CALIFORNIA COASTAL COMMISSION

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April 3, 2015

To: Commissioners and Alternates

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RE: 2014 Public Education Program Update

The Public Education staff had been scheduled to do its annual briefing at the December 11, 2014 Commission meeting. However, the briefing was postponed due to storm conditions, which hindered staff travel to the meeting.

The briefing will take place at the Commission meeting on April 15, 2015. Public Education Program staff will update the Commission on program activities and accomplishments for 2014.

Attached is the program's 2014 Annual Report.

(In addition, the staff report prepared for the December 2014 meeting is available in the Coastal Commission meeting archives and at this link http://documents.coastal.ca.gov/reports/2014/12/Th6-12-2014.pdf)





THE CALIFORNIA COASTAL COMMISSION'S PUBLIC EDUCATION PROGRAM

2014 ANNUAL REPORT

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Introduction

The California Coastal Commission is dedicated to protecting, restoring and enhancing California's coastal and marine resources. Acting under State and Federal law, the Commission regulates land development; participates in a land use-planning program with coastal cities, counties, and ports; promotes public access to the shoreline; and carries out a public education program.

Education is an important feature of an effective Coastal Program. In the California Coastal Act, the California Legislature declared "an educated and informed citizenry is essential to the well-being of a participatory democracy and is necessary to protect California's finite natural resources, including the quality of its environment" (Section 30012 (a)). Research shows that a knowledgeable population who values the coast and ocean is more likely to support environmental protection, and get involved in environmentally-beneficial activities. Individual behaviors, when considered cumulatively, can have a tremendous effect on the coast.

The Coastal Act directs the Coastal Commission to "carry out a public education program that includes outreach efforts to schools, youth organizations, and the general public for the purpose of promoting understanding of, fostering a sense of individual responsibility for, and encouraging public initiatives and participation in programs for, the conservation and wise use of coastal and ocean resources" (Pub.Res.Code, Section 30012(b)(1)).

The Commission's Public Education Program is dedicated to educating citizens of all ages, ethnicities, and income levels, whether they live along the coast or inland, about the importance of to preserving and protecting our coastal resources and what they can do to help. We involve the

general public, schools, civic groups, and businesses in hands-on educational programs that promote responsible stewardship of California's coast and ocean. In 2014 we involved 270,000 people in coastal protection through public education programs and events.

The Coastal Commission also supports others' educational efforts to equip and inspire students and the public to address environmental challenges. To this end, the Commission provides educational materials, grant funding, training, and technical support to a wide range of organizations and individual educators. We seek to promote ocean literacy, and cultivate public education efforts on marine debris, ocean pollution, habitat restoration, and other marine and coastal topics.

Our approach is through collaboration – we work with a variety of government agencies, non-profit organizations, citizen groups and businesses to achieve common goals. See attachment A for a list of partner organizations.

The main funding source for the Coastal Commission's education programs is the Whale Tail License Plate. Corporate contributions support the Coastal Cleanup Day Program through our partner, the California State Parks Foundation. And beginning in 2013, new source of funding, the Protect Our Coast and Oceans tax check-off, has raised additional funds for Whale Tail grants.

This report briefly describes the activities of the Commission's Public Education Program for the calendar year 2014.

Coastal Cleanup Day

Following the lead of the state of Oregon, California organized its first Coastal Cleanup Day in 1985. Since then, the idea for the event has spread throughout the nation and internationally. California is now part of the International Coastal Cleanup, organized by Ocean Conservancy (formerly the Center for Marine Conservation), with participation by 45 states and over 100 countries.

The event continues to be the Commission's premier event, and since being recognized as the world's largest beach cleanup in 1993, the event has remained the state's largest single-day volunteer event. In 2014, 66,844 volunteers took part at one of over 850 cleanup sites around the state in 54 of California's 58 counties. This represented a 15% increase in volunteer participation over 2013!



CALIFORNIA COASTAL CLEANUP DAY
SATURDAY, SEPTEMBER 20, 2014

From 9AM to NOON | For more information visit COASTALCLEANUPDAY.ORG or Call (800) COAST-4U

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In addition to its strong support in coastal counties, the Cleanup Program recruits participants from inland areas to clean creeks, rivers and lakes. These volunteers help to illustrate one of the event's messages – that we are all connected to the coast and ocean by our rivers, streams, and storm drains.

In 2014, 23,244 volunteers cleaned inland rivers and waterways, removing 786,247 pounds of debris, which far exceeded the amount of trash recovered at coastal locations. Combined with the coastal counties of the state, Coastal Cleanup Day volunteers removed over 1,190,065 pounds of debris from the state's coast and inland shorelines. Over 100,000 pounds of this debris was recycled.

Looking back over the history of the program helps to highlight the cumulative benefit of this program to the health of our coast and ocean. Since the Coastal Cleanup Day Program's inception in 1985, over 1.3 million volunteers have helped remove over 21 million pounds of debris from California's coast, ocean, and inland shorelines.

Event Messages Reach Millions

In addition to educating participants, the event messages reach a large and diverse audience through extensive television, radio, newspaper, and web coverage, as well as social media. This was made possible in part through a partnership with an advertising agency named BBDO, which donated their creative skills and time pro bono to develop the 2014 Coastal Cleanup Day artwork. Posters, postcards, bus back banners and t-shirts were printed with one of two different advertisements that the agency created to illustrate the notion that our environment is calling out for our help. (One of the posters can be seen on the previous page.) The message emphasizes the impacts that trash can have on our coastal and inland environments, and

the need for all of us to participate in the effort to rid our state of debris. That message was reinforced by a powerful TV Public Service Announcement that BBDO was able to create for the Cleanup as well, and for which they secured excellent free placement on multiple stations in the San Francisco, Los Angeles, and San Diego markets during the week before the Cleanup.

The impact that Coastal Cleanup Day can have on our environment was reinforced through a social media campaign entitled "Faces of Coastal Cleanup." In the weeks leading up to and following the Cleanup, the Commission highlighted a different Cleanup volunteer on our Facebook page, along with their answer to one of several different **auestions** that we sent around: facebook.com/CaliforniaCoast. The result was a very personal way of illustrating how important the Cleanup is to so many different people, from all walks of life and all corners of the State. The campaign proved extremely popular among the event's partners and posts were shared thousands of times over the course of the month leading up to the Cleanup.

