



SIERRA NEVADA
ALLIANCE

2024 Ambassador Program Report



Sierra Nevada Alliance
PO Box 7898, South Lake Tahoe, 96158
info@sierranevadaalliance.org
www.sierranevadaalliance.org

Table of Contents

- 1) Introduction
- 2) Host Site Overview
- 3) Trainings and professional development
- 4) Student research projects and growth
- 5) Data Summary
- 6) Evaluations and Suggestions

Introduction

The Lake Tahoe Ambassador Program has been in place for four years. It provides paid summer employment to local high school and early college-age students, stationing them at popular trailheads and beaches to work as environmental stewards. Throughout the program students learn about how to protect the natural resources in the Lake Tahoe Basin and use these skills to educate the public. This program is also the first step in the Alliance's environmental workforce development pathway programs—followed by the Sierra Nevada Americorps Partnership Program and the Sierra Corps Forestry Fellowship Program.

The Ambassador Program goal is to address the impacts of increasing tourism and promote sustainable recreation in the Tahoe Basin by employing local youth to act as stewards and guides promoting responsible behavior to locals and visitors alike. During the 2024 season a staff of 13 students were employed over the course of 12 weeks. Participants underwent an orientation weekend to develop naturalist and environmental communications skills and then attended periodic skill-building trainings throughout the summer in addition to regular weekly work at host sites.

This year, the Alliance partnered with the North Tahoe Community Alliance and Lake Tahoe Basin Management Unit to place students at 7 host sites. At these sites the Ambassadors shared knowledge with visitors about specific site related issues and general information about the environmental sensitivities of Tahoe. They handed out educational materials on good stewardship, modeled this behavior by picking up litter to protect the Tahoe Basin, and worked closely with our host sites to help fill their needed staffing capacity. For the first time this year Ambassadors also took on research projects of their own that built skills to further their careers as environmentalists. By the end of the summer, the Ambassadors had put over 2,500 hours into protecting the Lake Tahoe basin.

Funding

This program is made possible by generous funding from the Lake Tahoe Basin Management Unit (LTBMU), North Tahoe Community Alliance, Lake Tahoe Visitors Authority, Latrobe Fund, Career Pathways, a grant of Parks California, and the Sierra Nevada Alliance (FEIN: 77-0343881]. In addition to this support, Ambassadors used materials including signage, flyers, and branded apparel created by the Tahoe Fund's Take Care campaign. They also utilized the UC Davis Citizen Science App for data collection.

Host Site Overview

- *South Lake:* Tallac Historic Site, Taylor Creek Visitor Center, Kiva Beach
- *North Lake:* Tahoe City Commons Beach, 64 Acres, Skylandia, Kings Beach

Tallac Historic Site

The Tallac Historic Site had the largest variety of tasks for the Ambassadors. Site visitors and resulting needs changed daily, allowing the Ambassadors to utilize a myriad of skills, knowledge, and insight. Throughout the summer, Ambassadors educated visitors on the cultural significance of the museum and its surrounding historic properties. They engaged in restoration activities, including trail maintenance, repainting, and general upkeep. They also assisted in the setup and execution of site events like the Gatsby Festival and Tea at Tallac. Ambassadors carried out all these tasks and activities in addition to their typical daily objectives and goals.

Taylor Creek Visitor Center

Taylor Creek Visitor Center and its neighboring site, Kiva Beach, were popular with visitors to the Basin. At the Visitor Center, Ambassadors rotated between working inside the Center, the Stream Profile Chamber, and the Rainbow Trail. In all three locations, Ambassadors answered and addressed visitor questions and concerns about Tahoe's geography, wildlife, and local site needs. On the Rainbow Trail, Ambassadors would often pick up trash between their engagements with visitors. Since the sole purpose of the Visitor Center revolves around answering visitor questions and spreading information, it was an ideal environment for the Ambassadors. Taylor Creek's predominant site issue was litter; an issue the Ambassadors worked on every day.

