

CALIFORNIA COASTAL COMMISSION

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W7d

DATE: January 24, 2019

TO: Commissioners and Interested Parties

FROM: John Ainsworth, Executive Director
Susan Hansch, Chief Deputy Director
Christiane Parry, Public Education Program Manager
Sylvie Lee, Grants Program Coordinator

SUBJECT: **Proposed Competitive Grants for Fiscal Year 2018/2019 from the Commission's WHALE TAIL® Grants Program.** The Executive Director recommends that that the Commission **approve** the following proposed competitive grants for Fiscal Year 2018/2019.

SUMMARY OF STAFF RECOMMENDATIONS

Approve the following 23 competitive grants totaling \$465,000 and serving the following areas:

A) Youth programs—\$324,200

- (1) Academy of Scientific Exploration/Cesar Chavez Learning Academies (San Fernando)
- (2) Agua Hedionda Lagoon Foundation (Carlsbad)
- (3) Brown Girl Surf/Social Good Fund (Oakland)
- (4) Cabrillo High School/Lompoc Unified School District (Lompoc)
- (5) City Surf Project (San Francisco)
- (6) Ecology Center (Berkeley)
- (7) Exploring New Horizons (Santa Cruz County)
- (8) KIDS for the BAY/Earth Island Institute (Oakland and Richmond)
- (9) Ocean Connectors/The Ocean Foundation (National City, southern San Diego County)
- (10) Oceanographic Teaching Stations/Roundhouse Aquarium (Los Angeles County)
- (11) Pacific Environmental Education Center (Mendocino County)
- (12) Port of Los Angeles High School (San Pedro)

- (13) Salmon River Restoration Council (Sawyers Bar, Siskiyou County)
- (14) Ventana Wilderness Alliance (Monterey County)
- (15) Water Education Foundation (statewide)
- (16) WILDOAST (San Diego County)
- (17) YES Nature to Neighborhoods (Richmond)

B) Programs for the general public—\$86,800

- (18) International Documentary Association (statewide)
- (19) Keep Coyote Creek Beautiful (San Jose)
- (20) Napa County Library (Napa)

C) Climate education special focus —\$30,000

- (21) Monterey Bay Aquarium Foundation (Monterey)

D) Shoreline cleanup and enhancement projects (general public) —\$24,000

- (22) Northcoast Regional Land Trust (Bayside, Humboldt County)
- (23) Tolowa Dunes Stewards/Friends of the Dunes (Del Norte County)

I. MOTION AND RESOLUTION

Motion:

*I move that the Commission **approve** the grant awards set forth in the staff recommendation. I further move that the Commission authorize the Executive Director or his designee to enter into grant agreements with the grantees for allocation of these funds, and to make any amendments thereto.*

Staff recommends a **YES** vote on the foregoing motion. Passage of this motion will result in authorization of the Executive Director or his designee to enter into the appropriate agreements for disbursing the available funds. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby approves the grant awards set forth in the staff recommendation. Further, the Commission hereby authorizes the Executive Director or his designee to enter into grant agreements with the grantees for allocation of these funds, and to make any amendments thereto.

II. INTRODUCTION

The Commission's Public Education Program provides WHALE TAIL® grants to support projects that teach California's children and the general public to value and take action to improve the health of the state's marine and coastal resources. Funding for these grants comes from two sources: sales and renewals of the California WHALE TAIL® License Plate, and voluntary contributions to the Protect Our Coast and Oceans Fund on the state tax return form.

WHALE TAIL® License Plate

The WHALE TAIL® License Plate was established as a mechanism through which the public can contribute funds to coastal and marine education programs in California. As of December 31, 2018, close to 252,000 license plates have been sold. After the DMV deducts administrative fees, funds from WHALE TAIL® Plate sales and renewals are divided between the California Beach and Coastal Enhancement Account (CBCEA) and the Environmental License Plate Fund (ELPF). An average of \$11 is deposited into the CBCEA for each new plate that is sold, and an average of \$20 per plate is deposited into the CBCEA from annual renewal fees. An equal amount per plate is deposited into the ELPF for all sequentially numbered WHALE TAIL® license plates sold. Additional fees that are charged for personalized plates also go into the ELPF. **Altogether, from FY1997/98 through December 2018, WHALE TAIL® License Plate sales and renewal fees (plus miscellaneous other small fees) have contributed \$29.4 million to the CBCEA and \$73.9 million to the ELPF.**

California Vehicle Code Section 5067 dictates how the funds raised by sales of the WHALE TAIL® plate and deposited in the CBCEA account are to be used:

“Upon appropriation by the legislature, the money in the account (CBCEA) shall be allocated by the Controller as follows: (A) First to the California Coastal Commission for expenditure for the Adopt-A-Beach program, the Beach Cleanup Day program, coastal public education programs, and grants to local governments and nonprofit organizations for the costs of operating and maintaining public beaches related to these programs.” (B) Second, from funds remaining after the allocation required under subparagraph (A), to the State Coastal Conservancy for coastal natural resource restoration and enhancement projects and for other projects consistent with the provisions of Division 21 (commencing with Section 31000) of the Public Resources Code (as amended in 2004 in Budget Trailer Bill SB 1107).

The ELPF funds a variety of environmental programs in state agencies such as the California Natural Resources Agency, California Conservation Corps, the Department of Forestry and Fire Protection, the Department of Fish and Wildlife, California State Parks, and many others.

