

****DRAFT****

Marine Debris: A Snapshot of Work in California

**Ocean Protection Council
June 13, 2013**



Contributing Agencies and Organizations



Contributing Agencies and Organizations

California State Agencies



The California Ocean Protection Council's (OPC) mission is to ensure that California maintains healthy, resilient, and productive ocean and coastal ecosystems for the benefit of current and future generations. www.opc.ca.gov



CalRecycle's vision is to inspire and challenge Californians to achieve the highest waste reduction, recycling and reuse goals in the nation. Through innovation and creativity, sound advancements in science and technology, and efficient programs that improve economic vitality and environmental sustainability, we build a stronger California. <http://www.calrecycle.ca.gov/>



The mission of the Coastal Commission is to protect, conserve, restore, and enhance environmental and human-based resources of the California coast and ocean for environmentally sustainable and prudent use by current and future generations. <http://www.coastal.ca.gov/>



The State Water Board's mission is to preserve, enhance and restore the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations. <http://www.waterboards.ca.gov/>

Non-Governmental Organizations



Heal the Bay's mission is to make southern California's coastal waters and watersheds, including Santa Monica Bay, safe, healthy and clean. <http://www.healthebay.org/>



The Ocean Conservancy's goal is to bring people together to find solutions for our water planet. We educate and empower people to defend not only the ocean and its wildlife, but also the millions who earn their living from the ocean. <http://www.oceanconservancy.org/>



Surfrider's mission is the protection and enjoyment of oceans, waves and beaches through a powerful activist network. <http://surfrider.org/>



The Natural Resources Defense Council's mission is to safeguard the Earth: its people, its plants and animals and the natural systems on which all life depends. <http://www.nrdc.org/>

Clean Seas Coalition

The purpose of the Coalition is to act as an informal clearinghouse for diverse efforts aimed at making the recommendations of the Ocean Protection Council relating to marine debris a reality, and to increase public awareness of the serious environmental impacts of disposing of trash and plastic waste in the Ocean. <http://www.cleanseascoalition.org/>



The California Coastkeeper Alliance's mission is to unite 12 local Waterkeeper programs to fight for swimmable, fishable and drinkable waters for California communities and ecosystems. <http://www.cacoastkeeper.org/>

INTRODUCTION

Marine debris is a problem of international scale, as demonstrated by the North Pacific Subtropical Gyre; however, it is also an issue that needs to be addressed at a local level. Marine debris pollutes our beaches, creates a hazard for humans, entangles and poisons wildlife, and imposes costs on local municipalities through collection efforts and lost tourism revenue.

The Ocean Protection Council (OPC) identifies marine debris as a priority issues and will continue its work to coordinate efforts to reduce marine debris by leading collaborative partnerships, supporting implementation of past recommendations, funding targeted studies to inform management and policy debates, and sharing that information with decision makers.

This document serves as an overview of marine debris related work from a variety of actors within California. The snap shot includes current actions that state agencies and non-governmental organizations are taking to address the marine debris problem. This information provides the OPC with a better understanding of ongoing projects in California and will help identify gaps in order to better focus future efforts.

Thus far, state agency participants in the preparation of this report include; Ocean Protection Council, CalRecycle, California Coastal Commission and Water Resource Control Boards. Non-governmental organizations (NGOs) participants include: Heal the Bay, Ocean Conservancy, Clean Seas Coalition, Surfrider Foundation, Natural Resources Defense Council and California Coastkeeper Alliance.

****This draft document is a compilation of existing marine debris programs and projects, and the OPC acknowledges that it is not comprehensive. If you have questions, comments or would like to contribute to this document, please send your feedback via e-mail to Amanda Sackett, Amanda.sackett@resources.ca.gov | 916-653-9486. Comments are due by 5pm PST on June 21st, 2013.**

DEBRIS FROM LAND

I. State Agencies

Ocean Protection Council (OPC)

- The OPC convenes a Marine Debris Steering Committee which is comprised of 17 state and federal agencies and the four marine sanctuaries. The Committee agreed that a top priority was to increase communication and awareness among the public regarding Japan Tsunami Marine Debris (JTMD), and that OPC would take the lead on coordinating messaging and developing resources through the [Thank You Ocean](#) public awareness campaign.
- In 2011, the Ocean Protection Council commissioned an independent synthesis of scientific information as a place-marker for the current state of research on plastic debris in California's marine environment. The [California Ocean Science Trust](#) partnered

with [USC Sea Grant](#), to produce the report, : [Plastic Debris in the California Marine Ecosystem: A Summary of Current Research, Solution Efforts and Data Gaps](#).

