Heal the Bay

winter
2009

the newsletter of Heal the Bay volume 23 number 1 healthebay.org

currents

THE RIPPLE EFFECT

SCIENCE, POLICY, AND PEOPLE WORKING TOGETHER

INSIDE: Sensible Water Reuse • Marine Protected Areas • Low Impact Development

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COVER ART: iSTOCK

Heal the Bay is a nonprofit environmental organization dedicated to making Southern California coastal waters and watersheds, including Santa Monica Bay, safe, healthy and clean. We use research, education, community action and advocacy to pursue our mission.

GRAPHIC DESIGN ● MICHAEL KELLNER ● KellnerDesign ● *www.KellnerBookDesign.com*

Heal the Bay

Give and Take

An encouraging step to end the dysfunctional management of state water supplies

In February, the State Water Board finally adopted a comprehensive water recycling policy that the state desperately needs to heed. After five months of intense negotiations, a coalition of water supply agencies, water recyclers, sewage treatment agencies, the City of L.A. and environmental groups, including Heal the Bay, wrote the policy in response to a draft effort completed by the Water Board that was universally opposed. Since the coalition draft was completed, the State Board provided minor modifications and the policy was approved.

Implementation of the policy lies in the hands of the Water Board, but it is critical for the Schwarzenegger administration, including Lester Snow, director of the Department of Water Resources, and Secretary Linda Adams from Cal-EPA, to use the policy as a springboard for a more comprehensive and integrated water policy for all of California. Although the economic crisis is California's biggest challenge, dysfunctional management of California's water supplies is probably the state's next most urgent problem.

The water recycling policy makes a strong statement that California has entered a time of increasing water scarcity due to decreasing supplies because of climate change impacts and numerous water rights decisions, and increased demand due to continued population growth. In other words, the Governor, our senators, the legislature, and water agencies should end their fear mongering over drought declarations and just clearly acknowledge that we are living beyond our water means. In order to move toward sustainable water management, the policy contains clear numeric goals for recycled water use (2 million acre feet by 2030), stormwater use (1 million acre feet by 2030) and conservation (20% reduction in urban and industrial use by 2020).

A negotiated policy of this complexity required a great deal of give and take. From the environmental perspective, the highlights were:

• The development of salt and nutrient management plans (focusing on salts and nitrogen-based nutrients, but including local contaminants of concern) that include monitoring and stormwater recharge components for every groundwater basin in California by 2016 at the latest. Water suppliers, treatment plants and recyclers will pay for plan development;
• A mandate for the use of recycled water that applies to water suppliers, recyclers and wastewater treatment plants. Although the mandate numbers are low (only 200,000 acre feet by 2020), the policy makes it clear that the water suppliers have to use recycled water when it is available at reasonable cost;
• A requirement to analyze recycled water for emerging contaminants (pharmaceuticals, new organic toxins, etc.) on at least an annual basis;
• The creation of an expert panel to work with the State Water Board to develop technical guidance on emerging contaminants by 2010.

In exchange, the water recyclers got:

• A streamlined process on the use of recycled water for irrigation
• A streamlined process to determine if water recycling projects are causing groundwater degradation (anti-degradation analysis procedure)
• A commitment by all parties involved that we will push for an enormous increase in funding for water recycling projects
• A monitoring philosophy that doesn't require the drilling of a lot of new wells, except in high risk areas of the basins that are adjacent to receiving waters or high groundwater

The policy negotiation resulted in the creation of a far-reaching water recycling policy that could act as a catalyst for increased water recycling, stormwater use and movement towards an enduring water management plan for California. In the L.A. region, look for a lot more city water recycling in the San Fernando Valley and near Griffith Park, while the Los Angeles County Sanitation Districts and West Basin Municipal Water District continue to expand their successful programs. Also, I hope the policy inspires the Metropolitan Water District to finally offer a significant financial incentive ($250 an acre foot or so) for capturing and using stormwater as a new source of water in the region.

California leaders should seize the opportunity and move more aggressively on water conservation, including mandatory water metering statewide, water use reduction requirements for agriculture, plumbing code modifications and native planting requirements. We also need water rights reform, statewide low impact development requirements, wellhead treatment at contaminated aquifers, and management changes that better protect water quality, anadromous fish (salmon and steelhead), and coastal and riparian ecosystems. There is no more critical issue for the state than moving quickly to a sustainable water future.

— Mark Gold, President, Heal the Bay

president's letter

Mixed Greens

Connect With Us!

Want to hear and see more about what we're up to? Join us on our social networking pages. You can connect with other Heal the Bay members, view photos and get timely updates. Heal the Bay recently launched a new **MySpace** page that will include our Spanish language blog *(www.myspace.com/healthebay)*. You can also view our photos on **Flickr** *(www.flickr.com/healthebay)*, check out our videos and PSAs on **YouTube** *(www.youtube.com/healthebay)* or follow our tweets on **Twitter** *(www.twitter.com/healthebay)*. You can even keep track of our current work on our **Facebook** group and cause pages *(www.causes.com/healthebay)*. Tell your friends too, we're hoping to hit 5,000 friends on our Facebook cause soon!

SAVE THE DATE

Join us for our annual gala dinner, Bring Back the Beach! This year's dinner is on May 28th at Santa Monica Airport's Barker Hangar. Bring Back the Beach is an annual celebration of eco achievement toward cleaner coastal waters and watersheds. To learn more, visit *www.healthebay.org/bbb*

IT'S EASY

Heal the Bay has a new online donation system via Network for Good. It's simple to use. You can make a one time or recurring donation. Your donation can even be in honor or in memory or someone. It's a great way to make a difference by donating without creating more paper waste, or bothering with stamps and mailing. Simply visit our homepage *(www.healthebay.org)* and click the Donate tab.

CORRECTION

In our last edition of Currents we highlighted the underwater photography of our own Aquarium educator **Nick Fash** *(Dive Log, pg 12)*. Nick's website was incorrectly listed. To view Nick's underwater images, please visit his website at *Fashpix.com*

PHOTOGRAPH: NICK FASH

WORD TO YOUR MOTHER

April is Earth Month and we know you'll want to help out your Mother Earth. Here are some great events that we'd love to see you at:

Nothin' but Sand Beach Cleanup
April 18, 10am-Noon
Santa Monica Beach
by the Santa Monica Pier

Earth Day at the Aquarium
April 18 &19, 11am-6pm
The Santa Monica Pier Aquarium
Join us for special activities for the whole family. Call the Santa Monica Pier Aquarium for more information at 310.393.6149.

Stream Team Restoration
April 19, 9am-1pm
Malibu Creek State Park
To get more info and to RSVP, visit the Stream Team site at *www.healthebay.org/streamteam*

The Heart of the Aquarium

HtB senior aquarist Jose Bacallao on maintaining stunning exhibits

JESSICA BELSKY

I have always been of the opinion that every great aquarium has two common elements. A nifty gift shop and really, really clean bathrooms.

Just kidding. What really makes an aquarium shine is found within its people and the equipment that keeps everything alive, because these two pieces make up the life support system.

The science and technology behind a life support system, and the skilled staff to manage and operate it, are the principal elements behind keeping our many organisms alive. When you enter the Aquarium you'll see hundreds of different animals living together in various exhibits. The animals are well taken care of; well fed and healthy. What goes on behind the scenes to make this happen? Hours of dedicated effort are needed on a day-to-day basis to keep everything alive and healthy. It's far from easy.

The Aquarium displays marine organisms that are native to the Santa Monica Bay, so seawater is the main medium. The Aquarium's life support system is a closed system, meaning there is a fixed amount of water available, about 10,000 gallons, and that water is filtered and recycled over and over. Every two weeks the Aquarium receives a new delivery of filtered seawater from the Catalina Water Co. This filtered seawater is trucked from Long Beach and is delivered to the underground holding tank in the Aquarium's life support room. The water is the foundation of the system. The aquarium just completed an overhaul of the life support system with new energy conserving pumps, filters, and water chillers.