Kiva Beach

Unlike previous years, Kiva Beach and Taylor Creek were split into two separate locations to station Ambassadors this year. This separation came with new site responsibilities for Kiva Beach. Along with their usual trash runs along the beach and parking lot, parking control, and stewardship messaging, Ambassadors had an information table where they were based. Ambassadors engaged with visitors traveling to and from Kiva Beach from their table. They answered questions and informed visitors about their usual stewardship messaging with an additional focus on dogs and dog waste, a prevalent issue at a dog beach like Kiva. The main site issues at Kiva Beach were litter and dog waste. Ambassadors worked to combat this issue with action (picking up trash/bagged dog waste) and stewardship information.

64 acres and Tahoe City Commons Beach

Commons Beach is a highly trafficked site that's popular for tourists and families due to its easy access points. Most of the people at this site were already familiar with common stewardship messages so thanking them and encouraging them to come back was the main focus. The main issues at Commons Beach tended to be litter, full trash cans, and dogs being brought where they are not allowed. Commons Beach is regularly maintained by staff, while 64 acres is an unmanned launch area for rafting the Truckee River. For this reason, Ambassadors began their day with a quick check of Commons Beach but attention was focused more towards 64 acres. Within 64 acres Ambassadors set up environmental tabling near the parking lot to focus their attention on visitors with tubes/rafts going into the Truckee River and spread a widely-approved "clean, drain, and dry" message pertaining to watercraft, in addition to properly containing/collecting their own litter while in the river. Another common message ambassadors spread was how to deal with wildlife—specifically bears— due to multiple bear sightings. Ambassadors also helped visitors with directions and general questions about the surrounding area.

Skylandia

Skylandia was an alternate site for 2024, stationed for only two days in the summer. When staff was placed in Tahoe City, they rotated to Skylandia when possible. While at Skylandia Ambassadors stationed themselves at the beach entrance, where they focused on spreading the “clean, drain, and dry” message to beach visitors entering the water with kayaks and paddleboards. In addition, they walked the trails and the beach periodically picking up litter and reminding beach goers to pack out what they packed in. The Ambassadors also helped educate some of Skylandia Summer Camp kids on aquatic invasive species, wildlife identification, and litter management. Challenges with this site included the rotational schedule due to a lack of staff to support being there full time and distance from Tahoe City, which required driving and locating parking during busy summer days.

Kings Beach

Kings Beach is one of the Ambassador's primary locations in North Lake. Due to its central location and large beach, this is a very busy hub for visitors and thus for Ambassadors. Partnering with the North Tahoe Community Alliance (NTCA), the Ambassadors used this location as their primary tabling site. They set up an ez-up and assisted the NTCA with spreading visitor information, as well as setting up their own table that promoted responsible recreation and tourism. The Ambassadors passed out pamphlets about Sierra Nevada Alliance and spread stewardship messages in addition to walking the beaches at least once an hour to do trash pickup. The main site issue was litter present on the beach, full trash cans, and bathrooms being out of order. Later in the season, Ambassadors were also present during a Friday Music on the Beach event and reported illegal alcohol consumption outside of the limits that are set up during the event.

Ambassador Training and Professional Development



Sierra Nevada Alliance Staff worked to coordinate with various local organizations to offer a thorough orientation as well as enriching additional events and skills-based trainings for the Ambassadors throughout the summer. These trainings were focused on helping the Ambassadors to develop their environmental knowledge and professional skills. In addition, they provided needed workforce capacity to many organizations and events.


The orientation clinics, trainings, workdays, and events offered this year were:

- Citizen Science Tahoe app training with Keep Tahoe Blue
- Naturalist training with Tahoe Rim Trail Association
- Lake Tahoe orientation with UC Davis Tahoe Environmental Research Center
- Tahoe Keepers/Aquatic Invasive Species training with Tahoe Regional Planning Agency
- Stewardship messaging with Take Care Tahoe
- Public engagement/communication training with Sierra Nevada AmeriCorps Partnership
- Blue Crew Training with Keep Tahoe Blue
- Headwaters Science Institute research training
- Wild Tahoe Weekend: native species festival/bird festival
- July 5th Beach Cleanup with Keep Tahoe Blue
- Defensible space/fuels reduction training with Tahoe Living With Fire
- Assisting the tribe during the Washoe Cultural Festival
- Meadow Restoration with American Rivers
- California State Parks career shadowing at Kings Beach and Emerald Bay
- Trail Ambassador day with Tahoe Rim Trail Association
- Trail Maintenance with Tahoe Area Mountain Biking Association

Student Research Projects and Skills Development

Research Projects


Methodology



I first surveyed local grocery and convenience stores (between July 20th to August 8) to see if the ban was working and if they had a sign displayed about the city ban. After that, I recorded what alternatives they were selling and the price.