- In 2011, an OPC-funded project on cigarette butt waste in beaches was completed. This project was led by Save Our Shores (SOS) in the cities of Santa Cruz and Capitola, CA, as a response to a lack of decrease in cigarette butt waste at beaches with smoking bans. This study demonstrated that smoking bans require corresponding public education and ongoing waste collection and removal to ensure efficacy.
- In April 2009, the OPC issued a [Resolution Support for Extended Producer Responsibility Programs](#). This resolution resolved to target the reduction of packaging to reduce the environmental impacts of products, reduce the costs to local government of handling packaging waste, supports the concept of Extended Producer Responsibility and recommends legislation that implements the California Integrated Waste Management Board framework.
- In November 2008, staff brought to the Council an [Implementation Strategy for the California Ocean Protection Council Resolution to Reduce and Prevent Ocean Litter](#). Implementation Strategy contained the goal to reduce the amount of litter that accumulates in the ocean through the following objectives;
 - Reduce single-use plastic packaging and promote sustainable alternatives;
 - Prevent and control litter and plastic debris;
 - Cleanup and remove litter; and
 - Coordinate efforts with other jurisdictions in the Pacific region.
- In February 2007 the OPC adopted the [Resolution of the California Ocean Protection Council On Reducing and Preventing Marine Debris](#). This resolution resolves to pursue a wide-range of recommendations aimed at reducing and preventing marine debris.

CalRecycle

- Provides assistance to stakeholders to develop/strengthen recycling, source reduction, composting programs.
- Assists stakeholders with identifying where receptacles are most needed and ensuring they are in place and maintained so that the public has a resource to dispose or recycle materials instead of littering.
- Provides grants and resources to local governments for education and outreach and purchase of recycling bins.
- Ensures that landfills, transfer stations, material recovery facilities, non-disposal facilities are operating in compliance. Promotes the prevention of debris from facilities through the implementation of best management practices such as barrier fencing.
- Ensures household hazardous waste is properly disposed to prevent illegal dumping of materials in drains that lead to the ocean.
- Continues to work with stakeholders on AB 2449 regarding plastic bag recycling.
- Staff at CalRecycle continue to interact with Zone Administrators from Recycling Market Development Zones to site and expand businesses in California that will recycle materials, such as plastics.

California Coastal Commission (CCC)

- This year marks the California Coastal Commission's 29th California Coastal Cleanup Day, the state's largest one-day volunteer event.
<http://www.coastal.ca.gov/publiced/ccd/ccd.html>
- The CCC also directs the year-round Adopt-A-Beach Program, in which volunteers can clean a beach or shoreline in any of the 15 coastal counties and select inland counties. Volunteers must commit to three cleanups per year to be considered an official "adopter," although student groups are only required to clean once a year. One-time volunteers are welcome at any public cleanup.
<http://www.coastal.ca.gov/publiced/aab/aab1.html>
- Through a grant-making program, the CCC supports the Kids Adopt-A-Beach Day, during which students from elementary schools in several (usually 7 or so) communities up and down the coast participate in beach cleanups and aerial artwork. These children have all participated in a school assembly focused on marine debris prior to their participation in the cleanup. <http://www.oceanday.net/>

State Water Resources Control Board (State Water Board)

