Elkhorn Slough Reserve - 
A living Classroom

<table>
<thead>
<tr>
<th>2017</th>
<th>Connect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6,000 Students engaged</td>
</tr>
<tr>
<td></td>
<td>9,000 Student contact hours</td>
</tr>
<tr>
<td></td>
<td>30,000 Visitors</td>
</tr>
</tbody>
</table>

| Prepare      | 9 Unique workshops for teachers                                         |
|              | 125 Teachers Trained                                                    |
|              | More than 5,000 students reached                                       |

| Improve      | 90 Students participated in Estuary Explorers After School program     |
|              | 47 High School students in the WATCH Program                           |

"I enjoyed the hike. I learned about how farms can effect wetlands. Thank you for having us!"  
Student, Washington Middle School

"All staff members were enthusiastic, engaging, and knew well their areas of expertise. Thank you!"  
Teacher, Teachers on the Reserve workshop

**Bugs, Oak Groves, and Water Quality**

Each year education staff at the Elkhorn Slough Reserve engage over 6,000 students in meaningful estuarine science and exploration. From K to College, students explore wildlife and habitats in the Elkhorn Slough watershed through NGSS connected activities. As students move through the grade-level learning pathways, they develop a sense of place and understanding of their connection to preserving and protecting the Elkhorn Slough Reserve.

**Building Confidence and Competence**

Teaching science can be scary if it is not your area of expertise. The Elkhorn Slough Reserve Teachers on the Reserve workshops develop knowledge and skills in elementary school teachers giving them both confidence and competence to engage their students in exciting environmental lessons both at the Reserve and in their classroom. Specialized workshops such as the Reserve’s Teachers on the Estuary, GLOBE, and SWMP-Data Day, offer opportunities for K-College teachers to expand their skills in guiding students through data collection, analysis, and application.

**Making Deeper Connections**

*The Estuary Explorers Club*

Estuary! Explorers! The cry rings out every Wednesday from the 90+ students who call themselves the Estuary Explorers. These local 2-4 graders engage in weekly exploration, stewardship and monitoring, honing their investigative skills. After 4 years with the after school program, the students develop a sense of ownership and responsibility for the Reserve.

*WATCH*

Each year a select group of area high school students spends a semester at the Reserve developing scientific questions and carrying out investigations facilitated by Reserve educators. In its 10th year, Watsonville Area Teens Conserving Habitats (WATCH) has brought over 500 students to the Elkhorn Slough Reserve and seen many of these students go on to study the sciences in college.

Research Reserve System. Each site is a state federal partnership that combines research, monitoring, and education to advance the understanding and management of estuarine environments.
National Estuarine Research Reserve Education

Change on the Ground in 2017

Connects
People to Estuaries

1 million+ ACRES
of natural classrooms &
living laboratories with

28 INTERPRETIVE CENTERS

29 RESEARCH RESERVES

ALASKA PUERTO RICO HAWAII

650,340 VISITORS
learn about estuaries through Research Reserve outreach & education

Aloha to our Hawai‘i Reserve, designated in 2017!

Prepares
the Next Generation

87,899 STUDENTS
take learning out of the abstract & into the outdoors

3,079 TEACHERS
are trained in the estuary & supported in the classroom

ESTUARY SCIENCE
LOCAL DATA
LAB WORK
FIELD INVESTIGATION

SKILLS BUILT
 ✓ Observation
 ✓ Asking research questions
 ✓ Problem solving
 ✓ Data driven decision making

Improves
the Environment

12,849 CITIZENS
are trained & inspired to protect their coasts & estuaries

28 RESEARCH RESERVE EDUCATORS
lead programs that foster coastal stewardship in communities in 23 states

coast.noaa.gov/estuaries

VOLUNTEER ACTIONS
 ✓ Protect wildlife
 ✓ Monitor water quality
 ✓ Plant native species
 ✓ Clean up the coasts

Creating value through education
39,035 volunteer hours = $942,305*

*Value of a volunteer hour is calculated at $24.14 based on data from the Independent Sector.