Protect Our Coast and Oceans Fund

The Protect our Coast and Oceans “check box” on the California state tax return form was created pursuant to legislation authored in 2013 by Assemblymember Al Muratsuchi and renewed in 2017 by State Senator Josh Newman. Per Article 5.1 (Sections 18745-18748) that was added to Chapter 3 of the Revenue and Taxation Code:

“All money designated under the Protect Our Coast and Oceans Fund space on a tax return ... shall be allocated as follows:

(a) To the Franchise Tax Board and the Controller for reimbursement of all costs incurred by the Franchise Tax Board and the Controller in connection with their duties under this article.

(b) (1) To the California Coastal Commission to support eligible programs awarded grants under the selection criteria established by the California Coastal Commission for the Whale Tail Grants Program, and for direct program-related expenses.”

In January 2014, California taxpayers began making voluntary contributions to the Protect Our Coast and Oceans Fund while completing their state tax returns. **As of December 31, 2018, \$1,408,292 has been donated to the Protect our Coast and Oceans Fund.**

Public Education Grantmaking Budget

The Commission’s Public Education budget for FY2018/19 included \$793,000 for local assistance grants: \$381,000 from the CBCEA and \$412,000 from the Protect Our Coast and Oceans Fund. At its September 2018 meeting, the Commission voted to allocate the \$793,000 as follows: seven targeted grant projects totaling \$333,000, a temporary reserve of \$90,000 to be awarded later in the fiscal year, and the remaining \$370,000 for the competitive grantmaking program.

For a listing of the seven targeted grants, and other recent grants that have been funded through sales of the WHALE TAIL[®] License Plate, see [Appendix A](#). (For a complete listing of all WHALE TAIL[®] grants ever awarded, please visit the online map of WHALE TAIL[®] Grant Recipients Since 1998 at <http://www.coastal.ca.gov/publiced/plate/plgrant.html>.)

Of the \$90,000 in the temporary reserve, in November 2018 \$5,000 was added to Heal the Bay’s targeted grant to help fund a new marine debris database, and another \$20,000 is being recommended for the 21st District Agricultural Association to support the Fresno Fair (see agenda item [W7e](#)). The staff is now adding \$25,000 to the competitive grants budget to be awarded at this time. (The staff will return to the Commission before the end of this fiscal year to seek approval for the \$40,000 still remaining.)

Additionally, tax check-off funds including the Protect Our Coast and Oceans Fund are now allocated to agencies by “continuous appropriation,” which means the dollar amount available is not set in an agency’s budget ahead of time but rather is available to be spent as the contributions are received. The amount received into this fund in FY 2017/2018 exceeded the staff estimates, and the staff projects that revenues will be similar in FY 2018/2019. Therefore the staff is adding another \$70,000 to this year’s grantmaking budget, which would still leave an estimated \$100,000 in this fund’s reserve. This would bring the total available for grantmaking at this time to \$370,000 + \$25,000 + \$70,000, or \$465,000.

The Competitive Grants Program for FY2018/2019

The WHALE TAIL[®] Competitive Grants Program offers the following five funding subcategories:

- A) coastal and marine education for youth;
- B) coastal and marine education for adults and the general public;
- C) shoreline cleanup and enhancement programs (such as Adopt-A-Beach);
- D) projects addressing climate change as it relates to the ocean or coastline; and
- E) any of the above subcategories, specifically being done by organizations with annual operating budgets of \$500,000 or less that are working with underserved communities.

The staff began publicizing the grant program in September 2018. The deadline for submittal of grant applications was November 5, 2018. Applicants could request any amount up to \$50,000, and between 25 and 50 percent of the grant funds are to be allocated in small grants no greater than \$12,000.

Competitive Grants Applicant Pool

The staff received 125 grant applications requesting a combined total of \$3,061,334 which equals over six times the amount of funding available. [Appendix B](#) is a list of the applicants, project titles and amounts requested for this funding cycle.

Selection Criteria

The staff evaluated the applications using the following criteria, first approved by the Commission in 1998 and slightly modified with Commission approval in 2009, 2013, 2017, and 2018:

- 1. Educational Impact (and/or Environmental Improvement) (25 points):** We are seeking projects with a strong educational impact that feature high-quality education involving the marine and/or coastal environment. We encourage experiential, hands-on learning and incorporation of stewardship, where possible. The project's educational content and mode of delivery should be age-appropriate and culturally relevant for the target audience. Community projects improving the quality of beaches or coastal or marine habitats will be also be scored favorably like those emphasizing educational impact.
- 2. Need (15 points):** Projects will be assessed on the degree to which they address an identified need (educational, ecological, social, etc.). Projects that reach audiences who have historically been underserved in terms of marine education, including low-income populations, multicultural communities, and residents of inner city, rural and/or inland areas, are especially encouraged. Proposals for underserved audiences should explain how the target population is underserved in terms of marine education.
- 3. Project Concept (30 points, potentially up to 35 points):** We seek thoughtfully developed ideas, technically sound concepts, and creative, innovative, culturally competent approaches. Project design that reflects research-based best practices are encouraged. The degree to which a project could potentially be expanded or continued after the grant ends, and/or build organizational capacity, will be considered. The degree of impact relative to cost will also be evaluated. Up to an additional 5 points of extra credit will be awarded if the project will have a ripple effect beyond the project itself, by providing useful tools or knowledge to others in the field, helping to advance the field into new areas, or building fruitful collaborations with other entities.
- 4. Proposal Content and Project Implementation (30 points):** The proposal should demonstrate that the concept has been fully thought out and developed into a concrete, feasible project with clearly stated, realistic goals and measurable objectives; a defined audience; a workable project design; and a clear plan for implementation. A sensible plan for evaluating the project's success should be included, as should detailed and accurate cost information. The likelihood of the project's successful implementation and completion will be considered, including the likelihood that project objectives and goals will be achieved, as well as the strength of the organization's track record, and the qualifications and capabilities of project personnel.