- The California State Water Resources Control Board is considering the adoption of Amendments for Trash in the California Ocean Plan and the Enclosed Bays, Estuaries and Inland Surface Waters (Trash Amendments). The proposed Trash Amendments will include five elements: (1) Water Quality Objective, (2) Prohibition of Discharge, (3) Implementation, (4) Compliance Schedule, and (5) Monitoring. Water Board staff will release a draft Staff Report and Substitute Environmental Document (SED) for public comment. Following this formal release, the State Water Board will hold a public workshop(s) and a public hearing. At this time, staff proposes the State Water Board will consider adoption of the Trash Amendments in Winter 2013.
http://www.waterboards.ca.gov/water_issues/programs/trash/index.shtml
- Assembly Bill (AB) 258, which became effective January 1, 2008, adds Chapter 5.2 to Division 7 of the California Water Code, section 13367, entitled "Preproduction Plastic Debris Program." This section of the Water Code applies to facilities in California that manufacture, handle, or transport preproduction plastics, the raw materials used to produce plastic products. Regional and State Water Board staff conduct compliance inspections of preproduction plastic manufacturing, handling, and transport facilities enrolled under California's Industrial General Permit (IGP) for storm water discharges. Collectively these inspections are helping to develop cost-effective regulatory approaches for addressing this pollution problem.
http://www.waterboards.ca.gov/water_issues/programs/stormwater/plasticdebris.shtml
- In California, 27 water bodies have approved total maximum daily loads (TMDLs) for impairments due to trash. One of the trash reduction mechanisms is the installation of the full capture devices into all catch basins. By keeping trash from entering the storm drains, this reduces the amount of trash that enters a surface water body and the ocean or beach.
<http://www.epa.gov/waters/tmdl/docs/34863-RevisedStaffReport2v2.pdf>

- The San Francisco Bay Region (Region 2) uses provisions in the San Francisco Bay Area Municipal Regional Stormwater NPDES Permit (MRP) to address trash. The MRP prohibits the discharge of “rubbish, refuse, bark, sawdust, or other solid wastes into surface waters or at any place where they would contact or where they would be eventually transported to surface waters, including flood plain areas.” The trash-related receiving water limitations identified in the MRP do not place numeric targets on trash but use narrative language to prohibit discharges.
http://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/phase1r2_2009_0074.pdf

II. Non-governmental Organizations

Heal The Bay

- In 2012, Heal the Bay conducted 632 beach clean-ups at LA beaches, with over 36,400 volunteers.
- Currently working on statewide marine debris prevention legislation (e.g. EPR (AB 521), plastic bag bans (SB 405 and AB 158), fast food container (SB 529), and opposing legislation that would countervail marine debris prevention efforts.
- Participating in development of State Water Board trash policy through Public Advisory Group and advocacy efforts.
- Assisted with development and implementation of trash TMDLs in Los Angeles area.
- Working on local and tracking adoption of single-use bag policies (currently 72 municipalities in CA with a single-use bag policy under 51 ordinances) and policies that require more sustainable alternatives to foam food containers.

The Ocean Conservancy

- Convening an academic working group at the National Center for Ecological Analysis and Synthesis (NCEAS) at UCSB, to quantify the annual input of plastics entering the ocean globally, on an annual basis.
- Conducting brand characterization of marine debris items found on U.S. beaches.
- Modeling historical debris data to identify whether beaches are “sources” or “sinks” for marine debris. Modeling has been successfully completed on small scale but looking to expand.
- Rolling out new International Coastal Cleanup data form and supporting materials that apply material-specific classification to debris items.

Clean Sea Coalition

- Facilitates the Clean Seas Coalition: a nationwide coalition of NGOs, businesses, academics, government representatives and individuals working to reduce plastic in our oceans and waterways.
- Promotes source reduction of plastics through advocacy, regulation and legislation: at the local, state, national and international levels.

- Advocates for CA state bills on: smoking ban; polystyrene ban; plastic bag bans; Extended Producer Responsibility; and other packaging bills (i.e. Leash the Lid, etc.)
- Assists in the development of and supports the CA State Trash Policy
- Supports the implementation of ban ordinances at the local level, in CA and other states and countries.
- Participates in legal defense of source reduction ordinances.
- Participates in development of local, state, national and international policy initiatives about marine debris, sustainable packaging, EPR, etc.
- Facilitates the reporting and compiling of information critical to source reduction legislation and ordinances; information such as source identification of trash, trash characterization, environmental and health impacts of plastic on humans and other species, etc.

Surfrider Foundation

- Rise Above Plastics (RAP) program's mission to reduce the impacts of plastics in the marine environment by raising awareness and advocating for a reduction of single-use plastics. This program is most successful in bag and EPS foam bans at the local level. <http://www.surfrider.org/programs/entry/rise-above-plastics>
- The Hold On To Your Butt program is designed to keep cigarette butts off the beach through smoking bans, awareness, and receptacles.