The animals that live in that water also require food and nutrients to survive. The Aquarium feeding and maintenance schedule is very meticulous and routine. Each day various types of feedings, filter and equipment checks and maintenance and even procedures to address parasites and disease take place. The animals have various nutritional needs. Live foods, algae, frozen foods and vitamin additives are all prepared throughout the week. Staff takes great care to feed the animals while observing behavior that may indicate acceptance of food, distress and even illness. During feedings some animals are very aggressive, making it difficult for smaller or more timid animals to successfully feed. Our staff is aware of these behaviors and makes adjustments in order to meet the needs of all the animals while not overfeeding. Overfeeding can cause many problems for the animals and for water chemistry. Uneaten foods left in the exhibit will decay and increase highly toxic ammonia levels.

An unavoidable issue faced by all aquaria is that animals are constantly producing waste. The more food they eat the more waste they produce. The waste is in the form of nitrogenous compounds. Ammonia and nitrate compounds can be highly toxic to animals, even in very small concentrations. Over time nitrate concentrations will increase but can be easily reduced through water changes, disposing old nitrate-filled water with new nitrate-free water. Thus, it's important for us to maintain a monthly schedule with our water supplier.

The chemistry of the water and the levels of various compounds that can adversely affect animal health are tested by the staff. Colorimeters and reagent testers are used to determine the concentration of pH, ammonia, nitrates, phosphates, dissolved oxygen, and other compounds. Temperature is determined daily and with the aid of a hydrometer and refractometer, specific gravity and salinity can be calculated. The dynamic changes in water temperature and chemical and gas concentrations can change water chemistry, in turn changing the behavior and health of the organisms.

So who are the wizards behind the curtain pulling all the levers and rods? None other than the dedicated and skilled staff members, interns and volunteers of the Santa Monica Pier Aquarium. The science and technology of aquaria maintenance and husbandry keep the exhibits looking clean and running smoothly. And most important, they keep the animals happy and healthy too.

New Year, New Challenges

2009 promises to be a busy year for Heal the Bay.

Heal the Bay's science and policy staff will have its hands full this year, taking on numerous issues that affect the health and safety of our local oceans and watersheds. Here's a look at some of the major initiatives in which we are actively engaged:

VENTURA COUNTY MS4 PERMIT

Let's go back to 2007 for a moment. In January of that year, the Regional Water Board issued a draft version of a Municipal Separate Storm Sewer System Permit for Ventura County (an MS4 permit for short). The permit was issued for public comment. As the (extensive) title suggests, the document regulates all of the municipal stormwater in Ventura County. Stormwater, or water that drains from the streets through the storm drain system, is our largest source of coastal pollution. Now, here we are at the beginning of 2009, and a tentative permit has still not gone before the Regional Water Quality Board. This much anticipated document will serve as a model for a Los Angeles MS4 permit, likely to be released soon after Ventura's is adopted. As such, Heal the Bay and the NRDC have spent the past two years advocating for a very strong permit in Ventura; one that would include positive components such as Low Impact Development.

The previous set of L.A. Region MS4 permits withstood legal challenges. Instead of reissuing this previous permit, the Regional Board decided to draft a much more detailed permit. There are many positive aspects to the latest draft, including Low Impact Development requirements for new and re-development, structural treatment measure performance criteria, and also TMDL waste load allocations (pollutant limits). Stay tuned, as Heal the Bay anticipates that a permit will come before the Regional Board sometime early this year.

A REMISS STATE WATER BOARD

Heal the Bay recently completed a detailed study that showed that the State Water Resources Control Board has allowed dischargers to spew millions of gallons of toxin-laden effluents into Southland water bodies with virtual impunity over the past eight years. An extensive review of regulatory files by

POLLY BARROWMAN

Data from last summer's swimmer health effects study are now being analyzed.

Heal the Bay scientific staff revealed a nearly decade-long pattern of state officials shirking their responsibilities when public sewage treatment works and industrial facilities flout narrative and numeric limits for chronic toxicity in discharged wastewater.

Heal the Bay concluded that the Board has failed to use effluent toxicity testing as an effective regulatory tool. This toxicity testing is the only testing conducted for discharges that attempts to estimate the biological effects of the melting-pot of pollutants being discharged, functioning as the true safety net of the Clean Water Act. There have been over 900 instances of toxicity in discharged wastewater documented in the Los Angeles region over the last eight years. Despite this frequency of toxicity, the Regional Board recorded only 80 violations in the Los Angeles region during this time. Only 11 of the noted 80 violations had an accompanying enforcement penalty. In other words, in only 1.2% of the instances in which toxicity was present in the effluent did the Regional Board follow up with a substantial enforcement action.

The State Board has delayed making a statewide policy on limits for toxicity for over five years. This foot-dragging has created regulatory uncertainty and allowed dischargers to continue releasing toxic effluents. We make several recommendations in our recently released study (go to *healthebay.org* to view a complete version of the report). Most important, an enforceable numeric toxicity limit must be incorporated in permits for all major dischargers. It is time to repair the safety net and ensure that California's waters and all dependent aquatic organisms are adequately protected.

STUDY GOES SWIMMINGLY

Heal the Bay is gearing up to enter into the third and final year of one of the most comprehensive swimmer health effects epidemiology studies in history. The study is investigating better indicators of the human health risks of swimming in runoff polluted waters. Data from last summer are now in and are being analyzed at the hands of Dr. Jack Colford and his Berkeley crew of epidemiologists. This year the study will take place at two locations. A field laboratory will once again be set up on Doheny Beach in Dana Point from Memorial Day to July 4th and also Surfrider Beach in Malibu (provided restoration plans for the area are postponed until late summer/fall). Results of the three year study should be released in 2010.

DRIVING FORCE

Board of Governors member Kelly Meyer on protecting her home break.

Kelly Meyer, avid surfer, environmentalist and mom, understands firsthand the importance of a clean and healthy ocean. Kelly is a member of our Board of Governors and was instrumental in the passage of the Education and Environment Initiative—milestone legislation requiring the development of environmental education principles and curricula for public school students grades K-12. In addition to Kelly's work with Heal the Bay, she also works as a member of the Action Forum for the Natural Resources Defense Council and is Co-Founder of the Woman's Cancer Research Fund. Kelly, her husband Ron and their four children Jennifer, Sarah, Carson and Eli are Malibu residents. Kelly recently sat down in Malibu to "shoot the environmental breeze" with Heal the Bay's own Malibu resident, director of coastal resources, and avid waterwoman Sarah Abramson Sikich.

HEAL THE BAY: As an environmental leader and activist in your community, what most drives you to support Heal the Bay's advocacy efforts?

KELLY MEYER: Mark Gold (laughs)! But, in addition to that, I love to be in the ocean, either surfing, swimming or walking on the beach. I love to be outside. Being also a resident of Malibu, I don't see how you can not want to protect your backyard.

HtB: What do you think has been our biggest win in our backyard in the last five years?

MEYER: Winning the battle for beach TMDLs (pollution limits) was really significant. I was at the hearing that day. I think it was a 13-hour hearing and the thing that was extraordinary was that I saw David Beckman (from Natural Resources Defense Council), Tracy (Egoscue, then executive director of Santa Monica Baykeeper), Steve Fleischli (president of the Water Keeper Alliance), and Mark Gold together, each representing important environmental organizations, two nationally and the rest local. It was important for environmental organizations to witness this unification.

HtB: What do you think are the big issues facing the coast and ocean today?

