

Sea CHANGE

The Surfrider Foundation broadens its efforts to protect ocean waters by including residential landscape management.

BY KILEY JACQUES

* ome of the best times to go surfing are when it's raining, and we are told by the government to stay out of the water for 72 hours after a rain event—so you have to strike a balance between getting sick and taking advantage of great waves," says Paul Herzog, an avid surfer and Ocean Friendly Gardens (OFG) program coordinator for the Surfrider Foundation. The foundation's Clean Water Initiative is devoted to protecting 100 percent of U.S. coastlines over the next five years. Through these programs, of which OFG is one, they keep hundreds of millions of gallons of polluted water from entering oceans and waterways daily.

The Surfrider Foundation introduced OFG seven years ago with the idea of giving its members a way to make a difference while waiting for government policies to change. "We had seen water quality problems persist, and while we worked at multiple levels—advocacy, programming, projects—we wanted to give our members a kind of tool belt that [they could use] to take action," says Herzog.

Surfrider's nationwide chapters, made up of local volunteers, work with experts in science, policy, and law to protect coastal waters and beaches from contaminated runoff, the number one source of ocean pollution. Ocean-friendly gardens revive underhydrated watersheds and polluted oceans by employing the principles of conservation, permeability, and retention (CPR). "Everyone can be a part of the solution by applying CPR to their landscapes and hard surfaces," says Herzog. "If we each do our part, we can clean up pollution, reduce water use, recharge groundwater and streams, and prevent flooding."

Currently, there are 84 Surfrider chapters and 40 clubs in 10 regions across the country. Herzog works with the chapters, landscape professionals, biologists, and policy makers to further the nonprofit's mission. He is a preeminent "coastal defender" and the only paid staff managing the OFG program. Chapter volunteers work independently using a template Herzog provides. The template is threefold; it advocates education, hands-on activities, and change in public policy. Many volunteers spend their time talking with the public and taking part in projects that demonstrate how to manage landscapes responsibly.

Right: Paul Herzog is the Ocean Friendly Gardens coordinator for the Surfrider Foundation.





Rob Nieto is a professional landscape designer and the San Luis Obispo chapter's Friendly Gardens campaign coordinator.

One such volunteer, Rob Nieto, is a professional landscape designer and the San Luis Obispo chapter's OFG campaign coordinator. Since becoming involved with Surfrider, the conventionally trained designer has moved toward creating gardens that meet OFG criteria. He notes a shift in clients' interests, too—they are starting to ask for OFG designs. "People feel good about being able to do something that's part of the solution," he says. "People are trending in that direction."

At its core, the OFG program is a means of getting people to use rainwater as a resource, create biologically living soil with compost and mulch, and choose climateadapted plants (ideally native). High-efficiency irrigation is admissible when needed, particularly as new plantings get established. Soil is key. When healthy soil holds onto water for plants to tap during dry weather, it filters pollution, and it locks up carbon from the carbon dioxide that plants absorb.

With respect to CPR, Herzog says conservation occurs on three fronts: water, energy, and habitat. The idea is to use native and/or climate-adapted plants, spaced for mature growth and maintained organically, using the most efficient irrigation system to supplement rainwater. Permeability is achieved by cultivating biologically active soil as well as by using permeable materials for driveways, walkways, and patios so water can percolate down into the soil. For retention, devices like swales and dry streambeds soak up rainwater, thereby filtering pollutants and preventing them from leaving the property. Additionally, sponged-up water supports soil microorganisms, which bring water to plants when needed; it also equates to natural flood control. According to Herzog, with average rainfall, healthy living soil, and climate-appropriate plants at their mature size, many landscapes can go for long periods of time without additional irrigation—sometimes even a whole season.

To disseminate the OFG message, Herzog helps volunteers organize work projects, which he describes as "Habitat for Humanity in the garden." Projects are designed to meet standards for CPR—they teach people to evaluate their site to determine how it is functioning, for example, where is the runoff going? Then, they are shown how to direct water so that the majority of it stays onsite. "We focus on that first flush," says Herzog, explaining the three S's of water: slow it down, spread it out, and let it sink in. "I think that is a fairly simple way of explaining what we are all about. CPR expands it a bit because we are saying we want healthy living soil and climate-appropriate plants, too."