Natural Resources Defense Council

- Helped negotiate and defend in court the Los Angeles Trash TMDLs.
- For 22 years have produced Testing the Waters, an analysis of beach water quality at key recreational beaches around the country: <http://www.nrdc.org/water/oceans/ttw/>. The 2013 report will include a feature on trash as a pollutant of concern off California's beaches.
- Since 1990's, NRDC has advanced improved waste management, recycling and extended producer responsibility laws and policies in a variety of states to address range of problematic waste products. The organization also defends such laws from attack in court.
- Developed and continuing to refine a unique producer responsibility program to address marine plastic pollution. This program was introduced in 2013 in AB 521 (Stone and Hueso).
- Cultivating ongoing information exchange at the international level, between experts, government representatives and stakeholder through a web based platform (www.stopplasticpollution.org) and through engagement with the Convention on Biological Diversity, the Global Environment Facility, and at the United Nation (UN) Conference on Sustainability in Rio de Janeiro in 2012. Educated and engaged policymakers from around the world about the problem of marine debris and about effective solutions and helped achieve a final agreement and commitment to address marine pollution, especially plastics, from land-based sources.

- NRDC is a lead member of the UN Environment Programme’s Marine Litter Partnership, and hosted a December 2012 meeting of experts in marine litter source reduction law, policy and market innovations. Future meetings of this group to focus on extended producer responsibility are under development.
- Assist colleague organizations, e.g. in the Clean Seas Coalition, by supporting California State and local legislation to control some of the most problematic forms of plastic waste (e.g., single-use plastic bags and polystyrene take-out containers).

California Coastkeeper Alliance

- Works to strengthen the State Water Board trash policy as a Public Advisory Group member, and solicit input from local stakeholders.
- Coordinates with the Clean Seas Coalition to support statewide source control legislation, including SB 405 and AB 158 (plastic bag bans), AB 521 (marine plastic pollution producer responsibility), and SB 529 (fast food packaging reduction).
- Advocates for the State Water Board to implement initial trash reduction programs in the Phase II Small MS4 General Stormwater Permit (MS4 Phase II), and for the State Water Board to re-open its municipal stormwater permits (MS4 Phase II and Caltrans MS4 permits) to insert the Board’s trash policy requirements once adopted.
- Identifies waterways impaired by trash, and collecting and submitting data and photos to support waterways’ inclusion on the State Water Board’s 2012 303(d) List of Severely Polluted Waters.
- California Waterkeeper groups are actively monitoring critical trash “hotspots” throughout the state, with several Waterkeepers producing Surface Water Ambient Monitoring Program (SWAMP)-compatible data. Along with Rapid Trash Assessment methodology for monitoring trash, several California Waterkeepers are also conducting micro-plastics and open-ocean trawl monitoring.
- Local California Waterkeepers are conducting regular beach cleanup events throughout the state and are using the events to conduct trash source identification.

DEBRIS FROM OCEAN

I. State Agencies

Ocean Protection Council (OPC)

- In 2005, the Ocean Protection Council funded the SeaDoc society to implement the California Derelict Fishing Gear Removal Pilot Project. During the pilot project SeaDoc society removed nearly 10 tons of derelict fishing gear from around Channel Islands and identified 733 lost fishing gear targets. SeaDoc Society used the success of this pilot project to launch the [California Lost Gear Recovery Project](#) in 2006.

CalRecycle

- CalRecycle provides assistance to stakeholders with piers or boardwalks on waste reduction and recycling to reduce the amount of debris discarded into the ocean

California Coastal Commission (CCC)

- Both the Coastal Cleanup Day Program and Adopt-A-Beach Program deal with debris that washes up on shore from the ocean, as well as debris from land-based sources.
- In 2013, the CCC launched a new Japan Tsunami Marine Debris Cleanup Program in all 15 coastal counties, seeking to gather information about and remove debris that originated with the 2011 tsunami in Japan. <http://www.coastal.ca.gov/publiced/jtmd/jtmd.html>

State Water Resource Control Board

- The California Ocean Plan specifies that wastes discharged to the ocean must be essentially free of floatable, will become floatable or settleable material or substances. The California Ocean Plan further designates 34 Areas of Special Biological Significance (ASBS). Waste discharges are prohibited into an ASBS. http://www.waterboards.ca.gov/water_issues/programs/ocean/index.shtml

II. Non-governmental Organizations

Heal the Bay

- Track efforts if we hear of a dumping issue.