> *It's very important that kids have access to this information. I think it will not only be good for the environment but also for education.*

MEYER: From a world perspective, climate change and overfishing. From a local perspective, being on the water all the time, water quality is a huge issue.

HtB: We lost an amazing local environmental leader this year in Heal the Bay's founding president Dorothy Green. What did you learn from Dorothy?

MEYER: Dorothy is a good example of how one woman can change the world. She's a perfect reminder to us of what we can all do when we bring our passion. She demanded that people do the right thing.

HtB: You played a role in the passage of the Education and Environment Initiative. What are some of your thoughts on the long term success of this program?

MEYER: The long term success is that every child (in California) K-12 will have will have environmental education throughout the curriculum. When they study something, whether it's math, science, history or reading, they will actually be connected to the real world. It's very important that kids have access to this information. I think it will not only be good for the environment but also for education.

HtB: The City of Malibu was so impressed with the students that presented at the hearing to ban plastic bags in Malibu! What do you think made them so effective?

MEYER: The kids really came together and educated themselves on the issue! They were so inspiring and it's their absolute right to come and demand that we start becoming better stewards of the planet. They were effective because they were so well prepared and educated on the issue, an issue that resonated with them. They understood that plastics are taking over our ocean.

HtB: Yes, I think they were role models for the adults. So are you starting to see a difference in Malibu now that single use plastic bags have been banned in grocery stores?

MEYER: More people are trying to bring their bags. I think people are responding and being really positive about it.

HtB: Bringing your own bags is a great, easy way to get environmentally active. What else do you recommend people do to get active?

MEYER: You know what: get active. Every element is important: getting out to Coastal Cleanup Day, picking up trash and after pets, educating your kids, donating funds. Every bit counts.

Yosemites of the Sea

HtB staff is helping set boundaries for Marine Protected Areas.

by CHARLOTTE STEVENSON

There is growing scientific consensus that our oceans are in crisis. The United Nations Environment Program recently warned of worldwide collapse of fish stocks within decades.

Globally, fishermen are now catching fewer and smaller fish than what they caught 20 years ago, and here in Southern California, we have seen indications of our poor ocean health through the drastic decline of economically and historically important species such as lingcod, cowcod, boccacio, abalone and even our giant kelp forests. As a solution to this crisis, Marine Protected Areas (MPAs) are increasingly being used to protect biological diversity, sustain habitats, and restore depleted marine populations. In the same way that national parks, such as Yellowstone and Yosemite, were established over 100 years ago to protect special places on land, MPAs are being used today to protect special places in the ocean to be sure the ocean will be healthy and productive for generations to come.

What is a Marine Protected Area?

Marine protected areas, also known as "MPAs", are areas of coastal ocean set aside as safe-havens from fishing to protect and conserve marine life and habitat. There are three classifications of MPAs in California:

Marine Reserves: Fully protected, no commercial or recreational fishing

Marine Parks: Partially protected, some recreational fishing is allowed

Marine Conservation Areas: Partially protected, some recreational and commercial fishing is allowed

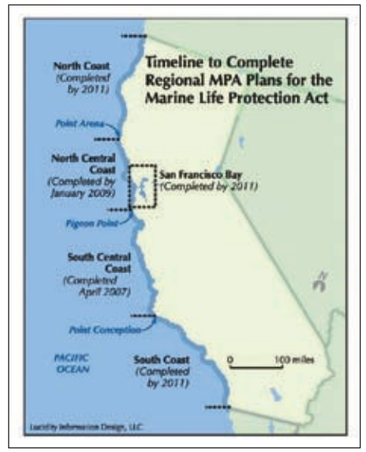
One common misconception is that MPAs will make the ocean off limits to people. Quite to the contrary, all non-extractive recreational activities such as sailing, kayaking, swimming, scuba-diving, snorkeling, and surfing are permitted in all types of Marine Protected Areas. It is only activities such as fishing, which remove living things from the ocean, that are limited in MPAs.

MPAs provide places where fish can feed, breed and thrive, and where human impacts are minimized. Based on a global review of more than 124 studied marine reserves, the number, size, and diversity of fish inside of marine reserves increased drastically compared to outside of reserves.

Bigger, older, female fish produce more young: A 40-cm Boccaccio rockfish produces an average of 200,000 eggs per year, whereas an 80-cm fish of the same species produces nearly 2 million eggs. One major goal of MPAs is to give fish a place to grow large and produce abundant offspring to feed the next generation.

MPAs are not a new idea. Currently, 29 nations and territories including New Zealand, the Phillippines, Cuba, Belize, and Chile use MPAs as a conservation tool, and some of these MPAs have existed for over 20 years. In some cases, these MPAs were met with opposition during their establishment, but in all cases, the MPAs have been successful and have been embraced by the local communities, including fishermen, who have benefited greatly from the recovering fisheries.

In 2002, right here in our backyard, the California Fish and Game Commission established a network of marine reserves in the state waters (within three miles of shore) of the Channel Islands off the coast of Santa Barbara. Studies five years later show that many



species of fish are more abundant within the marine reserves, the kelp is healthier, and there have been no severe impacts on the recreational or commercial fisheries. Most recently in January 2009, former President Bush designated three marine protected areas in the central Pacific, in addition to the Northwestern Hawaiian MPA which he established in 2006, to protect these unique and diverse tropical marine ecosystems.

The Marine Life Protection Act (MLPA) Process

California is now stepping out as a leader by implementing 1999's Marine Life Protection Act which called for the establishment of a network of MPAs along the entire California coast that can function as a system to protect marine life populations and habitats. Over the past six years the process of implementing this law has faced many obstacles; however, the state has finally established a framework that includes extensive public participation, a Science Advisory Team, a Blue Ribbon Task Force to facilitate implementing the law, and a Regional Stakeholder Group (RSG) including divers, fishermen, conservationists, and coastal residents who recommend locations for MPAs.

CHARLOTTE STEVENSON

The state is taking a regional approach to implement MPAs along the coast. So far, 29 MPAs have been established in the central coast covering 18% of the coast in that region, and 22 MPAs were established in the north central coast, protecting 20.7% of that study region. The MLPA process now has officially moved to the south coast study region (Point Conception in Santa Barbara to the California/Mexico border). It is important to note that even after this network is complete, the vast majority of the coast will be left open to fishing.

Heal the Bay is a member of the south coast RSG, and will also participate through all levels of the process, working closely with other environmental groups and community members over the next year to ensure that Southern California's marine resources receive adequate protection. One of the most important parts of this process is public participation. All meetings are open to the public and allow for public comment on the process and later on actual MPA proposals. For more information about MPAs, the MLPA process in Southern California and how to get involved, go to *www.healthebay.org/currentissues/mpas.*

There is a clear need for MPAs in Southern California, including the Santa Monica Bay. With over 50 million visitors each year, the Santa Monica Bay is a valuable asset to California's economy. These visitors, both locals and tourists, enjoy swimming, kayaking, scuba diving, and many other activities. Establishing MPAs within the Santa Monica Bay and throughout Southern California will help protect these resources, benefiting the ecosystem, coastal enthusiasts, and regional fisheries alike.

Fishing for Answers

Heal the Bay's Angler Outreach Program aims to educate local fishers about the dangers of eating contaminated seafood. Recently, our Angler Outreach Team has also been discussing the topic of Marine Protected Areas with local anglers.

Maria Joaquin

Heal the Bay Why were you interested in participating in the MPA-Pier Angler outreach project?

Maria Joaquin I think it is very important to educate the angler community about new projects in places where they usually fish. Also, it is important to let them know how an MPA works and what the benefits would be. I was interested in working in this project because I was an intern at the USC Wrigley Institute, where they have an MPA at Big Fisherman Cove. I gained a good understanding of the importance of MPAs, the importance of the recovery of certain species, and the importance of allowing certain fish species to reach their reproductive stage. For instance, the halibut matures at about eight years old, so it would be helpful for this species to be in an MPA to be able to mature and reproduce.

