



# ENVIRONMENTAL SCIENCE CENTER

2015–2016  
COMMUNITY REPORT

# 7/2015 – 6/2016 PROGRAM STATISTICS

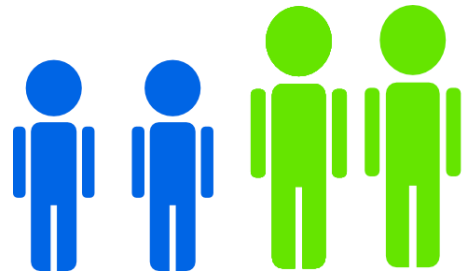
37,371

CONTACT  
HOURS



9,768

PEOPLE  
SERVED



7,516

VOLUNTEER  
HOURS



457

PROGRAMS  
DELIVERED



16

COMMUNITY  
PARTNERS





# FROM THE EXECUTIVE DIRECTOR

Dear community members;

Throughout South King County you may have seen our naturalists leading people of all ages in a wide variety of hands-on, innovative programs from designing underwater robots, to testing water quality, to restoring nearshore habitat.

**Thanks to community support, we offered 26% more programs in the 2015-16 fiscal year** than compared to the prior fiscal year. ESC's programs are successful because we provide the setting, tools, expertise and learning environment to "let nature teach." Hands-on learning in the outdoors has an undeniable transformative power that only nature can offer. By providing the space for people to develop a love of nature and advance their own STEM (science, technology, engineering, and math) skills, we are developing the next generation of environmental stewards.

**Speaking of the next generation, ESC involved teens in over 6,800 hours of restoration work within our community this year!** We have had many successes this year, but don't take my word for it. Please take a few minutes to glance at the programs within this community report to find out for yourself why ESC is such a valuable community resource. You are also welcomed to attend an ESC public program and learn first-hand what makes our programs so special.

**In the last 10 years, we have served over 70,000 people through our programs.** Many individuals have played a role in advancing ESC's mission within the community. Dedicated staff, board, and volunteers worked tirelessly this year to provide quality programs to community members, in particularly, low-income students that otherwise would not have the opportunity to experience hands-on environmental science programming.

In the upcoming years our organization plans to continue to expand our reach within South King County by improving accessibility to our learning center at Seahurst Park and serving more community members.

With your help, ESC can continue to provide meaningful experiences in nature, inspiring our community to protect what we all love so much for generations to come. Enjoy the community report!

Thank you,



Tara Luckie  
Executive Director

**P.S.- Please join us for an upcoming community program.**



*Jr. high students testing water quality.*



*High school students examining plankton samples.*



*Children pointing out marine invertebrates at a low tide beach walk.*



*Toddler Time participants doing an eco-friendly art project.*



*Beach naturalist, Katie Lalish, leading a group of Beach Heroes students on an exploration of Seahurst Beach.*

It has been fun watching new species occupy Seahurst Beach after the Seawall restoration project. We had some phenomenal wildlife sightings in 2016 during the **two-hour Beach Heroes field studies**. We saw several Giant Pacific Octopus, live Ratfish, Herring eggs about to hatch, and sunflower stars.

We made improvements to the Restoration Stations to allow more time to examine the important role forage fish, also known as bait fish, play in the marine food web; connectivity concepts from the Seawall Restoration project were also discussed in more depth with students during the classroom visit and during the field study.

Additionally, naturalists emphasized the scientific method during a forage fish activity. Students studied models of beach habitat before and after the shoreline restoration project to understand how the restoration improved habitat for fish egg survival.

We were proud to implement a protocol for bus reimbursements that made it possible for more schools to attend. This year we also gave a Beach Heroes flyer to each child who attended Beach Heroes to bring home to their families. The flyer was written in English and Spanish and highlighted what students did during their Beach Heroes field study. It suggested questions parents could ask their child about their experience, information on ESC's Summer Family Programming, and how to come back and explore Seahurst Beach on a low tide.

**96%** of teachers said that their students are excited to go back to Seahurst and other beaches with their friends and families.