Ocean Conservancy

- National Center for Ecological Analysis and Synthesis (NCEAS) working group is identifying data sources for which ocean-based debris estimates can be generated (e.g., fishing, cruise ships) and an estimate of global “ocean-derived” plastic debris can be calculated.

OUTREACH AND MESSAGING

I. State Agencies

Ocean Protection Council (OPC)

- The Ocean Protection Council in partnership with the National Oceanic and Atmospheric Administration (NOAA) runs a statewide outreach campaign, Thank You Ocean. Thank You Ocean has identified marine debris as one of the top four largest threats to the ocean. The Thank You Ocean website features information about marine debris, Japanese tsunami marine debris as well as action items for the public to reduce their personal impact on marine debris. Thank You Ocean also has featured marine debris on several of their bimonthly podcast productions. With over 14,000 “likes” on Facebook and 7,000 followers on Twitter, the campaign also uses its strong Facebook and Twitter presence to disseminate information about marine debris
<http://www.thankyouocean.org/threats/marine-debris/>
<https://www.facebook.com/ThankYouOcean>
<https://twitter.com/ThankYouOcean>

CalRecycle

- CalRecycle utilizes the majority of forms of social media for programs related to disposal, recycling, technology, composting and legislation.
- CalRecycle staff provides education and outreach to stakeholders on ways to reduce illegal dumping, littering and recycling programs located at beaches.

California Coastal Commission (CCC)

- The Coastal Cleanup Day, Adopt-A-Beach, and to some degree, the Japanese Tsunami Marine Debris (JTMD) Cleanup programs all have outreach and messaging components
- The CCC makes an especially big push around outreach and messaging for Coastal Cleanup Day, which includes event posters, postcards, t-shirts, web pages, and social media. You can access our Facebook page at www.facebook.com/CaliforniaCoast and our Twitter page at twitter.com/cleanupday

State Water Resource Control Board (State Water Board)

- The State Water Board released a short Trash Video on the September 13, 2012. This video highlights the issue and challenges of trash throughout state waters (i.e. rivers, lakes, and ocean) and details the role of the State and Regional Water Boards in finding a solution.
http://www.waterboards.ca.gov/videos/video_pages/beaches.html

II. Non-governmental Organizations

Heal the Bay

- Delivers presentations about marine debris prevention and what people can do in their daily lives at beach clean-ups, speakers bureau presentations (Heal the Bay volunteer corps of 50 speakers give multi-media presentations to over 40,000 people annually), youth summits (4 annually), and other outreach events
- Conducts outreach through social media via Twitter (>31,000 followers), Facebook (>9,500 likes), and Instagram (2450 followers), as well as Majestic Plastic Bag YouTube video. We may be hosting some Twitter parties on marine debris this year, contingent upon funding.
- Runs the Los Angeles International Coastal Clean-up Day which includes over 60 sites
- Features a plastic pollution exhibit at our Santa Monica Pier Aquarium (more than 85,000 visitors annually)
- Hosts an interactive Heal the Bay marine debris database (used with beach clean-up groups and schools): <http://www.healthebay.org/about-bay/pollution-101/marine-debris-database>

Ocean Conservancy

- Provides an education program for teachers, volunteer organizations, etc. to be used prior to, during, and following cleanup events in order to build a holistic understanding about the issue of ocean trash.

- Runs a social media campaign on plastics as a disruption to the natural order of things, emphasizing the inhumanity of plastics in the ocean.

Surfrider Foundation

- The Surfrider Foundation maintains a website, Facebook, Twitter and Blog (<http://www.surfrider.org/coastal-blog/c/rise-above-plastics>) accounts.
- Conducts grassroots outreach through our 84 local Chapters.
- Surfrider holds “Teach the Teacher” courses so that the issues can spread through the community through word of mouth.