The event also received extensive coverage in traditional media. It was covered by local TV news crews in many locations. Millions of television viewers are impacted by the image of thousands of volunteers spending the day cleaning the beaches, and by interviews with event organizers who help drive the pollution prevention message home. This also holds true for newspaper readers and radio listeners. The event was covered in over 400 newspaper, magazine, and on-line articles.

Corporate Partners in CCD

The Coastal Cleanup Day Program has enlisted strong corporate partners, which have greatly assisted our outreach efforts. We continued our key, ongoing relationship with CG Roxanne, makers of Crystal Geyser Natural Alpine Spring Water. In addition to their financial support, CG Roxanne provided free water, primarily in large, gallon-size containers, in 46 Coastal Cleanup regions, covering almost all of the Cleanup volunteers. This is a crucial benefit that helps local coordinators and volunteers immensely. The Coastal Cleanup Day Program also enjoyed continuing support from Oracle, the Whale Ecoplate. the National Oceanic Atmospheric Administration (NOAA) the and California Office of Emergency Services (in support of the Tsunami Debris Cleanup Project, which included Coastal Cleanup Day), and an array of inkind and media support from partners around the state. The Cleanup Program also enjoyed first-time support from Rubio's Restaurants, which provided a coupon for a free taco to every Cleanup volunteer, and the San Francisco-based law firm Orrick, Herrington & Sutcliffe LLP.

CCD Influence on Business Practices

An additional benefit of establishing Coastal Cleanup Day relationships with corporate partners is our ability to positively influence their business practices. One example of this is Whole Foods Market's move in 2008 to eliminate the use of plastic grocery bags at their stores, a decision that was influenced by their participation in Coastal Cleanup Day.

Another example was introduced in 2010 by Crystal Geyser -- a completely recyclable bottle cap that stays attached to the water bottle, with no plastic parts that need be completely removed. Crystal Geyser developed this bottle cap as a direct response to their involvement with Coastal Cleanup Day and at the urging of Commission staff, in recognition of the large contribution plastic bottle caps make to our overall marine debris problem and the impact they have on our environment. Crystal Geyser continues to innovate and find new ways to reduce waste in their manufacturing process,

recently introducing the lightest weight water bottle on the market and eliminating all corrugated cardboard from their shipping processes.

BYO for CCD

The Commission staff launched a new program in 2010 that has expanded each year since, known as "BYO for CCD." In recognition of the need to reduce the amount of waste created by the event itself, the Coastal Cleanup Day Program asks volunteers to bring their own reusable cleanup supplies from home, rather than using the single-use disposable plastic items available at cleanup locations. Whenever possible, the Commission and our partners also provide reusable supplies like buckets and gardening gloves for volunteer use.



The initiative has been a great success, as we estimate that over one-half of all cleanup participants brought at least one reusable item from home to the Cleanup in 2014. As a result, the Commission was able to order 70,000 fewer trash bags for the 2014 event (than in 2010 when the BYO initiative was first implemented), and expects to lower our order even further in 2015. The initiative is helping to reduce the environmental footprint of the Cleanup while educating volunteers about simple lifestyle changes that cumulatively can have enormous, positive benefits to our coastal and marine environments.

Who are our Volunteers?

In 2014, we again conducted a survey of Cleanup participants to gain information about our volunteers and their experience of participating in the cleanup e.g. how they heard about the event, whether participating in the event raised their awareness, and how they expect the experience to affect future behavior regarding the environment. We also use the survey to collect feedback and suggestions.

We used an on-line survey tool to collect 681 responses. Since it was not a random sample, it is important to consider these caveats – not everyone heard about the survey (depending on local site coordinator communication), and not everyone is inclined to take an on-line survey. That said, some general trends can be discerned from the survey results. For example, the biggest source of motivation to survey respondents in coming to the event is their concern for marine debris, especially impacts to wildlife. Almost all survey respondents (98%) report that participating in the event motivated them to take specific actions to protect the environment, such as educating others, picking up street and beach litter, reducing their use of single-use disposable items, etc.

In addition, the survey showed that participation in the Cleanup educational, was increasing respondents' assessment of their knowledge of the causes and impacts of marine debris. 85% of respondents considered themselves either "knowledgeable" or "very knowledgeable" about the causes of marine debris after the event, as opposed to only 63% before the event, a 22% increase. Similarly, 82% of all survey takers considered themselves "knowledgeable" or "very knowledgeable" about the impacts caused by marine debris after the event, as opposed to 66% before the event, an increase of 16%. These findings

indicate that the Cleanup is both educational and motivational for many participants.

Adopt-A-Beach

The Adopt-A-Beach Program offers groups a way to help take care of a favorite stretch of the coast or shoreline on a year-round basis. Volunteers pledge to clean their beach three times over the course of one year. School groups can fulfill the obligation with one cleanup. Over the past 20 plus years, tens of thousands of California schools, civic groups, businesses, scout troops, families and friends have adopted beaches throughout California.



All 15 coastal counties, plus Alameda and Contra Costa County participate in the program. The Commission coordinates 48 Beach Managers from 33 Adopt-A-Beach partner organizations (see Attachment A for a list of organizations) who run the program locally. These Beach Managers provide cleanup supplies, training, and educational materials, arrange for trash pickup, and sometimes deliver supplemental educational programs and public recognition. Some Beach Managers hold regular "drop-in" cleanups that anyone may attend.

The Commission provides Beach Managers with promotional materials, garbage and recycling bags, latex gloves, data cards, and pencils. In addition, the Commission maintains a free video loan library, and provides curricula, posters, and other materials to teachers and others to help educate Adopt-A-Beach groups about the importance of keeping our water clean.

The Commission staff compiles the data collected at many of the individual Adopt-A-Beach clean-ups. Based on reports from Alameda, Humboldt, Los Angeles, Monterey, Orange, San Diego, San Francisco, Santa Cruz, and Ventura Counties, over 25,500 people volunteered during one of the 919 Adopt-A-Beach Cleanups in 2014, contributing nearly 50,300 volunteer hours. Although not every group tracks the weight of their trash and recyclables removed, those who did collectively removed 20,444 pounds of trash and 1,979 pounds of recycling from our coast and shorelines.

