

Tulalip Charitable Contributions Funds Distribution Report

NAME OF AGENCY: Service Education and Adventure (SEA)

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GENERAL GOALS: SEA program participants engage in real-world learning, hands-on citizen

science, meaningful service to protect and restore our environment,

personal exploration, and conversations that leave participants informed,

inspired, nourished and connected.

SPECIFIC USE FOR THIS AWARD:

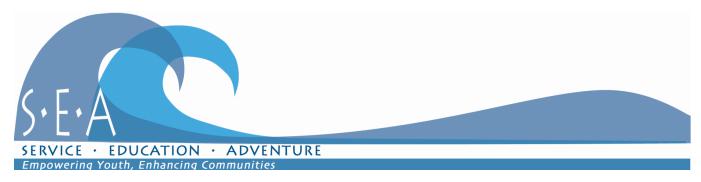
All funds were expended as described in our budget. The support of the Fund enabled us to deliver community-based environmental programming to Everett and Mukilteo students who would not otherwise have had this opportunity.

For more information please see the attached report from Service, Education and Adventure (SEA).









August 20, 2016

Marilyn Sheldon The Tulalip Tribes Charitable Fund 8802 27th 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 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.

We are very grateful for the support you provide to SEA and so many other local organizations. The Fund's generosity, heart and spirit truly expand the circle of care and support for our larger community.

In gratitude,

Susie Richards, Co-Executive Director

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Program Summary

Connection with our natural world is becoming disconnected from most young people's school based experience. Oftentimes, those children who most need the inspiring and life changing experiences that connection with nature bring do not have opportunities for those life changing moments. With the support of the Tulalip Tribes Charitable Fund, SEA was able to provide meaningful nature-based educational experiences to students in the Oak Harbor and Everett School Districts during the 2015-2016 school year. During our learning expedition with 2nd graders from Hillcrest Elementary in Oak Harbor, one young student shared in a ringing voice "this is where I learn best, with the trees!"

Our Bringing Learning to Life (BLL) programs, based at South Whidbey State Park, supported students in becoming engaged learners, environmentally aware community leaders and Puget Sound stewards. In BLL programs, young people engage in community-based learning that connects curriculum to real-world 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. These experiences also enable students to form or deepen their personal, immediate connection with the natural world.

With the available funding, we were able to deliver two full-day expeditions, serving a total of 132 students in grades 2-12. We also provided no-cost professional development support to participating teachers, giving them the skills, perspectives and tools needed to carry the field-based lessons back into the classroom for further exploration. 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 2016, we served 103 students - 32 students from Cascade High School (Everett, one class) and 100 students from Hillcrest Elementary School the Oak Harbor School District. Program activities are described below.

EVERETT SCHOOL DISTRICT

SEA partnered with Cascade High School teachers Brian Churniak and Kimberly Griggs on a marine science expedition based in the Everett Slough and Puget Sound, The program included both a learning experience aboard the marine education vessel "PostScript" as well as a learning rotation led by well known educator Dr. Thomas Murphy of the Edmonds Community College LEAF School. As shared in a thank you letter to SEA and Tulalip Tribes, Kim noted:

"Thank you so much for the amazing experience! It was by far the best field trip I have ever been on and I've done many! I hope that I can come back again next year. I would like to bring my freshmen APES in the fall if possible next year as one of the first trips to really get them thinking about the issues impacting Puget Sound and our local environment. Please thank the entire SEA Team and Dr. Tom Murphy of EDCC who led the Jetty Island component of the program. It is rare for our students to not only learn about the real issues impacting our local environment, but to experience the beauty and challenges we face locally."

Prior to engaging in the expedition, we posed questions to students in the classroom, including 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 public lands and our local waters? In addition, Dr. Murphy provided students with materials from research he has published related to Jetty Island to help students frame a big picture understanding of Jetty Island's history and its impact on local cultural, environmental and natural history. 85% of the participating students indicated that they had "no idea" of what Jetty Island's background and history was – and why it mattered.

Aboard the vessel PostScript, students learned from Captain Chris Burt (SEA Co-Director and a Washington State History Teacher) the background of the local waters, how the river has and is used today, as well as providing students the opportunity to "take the wheel" of the vessel and learn about navigation aboard a vessel. Each student was able to take a turn at the helm and reported that experience as one of the highlights of their day. In addition to the helm learning rotation, students also engaged in a water acidification study with Niles Twomey, a graduate of the University Of Washington School Of Oceanography. This allowed students the opportunity to engage in hands on experience, using real tools and equipment used in the marine sciences — while learning about the critical issue of ocean acidification on its impacts on Puget Sound life. Students also engaged in a plankton rotation with SEA Co-Director Susie Richards and UW Graduate Alea Robertson. Students learned about the importance of plankton on our planet (few realized that plankton are key to life on through their critical role in photosynthesis!), engaged in a plankton tow, and then used microscopes aboard the vessel to identify the various zooplankton and phytoplankton that were collected.

Providing students the opportunity to work with experts in the field was a powerful teaching tool. Students were deeply engaged with our educators and asked thoughtful, compelling questions throughout the expedition. Approximately 62% of students noted that they had never been to the Everett Marina or aboard a boat in the local area.

Brian Cherniak, another one of the educators from Cascade High School who participated in the expedition shared the following:

"I want to thank you and your SEA team for the incredible trip to Jetty Island and Possession Sound.