Next, I surveyed trash cans at a popular tourist, hiking and beach locations to see what disposable water bottles/alternatives like cans and glass were being used.

Map of Grocery Stores in South Lake Tahoe Surveyed



All stores were located on the California side. Stores within the City of South Lake Tahoe were Whole Foods, 7 Eleven, Grass Roots, Safeway, CVS, Raley's, Grocery Outlet and Smart and Final

The store outside of the City limits was Holiday Market.

For the first time, Ambassadors were given the opportunity to conduct a research project associated with their stewardship work. In previous years Ambassadors collected site data using the Citizen Science Tahoe app, which contributed to research used by environmental organizations around the lake. While this occurred again this year, the goal was to add an additional project where students could learn how to conduct their own research, choose a topic of interest, and have an experience that mimicked the work of a professional in an environmental career. In addition, students selected topics that were relevant to the Tahoe Basin with the goal

that partnering organizations could learn from the data collected as well.

Students were partnered either alone or in pairs with 8 professional mentors who volunteered from partnering organizations. Students attended a research project design workshop with Headwaters Science Institute to learn how to create their projects, then worked with mentors to identify an issue of interest at their site. Throughout their term they collected data, aiming to answer their research question. At the end of the season, Ambassadors created slideshows and presented their findings virtually to the public.

With this being the first year of the additional project, some challenges arose. Common issues included difficulty learning how to conduct research, ask unbiased questions, and collect statistically relevant data. Students also struggled to communicate properly with their mentors. In addition some students failed to complete the project. Feedback has been collected and this aspect will be modified in future years.

Mentors

- Nettie Pardue, Destination Stewardship Council
- Noah Shapiro, Take Care Tahoe
- Le'a Gleason, Sierra Nevada Alliance
- Will Richardson, Tahoe Institute for Natural Science
- Sarah Harry and Madeline Mouw, UC Davis TERC
- Darby Creegan, League to Save Lake Tahoe
- Deirdre Francks, League to Save Lake Tahoe

Completed Projects

- How Human Behavior Is Impacted By Signage, Kole Brouwer and Rossi Bonev
- South Lake Water Bottle Ban and Use Reduction, Callum Exline
- Do Trash Cans Matter?, Alex Gonzalez
- Bear Safety Awareness, Tatum Taves and Vivianne Brown

Skills Development

The aim of the orientation, training, research project, and overall Ambassador work is for these experiences to have a positive impact on the development of local youth. During the program, pre and post surveys were administered for students to self-report on their level of capability relating to science and stewardship skills and to test this aim.

The following is a sample of some notable survey results:

- Confidence in interacting with the public (Scale of 1-5)
 - Pre-program: 45.5% of students selected a 5
 - Post-program: 77.8% of students selected a 5
- Strength of communication skills (Scale of 1-5)
 - Pre-program: 18.2% of students selected a 5
 - Post-program: 44.4% of students selected a 5
- Interest in working in a conservation career in Tahoe (Scale of 1-5)
 - Pre-program: 54.6% of students selected a 4-5
 - Post-program: 55.5% of students selected a 4-5
- Level of knowledge about flora and fauna in Tahoe (Scale of 1-5)

- Pre-program: 9.1% of students selected a 5
- Post-program: 33.3% of students selected a 5