Reaching Diverse and Underserved Audiences

One of the primary goals of this grantmaking program is to use funding to reach diverse and underserved audiences that are unlikely to receive coastal and marine education from other sources. These audiences include low-income populations, inland and rural communities, and English language learners. To better serve diverse populations, the guidelines emphasize the need for cultural relevancy and cultural competency. In September 2018, a new subcategory for smaller, more grassroots organizations working with underserved communities was added to the grantmaking program.

In this year’s pool of recommended grants, 74% of the projects focus entirely on underserved and under-resourced communities. Another 17% contain a mix of both underserved groups and the general population. The remaining 9% focus on the public at large.

III. STAFF RECOMMENDATIONS FOR COMPETITIVE WHALE TAIL® GRANT AWARDS FOR FY 2018/19

The staff recommends that the Commission fund the 23 programs listed below (\$465,000 total).

The staff also recommends that the grants be funded from the following sources:

WHALE TAIL® License Plate (CA Beach & Coastal Enhancement Account)	Voluntary contributions on state tax return (Protect Our Coast and Oceans Fund)
Academy of Scientific Exploration—\$5,753	Cabrillo High School Aquarium—\$30,000
Agua Hedionda Lagoon Foundation—\$12,000	Ecology Center—\$12,000
Brown Girl Surf/Social Good Fund—\$25,000	Exploring New Horizons—\$11,000
City Surf Project—\$20,835	KIDS for the BAY/Earth Island Institute—\$30,000
International Documentary Association—\$50,000	Monterey Bay Aquarium Foundation—\$30,000
Keep Coyote Creek Beautiful—\$11,410	Napa County Library—\$25,390
Pacific Environmental Education Center—\$1,038	Northcoast Regional Land Trust—\$12,000
Ventana Wilderness Alliance—\$12,000	Ocean Connectors/The Ocean Foundation—\$12,000
WILDCOAST—\$23,642	Oceanographic Teaching Stations—\$12,000
	Port of Los Angeles High School—\$18,000
	Salmon River Restoration Council—\$11,000
	Tolowa Dunes Stewards—\$12,000
	Water Education Foundation—\$49,932
	YES Nature to Neighborhoods—\$38,000
Total Competitive Grants—\$161,678	Total Competitive Grants—\$303,322
Total allocated for targeted grants—\$179,322	Total allocated for targeted grants—\$178,678
Total still in temporary reserve—\$40,000	Total still in temporary reserve —\$0
Grand total to be allocated FY 2018/19—\$381,000	Grand total allocated FY 2018/19—\$482,000

(1) \$5,753 FOR ACADEMY OF SCIENTIFIC EXPLORATION

Project Title: The Environmental Effects of Plastic Pollution on Marine Life
Project Location: San Fernando
Project Timeline: March 2019 – June 2019
Total Project Budget: \$5,753
Estimated number of people served by the project: 120

Cesar Chavez Learning Academies are four high schools on the same campus that provide specially focused learning opportunities within Los Angeles Unified School District. The Academy of Scientific Exploration (ASE) emphasizes math and science and has a student body that is over 80 percent low-income. A science teacher there is teaching her 9th and 10th grade students about the effects of plastic pollution on marine life after they saw a video about a sea turtle impacted by a plastic straw and wanted to learn more.

In class, the students are learning about the impact of plastic pollution on ocean wildlife, the dangers of microplastics entering marine food webs, the relationship between plastic and atmospheric pollution, and solutions to help reduce plastic waste. They are also developing plastic pollution prevention messaging for their community, and presenting it at a family open house event. A WHALE TAIL® grant would make it possible for the students to also visit the Aquarium of the Pacific in Long Beach and to distribute reusable stainless steel water bottles and bamboo drinking straws to replace single-use plastic items.

(2) \$12,000 FOR AGUA HEDIONDA LAGOON FOUNDATION

Project Title: Environmental Stewardship Academy
Project Location: Carlsbad
Project Timeline: March 2019 – June 2019
Total Project Budget: \$28,332
Estimated number of people served by the project: 600

The Agua Hedionda Lagoon Foundation operates an Environmental Stewardship Academy at its Discovery Center by the 400-acre Lagoon. The program offers students five different hands-on educational stations. The Foundation is requesting funding to host third-grade students from underserved schools in the inland community of Escondido.

The students who would visit in the early spring would rotate among five activity stations that guide them through the flora and fauna at the Lagoon: bird beak design and adaptations; bird migration and challenges; interacting with reptiles, amphibians, and touch tank inhabitants; native plant hike and drought tolerance; and how California environments have changed over the ages and how those changes affected the plant life.

The students who would visit in the late spring would complete a rotation of five other activities that would emphasize people’s impact on the marine environment, how the coastal lagoon habitat has changed over time, and what to do to reach a sustainable future: challenges posed by invasive plants; simulating an oil spill and bird rescue; the food web of the Agua Hedionda Estuary and consequences from small changes; the impact and prevention of pollution; and climate change and reducing one’s carbon footprint.

(3) \$25,000 FOR BROWN GIRL SURF/SOCIAL GOOD FUND

Project Title: Creating a New Environmental Education Program

Project Location: Oakland

Project Timeline: March 2019 – March 2020

Total Project Budget: \$29,868

Estimated number of people served by the project: 70+

Brown Girl Surf offers programs that provide opportunities to build an emotional connection to the ocean in communities underrepresented at the coast. In order to make marine science and environmental conservation culturally accessible to participants, Brown Girl Surf is proposing to develop a culturally relevant environmental education curriculum.

