



## Tulalip Charitable Contributions Funds Distribution Report

**NAME OF AGENCY:** Service, Education & Adventure (SEA)

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**GENERAL GOALS:** SEA is committed to creating connections and learning opportunities so that the Pacific Northwest's Cascadian bioregion and Salish Sea environment -especially the Puget Sound region - can be the water and land that we truly know, enjoy and care for. As Puget Sound stewards, we work so that current and future generations can enjoy and benefit from this remarkable environment.

### **SPECIFIC USE FOR THIS AWARD:**

With the support of the Tulalip Tribes Charitable Fund, we set out to offer Bringing Learning to Life programs to diverse students in the Mukilteo and Everett School Districts. Our goal was that young people would become engaged learners, environmentally aware community leaders and Puget Sound stewards. During Bringing Learning to Life programs, students engage in community-based learning that links curriculum to realworld issues. Place-based experiences introduce students to environmental issues, employ STEM perspectives and project-based learning, cultivate 21st Century Skills and identify service opportunities focused on local environmental needs. With the available funding, we were able to deliver four half-day expeditions. We also set out to offer no-cost professional development trainings for teachers. To do this, we engaged in planning and professional development on-site for each participating teacher, as well as extensive sharing of materials and resources with teachers. In April and May 2014, we served 103 students in four classes, one on each of the four expeditions - 33 students from Cascade High School (Everett, one class) and 70 students from Serene Lake Elementary School (Mukilteo, three classes including one special education class).

For more information regarding the specific uses of the award, see the following pages from Service, Education & Adventure (SEA).

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August 8, 2014

Marilyn Sheldon  
The Tulalip Tribes Charitable Fund  
8802 27<sup>th</sup> Avenue NE  
Tulalip, WA 98271-9694

Dear Ms. Sheldon:

On behalf of Service, Education & Adventure (SEA), I am very pleased to once again share a report describing our successful delivery of Bringing Learning to Life programs to students with the support of a [REDACTED] grant from the Tulalip Tribes Charitable Fund. All funds were expended as described in our budget. The support of the Fund enabled us to deliver community-based environmental programming to Everett and Mukilteo students who would not otherwise have had this opportunity. Thank you so much for making this possible and I hope you enjoy this report. Please let me know if I can provide any additional information, and we look forward to future collaboration.

Sincerely,

Susie Richards, Co-Executive Director  
Email: [seaprograms@gmail.com](mailto:seaprograms@gmail.com)  
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### **Program Summary**

With the support of the Tulalip Tribes Charitable Fund, we set out to offer Bringing Learning to Life programs to diverse students in the Mukilteo and Everett School Districts. Our goal was that young people would become engaged learners, environmentally aware community leaders and Puget Sound stewards. During Bringing Learning to Life programs, students engage in community-based learning that links curriculum to real-world issues. Place-based experiences introduce students to environmental issues, employ STEM perspectives and project-based learning, cultivate 21<sup>st</sup> Century Skills and identify service opportunities focused on local environmental needs. With the available funding, we were able to deliver four half-day expeditions. We also set out to offer no-cost professional development trainings for teachers. To do this, we engaged in planning and professional development on-site for each participating teacher, as well as extensive sharing of materials and resources with teachers. In April and May 2014, we served 103 students in four classes, one on each of the four expeditions - 33 students from Cascade High School (Everett, one class) and 70 students from Serene Lake Elementary School (Mukilteo, three classes including one special education class). Program activities are described below.

## **Cascade High School**

With activities based at South Whidbey State Park, students from Jack McLeod's environmental studies class engaged in an environmental decision-making scenario, with SEA educators serving as experts to provide facts on the issues at hand. Essential questions included: What is an environmental issue? What are the key components of an environmental issue? What are the components necessary for stakeholders to make decisions related to the integrity of a watershed? Pre-expedition preparation in the classroom included worksheets focused on analysis of environmental issues, and school visits by SEA educators to explore the environmental issue decision-making process. Students were also assigned to one of three stakeholder groups related to the environmental issue to be explored on the expedition:

**Group 1: "Key Decision Makers"** – Members of Washington State Parks and Recreation Commission who are tasked with making final decisions on proposal below, after receiving input from the following two citizen groups.