Survey Data

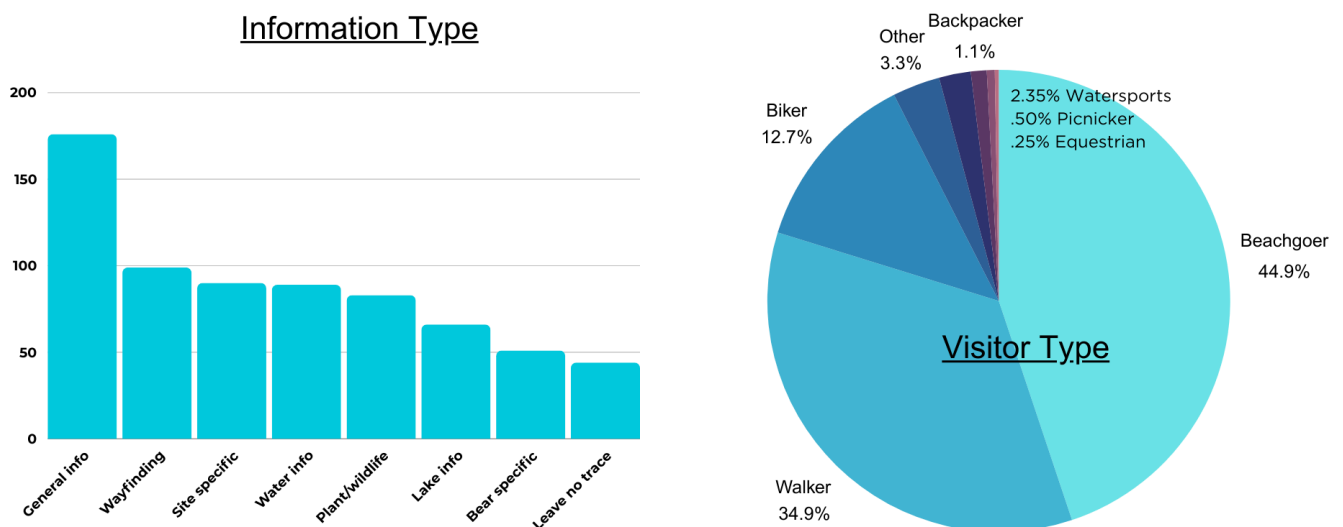
Introduction to Reports

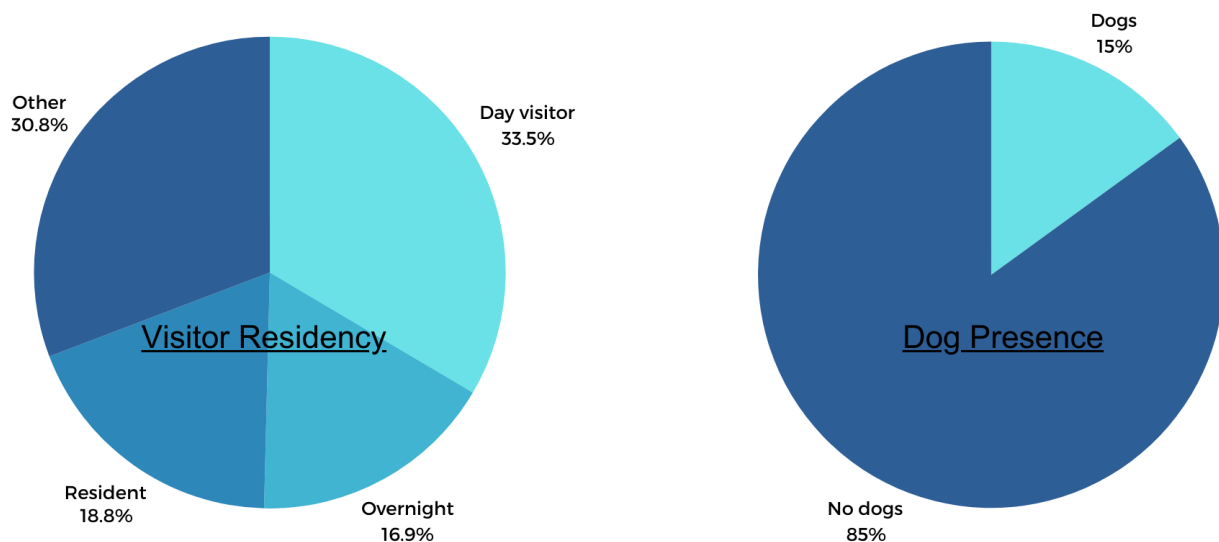
Throughout the summer, the Ambassadors were tasked with completing two different reports. The first report was the Visitor Engagement Report. The Ambassadors were asked to complete it appropriately after every interaction; however, given the nature of these interactions and the tasks already put upon them, they were asked to complete these as much as possible. Over the course of the summer, we recorded a total of 261 of these surveys. This survey was designed to determine the types of people and types of interactions Ambassadors were having with the public. The second report was the Infrastructure Report. Ambassadors were tasked with completing this report every day they finished working at a site. If they worked two sites in one day then they would complete two reports. We recorded a total of 31 of these reports. The purpose of these reports was to record any specific issues of the site and to try to examine the cause of these issues.