106  
CLASSES

2,467  
STUDENTS

674  
ADULTS

*"THE BEACH EXPLORATION WAS GREAT FOR MY KIDS! MOST OF THEM HAVE NEVER LEFT THEIR NEIGHBORHOOD. SOME OF THE PARENTS WERE EQUALLY GRATEFUL FOR THE INTRODUCTION AND LEARNING. THE KNOWLEDGEABLE NATURALISTS REALLY MADE THE WHOLE TRIP FANTASTIC."*

*-VAN ASSELT 1<sup>ST</sup> GRADE TEACHER*





ESC Naturalist, Noelle Ames, helps students examine the internal organs of a pink salmon.

We were exciting to expand our reach in 2015 to students in Renton and Auburn in addition to Highline, Tukwila, Kent, and Seattle. We delivered the **three-hour field study** at two sites: Normandy Park Cove and the Renton Community Center along a weir (a small dam-like structure) in the Cedar River.

Students learned about life stages of salmon and some of the pressures they face throughout their life cycle by participating in a large group game to see if they could survive the salmon’s journey. In addition, students collected water quality data in the field and participated in a salmon dissection. They analyzed the data they collected back in their classroom with naturalists and explored what they can do to help keep their watershed clean for salmon.

60  
CLASSES  
1,543  
STUDENTS

**100%** of teachers strongly agreed this field study was effective in providing their students opportunities to follow the scientific process.

**89%** of students demonstrated an increase in knowledge about salmon stewardship.

This year students were able to watch Sockeyes and Chinook returning to their spawning grounds in the Cedar River. Our young scientists observed males fighting and females digging their nests. Students could ask questions of biologists tending to the weir, inspiring the next generation of salmon stewards.

We also implemented a new model during the classroom presentations that immediately won over students and teachers. Students used marbles to represent salmon eggs and could observe how quickly their population could decline due to pressures from predators, habitat loss, and over-fishing.



Salmon Naturalist, Brandan McGarry, describes the anatomy of a salmon while students sketch and label a diagram.

“WE HAD A LOVELY MORNING LEARNING ABOUT SALMON HABITAT, LIFE CYCLE AND ANATOMY. THANKS FOR ALL YOU DO FOR PASSING ALONG THE STEWARDSHIP MESSAGE. THE MORE THEY HEAR IT FROM A VARIETY OF PEOPLE THE BETTER FOR THE KIDS.”

-LAURA HOLMES, WESTSIDE SCHOOL



## New Futures Science Clubs

In the 2015-2016 school year, ESC delivered a 7-week after-school science club to three different New Futures sites. Students learned about ocean acidification and its effects on food webs in Puget Sound through scientific observation and experiments. Students dissected salmon and observed egg shells disintegrating in vinegar. In addition, students learned about the important role we play in protecting our oceans by building their own model of a wetland to filter stormwater.

During the summer, each New Futures group visited Seahurst Beach for a three-hour field trip at low tide. They witnessed the marine invertebrates they had been studying throughout the year in their natural habitat and met some of the native plants that help keep our water clean!

## Gym Jams

In partnership with the City of Burien, the Environmental Science Center delivered two-hour hands-on science programs to families at Hazel Valley, Cedarhurst, and Southern Heights. Parents alongside their children compared the remarkable digestive system of raptors to our own by dissecting owl pellets, met live worms, and discovered plankton under a large video microscope.

## Cedarhurst After-School Science Club

ESC embarked on a new partnership with the City of Burien this year to deliver weekly after-school science programming to two different age groups at Cedarhurst Elementary.

Students worked together in hands-on science labs to explore several different scientific properties. They explored the different states of matter by making and experimenting with Oobleck (a fluid with unique physical properties), explored the adaptations in marine organisms by dissecting squid, and examined adaptations and tolerance levels in organisms by observing live aquatic macroinvertebrates under magnifiers. Students also took home their own fossil from the Cedarhurst Playground and practiced circuitry and wiring during an alternative energy lesson.