Recognition for Beach Adopters

Groups that adopt beaches are recognized on the Coastal Commission website and receive a certificate thanking them for their contribution. Over 150 groups adopted a California beach or shoreline in 2014 and received these recognitions.

Japan Tsunami Marine Debris Cleanups

The Coastal Commission continued a new project that it had begun in 2013 focused on cleaning up the debris that originated with the 2011 earthquake and tsunami in Japan. Debris from this tragedy began washing up along the West Coast of North America before the end of 2011, and has been washing up fairly regularly ever since. Anticipating the arrival of this debris in California, Coastal Commission staff worked with the California Office of Emergency Services (CalOES) and others to plan and prepare.

Using support from NOAA, CalOES provided the Commission with a \$50,000 grant in 2013 to conduct regular beach cleanups along the entire coast. Commission staff developed a new data card focused on debris items likely to indicate potential tsunami debris and recruited and provided mini-

grants to local coordinators in each coastal county. Local organizers, in turn, recruited volunteers to conduct quarterly beach cleanups in 2013, with one coinciding with California Coastal Cleanup Day.

The program proved to be so successful that CalOES provided renewed and increased funding of \$250,000 to enable the project to continue through June of 2016. This new round of funds began July 1, 2014, and more than 1,700 volunteers participated in a Tsunami Debris Cleanup in 2014, with many more Cleanups scheduled throughout 2015 and the first half of 2016.

The data gathered at these events provides the Commission with a baseline against which we can compare data from future events, to give us a better understanding of when and where tsunami debris is washing up in California.

Coastweeks

Coastweeks is a national celebration of our coastal resources. As the California coordinator for Coastweeks, the Commission maintains an on-line calendar and publicizes Coastweeks events. For three weeks (kicked off by Coastal Cleanup Day on the third Saturday in September) the public is encouraged to take part in activities that celebrate our coast and water resources, such as volunteer restoration days, beach hikes, ocean festivals, and scientific lectures. In 2014, our on-line calendar included a record 448 events, which is a 24%



increase over the prior year.

New Check-off Box for "Protect Our Coast and Oceans Fund"

Governor Brown signed AB 754, authored by Assemblymember Al Muratsuchi, into law on September 21st, 2013. Beginning in 2014, California taxpayers had the opportunity to check a box and make a donation to the Protect Our Coast and Oceans Fund in the voluntary contributions section of the state tax return.



Gyro, an award-winning advertising agency with an office in San Francisco, worked with the staff pro bono to create a marketing campaign for the check-off box. The Campaign ran between February and May 2014 and featured a website (www.checkthecoast.org), banner advertisements on websites such as LA Weekly, OC Weekly, and Surfline, advertisements in BART stations in the Bay Area, a video Public Service Announcement, a radio advertisement, and social media. In addition, numerous partner organizations expanded the Campaign's reach through social media posts and Letters to the Editor.

Gyro is again assisting the Coastal Commission's with a new campaign for Protect Our Coast and Oceans Fund for 2015. Donations to the Fund will support marine and coastal education and stewardship, through the Whale Tail Grants Program.

Whale Tail® License Plate

As of January 1, 2015, over 226,000 California drivers had purchased the Commission's Whale Tail® License Plate. Plate sales and renewal fees had raised \$81.7 million for environmental programs -

\$23.7 million to the California Beach and Coastal Enhancement Account (CBCEA) and \$58 million to the Environmental License Plate Fund (ELPF).

Each year, the legislature appropriates funds from the CBCEA to the Coastal Commission to carry out Coastal Cleanup Day, Adopt-A-Beach, and other coastal and marine education programs, including grants to schools, nonprofits, and local agencies. The CBCEA also funds projects of the State Coastal Conservancy. The ELPF funds a variety of state environmental programs.

The Whale Tail License Plate provides a way for the public to contribute funds to protect and conserve California's coast and ocean. Prior to 1998, the Coastal Commission's Public Education Program was supported financially by unpredictable sources, e.g. one-time grants, corporate contributions, inkind donations, and federal funds. The Whale Tail Plate was initiated through legislation in 1994. SB1411 established a special coastal environmental license plate to support the Commission's Adopt-A-Beach Program, Coastal Cleanup Day, and coastal and marine education.



Whale Tail Grants

Whale Tail Grants distribute funds from sales of the license plate and support programs 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 environments. The program funds projects that foster environmental stewardship, and cultivate knowledge of and enthusiasm for marine science, with a focus on reaching communities that are poorly served in terms of marine and coastal education. Funding is provided in the following three categories: 1) Adopt-A-Beach programs; 2) Youth programs; 3) Programs for the general public. Applicants must be either a school, a non-profit organization, or a government entity.

The need for Whale Tail Grants consistently exceeds the available funds. In Fiscal Year 2013/2014, for its competitive grants program, the Commission received 91 grant applications for a total of \$2,241,515 and awarded 23 grants totaling \$392,126.

In addition, the Commission awarded seven targeted grants, totaling \$423,874. To date, the program has awarded \$9.7 million in grants to a wide range of organizations. (See Attachment B for a table showing the grants that were awarded recently).

Examples of projects funded in 2014 included: bilingual ocean stewardship activities for children and their parents in Salinas; studies about earth science, carbon dioxide emissions, climate change, and renewable resources in City Heights, San Diego; training for docents and naturalists statewide on speaking to the public about Marine Protected Areas; raising and releasing salmon and steelhead trout in Del Norte County; watershed stewardship activities for elementary students in Guadalupe, Santa Barbara County; and measuring the ecological health of urban sandy beaches in southern California and sharing the data with land managers.

Boating Clean and Green

The Boating Clean and Green Program, which began in 1997, promotes environmentally sound boating through education and by working with marinas and local governments to increase availability of environmental services for boaters. The Coastal Commission works in partnership with the California State Parks Division of Boating & Waterways to implement the program.



The Program's Dockwalker Program develops clean boating kits and provides volunteers with training and tools to conduct face-to-face boater education

and distribute the kits. In 2014, the Boating Clean and Green Program conducted 12 statewide Dockwalker volunteer trainings in which more than 160 new volunteers were trained. These volunteers distributed 6,700 boater kits to the public.