HtB So in general, do you find that pier anglers are supportive of MPAs?

MJ In general, yes, anglers are very supportive about MPAs, but only after we explain to them the function of an MPA.

HtB Why do you think they are so supportive?

MJ I think they are supportive because most of the anglers I have talked to recognize that, for instance, the halibut are not as big as they used to be and there are fewer of them. I think they like the idea, or they hope that after a couple of years of having MPAs, they would see more fish around, larger in size.

HtB What is the most interesting thing you have learned from doing the MPA-Pier Outreach so far?

MJ I have learned a lot from anglers, but there is a specific time that stands out when I got the chance to talk to a group of anglers at Pier J in Long Beach. This group of three older men has been going to Pier J for the last 35 years. They talked to me about how Pier J used to be, 35 years ago, before all the construction and all the heavy industrialization of the L.A. and L.B. port. They remember catching a lot of large fish and diving for abalone. They told me how they saw the whole gradual industrial change in Pier J and also in the marine life in the area. They were very positive about the possibility of MPAs and their ability to help replenish the fish populations near Pier J. They added that if the fish recovered, then the companies that make all the fishing poles and other fishing supplies would benefit as well.

Sands of Time

HtB's policy staff has an impressive history of driving meaningful environmental change.

1985 Heal the Bay is founded.


Dorothy Green

1986 Consent decree requiring Hyperion Treatment Plant sewer system upgrades is approved by federal courts.

1987 Hyperion's sludge is no longer dumped into the Santa Monica Bay. The Bay's dead zone disappears in a decade.

1990 Heal the Bay first publishes the Beach Report Card, covering more than 60 monitoring locations in Los Angeles County from Leo Carrillo to Cabrillo. Heal the Bay now provides water quality information for over 500 beaches statewide through the Beach Report Card. Beachgoers can even have local beach grades sent to them instantly through SMS technology.

1991 Working together with the city of Santa Monica, Heal the Bay co-writes a groundbreaking municipal stormwater ordinance that requires runoff to be to be treated or infiltrated on site for new and redevelopment

1994 Coastal Habitat Restoration programs are put in place. Thousands of volunteers restore Point Dume Headlands and 20 acres of the El Segundo Blue Butterfly Habitat Preserve.

1995 With USC, the Santa Monica Bay Restoration Commission, Los Angeles and Orange counties, Heal the Bay completes the first health effects study of people who swim in the polluted runoff of the Santa Monica Bay, finding that swimmers near storm drains are more likely to fall ill than those swimming at clean beaches.

1996 Heal the Bay, backed by a diverse environmental coalition, initiates the 40-Day Fight Campaign, a huge success in passing Los Angeles County's first tough stormwater permit.

- The Los Angeles Regional Water Quality Control Board incorporates Standard Urban Storm Water Mitigation Plans (SUSMP) into the L.A. County Stormwater Permit. The SUSMP requires certain environmentally sound design criteria for development and redevelopment projects.

1997 Heal the Bay and an environmental coalition successfully advocate for the Regional Water Quality Control Board to pass requirements eliminating wastewater discharge from Malibu's Tapia Water Treatment Facility from April to November each year, which leads to a huge improvement in water quality at Surfrider Beach.

- Heal the Bay releases a study finding high DDT and PCB contamination levels in 84% of commercially caught white croaker, a fish popular for consumption in the Asian community
- Heal the Bay sponsored bill, AB411, the Beach Water Quality Act, creates statewide human health standards for beach water quality, a public notification and closure system, and mandates beach water quality monitoring

1998 Heal the Bay launches Stream Team, a large scale volunteer project that gathers data and monitors the Malibu Creek Watershed and establishes baseline data for the sources of storm drain pollution and the locations of degraded habitat

- Hyperion Sewage Treatment Plant reaches full secondary treatment
- Heal the Bay releases "Omission Accomplished," a report documenting the lack of a Los Angeles Regional Water Board enforcement program

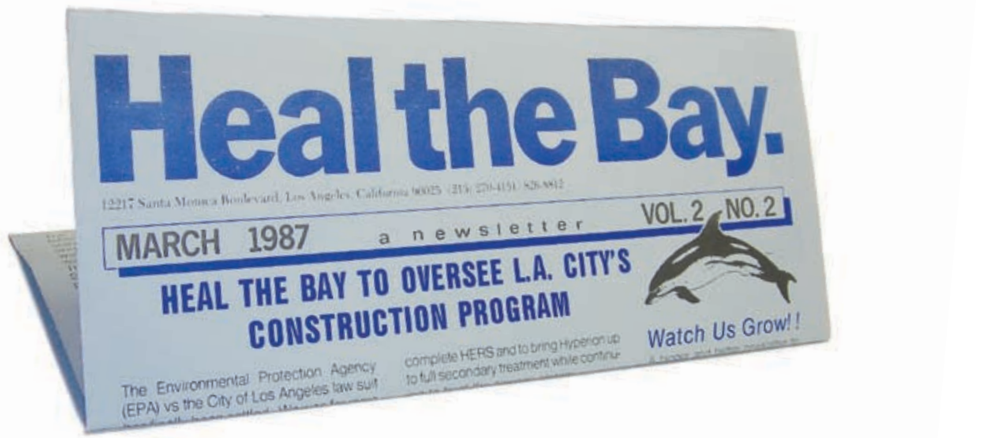
1999 Along with a coalition of other environmental groups, Heal the Bay settles a lawsuit with the EPA that requires the agency to develop enforceable cleanup plans for more than 150 polluted water bodies in Los Angeles and Ventura Counties by 2011.

2000 AB 885, the Septic System Standards Bill, which requires the development of statewide water quality standards for operations of onsite sewage treatment, is signed into law.

- California voters pass Props. 12 and 13, which together designate more than $2 billion for acquisition and improvements of urban parks and undeveloped state and local wilderness areas. $700 million are set aside for the county and city of Los Angeles, with $25 million for specific projects within Santa Monica Bay and $25 million for Ballona Wetlands protection.
- Settlement of Natural Resources Damages and Superfund cases for DDT and PCB contamination on the Palos Verdes shelf reached. The total settlement is about $154 million. Heal the Bay starts our Angler Outreach Program as a result.

2001 Heal the Bay, with a coalition of other environmental groups, wins a ruling at the Regional Water Quality Control Board stipulating that cities with storm drains that drain into the Los Angeles River will have 14 years to incrementally reduce and ultimately eliminate all trash entering the water body. This zero tolerance for trash in the Los Angeles River is followed by zero tolerance for trash in Ballona Creek.

- The Clean Beach Initiative is signed into law, thus dedicating $78 million for projects to help clean up California's most polluted beaches. Our Beach Report Card is a used as a key tool to target polluted beaches.



2002 Propositions 40 and 50 pass, providing $5 billion for safe drinking water, clean beaches and coastal waters, park and air quality improvements and wildlife and open space protection.

- The Los Angeles County Sanitation District upgrades the Carson Sewage Treatment Plant to full secondary wastewater treatment. For the first time, both major sewage treatment plants in L.A. comply with the Clean Water Act. The result is a nearly 95% reduction in sewage solids to the Bay.

2003 After years of pressure from Heal the Bay and a coalition of environmental advocates, Washington Mutual agrees to sell Ahmanson Ranch to the state of California, preserving 2,300 acres as parkland and ensuring a contiguous wildlife corridor from the mountains to the sea along Malibu Creek.

- California passes Heal the Bay-sponsored Education and the Environment Initiative (EEI), AB 1548, which authorizes comprehensive environmental education standards and curriculum in all disciplines for K-12 students statewide.
- After decades of pressure from environmental groups including Heal the Bay, the state purchases 200 acres of the Ballona Wetlands from Playa Vista, bringing the total size of protected lands to 500 acres.

