitment from our team, partners, and volunteers was one that did not go without challenges - including a 900-inch record snowpack that lingered through the summer and some difficult weather conditions to work in. This effort is a testament to Alta's commitment to providing authentic skiing experiences in a natural mountain environment and displays one of the cornerstones of the environmental center's mission - to invest in our collective future and the protection of the air, land, and water of Little Cottonwood Canyon.

### A QUICK LOOK AT OUR HANDS-ON EFFORTS THIS SUMMER





24 SPECIES OF SEED COLLECTED





**103 ACRES TREATED FOR INVASIVE SPECIES** 

#### **ENVIRONMENT**



"Our goal is to minimize impact, with our environmental health at the forefront of our project planning. The Alta Environmental Center aims to maintain a high level of care and consideration that will support the well-being of our environment, community, and skiing experience."

Jennifer Melton, Director



## **Development of our Restoration Projects**

The restoration process at Alta has been built from the tenure of dedicated employees with experience to see mistakes made in the past and successful efforts that have minimized the impact of projects at Alta. Existing on National Forest Service Land, Alta is a multi-use recreational site, where the public comes to enjoy the fresh air and beauty of the mountains. Our mutual goals with the Forest Service are to maintain a level of natural beauty, while being able to support functioning and modern infrastructure. Before any earth-work begins, the Alta Environmental Center works alongside contributing departments to understand the extent of each necessary project. The types of projects carried out at Alta Ski Area include infrastructure improvements to buildings, utilities, and ski lifts, as well as ski-run improvements. Mitigating the level of ground disturbance, travel to and from the work site, and erosion are some of the important topics covered in these considerations.

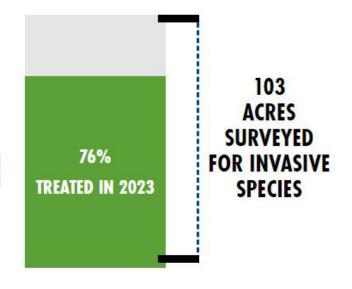
Once the project planning has been complete, plants are surveyed and inventoried at the site of project by the Alta Environmental Center. Trees, shrubs, and short forbs are documented so that restoration processes will include the same species that were present prior to disturbance. Seed is collected in the fall to be grown and returned to the site (see our article on seed collection and Dryland Horticulture, Alta's longtime, local grower). In some cases, it is possible to carefully remove entire plants with their root systems, store them temporarily above ground while the work is in progress, and put back into the ground once it is complete.

The final phase of the restoration process is to plant native species back into the area. Almost all disturbed areas are met with the same promise: 1,000 plants planted per acre of disturbance, for three years. Following this promise, oneacre area would be met with 3,000 plants over the course of three years. The only exceptions are areas that are so successful in the first two years that it would be damaging to walk and work within the area again.

## **Invasive Weed Management**

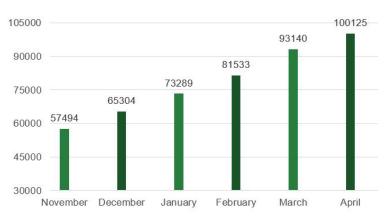
A major part of our land conservation efforts is the management and mitigation of invasive, non-native, and noxious plant species. These species thrive in areas of disturbance, where

they can out-compete native vegetation and lead to a reduction in native plant diversity. Additionally, the spread and presence of invasive plant species can contribute to soil instability which has significant impacts on local ecosystems that rely on healthy soil and clean water. The Alta Environmental Center team collaborates with Cottonwood Canyons Foundation and Friends of Alta to survey and manage 103 acres within the ski area and the Town of Alta. **Each acre is surveyed for the presence of non-native species, followed by meticulous hand-removal.** We avoid the use of herbicides that would pose a threat to native plant communities and have adverse effects on the quality of water flowing into Little Cottonwood Canyon Creek.



# Food Waste Management Program

Alta Ski Area's food waste collection program is an important component of our waste diversion and our broader mission to promote internal sustainability. Alf's, Watson's Shelter, Albion Grill, and the Buckhorn kitchen are the hard-working staples of this program. Through a partnership with two local facilities, Momentum Recycling and Wasatch Resource Recovery, **our food waste is turned into two products: renewable energy and ammoniumrich fertilizer.** Wasatch Resource Recovery specializes in organic waste management with



an anaerobic digester operation. The operation breaks down organic waste and is successful in capturing methane in the process. What would be a harmful greenhouse gas in the atmosphere, is captured and converted into renewable bio-gas for electricity. The remaining product is a nutrient-rich fertilizer sold to agricultural customers for use on crops. Wasatch Resource Recovery creates enough renewable energy over the course of a year to heat a community the size of Bountiful, Utah. Over the course of three years, **Alta Ski Area has contributed over 100,000 pounds of food waste to this effort.** Thank you to Momentum Recycling, who works hard to transport our waste from this challenging canyon to North Salt Lake, where Wasatch Resource Recovery is located. And thank you to our partners, employees, and skiers for making this program a success!