In addition, program staff directly connected with over 1500 boaters through its participation in five boat shows and boating events, and by conducting four clean boating seminars.

With support from the BoatUS Foundation, the program has installed a total of 148 monofilament fishing line recycling stations throughout the state since 2009. To date, approximately 1,033 pounds of

fishing line have been collected and properly recycled. Stretched out, this line would stretch from San Francisco, California to Rector, Arkansas.

The Changing Tide is the quarterly publication of the three chapters of the CCBN (California Clean Boating Network – a forum of members of from the boating industry, government agencies, and environmental groups). In 2014, the program distributed three issues (11,000 copies each). The newsletter focuses on new trends in clean boating practices and environmental services for boaters.

From 2010 to 2012 program staff led a working group in developing the Marinas and Yacht Clubs Spill Response Communication Packet. The Packet is designed to help boating facilities access needed information in the event of an oil spill. In 2014, staff, OSPR and CalOES conducted two workshop for boating facilities in San Diego and Redondo Beach to introduce the packet. The workshops were attended by 80 marina and yacht club operators. In addition, staff conducted a boom training in partnership with OSPR and CalOES for the Bay Area and Delta marine industry representatives. This workshop was attended by 36 boating facilities operators. Staff is currently planning additional workshops for Ventura and Long Beach areas

Program staff developed a toolkit for marinas and yacht clubs that will assist these facilities in planning and organizing their participation in Coastal Cleanup Day (CCD) and the Adopt-a-Beach Program. In 2014, thirty-eight boating facilities participated in CCD, involving 818 volunteers, who cleaned 48 miles of shoreline and collected 7,032 pounds of trash and recyclables on land and from 154 non-motorized vessels.

Children's Art & Poetry

The Coastal Art & Poetry Contest is open annually to California students in kindergarten through 12th grade. The contest invites students to submit poetry or art with a coastal or marine theme. By encouraging youth to reflect on the beauty and spirit of California's beaches and ocean, we hope to inspire a greater sense of stewardship for these natural places.

Every year, five winners each in art and poetry are selected, and around 40 honorable mentions are recognized. Since the contest began in 2003, nearly 24,000 entries have been received from students from throughout California. In 2014, 2,331 entries were submitted to the contest. See winners at: www.coastal.ca.gov/publiced/poster/poster.html

Following each contest, the winning honorably mentioned pieces are exhibited at venues up and down the coast. The 2014 contest exhibit locations were Channel Islands National Park Visitor Center in Ventura; Point Reyes National Seashore's Bear Valley Visitor Center in Marin County; the Ford House Museum in Mendocino; and Birch Aquarium at Scripps in La Jolla. Previous years' winners were placed on exhibit during 2014 at the Humboldt Bay National Wildlife Refuge visitor center, Santa Cruz State Beach visitor centers and at Westhaven Center for the Arts in Trinidad, California. Artwork from the Coastal Art & Poetry Contest is used in many Commission publications and throughout the Commission's website.

Ocean Day Kids' Cleanup and School Assemblies

Since 1993, the Coastal Commission has worked with the Malibu Foundation for Environmental Education and other partners to conduct the Ocean Day Kids' Cleanup and School Assembly Program. The assembly shows students the way to cleaner beaches and oceans. By presenting slides and talking about recycling, the dangers of plastic and debris in the world's oceans, litter reduction and the storm drain system, the assembly prompts children to care for the marine environment.

The children are then shown a way to help the environment – by doing a beach cleanup. The program focuses on underserved schools and provides grants to assist the schools with the costs of the beach trip.

In 2014, Kids' Cleanups were held in May and early June in recognition of World Oceans Day (June 8th). Approximately 6,900 students cleaned six sites: Crown Point Shores in San Diego County (700), Huntington State Beach in Orange County (1,266), Dockweiler State Beach in Los Angeles County (3,377), Ocean Beach in San Francisco (636), Municipal Beach in Monterey (169 students from Fresno), and Humboldt Bay (780).



In most locations, after cleaning the beach, the students formed giant images and messages in the sand that were photographed from the air, such as this one featuring a pelican in San Diego. Other cities featured different seabirds, and Los Angeles formed the world's largest text message. All of the 2014 aerial images, as well as those from past years can be viewed at www.oceanday.net.

Ocean and Coastal Photography Contest

In 2014 the Commission continued its partnership with the Thank You Ocean Campaign, jointly holding an online contest featuring digital imagery of the scenic coast and Pacific Ocean off California, people at the California coast, and California ocean and coastal wildlife.



Fairmont Hotels & Resorts of California donated overnight stays at luxury hotels for the prize winners, which included first, second and third place winners selected by a panel of expert judges, and a "Viewers' Choice" winner based on online voting. The winning photographs, along with 14 honorable mentions, were selected from a record 1,312 entries, and are featured on the contest website, http://mycoastalphoto.com.

Creeks to Coast Directory

The Creeks to Coast Directory is a fully searchable resource for organizations active in marine, coastal and/or watershed issues within California. Approximately 440 organizations are in the database, including information on their mission, programs, volunteer opportunities, and links to their website and contact details. Organizations can

edit their own entries and new organizations can input their data, which is approved by Commission staff before going live on the website.

Staff is working on an ongoing basis to further build up and update the database, with the overall goal of achieving and maintaining a comprehensive collection of organizations in this field. The database is intended for researchers, educators, students, and those seeking volunteer opportunities within their community. The Creeks to Coast Directory is on the Public Education page of the Commission's website at:

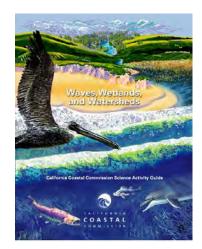
www.coastal.ca.gov/publiced/creekstocoast.

Waves, Wetlands, and Watersheds

In 2014, outreach and distribution continued for Waves, Wetlands, Watersheds, and Commission's science activity guide for California teachers. This guide addresses such issues as marine geology, debris, beach water quality conservation, endangered species, and wetlands protection. It presents lessons aligned to the California State Science Content Standards for grades three through eight and includes a "community action" chapter with activities that encourage students of all ages to take action to protect our coast. The connection between inland areas and the ocean is emphasized throughout, so the lessons are relevant for students living in all regions of California.