Compared to the previous year, we saw a significant decrease in survey data collection with 292 total surveys completed in comparison to 1,294, or a decrease of over 400%. However, the number of consistent overall staff also decreased by 50% from the previous year. In addition, the number of training and special workdays increased from last year, further keeping students away from their sites at least 1 day per work week. We believe these reports generate a significant amount of necessary data and there is strong room for improvement in our data collection methods and number of surveys collected.

Visitor Engagement Report: 261 reports collected

This summer, the Ambassadors collected this type of report after their interactions with site users. These reports contain a plethora of data including visitor type, residency status, group number, type of information given by the Ambassador, and more. We can use this data to understand the unique needs of each site based on utilization and the user type, and how these conditions differ from site to site. Below is a breakdown of some of this data.





Visitor Engagement Report Analysis

Based on our analysis, the most common site visitor type was “beachgoers” (44.9%) and “walkers” (34.9%). This was not surprising due to the fact that all surveys were completed at or near beach sites and some of these sites had walking paths. Of the 12.7% of people who self-reported as “bikers”, only 2% were listed as “e-bikers”, which was a surprising figure considering the increasing popularity of this mode of transit. Of these visitors, 33.5% were “day visitors” while a nearby 30.8% reported as “other”. The rest reported as “resident” (18.8%) and “overnight” (16.9%). It’s important to note that visitors were not asked if they are second homeowners, something that represents a large part of the population in the area, so this may account for some people who selected “other”. 15% of site users had dogs present, while 85% did not, although it is important to note that only 2 out of the 7 total host sites allowed dogs.

The surveys also allowed Ambassadors to report the type of information distributed to visitors during their interaction. In this question, they could select more than one type of information distributed. The most common interaction type was “general information” at 176 instances with “wayfinding information” being second (99 occurrences), and “site specific” and “water information” coming in third (90 and 98 respectively).

Visitor Engagement Report: Unusual/Interesting Data Comparisons

We also cross referenced data attempting to discover any unusual or interesting relationships. Below is some information that was of particular interest when data points were compared.

Presence of dogs: Kiva Beach saw a 250% increase in dogs compared to the average. Kiva and 64 acres were the only areas allowing dogs that the Ambassadors were stationed at. Kiva Beach alone contained 17% of the total dogs reported despite making up only 7% of total Visitor

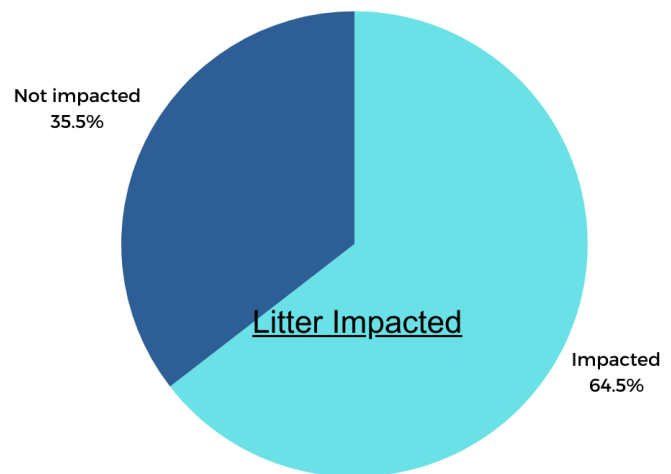
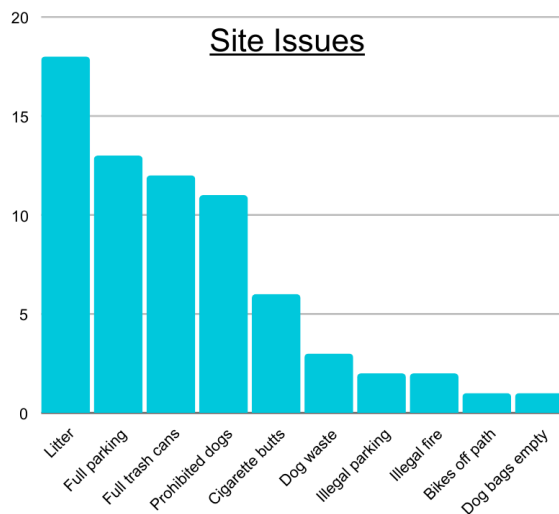
Engagement Reports. King’s Beach contained a comparable 17% of the total dogs reported but represents 36% of total Visitor Engagement Reports.