#### Total Food Waste Diverted since 2021 (lbs)

#### **ENVIRONMENT**

## **Wetland Restoration**

#### Cecret Site | 2021





Cecret Site | 2023







Berm Site | 2023

In the second year of active restoration on three sites in Albion Basin, our wetland mitigation sites are showing promising recovery. This project began as compensation for lost wetlands that were a part of the Albion parking lot improvements. To mitigate the loss of wetlands, three recovery sites were determined to be viable in the already-existing wetlands of the Albion Fen. These sites were seen as opportunities to expand the Albion Fen, beyond the wetland acreage lost in the parking lot improvements. The loss was matched 3:1 in acreage. Review and input from Salt Lake City Public Utilities and the U.S. Forest Service were utilized in the mitigation decision making process. Summer 2023 marked the second year of active restoration which included:

- » 964 wetland plant species planted
- » Native seed collected from surrounding areas and spread onto sites
- » Invasive species removal
- » Contouring improvements to create both retention and flow of water through the sites
- » Living transplants of grasses and willows from other wetland sites

With such promising results and density of revegetation, it has been determined that the third year of restoration will be a passive one - meaning we will monitor the sites throughout the summer without active planting. Invasive species removal will continue, and the health of the site will be first priority.

\*To learn more about our Wetland Restoration check out the 2022 Sustainability Report.



# **Public Outreach**

#### **Updated Kiosks**

This summer, we were delighted to debut fresh and updated trail signage and interpretive signs along some of our most used trails. Four major trailheads (Albion Meadows, Catherine's Trail, Cecret Lake, and Collins Gulch) received brand new trailhead kiosks. They include updated summer trail maps, interpretive signs, and a community bulletin board. These signs are the product of generous and important grants through Central Wasatch Commission and the Utah Outdoor Recreate Grant. Thank you to the Town of Alta and Salt Lake City Public Utilities for their time, effort, and dedication.



#### Wildflower Pull-Outs

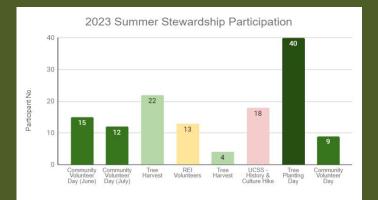
Designating specific wildflower photography pull-outs has become beneficial in preserving our native wildflower diversity. By providing areas to take photos within the meadows of wildflowers, we are effectively keeping foot traffic on the trail. This intentional placement of pull-outs allows recreationists to still capture that "immersed in the wildflowers" image without trampling and disturbing these fragile ecosystems, allowing them to continue to thrive and reproduce each year. Additionally, these pull-outs help foster a sense of awareness and appreciation for the ecological significance of the incredible wildflower blooms Alta receives each summer. **We are engaging the community to be more thoughtful in where they stand to cultivate a deeper understanding of the delicate balance within our ecosystem.** We can all contribute to the long-term preservation of native wildflowers and natural beauty found uniquely in Albion Basin.



## **Community Engagement & Partnerships**

This summer, we forged new partnerships and strengthened existing connections in pursuit of community engagement. **22 volunteer, stewardship, and educational events were held at Alta over the course of summer 2023.** Our long-time partners Tracy Aviary lead monthly birding hikes through scenic and quiet areas of the mountain, and TreeUtah and Cottonwood Canyons Foundation returned to help us lead a range of revegetation projects. New partners REI and Utah Cultural Site Stewardship (UCSS) emerged as bright new additions to our summer programming.

UCSS led a brand-new event, tracing history's footsteps along Twin Lakes Pass and through Grizzly Gulch. History enthusiasts and nature lovers alike enjoyed a thoughtful hike through mining remnants left from the last two millennium's inhabitants. Summer birding with Tracy Aviary returned with a special pygmy owl sighting on the Michigan City Road, an uncommon and exciting occurrence. Additionally, REI joined the environmental center crew for a hard-working day of invasive species removal. Thank you to the volunteers, the students, the helping hands, and the organizations who delivered one of our most successful summers yet.

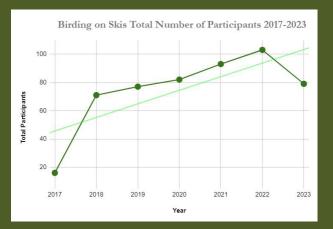




#### Winter Events

The incredible snowpack that was delivered over the 2022-2023 ski season presented some unique challenges for our on-snow education events. Along with the record snow, the construction of the new Sunnyside lift was also underway, adding another layer of complexity.