Between February 2003 and December 2014, the Commission distributed more than 16,675 hard copies of Waves, Wetlands, and Watersheds (including 5,000 copies produced by the City of Los Angeles in 2004 for local distribution) and held a total of 94 teacher workshops directly reaching 1,893 educators. The book can be downloaded from the Commission's website, and Spanish translations of the student handouts are available.

In 2014, staff held five workshops, in El Cajon, Manila, Rancho Palos Verdes, Santa Barbara, and Long Beach; in partnership with San Diego Science Alliance, Friends of the Dunes, Bureau of Land



Management, the CREEC Network, Ty Warner Sea Center, and the National Science Teachers Association. Activities from the book have been adapted for numerous other publications and audiences, and *Waves* has been incorporated into many educator workshops held by other organizations.

New High School Curriculum

During fall 2014, the Commission staff began work on a new high school curriculum about coastal science, policy, and management in the context of the issues facing the California coast. Staff is working with a curriculum writer who is developing project-based learning units that are aligned to the Next Generation Science Standards and Common Core State Standards. The curriculum is to be completed by the end of 2015.

Community-Based Restoration and Education Program

The purpose of the Community-Based Restoration and Education Program (CBREP) is to facilitate community-driven coastal habitat restoration in California. The program began in 2001 to restore critical species' habitat of the Upper Newport Bay

through the work of community volunteers. Working out of the Back Bay Science Center in Newport Beach, CBREP has an on-site native plant nursery that provides plants for volunteer restoration efforts. In 2014, volunteers at the native plant nursery propagated nearly 2,520 native plants.

The Program organizes a monthly volunteer restoration event at sites around the Upper Newport Bay, as well as weekly "Steward" gatherings to work in the nursery on plant propagation and other projects. To date, over 21,600 volunteers have removed over 94,300 pounds of invasive vegetation, planted more than 23,800 native plants, and restored over 15 acres of coastal habitat.

The Commission implements the Program in conjunction with the Tides Center, and works closely with the land managers at Upper Newport Bay — the California Department of Fish and Wildlife, Orange County Parks, and the City of Newport Beach, as well as with the Newport Bay Conservancy, a non-profit volunteer group.

In 2014, we worked on maintaining and expanding current restoration sites. Volunteers attending our restoration events represented schools, community groups, and corporations through such varied groups as Chapman University, Deutsche Bank, ExplorOcean, Starbucks, AP Environmental Science classes from local high schools, and Scouting troops. We also gave a presentation and site tour for the Orange County Natural History Lecture Series, and our work was represented at the conference of the

California Society for Ecological Restoration.

The program hired a part-time Restoration Coordinator in 2014 to focus on the management and execution of volunteer restoration events and the restoration site monitoring program. In addition, a partnership with the UC Irvine Center for Environmental Biology provided student "Education and Outreach" interns for our volunteer restoration events. These interns gain valuable experience developing their environmental education skills and enhance the educational value of the events for bay visitors.

In November 2014, the program was awarded a large grant from the Wildlife Conservation Board. The funds will be used to complete a 15 acre restoration project at a site within the Upper Newport Bay, known as Newport Valley. The \$381,000 grant will be spent over five years.



CBREP continued to distribute "Digging In: A Guide to Community-based Habitat Restoration." Guide explains the basic steps of information gathering, site selection, project implementation, maintenance, monitoring, and working volunteers. In 2014, staff provided technical assistance to several local government agencies and non-profit organizations assist development of their community-based own restoration programs.

Beach Wheelchairs

The Commission's beach wheelchair program aims to ensure that these chairs, which have wide, balloon tires that are able to move across soft sand, are widely available for public use. To this end, the Commission has awarded a total of \$103,000 to a variety of jurisdictions up and down the coast for the purchase of beach wheelchairs. By our count 98 California beaches now have beach wheelchairs that can be borrowed by members of the public, and the Commission has provided funding for approximately 40% of those. The Commission also

maintains а webpage that shows the location of beaches with wheelchairs available for use by the public.



each-wheelchairs.html



Marine Debris Policy and Coordination

Research conducted by the Algalita Marine Research Foundation (AMRF) and others has demonstrated that plastics are present on beaches and in coastal and in ocean waters in alarming quantities. In a 2000 study, AMRF found that plastic pieces outweigh degraded surface zooplankton in the central North Pacific by a factor of six to one (six pounds of plastic for every pound of zooplankton). In 2002, another AMRF study showed the average mass of plastic was two and a half times that of plankton on the surface of the coastal waters near Long Beach, California.

These findings prompted the Coastal Commission to team with AMRF and other stakeholders to develop a statewide plan: "Eliminating Land-based Discharges of Marine Debris in California: A Plan of Action from the Plastic Debris Project." In 2007, the California Ocean Protection Council (OPC) passed a resolution based on the Plan of Action regarding the prevention of marine debris, and set up a Steering Committee chaired by Coastal Commission Public Education staff to develop an Implementation Strategy. The OPC adopted the Implementation Strategy in 2008.

Since this time, at least 12 different bills have been introduced to the State Legislature that were based on the recommendations of the Implementation Strategy. Public Education staff continues to coordinate with the OPC and other state agencies on the marine debris issue.

In 2006, Governors of Washington, Oregon, and California entered into an agreement to work together on ocean issues of mutual concern, called the West Coast Governors' Agreement on Ocean Health (WCGA). Coastal Commission Public Education staff chaired the Marine Debris Action Coordination Team (MDACT), which was charged with establishing baseline estimates of marine debris and derelict gear along the West Coast and supporting state and federal policies that achieve marine debris reduction goals (see MDACT's strategy at: www.westcoastoceans.org).

To this end, the MD ACT launched the West Coast Marine Debris Database, which can compile historic data from all existing databases as well as accept new data directly, and will help to establish baseline estimates of marine debris and derelict fishing gear. It can be viewed at:

http://debrisdb.westcoastoceans.org

In 2014, the MDACT officially transitioned to a new quasi-independent organization known as the West

Coast Marine Debris Alliance (The Alliance). While still under the auspices of the West Coast Governors' Alliance, the Marine Debris Alliance will work with greater independence than the MDACT, and with a greatly expanded membership. The Alliance is designed to act as the entity that will carry forward the work suggested in the Marine Debris Strategy in the years to come.