The new curriculum would be used for two programs: a summer camp in Half Moon Bay and the Community Conservation Program. The Youth Surf Sister Summer Camp serves girls recruited from swim teams at low-income schools in Oakland. Many of them do not speak English at home. Girls would attend one of at least three sessions, and a WHALE TAIL® grant would support the cost of offering each session for four days instead of three to add time for community building and science education. Educational activities would include learning about marine ecology and food webs, studying (and singing and dancing about) plankton, examining plastic waste, encouraging zero waste, and comparing habits of community elders with modern practices. The Community Conservation Program entails two stewardship events. During Earth Day, participants pick up trash, remove invasive species, and plant native plants, and a new curriculum would highlight estuaries and how they are affected by the ocean and by freshwater and runoff. During Oakland’s Creek to Bay Day, participants conduct on-the-water cleanups from kayaks as part of Coastal Cleanup Day. At that time, Brown Girl Surf would launch a pledge campaign for people to commit to a behavioral change to reduce their environmental impact.

(4) \$30,000 FOR CABRILLO HIGH SCHOOL/LOMPOC UNIFIED SCHOOL DISTRICT

Project Title: Aquarium Tidepool Project

Project Location: Lompoc, Santa Barbara County

Project Timeline: March 2019 – September 2019

Total Project Budget: \$210,000

Estimated number of people served by the project: 7,000 annually

Cabrillo High School operates a student-staffed aquarium that is very popular. All fifth grade students in the Lompoc Unified School District visit as part of their curriculum, the District pays for fourth-grade Lompoc students to visit too, and other visiting students come from Santa Maria. The aquarium also hosts summer camps and monthly open houses for surrounding communities. The high school students learn about animal care and ocean issues, design and conduct their own research projects, and help create the curriculum for visiting schoolchildren.

The Cabrillo High School Aquarium currently has as one of its exhibits an old touch tank. The touch tank is breaking apart and looks unrealistic, so the Aquarium is seeking funds to help build a new one. The new interactive tidepool exhibit would feature rockwork to simulate an actual tidepool environment, a new salt water filtration system with larger capacity, and other support upgrades including new plumbing and energy-efficient pumps. As another part of this project, a new curriculum would be developed on topics such as climate change, ocean acidification, and watersheds. Allowing visitors to experience a simulated tidepool environment is especially important in this area where Vandenberg Air Force Base restricts access to the local coast so visiting the beach and tidepooling is not a common experience.

(5) \$20,835 FOR CITY SURF PROJECT

Project Title: Surfing as a Catalyst for Ocean Access & Stewardship

Project Location: San Francisco

Project Timeline: April 2019 - April 2020

Total Project Budget: \$237,738

Estimated number of people served by the project: 450

City Surf Project (CSP) works with very low-income youth in disadvantaged neighborhoods of San Francisco to inspire stewardship for the ocean, allow them to engage with nature, and help them develop inner calm and confidence. CSP provides a “Surfing 101” program for high school students which takes place three days a week for 16 weeks and is college-accredited. The program includes marine education, surfing, ocean safety, healthy lifestyles, and stress coping skills. On Mondays the students are in their classrooms and learn about environmental science, surf history of other cultures, tides, the physics of waves, marine biology, oceanography, and environmental justice. On Wednesdays they take swimming lessons at a pool through San Francisco Recreation and Parks. And on Fridays they are transported to a beach on the bay to learn to surf, and then to the ocean in Pacifica or Half Moon Bay.

In addition to the school-based Surfing 101 program, CSP also provides youth organizations with all-day surf trips that include oceanography instruction and a beach cleanup. CSP also supports leadership training for students that want to apprentice as surf instructors, summer surf camps for high school and middle schoolers, and surf clubs for the most motivated high school students. During this grant period, CSP would continue its programming while also working to strengthen it by bolstering the content of the ocean curriculum and developing at least one stewardship project for participants through partnering with a local ocean protection organization.

(6) \$12,000 FOR ECOLOGY CENTER

Project Title: Plastic Free Oceans

Project Location: Berkeley

Project Timeline: March 2019 – March 2020

Total Project Budget: \$263,370

Estimated number of people served by the project: 230

Ecology Center in Berkeley operates a Youth Environmental Academy, a youth development program providing green job training for a core group of 30 youth, environmental literacy activities for hundreds more young people reached through peer education, and community outreach initiatives. In this project, the 30 youth, who are primarily low-income youth of color who may also have other challenging life circumstances, would receive a thorough environmental literacy orientation, hear from a variety of diverse expert guest speakers, and take outdoor field trips to connect them with nature at the bay or coastline. They would also take part in two shoreline cleanups and design and implement a Plastic Free Oceans tabling kit to present at schools, farmers markets, and with local youth-serving organizations, to recruit their peers to join them in the shoreline cleanups and get involved with Ecology Center's zero waste initiative.

During the Academy graduation ceremony, these teens would share with the audience about ocean pollution and what they can do about it, with an emphasis on reducing plastic single use disposables. Then from the graduating cohort, five of them would be selected for leadership positions at Ecology Center. Those leaders would create presentations for 200 of their peers at two local conferences about impacts of plastics on the ocean and strategies to reduce plastic use, take care of the coastline, and get involved in local opportunities to make sustainable change.

(7) \$11,000 FOR EXPLORING NEW HORIZONS

Project Title: Ocean Literacy and Citizen Science for Salinas Students
Project Location: Santa Cruz County
Project Timeline: May 2019 – June 2020
Total Project Budget: \$97,880
Estimated number of people served by the project: 200

Exploring New Horizons operates residential outdoor schools providing environmental education on three different campuses. A WHALE TAIL® grant would support the cost of having 200 underserved students from Salinas and northern Monterey County attend the Sempervirens campus in Santa Cruz County and visit Natural Bridges State Beach.