**Group 2: "Citizen Activists"** – Conservationists, activists and those against any form of development and/or enhancement of current uses of the park in ways that threaten a sustainable environment.

**Group 3: "Recreational Users"** – citizens who use the park for a range of recreational uses – fisherman, mountain bikers, campers, RV users, hikers, etc

The two proposals which the students explored were: 1. Should a proposal to build a dock on the beach at SW State Park to enhance recreational use be approved? 2. Should the "Classic U" side of the park have its status revised (it is currently has a "natural forest" designation which limits recreational use on only walking on trails) which would allow camping, bike trails, horse trails, etc.

Students took on their assigned roles, and then spent time at on their expedition at the South Whidbey State Park gathering data from experts who provided critical background information on the watershed ecosystem. Students completed an "Analyzing the Issue" worksheet while moving through various "expert" learning rotations at SW State Park – and used their analysis form for their post-expedition class project, meeting with other members of their stakeholder group and using their collected data to reach consensus on one recommendation. The Citizen Activists and Recreational User groups presented their recommendations to the Key Decision Makers group, who provided a final recommendation.

During our initial classroom visit we invited students to think of a natural place that they care about and reflect on how they would feel if told it was going to be destroyed or developed. We went on to discuss ways in which citizens and community members can be part of the decision-making process and ways that this learning experience would help them to understand those opportunities.

Providing students the opportunity to work with experts in a decision-making process in a natural park setting was a powerful teaching tool. Students were deeply engaged with our educators and asked thoughtful, compelling questions throughout the expedition. Many students had never been to Whidbey Island and many had never been to a State Park. Part of the experience involved helping students to identify parks in their own communities and understand the role of parks as available to all people. We shared that, as an example, there is free transit from the Clinton Ferry dock directly to SW State Park if they ever wanted to come back on their own. During the post-expedition component of the program, students broke into their "key stakeholder groups" and made final recommendations on the scenarios. For the final discussion, classes were evenly split into two stakeholder groups (plus 3 or 5 Park reps). Students engaged in quality presentations of their cases. Final decisions in one class were "no" to any changes, citing landslide and

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preservation issues (unique forest ecosystem), and in the other class, “yes” to the dock with no road, “no” to campground.

Noted Pacific NW biologist Dyanne Sheldon served as an on-site educator for this project, as did Sue Ellen White (founder of Save the Trees in the 1970s). Sue Ellen had this to say about her participation:

*When I was asked by SEA... to give students a first-hand look at forest succession and characteristics in an on-site visit to the park, I cheerfully agreed as these are the young people to whom, as citizens, the ownership and stewardship of our state’s resources will fall. My surprise was to learn how infrequently students have the opportunity for field trips; frankly, I was shocked. The power of first-hand, direct experience leaves a lasting impression on youngsters as they engage all their senses and cannot be underestimated in the learning process.*

*Over the decades I’ve been a practicing journalist, I’ve interviewed so many people who have found their vocations or their passions through first-hand exposure to a subject during their formative years. I’ve now participated in two programs with SEA and am impressed with the thoughtful manner and professional process that has gone into maximizing the experience for students. Of course, not every student will be reached; but I’ve seen eyes light up, grins appear and enthusiasm grow as those connections are made and things begin to click in a way that cannot occur only in a classroom environment. If asked, I plan to continue working with SEA and those students fortunate enough to be included in its programs.*

Cascade student Caitlin Schafte shared these reflections:

***The field trip was arguably the best learning experience I’ve had in my senior year. It was thrilling to be outdoors in the forest, learning from my experience rather than a worksheet or Powerpoint. I loved being able to put my hands on what we were studying – the soil, the trees, the environment itself. The lessons I learned on the field trip will stick with me for a long time. Every walk I’ve been on since, I can’t help but identify the species of all the trees I pass by. The enthusiasm of our guides was contagious and exciting. I hope the program continues to benefit others as it benefited me.***