Environmental Literacy Task Force

In 2014, the Public Education staff participated in the Environmental Literacy Task Force (ELTF), Superintendent of established bν Instruction Tom Torlackson. The ELTF is tasked with developing an Environmental Literacy Blueprint, which will guide the state in improving students' environmental literacy. environmentally literate citizen has the knowledge, skills, attitudes, motivation, work individually commitment to and collaboratively toward solving current problems and preventing new ones. The task force began meeting in June 2014 and will complete the blueprint by May 2015.

Key Partnerships

Partnerships are essential to the work that the Coastal Commission staff members do. They enable us to leverage our resources and extend the impact of our programs. Some of our partnerships are mentioned in the descriptions of the various programs above; all are listed in Appendix A.

In addition, we coordinate with other agencies conducting environmental education programs by participating in the California Environmental Education Interagency Network (CEEIN). CEEIN is a state government consortium of environmental educators representing departments, boards and commissions of the California Department of Education, California Environmental Protection

Agency, and the Resources Agency of California. We also serve on the Advisory Council to Community Resources for Science.

Other Ways We Reach the Public

A key aspect of the Commission's public education programs is spreading the word about what opportunities are available, and using these same channels to raise public awareness and encourage stewardship. In addition to sending out press releases about upcoming events and other newsworthy activities, here are some other ways we keep the public informed:

WWW.COAST4U.ORG and Social Media

The Commission's web site for its public education programs describes all of the programs, contests, and resources that we offer to the public, including a Spanish language web page. In 2014, the Public Education website received almost 235,800 page views.

The Public Education program uses social media to communicate with the public. We maintain a Facebook page called "The California Coast" with more than 3,570 fans, a Twitter account @TheCACoast with 5,425 followers, a Pinterest Board and an Instagram page. Through these avenues we engage in conversations with members of the public, other organizations and agencies about volunteer opportunities, visiting and enjoying the coast, and ways to protect our coastal resources through everyday activities. As a statewide organization, social media provides us with a way to connect on a personal level with people throughout California and beyond.

Website: www.coast4u.org

Facebook: www.facebook.com/CaliforniaCoast

Twitter: <u>twitter.com/TheCACoast</u>

Instagram: instagram.com/thecaliforniacoast
Pinterest: www.pinterest.com/coast4u/

Environmental Fairs and Events

year, staff attends number environmental fairs and events, where we have an educational booth, hand out materials, and talk to attendees. This year we exhibited our education resources and spoke to 2,125 people at 13 events. Our 2014 list of events included Saint Ignatius Enrichment Fair, Monterey Whale Fest, Mendocino Whale Fests, San Jose State Earth Day, Los Angeles Sanitation Districts Earth Day, Earth Day at Drake High School in San Anselmo, Pacifica Earth Day of Action, San Diego County Fair in Del Mar, California State Fair in Sacramento, State Scientists Day in Sacramento, Beneath the Waves Film Festival in Santa Cruz, Olompali Heritage Day in Marin County, and the Friends of San Leandro Creek Environmental Forum.



CCC Booth at California State Fair in Sacramento

Partner Organizations

Note: If you are aware of an omission or correction, please contact us.

Coastal Cleanup Day

Current Local Coordinators:

Adopt-A-Highway CALTRANS Maintenance

Program

Alameda County Clean Water Program

American River Parkway Foundation

(Sacramento)

Benicia Water Education Program Big

Bear Marina (San Bernardino)

Bridgeport Elementary School (Mono)

Butte Environmental Council Cache Creek Conservancy Calaveras Big Trees State Park

California State Parks

City of Berkeley Shorebird Park Nature Center

City of Fremont

City of Long Beach El Dorado Nature Center

City of Milpitas

City of Oakland Watershed Improvement

Program
City of Pleasanton

COASTWALK

Community Creek Cleanup Action Group

(Redding, Shasta)

County of Orange/OC Parks Volunteer

Services

County of Santa Barbara, Public Works

Department, Resource Recovery & Waste

Management Division

Del Norte Unified School District, Crescent Elk

M.S.

East Bay Regional Park District

ECOSLO

Environmental Health Institute

Explore Ecology

Golden Gate National Parks Conservancy

Heal the Bay (Los Angeles County)

I Love A Clean San Diego

Lake County Department of Water Resources

League to Save Lake Tahoe

Literacy for Environmental Justice

Mendocino Land Trust

Napa Resource Conservation District

Northcoast Environmental Center (Humboldt)

Orange County Coastkeeper

Orange County Volunteer Services

Port of Oakland Premier Mushrooms Restore Our

Sea (Imperial)

San Joaquin County Public Works

San Joaquin River Parkway & Conservation

Trust, Inc.

San Mateo Countywide Water Pollution

Prevention Program

Santa Clara Valley Water District

Save Our Shores (Santa Cruz & Monterey)

Sierra Nevada Conservancy

Silverwood Lake SRA

Solano County RCD

The Watershed Project

Trails 4 All

U.S. Army Corps of Engineers - Bay Model

Visitor Center (Marin County)

UC Merced

U.S. Forest Service Orleans Ranger District

(Siskiyou)

Ventura County Coalition for Coastal & Inland

Waterways

Yuba County Dept. of Environmental Health

Other Coastal Cleanup Day Partners:

California State Parks Foundation

Channel Islands National Marine Sanctuary Gulf of the Farallones National Marine Sanct.