Natural Resources Defense Council (NRDC)

- NRDC has 1.4 million members and activists nationwide who periodically receive information about our work on marine plastic pollution. We also send action alerts and information to our ½ million California members and activists.
- Created and are continuing to update a coalition website for groups interested in supporting producer responsibility for marine plastic pollution at www.stopplasticpollution.org
- Produced a short film to explain producer responsibility for marine plastic pollution: <http://youtu.be/Lkuek9RqjXE>

California Coastkeeper Alliance

- Conducts outreach to local organizations on the development of the State Water Board’s trash policy around coastal cleanup day and other beach cleanup events. We collect and use beach cleanup day statistics and photos in advocacy to the State Water Board for a strong trash policy.
- Educates media and the public on the content and State Water Board process to develop a statewide trash policy. Developed a briefer to summarize the trash policy components, describe its impact to municipalities, and relation to bag bans and other source reduction efforts.
- Works with California Waterkeepers to provide information to local media outlets on trash impacts to local waterways and tips on how to reduce trash when visiting outdoor areas (eg. Los Angeles Waterkeeper’s 10 minute trash cleanup).
- Encourages the public to report marine debris and other sources of pollution via the *Swim Guide* smartphone application and local Waterkeeper hotlines.

EMERGING RESEARCH AND RESEARCH NEEDS

The Ocean Protection Council asked what were specific priority research needs pertaining participating agencies and organizations as well as overarching research needs.

I. State Agencies

State Water Resource Control Board (State Water Board)

- Quantification of impacts of trash on beneficial uses.

- Protocols for monitoring trash reduction.
- Quantification of chemical bioaccumulation in the food chain from trash materials.
- Quantification of economic benefits from trash reduction in a municipality.

II. Non-governmental Organizations

Heal the Bay

- Promotion of recent US EPA's recent economic research which highlights the costs of marine debris, as well as NOAA's research on this issue.
- Cost-benefit analyses comparing single-use products (e.g. water bottles, plastic bags, coffee cups) to reusable alternatives – sort of like a life-cycle assessment comparison.
- Cost analysis of contamination of the recycling stream by biodegradable products.
- Analysis of cost savings to businesses in communities with carryout bag reduction policies.
- Market evaluation of the green job potential of shifting towards reusable items in place of single-use alternatives (e.g. bags, water bottles, coffee mugs, etc.).
- Additional analysis of the ability for compostable/biodegradable plastics (e.g. Metabolix Mirel) to breakdown in aquatic environments, and toxicological analysis of the byproducts from any breakdown that occurs.
- Additional analysis of the bioavailability of toxins associated with plastic marine pollution (plastic additives and chemicals absorbed to plastic marine debris) to wildlife.
- Bioaccumulation studies of toxins associated with plastic marine pollution (plastic additives and chemicals absorbed to plastic marine debris) in marine life.

Ocean Conservancy

- Identify what the actual entry points of debris into the marine environment are. Moving beyond ambiguous terms and “storm water” source, and identifying actual pathways for which prevention, not cleanup, can be implemented.
- Toxicity of plastics/contaminants in seafood.

Clean Seas Coalition

- Need for more information and NGO understanding about bioplastics.
- Need to gather more information and data on the effectiveness of the implementation of source reduction ordinances.

Surfrider Foundation

- Costs of plastic pollution on local economies.
- Effects of plastic pollution on marine environment, including marine animals.
- Need to refute plastics industry arguments about the safety of plastic bags and dangers of reusable bags.

California Coastkeeper Alliance

- Identify what types of products are showing up in rivers, shorelines, and on beaches. Identify the source of these products. Identify the primary sources of micro-plastic debris.

- Assess the percentage of the plastic industry in full compliance with Operation Clean Sweep and determine what practices are effective during storm events, and if there are any plastics facilities implementing those practices successfully.
- Analyze the prevalence of debris in near shore fauna.
- Additional research on the extent and magnitude of plastic debris consumed by coastal fishes.
- Analyze the impacts of plastic pollution on benthic communities.
- Determine the effects of bioaccumulation of toxins in marine species due to plastic pollution in the marine environment.
- Assess the economic impacts of marine debris on our beaches and in our waterways. Determine the economic cost to cleanup marine debris from our storm drains, beaches, and waterways.
- Identify the composition of plastic marine debris to determine if it has changed off the California coast over the years.