Our Cascade High School students were blown away by the level of knowledge, commitment and organization you provided for them. I have to agree; it was by far one of the most impactful trips I have experienced with my students. As school budgets get tighter and tighter, field trips and amazing experiences for students become more difficult. I also want to thank the Tulalip Charitable Trust for their commitment to fund educational programs for younger generations and making our trip possible. If you wouldn't mind relaying a big thank you from Cascade High School to them I would appreciate it. I look forward to other field trips with you and SEA. Thanks again, Brian."

Both Brian and Kim are caring and committed educators who want only the best for their students, but as noted, opportunities within the public school system for these types of meaningful, relevant and truly life changing learning experiences are no longer a reality for most students. It is thanks to the amazing generosity and commitment of the Tulalip Tribes that these students and teachers were able to have this powerful learning experience.

Oak Harbor School District

Students from Hillcrest Elementary in the Oak Harbor School District represent a wide range of culturally diverse backgrounds and have teachers committed to sharing new and unique learning opportunities with them. Hillcrest 2nd grade teacher Jodi Crimmins worked in partnership with SEA to coordinate 100 2nd graders in a combination of in-class pre-expedition learning experiences with SEA staff, on-site expeditions at Fort Casey State Park – and in-class post-expedition lessons that brought the field-based learning back to the classroom.

For the pre-expedition Native Tree Identification classroom project, SEA staff guided teams of students in learning to ID native trees through bark, needle, leaf and other techniques. This is a fun and engaging activity that helps students prepare for the expedition-based forest activity, while they get to know SEA staff prior to meeting them at the Park.

Park-based learning rotations.

Nearshore Beach Rotation: Students hiked to the Camp Casey Conference Center beach, where they engaged with Island County Beach Watcher Volunteers, learning about species growing on the beach trail along the way, then studying the nearshore environment on the beach. Students are given and taught how to use identification guides. They engage in ID activities as they explore what birds, seaweeds and other life exists on the beach. We also discuss issues that impact the health of our waters and help students understand that everyone, young and old, has a role in protecting the health of Puget Sound.

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Marine Lab Expedition: Camp Casey Conference Center has an onsite marine lab, in which students can see firsthand the life that lives in the local waters – and have "hands on" experiences with the lab educators and marine life in the lab. This was a highlight for many students – and as one young girl expressed "I've never see a sea star up so close before!!!"

Forest Rotation: As a continuation of the classroom-based native tree identification activity, students engage in a forest rotation with State Park Naturalist Janet Hall. Small teams of students walked the extensive trails and put their new identification skills to work. In addition to tree identification, SEA leaders invite students to use their math skills by initially estimating the circumference of the trees, then engaging in hands-on tree measurement. Students also use graph paper to plot trees on in a specific grid and then engage in post-expedition math activities back in the classroom – assessing the health of the forest in terms of the percentage of trees within a certain area that they measured and other key indicators.

Compass Rotation: SEA has learned over the years that most young people today do not know how to use a compass, or how to identify major landmarks in their local areas to "know where they are." This is a skill that should not be lost – and helping students to understand those skills has become an important learning rotation for our program. Students in this rotation learned basic compass skills, identified major landmarks in the area and practiced using their compass to identify where they were during the rotation. As one young man commented "I always wondered what a compass was for!"

Lighthouse Rotation: Fort Casey docent volunteers also led a learning rotation through the Admiralty Head Lighthouse, helping students understand the role of lighthouses in marine navigation and the history of the local lighthouse. Many students expressed that they wondered what a lighthouse was used for – and now they knew!

Student, partners, parent volunteers and teachers were full of smiles throughout the day as students learned and connected with their "home place." As noted by one of our volunteers:

"Today was a FABULOUS day of fun, connection and excellent outdoor learning! I can't express how much it meant to me to see such amazing collaboration today with so many organizations - from Fort Casey State Park Staff, Lighthouse and Fort Casey Volunteers, Camp Casey Conference Center, Sound Water Stewards (Bill and Mary were amazing!!!), Hillcrest Elementary staff/students and families, SEA and Tulalip Tribes - all coming together to support today's children! Watching the joy, curiosity and excitement in the faces of so many children today was the best!"

Another note was received from lead teacher Jodi Crimmins, who shared:

"Thank you, S.E.A., and Tulalip Tribes Charitable Fund for giving my students the opportunity for outdoor learning and adventure by funding our trip to Fort Casey State Park. My students learned mapping skills, stewardship of or natural resources, and made connections with nature. My kids returned to the classroom overjoyed to do a creative writing project about what they've learned. Thanks for the inspiration!"

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

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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 represented 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.

Our survey results show a positive shift in average response for all survey items among both groups, indicating movement toward our desired outcomes. Overall, our results were 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 the Hillcrest students did not produce post ratings of the same level, they were positive for every item and the age of the participating children could have impacts on outcomes. 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.

Prepared by Susie Richards, SEA Co-Director

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Bringing Learning to Life

Cascade High School



Cascade High School Students engage in on board marine science experiments and activities



Cascade High School Student "takes the wheel" of the vessel PS while on the helm station — learning about local maritime history, navigation and natural history.

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Dr. Thomas Murphy, Founder and Director of the LEAF School at Edmonds Community College engages in a natural history and environmental studies learning rotation on Jetty Island.



Students prepare to deploy the plankton net off the side of the vessel during plankton rotation

Hill Crest Elementary



Students show their enthusiasm and excitement for learning during their beach rotation with Island County Beach Watchers

Students prepare for their marine lab visit with some of the parents and volunteers!



Students get ready for hands on learning in the marine lab





Students prepare their journals for their forest learning rotation