CG Roxane Crystal Geyser Spring Water

Whale Tail Ecoplate

Oracle

Rubio's

Orrick, Herrington & Sutcliffe LLP

Ocean Conservancy

Cordell Banks National Marine Sanctuary Monterey Bay National Marine Sanctuary

Marine Mammal Center

See's Candies

NOAA

California Office of Emergency Services

Whale Tail License Plate

Department of Motor Vehicles

State Coastal Conservancy

Adopt-A-Beach

Ano Nuevo State Reserve

California State Parks

Center for Natural Lands Management

Channel Islands Beach Community Service

District

City of Berkeley Shorebird Park Nature Center

City of Huntington Beach

City of Long Beach El Dorado Nature Center

City of Newport Beach

City of San Leandro

City of San Mateo

City of Santa Barbara, Creeks Division

City of Ventura, Partners in Progress for a

Beautiful Ventura

Coastwalk

East Bay Regional Park District

Eco Warrior Foundation

Heal the Bay

I Love A Clean San Diego

La Conchita Community Organization

Marin County Parks and Open Space

Northcoast Environmental

National Parks Service

Oosurf.com

Pacifica Beach Coalition

Point Reyes National Seashore

Santa Barbara County Parks Department

Santa Cruz County Parks

Save Our Beach

Save Our Shores

Sonoma County Regional Parks

Surfrider Foundation The

Watershed Project

Vandenberg Air Force Base

Ventura County Parks

Boating Clean and Green Campaign

CA Division of Boating and Waterways

CalRecycle

Contra Costa County Public Works

The Bay Foundation

SF Bay Conservation and Development

Commission

Northern CA Marine Association Southern CA Marine Association

Pacific States Oil Spill Prevention Education

Team

Marine Recreation Association
Pacific Inter Yacht Club Association

San Joaquin County Department of Public

Works

Save Our Shores

Southern CA Yachting Association

The US Coast Guard Auxiliary

The US Power Squadrons

The State Water Resources Control Board

The Boat US Foundation

SF Estuary Project

The US Coast Guard Marine Safety Offices

Recreational Boaters of California
CA Port Captains and Harbormasters

Association

CA Department of Fish and Game - OSPR Monterey Bay National Marine Sanctuary

Lake Berryessa Partnership

Marinas and harbors (approximately 20)
Morro Bay National Marine Sanctuary
San Francisco Dept. of the Environment

Seabird Colony Protection Program (National Marine Sanctuaries-Gulf of the Farallones)

Kids' Adopt-A-Beach School Assemblies and Ocean Day Cleanup

Malibu Foundation

I Love A Clean San Diego

Richardson Bay Audubon Center & Sanctuary

Orange County Coastkeeper

Fresno Chaffee Zoo Friends of the Dunes

National Fisheries Conservation Center

Restoration Education

Tides Center

Orange County Parks City of Newport Beach Newport Bay Conservancy Orange County Coastkeeper

Endemic Environmental Services, Inc.

ExplorOcean

Transformative Wellness Coaching

California Department of Fish and Game U.C.C.E. Master Gardeners Program

U.C. Irvine

Society for Conservation Biology, Orange

County Chapter

Institute for Conservation Research and

Education

Coastal Stewardship

Monterey Bay Aquarium

Back to Natives Restoration Benicia Water Education

City of San Mateo

Coastwalk

El Dorado Nature Center

Heal the Bay

Shorebird Nature Center I Love A Clean San Diego

San Joaquin County Public Works

Santa Cruz County Parks

Ventura County Resource Conservation District

Marine Debris Policy and Statewide Coordination

California Ocean Protection Council

CalRecycle

Department of Conservation

Department of Toxic Substances Control

California State Parks

California Department of Public Health

State Water Board

State Coastal Conservancy

California Department of Environmental

Protection

Environmental Protection Agency Region IX

Caltrans

Keep California Beautiful

West Coast Governors' Agreement on Ocean Health Marine Debris Action Coordination Team

Oregon Department of Fish & Wildlife

Washington Department of Natural

Resources

NOAA Marine Debris Program

NOAA Coastal Services Center

Surfrider Foundation

Port of Seattle

Heal the Bay

California Ocean Protection Council

Monterey Bay National Marine Sanctuary Pacific States Marine Fisheries Commission

Northwest Straits Commission

Sea Grant Extension

Stillaguamish Tribe

Sea Doc Society / UC Davis

Oregon Fishermen's Cable Commission

Protect Our Coast and Oceans Tax Check-off Box

Assemblymember Al Muratsuchi Aquarium of the Pacific

Gyro SF ExplorOcean

Heal the Bay Crystal Cove Alliance

I Love A Clean San Diego Save the Bay

Orange County Coastkeeper Community Resources for Science

Save Our Shores CREEC Network
San Mateo County Environmental Health Coastwalk California

Friends of the Dunes 5 Gyres

Thank You Ocean Surfrider Foundation
Pt. Reyes National Seashore Assn Ocean Institute

Coastkeeper Alliance Back Bay Science Center (Dept. of Fish and Wildlife)
Environment California Institute for Conservation Research and Education

American River Parkway

Newport Bay Conservancy

Sierra Nevada Conservancy

Muth Center (Orange County)

O'Neill Sea Odyssey Malibu Foundation

Fresno Chaffee Zoo City of Newport Beach (Marine Education Program)

Monterey Bay Aquarium
The Watershed Project
California Audubon
SF Estuary Partnership
Golden Gate Audubon
Solano Resource Conservation District
Richardson Bay Audobon

Penny Elia Contra Costa County Watershed Program

Birch Aquarium Humboldt BayKeeper

Warner Chabot Northcoast Environmental Center

Aquarium of the Bay

Appendix B – Recent Whale Tail Grants

	Targeted Grants		Competitive Grants	
2012/2013 \$798,000 Total Funds avail. for targeted grants: \$369,540 Funds avail. for competitive grants: \$428,460	Foundation of California State University Monterey Bay for Camp SEA Lab \$30,000 Adopt-A-Beach School Assembly Program and Kids' Cleanup Program \$95,600 Heal the Bay Adopt-A-Beach Program \$30,000 Love A Clean San Diego Adopt-A-Beach Program \$27,000 Tides Center for School-Based Marine Education Program \$88,000 Tides Center for Community-Based Wetland	Berkshire Elementary School for sixth-graders in Bakersfield to attend Camp KEE day outdoor science school in San Luis Obispo County \$ Fresno Chaffee Zoo for a cohort of teens to interact with zoo visitors and promote conservation \$ Friends of the Dunes to provide coastal education activities in Manila, Humboldt Montessori students, who will then help educate the public \$ Mayfair Middle School to add hands-on labs and other educational activities to a science elective in Lakewood, Los Angeles County \$ Monterey Bay Aquarium for the Splash Zone/Head Start Discovery program for	633,310 EP, a four- 8,800 te marine 6,400 County for 614,162 a marine 65,230	
Requests received: 128 totaling \$2,591,762	Beach Wheelchair Purchases	\$80,000 \$18,940	Mountains Recreation and Conservation Authority for developing an oceans un Junior Rangers Program for urban youth from the Los Angeles area \$ Ohlone Elementary School in Watsonville for a new wetlands unit for third-grade	59,993
¥2,331,702			Point Reyes National Seashore Association for seashore science field education	
			San Diego Junior Lifeguard Foundation for a summer program teaching ocean so	-
			Smith River Alliance for the Tolowa Dunes Stewards program to restore dune ha Norte Co. and teach Native American and other youth participants	bitat in Del
			YMCA Point Bonita for "My Home, My Community, My World," a science educa	
			California Native Plant Society for the "California Coastal Rare Plant Treasure Hu	•