While at the four-day camp near Big Basin State Park, they would explore old growth redwoods, learn about their local watershed and the importance of conservation and protecting public lands, and hear about careers in the environment and earth sciences. While spending a full day at Natural Bridges State Beach, they would go tide pooling and learn about beach ecology and the geology of sand and erosion. They would also conduct habitat restoration and a beach cleanup and use their field journals to collect data from the trash collected and analyze their findings.

(8) \$30,000 FOR KIDS FOR THE BAY/EARTH ISLAND INSTITUTE

Project Title: Watershed Action - Coastal Connections Program
Project Location: Oakland and Richmond
Project Timeline: April 2019 – July 2020
Total Project Budget: \$81,357
Estimated number of people served by the project: 240 + 1,400 + 8 teachers

KIDS for the BAY (a project of Earth Island Institute) works in urban, underserved elementary schools in the Bay Area to provide its Watershed Action Project, which is an environmental education program focusing on local creeks, the San Francisco Bay, and pollution prevention. Students learn about their local watershed and how pollution travels down it; they do hands-on investigations and dissections of kelp, fish, and crabs; and they clean up litter and learn how to reduce trash and waste at the source. KIDS for the Bay operates by providing lessons in classrooms and leading field trips, thereby modeling activities for teachers and allowing them to get in-depth training alongside the children. The teachers then continue the programs on their own in future years.

This grant would support additional ocean-related components in eight classrooms for grades 3-5 at four schools in Oakland and Richmond. With WHALE TAIL® grant funds, students and some of their parents would be able to take an educational field trip to an ocean beach (in many cases for the first time) to hike and explore, conduct a cleanup, and investigate the plants and animals that live there. Also with this funding, KIDS for the BAY would develop new materials to teach about the problems of plastic pollution in the ocean. Students would bring home some information to share with their parents and families could pledge to reduce storm drain pollution to reduce plastics in the ocean. And finally, the participating students would lead a schoolwide assembly to 1,400 other elementary students on how to reduce marine plastic pollution.

(9) \$12,000 FOR OCEAN CONNECTORS/THE OCEAN FOUNDATION

Project Title: Ocean Connectors
Project Location: National City (southern San Diego County)
Project Timeline: June 2019 – July 2020
Total Project Budget: \$292,100
Estimated number of people served by the project: 3,000

Ocean Connectors is a project of the Ocean Foundation that is teaching every public school student in National City about migratory marine life and conservation over four years. In fourth grade, students study endangered sea turtles in San Diego Bay while learning about waste management, single-use disposable plastics, and the “3 R’s” (reduce, reuse, recycle). They also visit the Living Coast Discovery Center in Chula Vista to see the green sea turtle exhibit and other animals. In fifth grade, students learn about gray whales and sustainable seafood and bycatch, and they take a narrated whale-watching trip. In sixth grade, they study migrating birds and their habitats and also learn about the impacts of pollution, coastal development, and climate change. The six-graders’ outdoor experience is to go bird-watching and help restore habitat in the South San Diego Bay National Wildlife Refuge. And in a new program for seventh graders, they learn about sharks and issues of overfishing, shark finning, and their role in the ecosystem, and they visit behind the scenes at Sea World’s Shark Encounter exhibit. Additionally, all the teachers receive a bilingual binder of environmental lessons and activities to use year-round.

Ocean Connectors also includes a bilingual, cross-border “knowledge exchange” component in which students share artwork, writing, or short videos about their animals with other students who live in Nayarit, Mexico, near where the animals migrate. Migration of the animals illustrates the connection between different parts of the same ocean.

(10) \$12,000 FOR OCEANOGRAPHIC TEACHING STATIONS (ROUNDHOUSE AQUARIUM)

Project Title: Free Marine Science and Field Trip Program
Project Location: Los Angeles County
Project Timeline: June 2019 – June 2020
Total Project Budget: \$63,000
Estimated number of people served by the project: 6,660

The Roundhouse Aquarium (operated by Oceanographic Teaching Stations) in Manhattan Beach has been hosting marine science and environmental field trips since 1982. Students begin their half-day visits with an animal scavenger hunt and time to explore the aquarium, followed by questions for the staff, who are all trained scientists. Students then learn about the dangers of marine pollution and what they can do to prevent it. Students also dress up in marine animal costumes and make an ocean food web, and they learn about tidepool animals and their adaptations. After the aquarium, the students move to the beach, where they take a walk and look for signs of animals and also see the outfalls where pollution arrives at the coast. They explore the beach, collect trash, and learn how sand is formed and how plant life in the ocean produces oxygen people breathe.

Every year, approximately 15,000 students from Los Angeles County and the surrounding area participate in the aquarium's educational programs. Many of them do not receive environmental education otherwise and approximately 25 percent are visiting the beach for the very first time. A WHALE TAIL® grant would help support free visits by 6,660 Los Angeles County students from underserved schools that could not otherwise afford bus transportation to come.

(11) \$1,038 FOR PACIFIC ENVIRONMENTAL EDUCATION CENTER

Project Title: All-Weather Accessibility

Project Location: Fort Bragg

Project Timeline: March 2019 – June 2019

Total Project Budget: \$1,038

Estimated number of people served by the project: 850 annually

The Pacific Environmental Education Center (PEEC) is a nonprofit residential outdoor school on the Fort Bragg coast serving students from Redding, Lake County, Sebastopol, Round Valley Indian Reservation, and other communities in Mendocino County and northern California. PEEC offers a science camp primarily for students in fifth through eighth grades and teaches them through ecology-based field studies about tidepools, sand dunes, redwood and pygmy forests, estuaries, and coastal headlands, emphasizing people's interdependence with the natural world.