Leave No Trace Information: 64 Acres/Commons Beach alone reported 47.6% of all Leave No Trace data in the Visitor Engagement Report. An impressive feat compared to its 34% share of total data. This is most likely due to the fact that 64 Acres is an unmanned site with very little signage and infrastructure, which may cause users to question how to interact with that specific environment.

Infrastructure Report Data: 31 reports collected

As stated above, the Ambassadors used the Infrastructure Reports to record specific issues pertaining to their sites such as dog waste, full trash containers, litter present, cigarette butts, full parking/illegal parking, and campfires. This report also recorded a need for site maintenance and status of trails, bathrooms, beaches, and signage. This survey was valuable for a number of reasons, including informing suggestions for host sites and making the ambassadors reflect/think about what they did and the impact they had.

Ambassadors were able to record up to 15 categories of site issues: litter present, public intoxication, illegal alcohol, smoking in a non-smoking area, dogs off-leash, dog waste, dogs present where they were not allowed, pet mitts needed, full trash containers, illegal BBQ/campfire, boat mooring, enforcement necessary, and other. Below is a breakdown of some of this data.

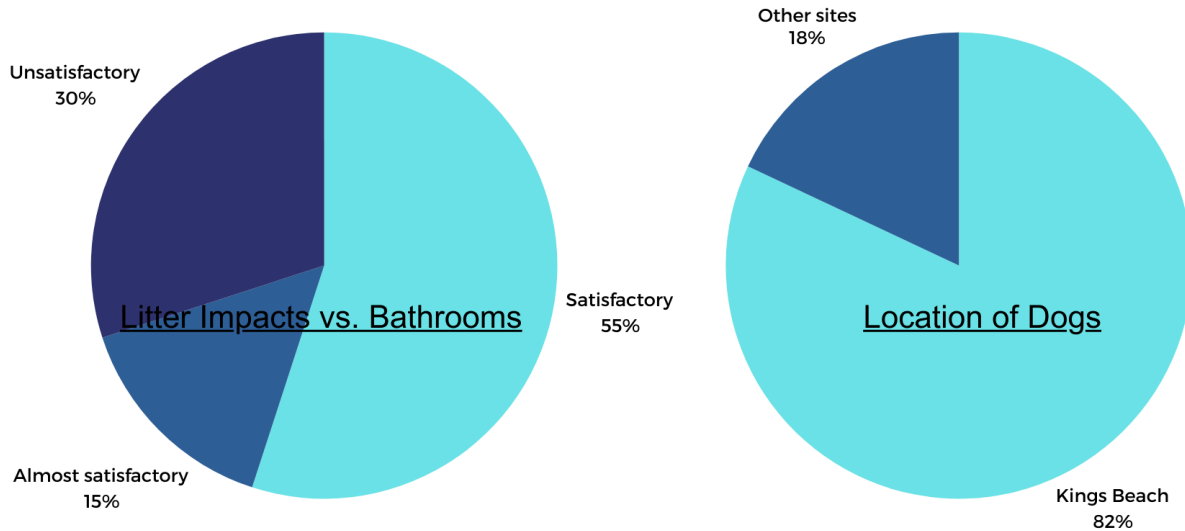


Infrastructure Report Analysis

Ambassadors were instructed to select as many site issues as were applicable. The most common site issue was “litter”, with 18 reported instances out of a total 31 reports. This was followed by “full parking”, “full trash cans”, and “dogs present when not allowed”. 64.5% of reports described their sites as “impacted by litter” on a given day. The site most impacted by litter was

Kings Beach. When a site was impacted by litter, Ambassadors were asked to submit a Citizen Science Tahoe report alerting site leaders to the litter issue. Unfortunately, we found that Ambassadors submitted a CST report 0% of the time. This is an indication to strengthen this point in future years. Another interesting data point related to bathroom status. 55% of reports listed bathrooms as “satisfactory” while 25% listed them as “unsatisfactory” (20% reported “almost satisfactory”).