Appendix B

Fiscal Year	Targeted Grants	Competitive Grants	
2012/2013 (continued)		Concerned Resource and Environmental Workers ("the CREW") to employ to restore habitat along the lower Ventura River	young adults \$9,800
(commutation)		Reef Check Foundation to train volunteer divers to collect data on underwate the California coast, especially in Marine Protected Areas	er species off \$25,000
		SPAWN, a project of Turtle Island Restoration Network to develop a Coast 8 module for the California Naturalist Program	Ocean \$9,880
		Seymour Marine Discovery Center in Santa Cruz to increase its capacity to se speaking audiences	erve Spanish- \$9,370
		Southwest Wetlands Interpretive Association for formalizing the training for volunteer docents at the Tijuana Estuary	its long-term \$25,000
		UC Santa Cruz Arboretum for engaging community members in restoring hab threatened red-legged frog	oitat for the \$10,500
		University of Redlands for developing a mobile app and website for people to they spot marine mammals while learning more about them	o record where \$33,272
		Coastwalk California for expanding the Adopt-A-Beach program in Sonoma of adding educational components	County and \$9,779
		Save Our Shores for launching the Beachkeepers program in Santa Cruz Coun installing trash bag holders so beach visitors can clean up on their own	sty and \$25,610
		The Watershed Project in Richmond for strengthening the Contra Costa Cour Beach program and incorporating on-the-water kayak cleanups	nty Adopt-A- \$17,313
		Navarro-by-the-Sea Center for Riparian & Estuarine Research for installing in panels at the Navarro River mouth in Mendocino County	nterpretive \$40,300

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	Targeted Grants	Competitive Grants	
2013/2014 \$816,000	Foundation of California State University Monterey Bay for Camp SEA Lab \$15,000	Ocean Discovery Institute for sixth-graders from City Heights, San Diego to le carbon dioxide emissions, climate change, and renewable resources	earn about \$22,407
Funds avail. for targeted grants:	Adopt-A-Beach School Assembly and Kids' Cleanup Program \$100,314	Youth Outdoors! for teens from southern San Diego County to visit the Tijual learn about the area and restore habitat	na Estuary to \$5,500
	Heal the Bay Adopt-A-Beach Program \$30,000	San Elijo Lagoon Conservancy for a 2-year wetlands and watersheds program elementary students in Escondido and Vista	for \$18,272
\$423,874	I Love A Clean San Diego Adopt-A-Beach Program \$29,550	ExplorOcean for underserved students in the KidWorks program in Santa Ana about the principles of ocean literacy and attend camp in Newport Beach	to learn \$35,000
Funds avail. for competitive	Tides Center for School-Based Marine Education Program \$99,000	Gray Whale Foundation for whale observation research trips and lessons about whales and the marine environment for southern Orange County youth	out gray \$20,000
grants: \$392,126	Tides Center for Community-Based Wetland Restoration and Education \$106,000	Beach Ecology Coalition for community volunteers to measure the ecologica urban sandy beaches in southern California	health of \$9,915
Requests	Earth Alert for the "Heroes of the Coast" project \$9,360	Camino Nuevo Charter Academy , in the Westlake neighborhood of Los Ange seventh-grade students to visit and research Santa Catalina Island	les, for \$6,000
_	California State Parks Foundation for a high school curriculum on coastal science and policy	City2 Sea for teens at four underserved high schools in the Los Angeles area about ocean acidification and carbon footprints on boating expeditions	o learn \$9,995
	\$34,650	Cachuma Resource Conservation District for watershed stewardship educati 5 th - graders in Guadalupe, Santa Barbara County	on for \$9,964
		UC Santa Barbara, Marine Science Institute for water quality education and restoration of the Ormond Beach wetlands in Ventura County	community \$28,000
		Return of the Natives for families in Salinas to learn how litter gets washed do Monterey Bay, clean a local creek, and install native plants on sand dunes	own to \$20,500
		Edventure More for elementary students at underserved Oakland public school about watersheds and their own connection with the ocean	ools to learn \$9,750

Appendix B

2013/2014 (continued)	Small Schools for Equity for biology class field trips and field supplies for high school students at San Francisco's June Jordan School for Equity \$9,200
	California Exposition & State Fair for a large exhibition at the 2014 State Fair about the coast and ocean and ocean stewardship \$40,000
	Sierra Streams Institute in Nevada City for a year-long environmental education program focusing on migrating salmon and the effects of climate change \$9,573
	Noyo Center for Science and Education in Fort Bragg for marine mammal education and science activities featuring the reconstructed skeleton of a blue whale \$35,000
	Mattole Restoration Council for a partnership of five organizations to provide coastal and watershed education in the remote Mattole Valley \$25,510
	Northcoast Environmental Center for leading a number of public education programs in Humboldt County focused on clean beaches and watersheds \$30,320
	Rural Human Services for students to raise salmon and steelhead trout in Del Norte County classrooms and then release them into the wild \$9,997
	Clean Water Fund for educating the public about how most marine debris is disposable food and beverage containers and the benefits of reusable items \$17,850
	Ocean Communicators Alliance for creating handbooks and providing training to help docents teach the public about California Marine Protected Areas \$9,708
	The Ocean Foundation for the "Squids-4-Kids" program providing frozen giant squid for dissections (and related educational content) throughout California \$9,665