2004 City of Los Angeles voters pass Proposition O, a measure to improve local water quality by keeping dangerous bacteria and toxic pollution from contaminating waterways. The $500 million bond aims to control pollution by advancing storm drain systems and creating community parks that also act as filtration for urban runoff.

2005 Heal the Bay, in partnership with the California Coastal Conservancy and National Park Service, removes stream barriers at Solstice Creek in Malibu, opening stream habitat for the endangered steelhead trout.

2006 The Los Angeles Regional Water Quality Control Board incorporates Santa Monica Bay Beaches Bacteria Total Maximum Daily Loads (pollution limits) into the L.A. County Municipal Stormwater Permit. For the first time in the nation, every County beach must be clean and safe 100% of the time from April to October.

- The long-awaited removal of the Texas Crossing in Malibu Creek State Park is completed, opening up over one mile of quality fish habitat that was previously blocked.
- Santa Monica voters pass Measure V: The Clean Beaches and Ocean Ballot Measure. The measure provides funds for projects that improve water quality, clean up beaches, recharge groundwater, collect and reuse water, restore the natural hydrological cycle, and control flooding.

2007 AB 258 is signed into law. The bill requires all plastic product manufacturers to use best management practices, such as proper storage and clean-up procedures, to prevent spillage of preproduction plastic pellets.

2008 Los Angeles River Trash TMDL goes into effect. All cities that discharge to the river must ensure that no trash enters the river from their stromdrain by 2014

- The Ocean Protection Council adopts a Marine Debris Implementation Plan. The report from this five-member panel comprised of state leaders lays out an ambitious plan for eliminating plastic bags, polystyrene food packaging, cigarette butts and other harmful debris from entering the Pacific Ocean as a roadmap for statewide action to reduce and prevent marine debris.

2009 Heal the Bay releases "License to Kill," a toxicity report documenting eight years of effluent toxicity problems in Los Angeles and Ventura Counties.

- The California Water Recycling Policy is approved by the State Water Board.

Civic Duty

It's time for Malibu to fix all of its chronic pollution problems.

Malibu is undoubtedly one of the gems of the Pacific coastline. But despite the idyllic setting and the city's relative affluence, the sad truth is that the area is tarnished by having its waters regularly test as being some of the most chronically polluted in the state.

The Malibu Civic Center area, for example, has been plagued with water quality problems for decades. Heal the Bay's Stream Team, whose objective is to monitor and promote water quality and habitat conservation in the Malibu Creek watershed, has long documented the water quality impairments and corresponding human health hazards. Chronic fecal bacteria and nutrient pollution in the Malibu Creek Watershed, and especially Malibu Lagoon have long plagued ocean users, both residents and visitors alike.

Stream Team data show that a major source of bacterial pollution originates from the city of Malibu, stemming from nearby septic systems. Runoff from agriculture, horse ranches and onsite wastewater treatment systems throughout the watershed all add to the problem.

Waters discharged from the Tapia Water Reclamation Facility remain the largest source of nutrient pollution to both Los Virgenes and Malibu Creeks, data show, but they only discharge from November to March. The high concentrations of nutrient pollution in the watershed have been shown to increase algal growth, which can be harmful to local fish and other aquatic species. The high percentage of impervious surfaces mapped in the watershed by the Stream Team is shown also to have degraded both water quality and biological diversity.

World-famous Surfrider Beach continues to get failing grades on our Beach Report Card, serving as an embarrassing example of the direct effect of water quality impairments in the Malibu Creek watershed. Wastewater from commercial septic systems in the area have been found to leach into the nearby Malibu Creek and Lagoon, adding to the already polluted waters coming from upstream, and then flows directly into the ocean.

Heal the Bay's extensive water quality dataset has been used by the Los Angeles Regional Water Quality Board to help develop the watershed's Total Maximum Daily Load (TMDL) requirements, which has placed limits on fecal bacteria and nutrient levels for the Malibu Creek watershed. The goal of this regulation is to make the streams and beaches comprising this watershed safe for human use and aquatic life which includes dramatically lowering the frequency of exceedances of water quality standards.

The good news is that TMDLs are in place for cleanup; the bad news is that progress in implementing TMDLs and cleanup for local waters has been slow. Last Nov. 20, the Regional Water Board asked staff to move forward on a moratorium on new septic system permits for the Civic Center area within one year, as any new discharges to the Civic Center area would cause or contribute to TMDL violations for bacteria and nutrients. Heal the Bay supported the decision.

Despite these current pollution problems and the impending moratorium, additional sources of pollutants are being added to the mix. On Dec. 11, the Regional Water Board heard an item on the Malibu Lumber development in the Civic Center area. The development is planning to open doors as you read this, yet the owners failed to get waste discharge requirements from the Regional Board before construction started. Here the plot thickens.

The Regional Board was caught in a tricky situation because the development was nearly complete, and the city of Malibu planned to use the lease money from the property to help fund the new Legacy Park water quality improvement project. However, the lumber development will likely contribute to existing nutrient and bacteria water quality impairments. After much debate and ridicule of Malibu's inaction on moving forward on a centralized treatment system for the Civic Center, the board decided to adopt the waste discharge requirements with several changes. For example, it required the project to hook into a centralized treatment facility if completed and granted a reduction in the term of the permit.

In December, the Malibu City Council also approved the La Paz project development Environmental Impact Report (EIR). The La Paz project is a large development of retail stores and restaurants that is planned for the Civic Center area. The development would add more waste to the already over-taxed infrastructure. On a positive note, the council included a provision to set aside land for a wastewater treatment facility for the Civic Center if deemed an appropriate site. Inexplicably, the members did not require La Paz to use the facility if it gets built. Due to the impending moratorium, it is unclear if the Regional Board will approve a permit for the La Paz development. The Santa Monica Baykeeper sued Malibu over the adequacy of the La Paz EIR.

The Legacy Park Project adds another wrinkle to the Civic Center story. To be located on the site of the city's annual chili cook-off, the proposed park promised to be the stormwater and sewage pollution remedy for the Civic Center area. Malibu raised $25 million to purchase the parcel and early conceptual plans for the 10-acre plot included a treatment wetland for stormwater and treated wastewater. Unfortunately, despite opposition from the environmental community, the final EIR for Legacy Park did not include an analysis for the proposed central water recycling plant. Malibu's omission of the facility in the Legacy Park EIR is a stumbling block for a comprehensive solution to Malibu's many water quality problems.

It's been 17 years since the City of Malibu incorporated, following Los Angeles county officials attempt to move forward a horrendous water treatment facility in undeveloped Corral Canyon. To date, little has been done to address the City's sewage problems from existing development. But it's not too late to take corrective action.

So what specifically can be done to remedy the situation?

The Water Board and Malibu need to enter into a legally binding commitment for a centralized water recycling facility to be built by 2012 in order for Malibu to solve its Civic Center wastewater management problems. The centralized water recycling facility must provide at least filtration, denitrification (nitrogen removal), and disinfection. All of the commercial facilities in the Civic Center should be required to tie in to the treatment facility, and other sites should be phased in a few years later. Heal that Bay believes that this is the only way to meet our goals: ensuring that Surfrider Beach will be safe for recreation and Malibu Lagoon will be safe and healthy for aquatic life.

Additionally, solutions need to be forged to mitigate the problem of many non-regulated sources of polluted runoff, throughout the watershed, that discharge into local streams and stormwater drains, directly polluting our ecosystems and water bodies.

In the meantime, Heal the Bay's Stream Team, with volunteer support, continues its efforts to monitor and document water quality and ecological trends and impairments in the watershed. Heal the Bay's goal is that, through monitoring the state of the watershed and by advocating for regulations that protect human health and natural resources, we can move forward with cleaner water for all.