Cascade teacher Jack McLeod provided this feedback:

*This was such a valuable experience for my students. Suburban kids don’t know the woods anymore and this trip gave them first-hand knowledge of, and passion for, a world they didn’t know existed. The instructors were all amazing, knowledgeable, friendly and had terrific interpersonal skills. I recommended this field trip to three other teachers for next year.*

## **Serene Lake Elementary School**

Students from three Serene Lake classes participated in three different expeditions. These included students in 4<sup>th</sup> grade (literature and social studies, math and science) and a 4<sup>th</sup>/5<sup>th</sup> special education class. Four learning rotations were organized around pre-expedition classroom preparation, journal questions, and post-expedition learning extensions. Learning rotations included the following:

**Nature-Based Art Rotation:** Andy Goldsworthy is an artist who uses nature to create and display his art. In this rotation, students used found materials to create their own Goldsworthy art project while learning about

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the elements of design in art. As a pre-expedition experience, students watched a PowerPoint of examples of Andy Goldsworthy's nature-based art, and the elements of design included in each piece. Post-expedition experiences included the opportunity for students to build a PPT of their own Goldsworthy art pieces created at SW State Park and to write a paragraph on their elements of design.

**Puget Sound Starts Here:** Each of us, young and old, has a role in protecting the health of Puget Sound. In this learning rotation, student teams became "experts" on a particular issue that impacts the health of the Sound and taught members of their group about their issue. As a pre-expedition experience, students visited the "Puget Sound Starts Here" website and learned about key Puget Sound Issues. Post-expedition experiences included creating poster to educate their peers and families on issues impacting the health of Puget Sound.

**Stewardship – Archangel Invasive Species Removal:** Invasive species are plants (and animals) that don't naturally occur in a particular ecosystem. They can have very negative impacts on the environment. In this learning rotation, students worked with the Park Rangers on removing a very invasive plant that is taking over native plants at SW State Park. As a component of their pre-expedition learning, students wanted a short video on what invasive species are and how they negatively impact ecosystems. Post-expedition experiences included sharing a brochure on local invasive species with family members.

**Forest Ecosystems:** Teams of students became experts on a forest ecosystem topic and taught other students. Together, we built a picture of forest habitats and ecosystems and learn why big trees, understory, nurse logs and snags form the structure of an old growth forest. Pre-expedition experiences included an overview of native trees in our region and post-expedition opportunities included identification skill building with trees they learned about on their expedition.

Dr. Karen Reid, Principal, Serene Lake Elementary had this to say:

*Many of our students (who are in a special education, self-contained program), rarely are given the chance to explore nature and more importantly, have limited experience to learn first-hand what an ecosystem means. Through your gift of this special field trip, students learned how they can positively impact the environment with their personal choices. Thank you so very much.*

### **Program Evaluation**

#### ***Student Looking Back Survey Results***

Our desired student outcomes were: 1) Deeper understanding of regional and local environmental issues (including STEM perspectives), 2) Improved communication and critical thinking skills, 3) Increased sense of empowerment and self-efficacy, 4) Increased perception of connection between academic learning and real-world issues, and 5) Increased commitment to civic engagement and Puget Sound stewardship. To assess program impact toward these outcomes, our Student Looking Back Survey (LBS), administered post-program, uses a retrospective pre-test format. It presents an item such as "*I care about the natural environment.*" and asks respondents to rate the item twice on a scale of 1-5 (1=Strongly disagree, 5=Strongly agree). The first rating represents respondents' level of agreement with the statement as it had been BEFORE participating in the Bringing Learning to Life program, and the second rating represents their level of agreement with the statement now, AFTER participating in the Bringing Learning to Life program. Research has found that retrospective pre-tests control for response shift bias as participants apply program knowledge in forming self-reports, leading to a more accurate outcome measurement.