## Roxhill Garden Club

ESC was excited to pursue a new partnership with Roxhill PTSA to deliver one-hour before school science programming to K-2<sup>nd</sup> graders. Using the school garden and Roxhill Wetlands as outdoor classrooms, students learned how to plant seeds, attract pollinators, care for the soil, and made pinwheels to distract pests. We also got to taste some of the delicious vegetables that were grown in the garden. Regular visits to the Roxhill Wetlands to examine animal tracks and meet native plants and pollinators were also a big part of the program.



*The Falconer, John Prunich, introducing an Eagle Owl to students.*

370 PARTICIPANTS  
159 PROGRAMS



*Students at Seattle Aquarium Open House with ESC Naturalist and Board President, Larry Reymann.*



**ESC provided hands-on environmental science activities for a wide variety of new community events this year, in addition to the Burien Wild Strawberry Festival, the Tukwila Backyard Wildlife Festival, and the Water Festival!**



*A young community member uses an interactive bird calling display at an ESC Summer Open House program.*

75  
PROGRAMS  
3,849  
PARTICIPANTS

### **NEW! ESC Summer Open House**

ESC opened its doors to the public and engaged visitors through exhibits, arts and crafts, microscope labs, bone artifacts from the Burke Museum, The Falconer, and so much more! Our dedicated team of volunteers welcomed and engaged each and every family who entered our doors.

### **Burien's Awesome Kids Day**

ESC Naturalists helped over 200 kids in one day make Fish Prints! Introducing these young community members to fish of the Pacific Northwest is easy when you make it fun and creative.

### **2015 International Coastal Cleanup (ICC) at Seahurst**

Over 200 pounds of trash were collected throughout Seahurst Park for this global united effort! With the help of volunteers from Puget Soundkeeper, City of Burien, Highline High School, Burien Rotary, and Recology CleanScapes ESC was able to create a cleaner and healthier park.

### **Tidepools for Tots**

Toddler Time was a major hit this year especially with our Tidepools for Tots extension! The number of beach walks with the little ones increased from two programs last summer to six this summer.



*Toddler Time participant looking at insects from a creek water sample.*

Through storytelling and immersion in the marine world, ESC engaged these toddlers' active minds and helped them learn about the natural world during a time when stimulation is so important for brain development. To strengthen our general Toddler Time program, ESC collaborated with **the Burien Library.**





*Big Picture Middle School students testing water quality at Seahurst Park.*

**Student Interns**— Four student interns joined the ESC staff weekly to assist with OpenROV and Toddler Time program preparations.

**Toddler Time Volunteers**— Teen volunteers attending Highline High School gave back to their community by assisting ESC staff with hands-on activities for toddlers.

**Seahurst Beach Restoration**— ESC and its partners hosted two beach cleanups to collect hundreds of pounds of trash found within Seahurst Park.

**Jr. Naturalist Program**— High school students assisted ESC with the Beach Heroes program. They participated in naturalist training sessions, shadowed a naturalist, and assist younger students during field studies.

**Restoration**— Both Big Picture Middle School and New Start High School spent many hours in our local parks and community spaces removing invasive plants and planting native species. Big Picture students led hands-on science activities about their restoration project to toddlers during Toddler Time.

56  
PROGRAMS  
526  
STUDENTS



*Students working on New Start High School community garden.*



*Student intern Kim Ha*



ESC would not function without its volunteers! This year we had a record number of volunteers dedicate thousands of hours to our programs. **Thank you, thank you to our volunteers!**

*"AS A VOLUNTEER AT ESC I FEEL VERY CONNECTED WITH THE STAFF AND THE PEOPLE THAT COME THROUGH HERE. SEEING ADULTS AND THEIR CHILDREN BEING ENTHUSIASTIC ABOUT THE ENVIRONMENT MOTIVATES ME TO WORK EVEN HARDER AS A VOLUNTEER TO MAKE THEIR EXPERIENCE MORE MEANINGFUL. I HOPE TO STAY WITH ESC FOR A LONG TIME AND WATCH IT CONTINUE TO GROW AS I GROW ALONG WITH IT."*