Wildlife in the Malibu Lagoon

LEARNING ON THE JOB

Heal the Bay helps budding scientists link academic study and choosing a career path.

by RANDI PARENT

It's well known that the Santa Monica Pier Aquarium educates future generations to be appreciative caretakers of the marine environment. But besides making young visitors aware of stewardship, the Aquarium is also a training ground for budding scientists on the brink of making career decisions.

"We always talk about creating stewards of the environment, but we in fact are also creating scientists," said Santa Monica Pier Aquarium director Vicki Wawerchak in a recent conversation.

Indeed, with five thriving internship programs in place, for many local students, the Aquarium is a nexus between academic study and choosing a career path.

The Aquarium offers internships in aquaristing, shark education, teaching science to young children, education programs, and public programs.

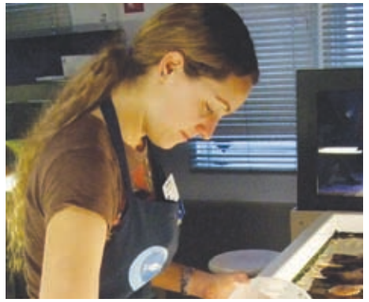
"The internship program gives me an opportunity to mentor young adults while they're finding their career path," says Jose Bacallao, senior aquarist. "It's a unique learning experience for them and I get great fulfillment from that teacher/mentor role. The interns are passionate and energetic about marine biology and that energizes and motivates me as well," he continued. "And, they do a heck of a lot of work for us."

Here, three Aquarium interns, all recent UCLA graduates, discuss their career choices and the impact the Aquarium has had on their decisions:

"Science is the family profession," confesses ***Asma Mahdi,*** *explaining that several relatives are scientists, and that as she grew up, she too gravitated toward a career in that field. Asma started college as a pre-med major. "I thought I was going to be a doctor," she said. "But in my third year I changed my major to environmental studies and geography, and things fell into place. I really wanted to go into conservation awareness, and science leads to awareness."*

Asma began an internship with the Aquarium's education department in the fall of 2007, and a month later she became a paid naturalist with the Key to the Sea education program. She still continues to volunteer her time at the Aquarium while also interning with Heal the Bay's Science and Policy department, working on our Marine Protected Area initiative (see pg. 6 for more about MPAs) with staff scientist Charlotte Stevenson and director of coastal resources Sarah Abramson.

"I have to admit," Asma ventures, "I first started volunteering at Heal the Bay because I knew it would look good on my resume. Now it is so dead-on what I want to do. It's been a significant influence. I've become really political." When she returns to graduate school in the fall, Asma will focus on science and policy pertaining to coastal watersheds.



For ***Heather Peterson*** *there was no other career goal, ever.*

"I've known since I was really little that I wanted to be a marine biologist," says Heather, who received her degree in marine biology last year. "I was in kindergarten when a man came to the classroom with buckets of brittle stars and I thought it was the coolest thing," she remembers. "I had this book called: You Can Be a Woman Marine Biologist."

Growing up in Santa Monica and attending public schools here, Heather came to the Aquarium several times on class field trips. "I always wanted to do something with the ocean, but the options weren't really visible to me. I knew I wanted to study marine biology, but I wasn't sure what I would do with it.

Heather started as an education and public programs volunteer in 2005. "I decided to volunteer to see where it would lead. I found I really liked doing the behind the scenes stuff. I wanted to take care of the animals and their tanks so others would have the opportunity to learn about what lives in the ocean and they would come to appreciate the ocean and the animals in it."

When senior aquarist Jose Bacallao had an opening in his internship program, Heather applied to work with him, and she found her niche. "I really like the aquaristing side. There's so much involved. I had no idea. It's hard to learn this in the classroom, and it's hard to know what your options are. There aren't many opportunities to try out a career." She's currently applying for aquarist's positions in several aquariums.

Smitha Srinath *grew up in Buena Park, knowing from an early age that she would eventually go to veterinary school after watching a neighbor's dog go blind and deaf.*

"I knew from the beginning that I wanted to work in the sciences. I've known that I wanted to be a veterinarian since 5th grade."

A shark education intern at the Aquarium for the past two years, Smitha is currently applying to veterinary schools. In addition to her work at the Aquarium, she is a veterinary assistant at an animal hospital/clinic, and also works as a biology and math tutor at Fullerton College.

"By working at the Aquarium, I think I have learned information about different animal species that I'll remember for a long time, probably longer than what I learned from my classes in college because rather than stopping at learning for an exam, we teach the information to other people, and get to hands on see the animals."

Smitha gives a weekly shark presentation at the Aquarium, an experience, she says, that has helped her "become a better public speaker and to be more creative."

"Working at the Aquarium has influenced the way I want to run my (veterinary) practice as well, by putting such a great emphasis on environmentalism." Smitha also plans to volunteer as a wildlife veterinarian in the future to help rehabilitate and release injured wildlife.

Know someone interested in becoming an intern at the Aquarium? More information is available on our website at *www.healthebay.org/smpa/internships/default.asp.*

FEELING THE HEAT

HtB takes aim on once-through cooled power plants.

by SARAH ABRAMSON SIKICH

California ecosystems face a bevy of threats: polluted runoff, marine debris, destructive fishing practices and harmful algal blooms. Talk about stress. Heal the Bay has been actively working to reduce these threats. We face another challenge to our ecosystem—once-through cooled power plants.

Nineteen coastal power plants in California use outdated technology known as once-through cooling. Intake pipes, drawing in millions of gallons of ocean water daily to cool the plant, indiscriminately kill plankton, fish, invertebrates, and other marine life. Collectively, these power plants draw in up to 16.3 billion gallons of coastal water per day. Many are located on bays and estuaries that house sensitive fish nurseries and populations of numerous species, including ones that are important to the commercial and recreational fishing industries. The heated water released from these plants can also have negative environmental impacts, potentially upsetting the surrounding ecosystem by raising the water temperature to damaging levels.

Our sensitive marine ecosystems are at stake. Heal the Bay has joined a coalition of groups that includes the Ocean Protection Council, the State Lands Commission, and the State Water Resources Control Board to develop a policy on once-through cooling for California. The draft policy calls for a shift from antiquated and environmentally harmful technology to new, greener alternatives, namely, closed-cycle cooling. This technology uses radiator-style coils to disperse heat to air passing over the coils, resulting in dramatically reduced water use and the elimination of thermal discharge into waterbodies.

Some members of the industry are moving forward with greeener alternatives without any state requirements. For example, El Segundo Power recently petitioned the California Energy Commission to repower a portion of its plant using closed-cycle cooling, thereby retiring two of its once-through cooled units. We support their efforts.

We are starting to see progress in California, but there is risk of a separate industry prolonging the use of these ocean intakes. There have been many recent proposals to co-locate desalination plants with existing coastal power plant intakes.

At first, the idea might make sense on the surface -- providing two uses for a single intake of ocean water. But in reality, with the pending state policy, and past Federal Court rulings against once-through cooling, it's likely that most coastal power plants will shift to alternative technologies in the near future. Co-location of desalination plants would simply prolong the indiscriminate take of marine life through these ocean intakes. Alternative sources of fresh water, including water conservation, stormwater capture and use, and water recycling should be tapped before considering the expensive, energy-demanding, and environmentally destructive alternative of desalination. Heal the Bay also recommends that alternative intakes for desalination, such as beach wells or subsurface intakes which would have minimal impacts on fish and plankton, be investigated before relying on co-location with coastal power plants.