REGIONAL COORDINATION EFFORTS

Contributing agencies and organizations identified both statewide and West Coast regional coordination efforts.

I. State Agencies

Ocean Protection Council (OPC)

- Staff at the OPC play the role of liaison between the Executive Committee and Marine Debris Action Coordination Team through the West Coast Governors Alliance on Ocean Health. The Executive Committee is in the process of approving the marine debris strategy which is a framework to reduce the amount and impact of marine debris through leveraging existing resources and expertise within the three states and the federal government. Also heavily involved with the development of a regional marine debris database: <http://debris-db.westcoastoceans.org/>
- Participates in the Pacific Coast Collaborative to address issues related to marine debris, including Japan Tsunami marine debris: <http://www.pacificcoastcollaborative.org/priorities/resource/Pages/ResourceConservation.aspx>

California Coastal Commission (CCC)

- CCC staff chairs the West Coast Governors' Alliance Marine Debris Action Coordination Team, which is developing a strategy for addressing marine debris along the entire West Coast, among other deliverables. <http://www.westcoastoceans.org/index.cfm?content.display&pageID=81>
- CCC staff also participates in the California Ocean Protection Council's Marine Debris Steering Committee. <http://www.opc.ca.gov/>

State Water Resource Control Board (State Water Board)

- The State Water Board is part of the Bight '13 Debris Assessment Regional Monitoring Group. This group is tasked to assess trash and marine debris within the Southern California Bight.
- The State Water Board partnered with the Southern California Coastal Water Research Project (SCCWRP) and CSU Fullerton from 2009-2012 quantify the amount of plastic pellets on beaches with two main objectives. The first objective was to provide baseline information on the distribution and amount of plastic pellets on beaches throughout the state of California. The second objective was to conduct an intensified study in areas the pellets were found in from the baseline study to provide more detailed information on the distribution and amount of pellets in these areas.
<http://www.sccwrp.org/ResearchAreas/MarineDebris/DebrisOnBeaches/PlasticPelletsOnBeaches.aspx>

II. Non-governmental Organizations

Heal the Bay

- Participates in the Clean Seas Coalition: <http://www.cleanseascoalition.org/>
- Participates in West Coast Governors Alliance Marine Debris Action Team: <http://www.westcoastoceans.org/index.cfm?fuseaction=content.display&pageID=81>
 - Works on WCGA development of a west coast marine debris database
- Conducts surveys on two local LA beaches (Carbon Beach, Malibu and Malaga Cove, Palos Verdes) as part of the NOAA Japanese Tsunami Marine Debris Baseline Monitoring Surveys: <http://marinedebris.noaa.gov/tsunamidebris/monitoring.html>

Ocean Conservancy

- Collaborates with existing volunteer conservation organizations (e.g., sea turtle volunteer groups) to maximize resources and conduct debris monitoring in conjunction with existing monitoring efforts. Analyzes data to estimate probability of interactions between animals and marine debris

Clean Seas Coalition

- Generally, participates in international policy initiatives and/or legislative review.
- Advocates for regional efforts to incorporate target reductions.

Surfrider Foundation

- Participates in the Clean Seas Coalition.
- Participates in the West Coast Governors Alliance on Ocean Health (Angela Howe is a member of the Marine Debris Action Coordination Team).
- Works with Coastal Commission on tsunami debris clean ups and Coastal Clean Up Day; also beginning to coordinate with NOAA more.

Natural Resources Defense Council (NRDC)

- Tracks and supports the work of the West Coast Governors Alliance on Ocean Health Marine Debris Action Coordination Team.

California Coastkeeper Alliance

- Participates in the Clean Seas Coalition.
- Collaborates with California Waterkeepers to develop and participate in the Southern California Coastal Water Research Project's (SCCWRP) 2013 Bight Regional Monitoring Program to conduct regional debris monitoring in conjunction with existing monitoring efforts. Several Southern California Waterkeeper groups serve on the Bight debris committee to identify sites for marine debris monitoring, and mobilize volunteers and partners to conduct the monitoring. For example, San Diego Coastkeeper will collect data from more than 30 sites for ingestion analysis and tissue contaminant transfer.
- Works with California Waterkeepers to develop uniform data collection methods and forms so that local cleanup and volunteer monitoring efforts can be used to determine regional trends.

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