PEEC is requesting a modest amount of funding to purchase new, youth-sized rain ponchos to provide for students who don't bring adequate rain protection with them. Some of the attending students cannot afford to purchase appropriate rain gear. The current supply of rain slickers provided by PEEC has become too moldy to continue using. Adequate rain gear would allow all students to safely explore coastal dunes and prairies, tidepools, and other parts of the watershed.

(12) \$18,000 FOR PORT OF LOS ANGELES HIGH SCHOOL

Project Title: Sustainable Aquaculture Program

Project Location: San Pedro

Project Timeline: June 2019 – June 2020

Total Project Budget: \$141,546

Estimated number of people served by the project: 80

Port of Los Angeles High School (POLAHS) is a public charter school in San Pedro, located one block away from the port waterfront. POLAHS is seeking funding to expand its sustainable aquaculture program so students in grades 10-12 could raise seabass, kelp, eelgrass, oysters, other bivalves, tilapia, coral, and brine shrimp. The associated curriculum would cover topics such as the state of global fisheries, the history of aquaculture, the key elements of sustainable seafood aquaculture practices, toxicity and control, food safety, and how to design and create their own aquaponics systems (growing fish and vegetables together in water). They would also learn about other subjects related to ocean health including the causes and effects of ocean acidification and how to do water quality testing.

In other activities, kelp grown through this program would be outplanted to aid with restoration along the coast. The students would present their program to approximately 1,500 members of the public at two school community events. They would also further develop their potential career skills by creating an aquaculture business plan.

(13) \$11,000 FOR SALMON RIVER RESTORATION COUNCIL

Project Title: Creeks to Coast: A Watershed Science Program
Project Location: Sawyers Bar, Siskiyou County
Project Timeline: March 2019 – June 2019
Total Project Budget: \$19,125
Estimated number of people served by the project: 50

A collaboration between the Salmon River Restoration Council, the Mid Klamath Watershed Council, and the Karuk Tribe’s Department of Natural Resources would educate rural middle schoolers at five different schools along the Klamath and Salmon rivers about the connections between their local creeks and rivers and the Pacific Ocean. This watershed science program would consist of teaching a six-week curriculum at the five schools and would culminate in a three-day field trip to the North Coast as the schools come together to celebrate “Science Week.” Approximately 40 percent of the participating youth would be from the Karuk or Yurok tribes.

The six-week curriculum would use lessons from Project WET (Water Education for Teachers) as well as the Karuk Tribe’s TEK (Traditional Ecological Knowledge) curriculum. Project WET topics would include water pollution, water quality, the water cycle, ocean currents and climate, and watersheds. The Karuk curriculum would include anadromous fisheries and storytelling. The students would also take part in a watershed habitat restoration project and then they would travel to the coast to camp at Patrick’s Point State Park and participate in activities such as visiting the mouth of the Klamath River, tidepooling, doing a beach cleanup, and meeting with the Yurok Tribe to hear about the Yurok’s connections with the ocean.

(14) \$12,000 FOR VENTANA WILDERNESS ALLIANCE

Project Title: Wilderness Watersheds Project
Project Location: Monterey County
Project Timeline: March 2019 – February 2020
Total Project Budget: \$114,843
Estimated number of people served by the project: 70

Ventana Wilderness Alliance operates the Youth in Wilderness Program to lead expeditions for young adults in the Ventana and Silver Peak Wildernesses near Big Sur. This project would provide an introductory coastal wilderness immersion experience for participants in the Youth in Wilderness Program, while also teaching them about the connectivity of water that flows between backcountry waterways, their homes, and the coast.

This project would reach 60-80 high school students from underserved urban and agricultural communities such as Salinas. The 3-day, 2-night backpacking trips would take the teens up steep climbs and along creeks and rivers, where they would enjoy nature, observe different watersheds and see where the waterways drain to the ocean or back inland, and conduct stewardship activities including campsite rehabilitation and habitat maintenance. They would also learn about hydrology and water ecology, leave-no-trace waste management, and the relationship between upstream stewardship activities and the health of the Monterey Bay National Marine Sanctuary. The trips would end at a coastal river mouth or a river’s entry point in the community to highlight this connection.

(15) \$49,932 FOR WATER EDUCATION FOUNDATION

Project Title: Connecting Terrestrial Watersheds and Marine Environments with Project WET
Project Location: Statewide
Project Timeline: April 2019 – April 2021
Total Project Budget: \$49,932
Estimated number of people served by the project: 400 educators/40,000 students

California Project WET (Water Education for Teachers) has a long track record as a well-respected, quality program that trains K-12 educators about water science and water issues. Project WET trains an average of 1,000 California teachers per year who report using the activities with at least 100,000 students annually. California teachers are newly required to implement Next Generation Science Standards (NGSS) in their classrooms, but these are quite complex and many teachers look toward outside resources for help. Project WET already correlated its activities to NGSS standards, and its next step is to develop bundles of content (called “activity pools”) to help teachers better understand and more easily integrate both NGSS and Common Core standards.

This grant would fund Project WET to develop the activity pools using the theme of how local watershed issues impact coastal and marine ecosystems, and how students can apply what they learn through local citizen science and stewardship opportunities. The Project WET curriculum is available to teachers who attend trainings, and this grant would also fund 20 day-long training workshops throughout California focused on the connections between land-based watershed issues and stewardship actions and ocean impacts. Since a WHALE TAIL® grant would ensure that new NGSS-aligned activity pools would be ocean-related, and since Project WET activities are used so broadly, this funding has the potential to greatly increase the amount of ocean education being offered all over California as more teachers need to implement the NGSS.