*- KIM HA, JUNIOR AT HIGHLINE HIGH SCHOOL*



*Volunteer Jarett Kaplan guides families on a low tide beach walk.*

*"ESC COMBINES FUN AND ENVIRONMENTAL LEARNING AT ONE OF THE BEST NATURAL LOCATIONS IN THE PACIFIC NORTHWEST! IT'S A PRIVILEGE TO VOLUNTEER WITH MANY OF ITS EDUCATIONAL PROGRAMS AND ACTIVITIES."*

*- JARETT KAPLAN*

## VOLUNTEERS

Amy May  
Chris Jansen  
Emmanuel Cruz Soria  
Highline HS AVID students  
Georgette Valle  
Gretchen Frankenstein  
Jacqueline Drumheller  
Jarett Kaplan  
Jean Spohn  
Jerrica Pierson-Seeger  
Joan McGilton  
John & Nanci Leonard  
Karina Marroquin  
Katherine Himes-Strange  
Kevin Alexander  
Kim Ha  
Kristine Ashcraft  
Larry Reymann  
Maria Arevalo  
Nicole Killebrew  
Ning Vung  
Phillip Thompson  
Ruby Krueger  
Shea Scribner  
Sheri Barr  
Stephany Martinez  
Terrill Chang  
Thomas Mickel  
Victoria Hall



7,516

VOLUNTEER HOURS

COMMUNITY LEADERS

THANK YOU ESC SUPPORTERS!

LEADERSHIP CIRCLE

\$2,500 +

- Charlotte Martin Foundation
- Paul Glaser Foundation
- Horizon Foundation
- Jean and Tom Spohn
- The Russell Family Foundation
- Loren Tomlinson
- Barb and Darrell Williams

\$1,000 - \$2,499

- Kristine Ashcraft and Gorm Brunso
- Terrill Chang and Jan Faul
- Patti Gifford and Thor Edman
- Loran Kollmorgen
- Janice and Peter Mathisen
- Amy and Scott May
- Kathy and Wade Strange
- Brenda Sullivan
- Georgette Valle
- Peter Valle

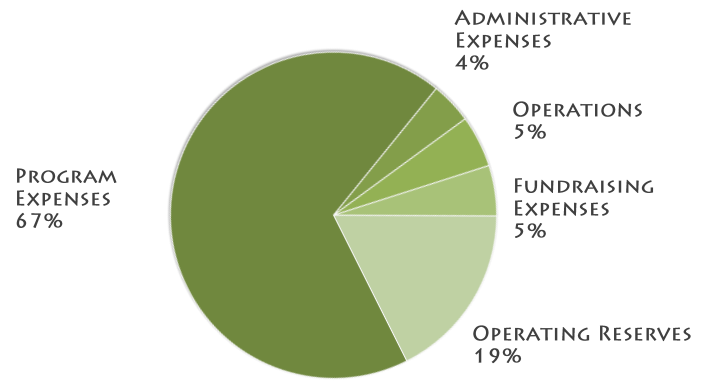
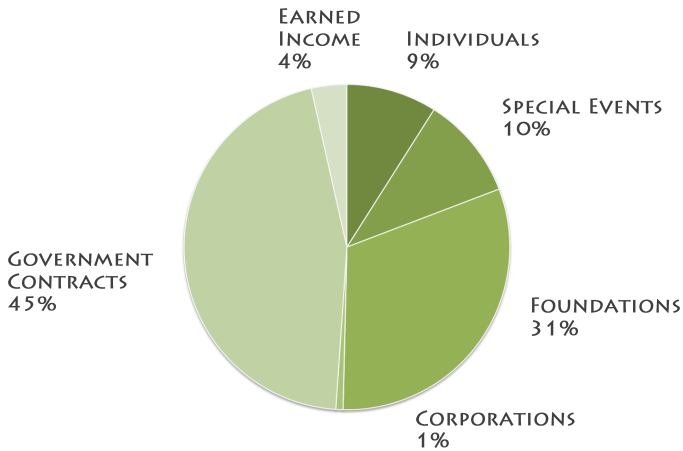
\$500 - \$999