Ocean intake has recently been put on the agenda of the state legislature. State Sen. Ellen Corbett (D- San Leandro) introduced a bill (SB 42) that would prohibit the co-location of desalination with existing once-through cooled plants and phase out the use of once-through cooling altogether. Heal the Bay will follow this bill as it moves through the legislature, as well as the state policy development, and keep you updated. Once-through cooling remains one of our priority coastal issues.

For more information on once through cooling, please visit *www.healthebay.org/currentissues/powerplants/default.asp*

For more information on desalination, please visit *www.healthebay.org/currentissues/desalplants/default.asp*

PHOTOGRAPH: iSTOCK

How We Work

Research, education, community advocacy and legislation drive Heal the Bay.

Have you ever wondered how research informs the policy we advocate for at the local and state levels? How our education and volunteer programs help guide these efforts? Each of these components connects. Below, we take a look at one of our biggest causes—eliminating single use plastic bags—and how the works of our various departments dovetail to effect meaningful change.

A Case Study in Plastic Bags

IDENTIFYING AN ISSUE

Heal the Bay Science and Policy staff meet on a regular basis to brainstorm ideas for legislation. While developing our issue areas we look at the current research available and determine whether or not there are improvements needed in existing government programs to address the problem or if legislation is the only way to address the problem most effectively.

RESEARCH AND DATA GATHERING

Heal the Bay identifies the problem of plastic bags in our environment through existing research and observation in the field using data gathered from our beach and inland cleanups such as Costal Cleanup Day and Nothin' but Sand. We also rely heavily on outside research support from other scientists, research foundations and government agencies.

POLICY DEVELOPMENT AND LEGISLATION

Once the issue is identified, Heal the Bay staff tackles the problem in the form of recommendations to be translated into legislation and/or policies developed by state and local agencies and officials. We share this information by meeting with officials and testifying at state and local regulatory hearings. In the case of plastic bags, the Ocean Protection Council (OPC) is responsible for improving the protection and management of California's coastal and ocean resources. In No-

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vember, the OPC issued an implementation plan to reduce marine debris. One of the recommendations made was statewide legislation to impose a pollution fee on all single-use plastic bags. Heal the Bay took this policy recommendation, drafted bill language and contacted state elected officials to author a bill.

An author is found, Assemblymember Julia Brownley, the bill gets introduced and assigned a bill number, AB68. Heal the Bay begins lobbying other members of the legislature to win support for the bill and starts building a support base utilizing letter writing campaigns and media outreach to get the public to contact their elected officials.

BUILDING COMMUNITY KNOWLEDGE AND CAPACITY

Even before legislation is introduced, Heal the Bay must begin the monumental task of engaging the public through our various programs to develop a base of knowledge about the problem and provide tools for capacity-building. For example, when a local city council is going to take action on plastic bags, Heal the Bay meets with community leaders and elected officials to discuss the issue, mobilizes efforts on the ground to get community members to attend the hearing and/or participate in related demonstrations to address the problem of plastic bags in their communities. Our communications team engages editors, reporters and bloggers to provide perspective and tip them about community events and upcoming legislation.

PROGRAMS AND EDUCATION

On an ongoing basis, Heal the Bay must communicate the message to the public, encouraging change in their daily lives. For example, we conceived and launched the "Day Without A Bag" promotional and giveaway program to encourage holiday shoppers to use reusable bags. The partnerships made with businesses and communities help build a knowledge base about the problem and encourage people to start reusable bag programs in their communities. Outreach to youth is a critical piece in reinforcing our connection to the environment. For example, we created a plastic bag exhibit at our Santa Monica Pier Aquarium which compares bags floating in the ocean to sea jellies, a common sea turtle food.

PHOTOGRAPH: iSTOCK

Staff Updates

KERRI FEAZELL joins Heal the Bay as our Development Manager. Honored as one of the Top Women in Fundraising for 2007 by FundRaising Success magazine, Kerri is a skilled fundraiser with broad experience, including grant management and online fundraising strategies. Kerri frequently shares her expertise as a fundraising consultant, mentor to interns, and recently, as an instructor for a community education course on grant writing conducted through Fort Lewis College.

Before joining Heal the Bay, Kerri served as Vice President of Grant Services for The Myrtum Corp. Grants clients served by Kerri included Beyond Shelter, Coldstream Creative, Giving Vision, and Hugh O'Brian Youth Leadership (HOBY). Before her consulting work with Myrtum, Kerri served as Digital Services and Grants Consultant for Union Rescue Mission.

Kerri earned a Bachelor of Arts degree in Global Studies from Azusa Pacific University and has spent time studying and volunteering in several developing countries, such as Guatemala, Mauritius and India. In her free time, Kerri serves as an Advisory Board Member for iCareNOW.tv, contributing to the direction of this emerging online community that engages individuals, businesses and organizations in a lifestyle of giving. She also serves as a Board Member for CREATE NOW, a nonprofit focused on changing the lives of high-risk and at-risk youth through creative arts mentoring.

Corporate and business sponsors can look forward to working with Kerri on Bring Back the Beach, Coastal Cleanup Day, and other cause-marketing opportunities throughout the year.

ALISON LIPMAN is the new Stream Team Manager at Heal the Bay. She earned her Ph.D. in ecology this year at the Odum School of Ecology at the University of Georgia. She spent much of the past 10 years directing conservation/research projects in South America, where she lived and worked in collaboration with local communities in Bolivia and Brazil.

She has 15 years of experience working with community groups, nonprofit organizations and local and national governments in South America and the U.S. Past research projects investigated life histories, decline and threats to various endangered species; toxicity effects of cleaning products; habitat restoration in California ecosystems; propagation and conservation of California native plants; land-use effects of subsistence-based livelihoods; and community-based natural resource management.

She has worked under contract with UCLA, the University of Georgia, the U.S. National Park Service, the California Department of Fish & Game, the U.S. Fish & Wildlife Service, various NGOs in the U.S. and South America, as a private consultant, and most recently with the Bolivian National Park Service. She has managed protected areas owned by the U.S. Navy and the Palos Verdes Peninsula Land Conservancy on which she instituted and secured funding for the first off-site reintroductions of the endangered Palos Verdes blue butterfly.

She is a member of the IUCN Species Survival Commission and has managed and written management and reintroduction plans for high-profile conservation projects, including the Palos Verdes blue butterfly Project in California, and the Parque Machía Wildlife Refuge and giant South American river turtle project in Bolivia. She has taught and created environmental ecology curriculum at the University of Georgia and for elementary schools in Bolivia. Finally, Alison works as president of a new conservation nonprofit, SELVA International, which supports the implementation of local, science-based conservation projects worldwide.

Alison's goal at Heal the Bay is to organize and rejuvenate our Stream Team—to make its work more relevant to citizens and resource managers. She will be updating the science behind all Stream Team projects and expanding out to new areas of work. Alison will analyze and apply the results of all data the Stream Team collects.

Four Star Rating

CHARITY NAVIGATOR ★★★★ Four Star Charity

Heal the Bay has for the fourth year in a row received a four star rating from Charity Navigator. Charity Navigator is America's premier independent charity evaluator. They evaluate the financial health of over 5,300 of America's largest charities. Only 6% of charities rated have ever received this award for four years running!

CORPORATE HEALER BEACH CLEANUPS

Looking for a low-cost marketing opportunity for your business? Trying to encourage corporate spirit and giving back to the environment? Why not do both—at the beach! Join Heal the Bay's new Corporate Healer Beach Cleanups and let us feature your brand to thousands of other environmental advocates while you share the spirit of volunteerism with your staff at a beach cleanup. Branded sponsorships with event hosting start at just $1,000.

Contact Kerri Feazell, Development Manager, for details at *kfeazell@healthebay.org*

The following list represents gifts from September 1, 2008 through December 31, 2008.