We utilized age-appropriate versions of the survey for the high school and elementary groups. Teachers determined that the survey would not be viable for the special education class, and for that reason our Serene Lake number of respondents is limited. The tables below show the LBS items and average participant responses on a scale of 1-5 for both *before* and *after* (1=Strongly disagree, 2= Disagree, 3=Neither agree nor disagree, 4=Agree, 5=Strongly agree). All items are positively worded so that a rating of 5 indicates the most

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desirable response. The final column shows average *change in response*, representing *how much more strongly* respondents agreed with the items *after* the program. The two tables present the different survey items that we utilized with the high school and elementary school groups respectively.

<b>Cascade High School (n=33)</b>	<b>Average - Before Participating in SEA program</b>	<b>Average - After Participating in SEA program</b>	<b>Average Change in Response</b>
<b>Looking Back Survey Item</b>			
<b>1. I care about the natural environment and feel a personal connection with it.</b>	3.73	4.18	<b>+0.45</b>
<b>2. I have a good understanding of local environmental issues.</b>	3.18	4.18	<b>+1.00</b>
<b>3. I can communicate well with others about environmental issues.</b>	3.00	4.12	<b>+1.12</b>
<b>4. I believe that I can make a difference to help our environment.</b>	3.33	4.03	<b>+0.70</b>
<b>5. I see ways that my school learning is connected to real-world environmental issues.</b>	2.91	4.09	<b>+1.18</b>
<b>6. I am committed to taking action to protect the environment.</b>	3.52	4.55	<b>+1.03</b>

<b>Serene Lake Elementary School (n=41)</b>	<b>Average - Before Participating in SEA program</b>	<b>Average - After Participating in SEA program</b>	<b>Average Change in Response</b>
<b>Looking Back Survey Item</b>			
<b>1. I care about the natural environment.</b>	2.02	2.85	<b>+0.83</b>
<b>2. I know about environmental issues facing Puget Sound.</b>	1.44	2.63	<b>+1.20</b>
<b>3. I am able to tell others about protecting the environment.</b>	2.27	2.98	<b>+0.71</b>
<b>4. I believe I can make a difference to help the environment.</b>	1.61	2.63	<b>+1.02</b>
<b>5. I see ways that my school learning connects to the real world.</b>	2.24	2.85	<b>+0.61</b>

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These survey results show a positive shift in average response for all survey items among both groups, indicating movement toward our desired outcomes. For Cascade students, the three largest positive shifts were seen in *ability to communicate well about environmental issues*, *awareness of ways that school learning connects to the real world*, and *commitment to taking action to protection the environment*. For Serene Lake students, the two largest positive changes related to *increased knowledge about environmental issues*, and *belief in their ability to make a difference to help the environment*.

For Cascade students, the item with the lowest positive shift was *care about the environment*. It is noteworthy that the average rating in the BEFORE condition for this item was the highest of any survey item, and that the average rating in the AFTER condition for this item was the second-highest of any survey item. The smaller positive shift for this item, then, does not indicate a lack of care for the environment. Rather, it suggests that care for the environment was the strongest factor pre-program and may have shifted less as a result of these program activities.

Overall, these results are encouraging and point to the powerful impact this program can have in a short time on awareness, knowledge, skills and commitment. It is noteworthy that for Cascade students, average responses for all items shifted from their starting point to an average of over 4.0 on the 1-5 scale. Post-program, on average, Cascade participants located themselves somewhere between “agree” and “strongly agree” for every outcome measure, which is a very positive result. While increases from Serene Lake students were not as marked, they were also positive for every item. The positive results from teacher verbal feedback and student survey data affirm effective program delivery leading to meaningful shifts toward our desired goal that young people would become engaged learners, environmentally aware community leaders and Puget Sound stewards.

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# Bringing Learning to Life

## Cascade High School





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# Serene Lake Elementary School