Infrastructure Report: Unusual/Interesting Data Comparisons



First, the sites with litter impacts were compared against the condition of the bathrooms. Of the sites that were listed as “litter impacted”, a combined 45% had bathrooms that were reported as “unsatisfactory” or “almost satisfactory” while the majority (55%) were reported as “satisfactory”. It was interesting to find that a site being litter impacted did not necessarily mean it also had unsatisfactory bathrooms. However, the site with the most litter impact reported, Kings Beach, was also reported to have unsatisfactory bathrooms 100% of the time in those same reports. At the same time, when Kings Beach was reported to be impacted by litter, it was reported to have full trash cans in only 27% of those reports.

Next, it was interesting to note that of the sites that were found to have a presence of dogs who were not allowed there, 82% of those were at Kings Beach. This could be due to the fact that Kings Beach is the most heavily trafficked site of the 7 the Ambassadors were present at, and has the highest presence of tourists. It’s possible that there is a greater percentage of people using this site who don’t understand the rules, or have nowhere else to leave a dog while visiting the beach.

Program Summary: Evaluations and Suggestions

Now in its fourth year, the basic structure of the Ambassador program has stabilized, however some challenges still remain relating to program planning, staffing, funding, and execution. As a baseline, unless multi-year funding is obtained, the challenge of securing funding every year

during the off-season while preparing for the upcoming season makes program planning more uncertain and difficult. In addition, even when funding is present, recruitment and hiring in a community with an employment and housing crisis is a challenge. Below is a list of additional recommendations for improving the program in future years.

- Improve program execution through utilization of supervisors
 - Onboard crew leads a few weeks prior to program implementation so that they may better familiarize themselves with the program, site needs, and expectations.
 - Seek funding to hire a Program Coordinator to work underneath the Program Director.
- Create deeper relationships with host sites
 - 1-2 months before start of program: Conduct an initial meeting with host sites and the employees who will be working directly with ambassadors in order to establish a clear line of communication/clarify ambassador expectations for each site.
 - Assign 1-2 crew leads per host site supervisor who will delegate tasks to Ambassadors daily.
 - Orientation: arrange for host sites and employees to attend orientation.
- Improve survey data collection process
 - Train and incentive Ambassadors to complete daily surveys, and develop a penalty for not completing
 - Improve citizen science data collection/contribution— figure out the best type of data that could contribute to the greater good and a streamlined process to collect this.
- Better implement a variety of daily tasks
 - Ambassadors supervisors noted that having established tasks and feeling needed at their sites improves Ambassador engagement and overall satisfaction.
 - Create an orientation session around daily tasks with a list of additional optional tasks.
 - Distribute daily task list to every host site supervisor.
- Improve execution of the research project
 - Identify ways to create an optional project that contributes to overall scientific research in the Tahoe Basin and makes a long-standing impact.
 - Better integrate a research design course at the start of the program, such as through Headwaters Science Institute, so there is more time for research. Hold more than one session if possible.
 - Improve relationship between students and mentors; create work sessions where students are coached through the process.
- Adjust schedule of skills trainings to have less impact on time at sites
 - Trainings helped build stewardship skills but took away from time at sites; create a F-M work schedule, with all trainings added in on Thursdays or Tuesdays.
- Establish two permanent North Shore crew leads at Kings Beach and Tahoe City, and another that rotates to sites around the North Shore.
 - Ensure that there is enough staff to support the variety of needs in North Lake and that there are permanent leaders placed at high traffic sites where we know we will always need Ambassadors.
- Work to place staff at sites where there is no existing infrastructure/stewardship messaging rather than assisting staff at existing sites



Thank you to the mentors, host sites, supporters, and funders of the 2024 Ambassador season! We look forward to working with you next year.