(16) \$23,642 FOR WILDCOAST

Project Title: Explore My Marine Protected Area
Project Location: San Diego County
Project Timeline: March 2019 – February 2020
Total Project Budget: \$82,522
Estimated number of people served: 300

WILDCOAST helps lead the management of the Marine Protected Area (MPA) network in San Diego County through such activities as public outreach, monitoring, and youth education, recreation, and stewardship projects. “Explore My Marine Protected Area” would help strengthen a new generation of MPA stewards by working with schools and youth programs in San Diego County’s Native American and low-income “park poor” communities.

In 2018 WILDCOAST developed MPA outreach toolkits made up of lesson plans about the sandy shoreline and the intertidal zone, as well as materials for classroom and field activities. Through this grant, WILDCOAST would recruit 100 teachers and train them on how to implement an MPA-based curriculum by using these toolkits with their students. Also through this project, WILDCOAST would involve 200 of those students in field experiences such as kayaking, touring a research aquarium, and MPA monitoring of human use or marine species from the shoreline or onboard a commercial fishing boat on the open ocean. Finally, using two donated ROVs (remotely operated vehicles), students would film, edit, and produce three short videos about three MPA topics—sandy shorelines, the intertidal zone, and climate change—to share in order to promote greater MPA stewardship and raise awareness about local conservation issues.

(17) \$38,000 YES NATURE TO NEIGHBORHOODS

Project Title: Coastal Conservation Science & Education for Richmond Youth
Project Location: Richmond
Project Timeline: March 2019 – June 2020
Total Project Budget: \$258,265
Estimated number of people served by the project: 200

YES Nature to Neighborhoods facilitates outdoor experiences for urban youth and families who lack access to outdoor programming. The organization’s programs for young people are provided through its Youth Leadership Pathway (YLP), a ten-year pipeline from childhood to young adulthood. A WHALE TAIL® grant would help support existing YLP programs, which include: children’s day camp at Miller Knox Regional Park along Richmond’s bay shoreline; the year-long Richmond Rangers program for preteens who visit parks twice a month, take overnight backpacking trips including one to Point Reyes National Seashore, and participate in family nights where they also learn about natural history and conservation science; winter camp at the Point Bonita YMCA in the Marin Headlands for ages 8-18; the Camp-to Community (C2C) program for teens to be trained as outdoor leaders and peer educators; and three family camp weekends each year, in which C2C teens would present marine and coastal conservation education to the families.

In addition to the YLP programs, this funding would also support a new “Coastal Conservation Corps” (C3) to deepen the experience of some of the C2C teens. They would meet bi-monthly to learn about marine, coastal, and bay conservation issues that impact them and that they impact. They would conduct research on relevant topics and lead field excursions on the California coast. C3 teens and YES staff would also conduct a public information sharing campaign.

(18) \$50,000 FOR INTERNATIONAL DOCUMENTARY ASSOCIATION

Project Title: Coastal Access for Everyone Video Series
Project Location: Statewide
Project Timeline: March 2019 – September 2019
Total Project Budget: \$50,000
Estimated number of people served by the project: thousands

In 2018, the media production company, Rigler Creative, working through its nonprofit fiscal sponsor the International Documentary Association and funding from the State Coastal Conservancy and the Coastal Commission, completed a series of 50 video vignettes highlighting segments of the California Coastal Trail from the Mexico border northward through Del Norte County. This new project would more deeply investigate and bring together broader themes and topics that the Coastal Trail videos initially touched upon.

The new video series would consist of 5-6 new video segments that would be able to stand alone but that would also be combined to create a half-hour television program for California Public Broadcasting Stations and their subsidiaries to air on television and stream on the Internet. The series would include a number of themes related to coastal access, such as: why the California coast belongs to the people, environmental justice issues, education and outreach programs to facilitate coastal access, sea level rise and disappearing beaches, highlights of the Coastal Trail, and the role of public activism in expanding coastal access in California.

(19) \$11,410 FOR KEEP COYOTE CREEK BEAUTIFUL

Project Title: Wheels and Wildlife at the Don Edwards Refuge
Project Location: San Jose
Project Timeline: April 2019 – March 2020
Total Project Budget: \$12,610
Estimated number of people served by the project: 400

Don Edwards National Wildlife Refuge is an estuary of international ecological importance on San Francisco Bay. Many current visitors come from a similar demographic – older and high-income. In order to introduce the area to new audiences, Friends of Coyote Creek is seeking funding to offer a series of four free educational bike rides around some of the refuge's levees—one during each season of the year. During each two-hour ride, participants would leave from the Refuge's Environmental Education Center and bike four miles, making three 20-minute educational stops led by partner organizations including San Francisco Bay Wildlife Society and San Francisco Bay Bird Observatory. Topics covered would include local bird life, the Coyote Creek watershed, the restoration of the South Bay salt ponds there, wetland wildlife and botany, local history, sea level rise and climate change, and health benefits of being in nature.

To reach new audiences, Friends of Coyote Creek would advertise to families in the greater San Jose region through organizations such as Boys and Girls Clubs, Latino Outdoors, and Outdoor Afro, and have notices translated into Spanish and Vietnamese. To be accessible to underserved communities, Friends of Coyote Creek also plans to offer bicycles that can be borrowed so participants wouldn't have to own one.