$25,000+

Debbie & Mark Attanasio
The Goldhirsh Foundation
Grousbeck Family Foundation
The James Irvine Foundation
Resources Legacy Fund Foundation
Rilla & Patrick Rogan
The David & Lucile Packard Foundation
Thomas & Janet Unterman

$10,000 - $24,999

Lorena Barrientos & Mark E. Merritt
Bell Family Foundation
Enviro Plumbing
Flora Family Foundation
Madelyn & Bruce Glickfeld
The Green Foundation
Kathleen & Matt Hart
Conrad N. Hilton Foundation
HSBC Bank, USA, National Association
John W. Carson Foundation
Jean & Stephen Kaplan
Kissick Family Foundation
Brian O'Malley
Philo Dough, Inc
Shari Sant & Daniel Lee Plummer
The Ralphs/Food 4 Less Foundation
Sempra Energy Foundation
Sheila Gold Foundation
simplehuman®
Surf Industry Manufacturers Association Environmental Fund
Krystal Weinstein

$5,000 - $9,999

1 Bag at a Time
Alper Family Foundation
California State Parks Foundation
Eloise & John Paul DeJoria
Earth Share of California
Earthwise Bag Company, Inc.
Leland Ettinger
Roger S. Firestone Foundation
The Joseph Goldenberg Family Trust
Tatiana & Todd James
Richard Katz
Mark Lemons
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Cydney & Gary Mandel
Neutrogena Corporation
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Victoria Principal
Ronald Newburg Foundation
SAKS Fifth Avenue
Santa Monica Bay Restoration Commission
Kristin & Michael Sant
Sherwood Foundation Trust
Sketch Foundation
St. Matthew's Parish School
Stoller Family (Charitable Lead Annuity) Trust
David & Sylvia Weisz Family Philanthropic Fund
Rita Wilson & Tom Hanks
The Zolla Family

$1,000 - $4,999

Anonymous
AllianceBernstein
Argonaut Charitable Foundation
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The Connie Frank Foundation
Lori Froeling & Theodore Braun
Camilla Frost
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Patricia Glaser & Samuel Mudie
Ethan Glober
Goldman, Sachs & Co.
Michael Grandcolas
G. Karl Greissinger
Susan Grossinger
Daniel S. Haas Fund
George Hatch
Susannah Grant Henrikson
Clement Hirsch Jr.
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Christopher Hordan
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Craig Huber
Helen Hunt
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Katharine King
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Charlotte & Russ Lesser
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Josephine Lipton
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Hardy Mosley
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The Natter Family Foundation
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Scott Zolke
Zuckerman-Kanner Gift Fund

$500 - $999

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Andrew Weiss Gallery
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Janet & Mark Brown
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David Henry Jacobs
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Maureen Kaine-Krolak
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Elise Klein & Lee Harwell
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Cindy Landon
Laura & Andrew Leeds
Christine Lennon & Andrew Reich
Terrence Lynch & James Martin
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Andy Milder
Wynn Miller
Robert Mitchell
Dorothy Moore
Robbin & Kenneth Morgan
Bernita Myers
Jan & Larry Myers
Michele & Mark Nasatir
Victoria Nourafchan & David Rosenstein
Christopher Paine
Frank Perna
Louise & Stephen Pesce
Cynthia Pett
Project AWARE Foundation
Susan Purcell & Yair Landau
Pearl & Bob Radnitz
Elizabeth & James Ralston
The Reel Inn
Cristan & Kevin Reilly
Roll Giving
Whitney & Jeffrey Roy
Sacks With Attitude
Amber Sakai
Nadya Scott
Phil Selway
John Shackelford
Kevin Sharkey
Amy Smart
Melinda Taylor & Craig Webb
Hope & Roy Turney
Dawn Vincent
Michael Vorhaus
Wilbur Elementary
Marla & Tom Williams
Cindy & Jacob Winebaum
Rita Winston
John Wiseman
Kristen Woods
Peg Yorkin
Elisabeth Zall
Yvonne & David Zaro
David Zuckerman

AQUADOPTION

Aquadoptions at Heal the Bay's Santa Monica Pier Aquarium are a great way to express a special connection with the marine life of Santa Monica Bay. Aquadoptions have been acquired for the following:

Ethan Beane
Cheryl & Terry Crow
Eli Diamond
Diane Dickey
Kenny Garmoe
Steve Hewitt
Gia J'aimee Logan
Oak Park Neighborhood School
Emma Guerrini Romano
Bella Thornton

IN HONOR OF

A wonderful way to commemorate a special occasion, milestone or birthday for friends or family is to make a donation to Heal the Bay in their honor. The following people have been honored recently:

Lyn Anderson
Andrew
The Ayappa Family
Brian & Joann Bailey
Brent Barry
Seth & Linda Bass
The Bernstein Family
Brian Biniak
Bill Bischoff
Jeremiah & Alison Bogert
Ron & Barbara Boyd
Lili Boyle
Tom & Sue Brundidge
Jake James Bryant
Stacy Burgum
Dan Burrier
Dylan Cheah
Nate Comay
Yehudit Coutin
Hill & Dianne Covington
Brad & Tahnee Cracchiola & Family
The Dayton Family
Eli Diamond
The Diamond Family
Aaron & Katie Diecker
Phyllis & Satya Dosaj
Kelly Eshelman
Michael Eugene
Tom & Jenny Everhart
Demian & Katie Feldman
Gary & Patty Fong
Craig & Gulden Fox
Friends & Neighbors
Erin Gardiner
Patricia Gaskey
Jon Goulding
Nancy & Peter Hapke
William Harrell, MD
Dina Hataishi
David Hilton
Ed & Carolyn Horn
Heidi Hrowal
David Jacobs-Strain
Sarah Johnson
Matt & Jessica Joy
The Juillard Family
Nick Kaufman
Katherine Heilard
Paul King
Jeanette Kloos
Larry & Janice Lamattina
Kenny Landy
Michael Leventhal
Chang Lin
Julia Louis-Dreyfus
The Lurie Family
Alicia Macias
Mike Marshal
Murphey & Kreiss
Matthew Martinez
Andrew Miller
Julie Miller
Tracy Murray
Lucas & Declan O'Brien
Our Many Clients
Our Many Friends
Eileen Peed
Justin, Cj, Caleigh & Jackson Peed
John Peed
Lauren Persico
Adam Pisoni
Tony Pritzker
Nikki & Joe Reber
Nancy Reed
Julie Rhee & Thane Roberts
Linda Richards
Ron Rocco
Jessica Rosemberg
The Savitsky Family
Monica Schneider
Michael & Beverly Sherman
Mike & Bev Sherman
Dan Silverman
Marvin Smith
Rod Stephens
Angelique Tinoco
Jeanne Tomcavage
Alyssa Unger
Tom Unterman
Lourdes Vitor
Ben Wang
Tiffany Ward
Sue Weber
Winnie Wechsler
Gail Wehner
Martin Weiss
Jeff & Jean Wong
Jeff Yack
Geraldine Yee

IN MEMORY OF

Donations have been made to Heal the Bay in memory of the following people who have recently passed away. We at Heal the Bay extend our sympathies to the family and friends of:

Anna
Michael Blumenberg
Tom Brice
Alan P. Carlson
Mildred Gneier Cervantes
Don Francis
Owen Furey
Dorothy Green
Rio Marasca Kushner
Paul List
Richard Redfern
Ron Rocco
Debbie Rosenberg
Richard Samore

Macy's and Heal the Bay Invite you to join us for

"One Good Turn"

Saturday, April 25, 2009

Purchase a $5 coupon from Heal the Bay for special in-store discounts, including $5 off any purchase of $15 or more, and up to 20% off most items.

All proceeds from tickets purchased at *www.healthebay.org/specials* to benefit Heal the Bay.

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Heal the Bay

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