- Erik Brunso and Cheryl Morris
- Steven and Lori Buchsbaum
- Joanna Canepa and Charlie Nath
- Jacqueline and Steve Drumheller
- Alma and Bob Feldpausch
- Peter and Anne Hummel
- John and Nanci Leonard
- Paul and Janet Nuyen
- Lawrence and Linda Reymann
- Jo Surbrugg and Mark Benson
- Phillip Thompson and Kimberly Corrigan





# FISCAL YEAR 2015-2016 FINANCIALS



## REVENUE

INDIVIDUALS	\$27,375
SPECIAL EVENTS	\$31,146
FOUNDATIONS	\$95,806
CORPORATIONS	\$2,176
GOVERNMENT CONTRACTS	\$138,405
EARNED INCOME	\$10,725
<b>TOTAL REVENUE</b>	<b>\$305,633</b>

## EXPENSES

PROGRAMS	\$204,212
ADMINISTRATION	\$12,284
OPERATIONS	\$15,370
FUNDRAISING	\$15,001
OPERATING RESERVES	\$58,766
<b>TOTAL EXPENSES</b>	<b>\$305,633</b>

## HOW CAN YOU MAKE A DIFFERENCE?

### DONATE!

*Donations can be made at [www.EnvScienceCenter.org](http://www.EnvScienceCenter.org)*

**\$2,000** Funds a 6 day science camp program for 25 students.

**\$1,000** Sponsors three classrooms to become Beach Heroes by funding 3 classroom presentations, and three field studies at Seahurst Beach.

**\$500** Gives a class the opportunity to become Salmon Heroes with a pre-classroom presentation, a three-hour field study, and a post-classroom presentation examining the lifecycle of Pacific salmon.

**\$250** Pays for transportation for two classes to a field study. Transportation is often the greatest barrier for youth to explore nature!

**\$100** Purchases much needed hands-on supplies for educational programs such as water quality testing supplies and durable science equipment to be used in the classroom.

**\$50** Sponsors two high school students to receive eight hours of intensive training and mentorship to become Junior Naturalists.

### VOLUNTEER

Make a difference by getting involved with ESC's many programs!

If interested, please contact:  
[outreach@envsciencecenter.org](mailto:outreach@envsciencecenter.org)  
**206-248-4266**

ADVOCATE – Spread the word about environmental stewardship by informing yourself and others.

- Check ESC's Facebook page, **Environmental Science Center at Seahurst Park, for environmental tips**
- Participate in programs hosted by ESC
- Sign up for ESC's e-newsletters on our website to learn about local events
- Attend our annual March fundraiser event on **3/4/2017**

**YOUR IMPACT**



# ENVIRONMENTAL SCIENCE CENTER

## ESC STAFF

Dr. Tara Luckie, Executive Director  
Jennifer Dumlao, Development Director  
Joanna Stodden, Program Manager  
Christine Froschl, Outreach and Volunteer Manager

## BOARD OF DIRECTORS

Larry Reymann, President  
Kristine Ashcraft, Vice President  
Terrill Chang, Treasurer  
Brenda Sullivan, Secretary  
Chris Jansen  
Jacqueline Drumheller  
Victoria Hall  
Katherine Strange  
Nicole Killebrew  
Jean Spohn  
Phil Thompson  
Jerrica Pierson Seeger

## ADVISORY BOARD

Joan McGilton  
Ron Kreizenbeck  
Loren Tomlinson

## NATURALISTS

Alexandrea Abe	Katherine Lalish
Noelle Ames	Brendan McGarry
Sheri Barr	Rebecca Mullen
Ellie Canade	Autumn Nettey
Elizabeth Brant	Kevin O'Malley
Rick Davis	Larry Reymann
Jennifer Dumlao	Shea Scribner
Mike Gervais	Joanna Stodden
Stephanie Eckard	Kelly Steffen
Christine Froschl	Arianne True
Nicole Killebrew	Nancy van Roessel
	Rosie Wilson-Briggs



## OUR MISSION

To promote environmental stewardship and academic achievement through science-based education.

*Serving South King County since 2000.*



[WWW.ENVSCIENCECENTER.ORG](http://WWW.ENVSCIENCECENTER.ORG)

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