The OFG program also stresses to people that nature is curvilinear and topographically diverse. "The best way to slow, spread, and sink," notes Herzog, "is to use plants, rocks, and mulch—that's what we are mimicking in this approach, that's our standard." Instead of flat yards and roofs that are draining from a downspout onto a driveway, they hope to get people



Volunteers for the Surfrider Foundation mulch a garden.

thinking about "creating waves in our yards so that we have clear waves at the beach."

So what does an OFG look like? "The design can be a simple shallow low spot.... It can take the form of a curvy dry streambed, a large but shallow basin, or something else. When soil is saturated, the water is directed away from a building to flow off, but at least it's been cleansed," explains Herzog. Slowing water down requires a simple variation in terrain contours. "It just takes a little change in the landscape—a little place where water slows," notes Herzog, who also advocates for using cultivated edible plants like fruit trees and vegetables. "That is conservation," he says, "in the sense that food isn't being trucked in from afar."

Beyond hands-on work, chapters also encourage local and state government to set standards that follow OFG's own. In that way, members help others understand that what they are doing in their landscapes helps to meet city, county, or state statutory requirements for water supply, water quality, green waste reduction, carbon sequestration, and flood control. "Those first four are primary drivers," says Herzog, noting there is a piece of legislation out in California, AB-2525, that would provide two-dollar-persquare-foot rebates for retrofitting landscapes to follow "the watershed approach." This approach sets the same standards for everyone everywhere because, according to Surfrider, we all live in a watershed, which they define







as "the area that drains to a common waterway, such as a stream, lake, estuary, wetland, aquifer, or even the ocean."

Legislatively speaking, Herzog wants to see three things happen. First, he envisions agencies working together to deliver consistent information. "People get confused by all the different 'brands' of [ocean friendlylandscapes," he says. Using the analogy of ENERGY STAR, which denotes efficiency on any brand of appliances, Herzog explains "OFG" can be applied to any type of landscape. Second, he wants a set of standards put in place for both new and existing sites. "We are not going to grow our way toward environmental resiliency," he says, adding that residential landscapes need to be standardized in terms of function. Finally, he says, "We need to train a workforce...to see landscapes as an environmental solution on the order of any other." He envisions trainings that go beyond weekend seminars to include "a good education and a respectable job that pays a living wage."

As an industry professional, Nieto also sees the need. His initial role with Surfrider was to help educate people around the idea of ocean-friendly gardens. "More recently, I have focused my efforts on trying to build a qualified workforce to do the retrofits that are going to be needed." Like Herzog, he wants contractors to use water as a resource (traditionally, they have been trained to get it off site) and to understand the need for healthy soil, which, he says, is an often overlooked component. He notes, too, that people may want ocean-friendly gardens, but may not have access to qualified professionals who can install Surfrider trains professionals on planting sustainable, ocean-friendly gardens. Paul Herzog believes residential landscapes need to be standardized in terms of function.

them. "We are getting very close to making that [workforce training] a reality. It will have an exponential impact rather than a one-garden-at-a-time approach." Surfrider is working with Green Gardens Group to put together a professional training program, which will hopefully be unveiled this fall.

Herzog believes forming partnerships with U.S. Green Building Council (USGBC) chapters can further leverage the OFG program. "We need [USGBC's] ethical knowledge and experience working in the field of building and retrofitting, and working with government to get things done. We are interested in things that are easy to plug into because these people are working as volunteers." He wants to develop landscapes to serve as models with high visibility, and expresses an interest in taking USGBC's education efforts to the level of helping homeowners understand the value of their landscape—to measure its worth in terms of how little waste it generates.

Though there is clearly more to be done, Surfrider is making a huge impact. People are learning to see landscape management as an environmental solution to the problem of polluted waters. They are being empowered to believe they can help bring about change on many fronts through simple means. "If everybody does a little bit, it's a lot easier than [doing] some big project at the bottom of the watershed, which is expensive and you don't get all the benefits...people don't see they are all part of the solution," explains Herzog. This last piece, being part of the solution, is the very heart of OFG's message.