Thanks to our partners, TreeUtah, Cottonwood Canyons Foundation, and Tracy Aviary, we remained flexible and worked around these challenges. This adaptability allowed us to deliver educational programs to over 500,000 skiers who visited Alta last winter.



# Summer 2023 Summary

#### **Summer Road**



- This summer was Alta's 6th season managing Summer Road Operations.
- With record snowfall this past winter the summer road opening was delayed until Friday, July 28th.
- The Summer Road closed on Monday, October 10th, 2023 (with a two-day snow closure prior to final closure on October 10th).
- This provided a total number of 75 days for visitors to drive the summer road into the Albion Basin.

#### **Visitor Engagement**



- Representatives from the U.S. Forest Service, Alta Ski Area, Friends of Alta, and Cottonwood Canyons Foundation were present during weekends and holidays to engage with visitors. For 2023 the focus for naturalists was proactive education topics.
- Key discussion topics included
  - » Protected Watershed
  - » Trails Stay on trails
  - » Naturalist Information Flora and Fauna specific to the area
  - » Interpretive stations set up at Albion base area and Cecret Lake Trailhead
- New for this year, two USDA Forest Service rangers were on-site at Alta Friday-Monday to engage and educate visitors to Alta's Albion Basin.
- Alta published a new summer trail map for summer 2023. The new layout received a lot of praise and was very helpful in identifying trails for visitors. The new map layout uses the same view as the winter trail map.

#### **Albion Basin Campground**



- The Albion Basin Campground was open for 51 days.
- The campground was open from Friday, July 28th through Saturday, September 16th.
- All sites were by reservation on recreation.gov.

### ECONOMY Alta's Initiatives

| Environment | Revegetation                                | <ul> <li>Our commitment is planting 1,000 plants per acre in areas of disturbance, for three years.</li> <li>FY 23 planted a total of 13,000 native wildflowers and shrubs.</li> <li>109,689 plants and shrubs planted since 1991.</li> </ul>   |
|-------------|---|---|
|             | Reforestation                               | <ul> <li>FY 23 planted 600 Engelmann spruce trees to continue the ski areas reforestation goals.</li> <li>42,924 trees planted since 1991. Tree seedlings are harvested from groomed runs and relocated to safer places on mountain.</li> </ul>   |
|             | Restore<br>Wetlands                         | <ul> <li>Restored wetland areas that were disturbed during the installation of the Supreme lift in 2017.</li> <li>3200sf of restored wetlands.</li> </ul>   |
|             | Invasive Plant<br>Management                | <ul> <li>With help from our partners, Cottonwood Canyons Foundation and<br/>Friends of Alta, we survey and treat areas of invasive weeds.</li> <li>76% of the 103 acres of invasive weeds were surveyed and treated<br/>this past summer.</li> </ul>  |
|             | Waste<br>Reduction                          | • Through our Food Waste Program we have successfully diverted 50 tons (100,125 lbs) of food waste from the landfill.   |
| Social      | Community<br>Engagement                     | • FY 2023 hosted 8 stewardship events with over 130 participants in total   |
|             | Education                                   | • FY 2023 hosted over 20 educational events free to the public.   |
|             | Partnerships                                | <ul> <li>Partner with 9 local and federal organizations.</li> <li>Cottonwood Canyons Foundation, Tracy Aviary, TreeUtah,<br/>U.S. National Forest Service, Friends of Alta, Town of Alta, Alta<br/>Community Enrichment, Utah Cultural Site Stewardship, SLC Public<br/>Utilities.</li> </ul>   |
|             | Research                                    | <ul> <li>Facilitate long-term breeding surveys with Bird Conservancy of the Rockies and Tracy Aviary.</li> <li>Supported bird-banding efforts of Black Rosy-Finches in collaboration with the Division of Natural Resources and Sageland Collaborative, a local non-profit. This effort will help answer questions about the life history of this cryptic species, and guide future conservation planning.</li> </ul> |
| Economic    | Investing<br>on-site<br>Renewable<br>Energy | <ul> <li>In 2015 we installed 98 solar panels on three buildings within the ski area.</li> <li>Installed EV charger in Albion Parking Lot to incentivize guests to commute in electric vehicles.</li> </ul>   |
|             | Purchased<br>RECs                           | • Purchased REC's in 2022, 23, and will do so in 2024 to match 100% of our electricity with renewable energy. Rewarded 2023 Rocky Mountain Power Blue Sky Legacy Award.   |
|             | Energy Cost<br>Efficiency                   | Upgraded employee buildings to LED efficient lighting and sensor lighting to reduce consumption and cost.   |