(20) \$25,390 FOR NAPA COUNTY LIBRARY

Project Title: H₂O Superheroes
Project Location: Napa Valley
Project Timeline: April 2019 – November 2020
Total Project Budget: \$47,824
Estimated number of people served: 1,000+

The Napa County Library system has four branches in Napa, American Canyon, Calistoga, and Yountville. In response to input that residents would appreciate community involvement activities for local families (rather than events targeting tourists), the Library developed this project, in which the four branches would host programs offering opportunities to learn about, serve, and protect local waterways.

The County Library would provide at least 1-2 programs per month for 18 months, together with local partners such as Napa County RCD, Napa-Solano Audubon Society, and Friends of the Napa River. The four libraries would take turns hosting the programs and each library is within walking distance of a waterway. The project would include: increasing the number of children's books (including in Spanish) about coastal and marine environments, watershed flora and fauna, and climate change; purchasing relevant musical CDs; allowing library patrons to check out birding kits (including binoculars and guide books) and cleanup kits (including a bucket, litter grabber, and gloves); providing "eco-tainment" shows by performers and educators; holding storytimes focusing on taking care of local watersheds; hosting a "Wild Napa" lecture series and ocean-related movie nights with conservation messaging; offering guided watershed hikes and birding walks along waterways; having high school students learn about watershed stewardship and host watershed-themed arts and crafts; and hosting Napa River volunteer cleanup events.

(21) \$30,000 FOR MONTEREY BAY AQUARIUM FOUNDATION

Project Title: Climate Action Project Symposium

Project Location: Monterey

Project Timeline: March 2019 – May 2020

Total Project Budget: \$67,250

Estimated number of people served: 75 teachers and their classes + 125 student attendees

In order to help California teachers educate their students about climate change and its effect on the ocean, the Monterey Bay Aquarium is planning to host a Climate Action Project Symposium, modeled after its successful annual Ocean Plastic Pollution Summit. In this program, middle and high school teachers would participate from both urban and rural schools in the Monterey and San Francisco Bay areas, but would also be recruited from elsewhere such as Fresno, Sacramento, and southern California.

The 75 participating teachers would attend the symposium kick-off event at the Aquarium in the fall, when they would hear a keynote talk, attend learning sessions, and learn how to help their students understand climate change. They would also learn about how to lead a project design process, build community partnerships, and communicate a climate change action message. Teachers would return to school and work with their students to develop an action project, and then come back to the Aquarium to check in, share their project designs, and learn more about climate change issues and data collection and project management strategies. In the final phase of the program, classes would undertake their action project to increase awareness of climate change and its ocean impact or to mitigate climate change, and then the teachers and some of their students would come to the symposium's closing session at the Aquarium to present their projects.

(22) \$12,000 FOR NORTHCOST REGIONAL LAND TRUST

Project Title: Stewards of Today and Tomorrow

Project Location: Bayside, Humboldt County

Project Timeline: March 2019 – September 2020

Total Project Budget: \$17,375

Estimated number of people served by the project: 500

The Northcoast Regional Land Trust (NRLT) owns Freshwater Farms Reserve that includes 35 acres of restored tidal wetland near Humboldt Bay, as well as a property at Martin Slough at the southern edge of Eureka. NRLT is seeking funding to help make the habitats on these properties as relevant to as many people as possible and accessible to new and diverse audiences.

To do this, NRLT would engage in three main activities. The first would be to conduct outreach to Spanish speakers and students at Humboldt State University through bilingual radio ads and other forms of publicity to let them know about public events at the two properties. NRLT would also create signs in Spanish and English on the topics of migratory species, agriculture, how sea level rise will affect Humboldt Bay's shoreline, and habitat restoration. Second, NRLT would host eight Stewardship Day events for people of all ages to engage in activities such as native plant propagation, planting, trail maintenance, sustainable agricultural practices, or invasive plant removal. At least one event would be held in English and Spanish. To strengthen partnerships with other organizations, at least three events would be held with groups such as Latino Outdoors or a local Boys and Girls Club. The third main activity would be to develop a family-friendly nature treasure hunt by creating a new "Redwood EdVentures Quest" to be part of a series of "quests" in the region offered to the public.

(23) \$12,000 FOR TOLOWA DUNES STEWARDS/FRIENDS OF THE DUNES

Project Title: Developing Youth, Tribal and Community Leaders

Project Location: Del Norte County

Project Timeline: April 2019 – March 2020

Total Project Budget: \$30,000

Estimated number of people served by the project: 600-1,200

Tolowa Dunes Stewards (a program of Friends of the Dunes) is requesting funds to continue its restoration and education programs at Tolowa Dunes State Park and the Lake Earl Wildlife Area. TDS restores coastal dunes and wetlands for the benefit of native plants and wildlife, especially by removing invasive European beach grass. The group also provides education about coastal ecology and fosters environmental stewardship among its program participants.

During this grant period, TDS would be leading programs in the field for youth and adult members of different partner organizations. For example, members of the Tolowa Dee-Ni' Nation (Smith River Band of Tolowa Indians) would be able to participate in educational restoration outings. TDS would offer other tribal members opportunities to explore their cultural ties to the land through events such as guided walks focusing on traditional plants or canoeing excursions to learn about local birds. Youth and family summer visitors from the Sierra Service Project would attend evening presentations about the biodiversity of the Tolowa Coast and daytime excursions to the dunes, wetlands, and ocean beach. TDS would also add an annual Earth Day restoration event and explore adding new public programming for seasonal events during the off-season (as opposed to the summer). An additional benefit of this grant would be that TDS was recently awarded funding from the Wildlife Conservation Board and these funds would help provide required matching money.