

## 2014 ANNUAL REPORT







The Surfrider Foundation is a non-profit grassroots environmental organization dedicated to the protection and enjoyment of our world's oceans, waves and beaches through a powerful activist network.

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For more information on our campaigns and programs, visit **surfrider.org** 

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# Executive Summary

Over its 30-plus-year history, the Surfrider Foundation has been protecting our oceans, waves and beaches for our enjoyment through a powerful activist network.

The Surfrider Foundation, through its Clean Water Initiative, advocates for solutions that can restore the water cycle and natural functions of landscapes to prevent pollution from reaching the ocean, protect local water supplies and achieve additional benefits such as carbon sequestration. Activities include programs, campaigns, tools and resources to educate communities on the mismanagement, waste and pollution of water resources, and how to restore the natural water cycle through integrated land and water management.

Surfrider chapters are accomplishing this work by engaging with their communities through Clean Water Initiative programs: Blue Water Task Force, Ocean Friendly Gardens and Rise Above Plastics. They also run campaigns against projects that will cause pollution, and advocate for government policy that implements wise management of our land and water resources.

Ocean Friendly Gardens is a volunteer-run landscape education, hands-on training and advocacy program. In addition to providing valuable information to property owners on how landscapes and hardscapes can prevent water pollution, Surfrider chapters are using this program to train landscape professionals to incorporate the program's principles into their business practices. Chapters also use the program to motivate local governments to support Ocean Friendly Gardens-oriented policy changes for existing and new development.

In 2014, there were 33 chapters running various levels of garden programming, using Surfrider's Ocean Friendly Gardens online map to display their projects. This is up from from 23 chapters that were working on OFG in 2012. Connections were made with chapters in the Mid-Atlantic, discussions held with Northern California chapters, and programs were strengthened in a handful of other areas. A total of 12,172 hours of volunteer time we given, up significantly from the previous year.

Chapter volunteers do everything from neighborhood walks and speaking engagements to workdays and influencing public policy. Chapter's Ocean Friendly Gardens activities continue to demonstrate that: (1) interest amongst water agencies and other state agencies in OFG principles is growing and beginning to be promoted as the "watershed approach," which applies everywhere because we all live in a watershed (seeing every site as a mini-watershed, and applying OFG principles of CPR: Conservation, Permeability and Retention; (2) property owners essentially want to be shown what to do to have their gardens function to prevent pollution, whether they do it themselves or hire a professional; (3) programs are needed to train a workforce that can scale-up OFG and reach a mass audience; (4) all landscape-related government agencies need to work together, getting behind an OFG-type approach, leveraging their financial resources and regulatory powers. These insights are consistent with what is being learned by other non-profit organizations.

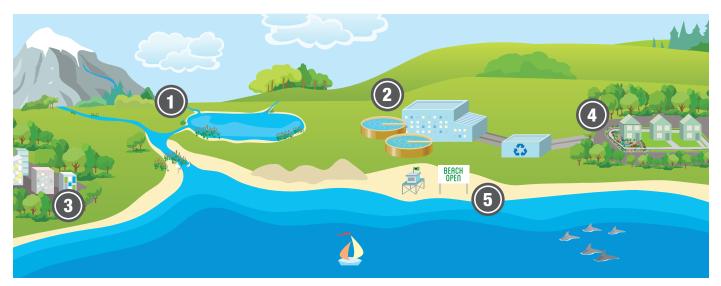
Armed with knowledge, experience, data and examples of solutions, chapters are raising public awareness of local water quality issues and bringing together stakeholders to investigate and solve water quality problems. This annual report includes cases studies that describe how 6 chapters are running activities based on their capacity and issues. Surfrider chapters across the country are also implementing other Surfrider clean water programs such as Blue Water Task Force to identify pollution sources and monitor how well solutions work.

#### Learn more at surfrider.org/ofg





# Initiative Summary



## **The Clean Water Initiative**

The urbanization along our coasts has altered and polluted the natural water cycle. For example, green landscapes that have been replaced by concrete prevent rain from soaking into the ground which results in polluted runoff straight to the ocean. The Surfrider Foundation advocates for solutions that can restore the water cycle and natural functions of coastal landscapes to protect local water supplies and prevent pollution from reaching our oceans, waves and beaches.



#### **Restore Our Watersheds**

Restoring floodplains, wetlands, and rivers creates more resilient landscapes that allow water to soak into the ground, which filters out pollutants and provides flood control benefits. Fish and wildlife also benefit as new habitat is created. And, it improves stream flow, which carries more sand downstream to help build beaches.

### (2)

#### **Recycle Wastewater**

Recycling wastewater reduces ocean discharge from sewage treatment plants while creating a local, reliable, and safe clean water supply.



#### **Create Green Streets**

Capturing rainwater in vegetated areas near streets and paved parking lots allows water to soak into the ground, which recharges ground water supplies, reduces flooding and prevents polluted runoff from reaching the beach and ocean.

## Plant an Ocean Friendly Garden



Planting an Ocean Friendly Garden applies Conservation, Permeability and Retention (CPR) to your yard.

This conserves water, creates habitat for wildlife, and reduces polluted runoff from your landscape.



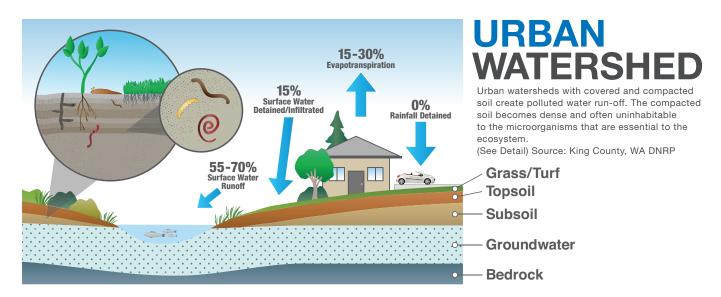
#### **Monitor Water Quality**

Testing the water at the beach lets us know where it is safe to swim and surf, and helps identify pollution problems so they can be fixed. Learn how to test the water at your local beach with the Surfrider Foundation's volunteer water quality monitoring program, the Blue Water Task Force.

## Ocean Friendly Gardens Program Overview

The Surfrider Foundation's Ocean Friendly Gardens Program (OFG) uses landscaping-based solutions to prevent polluted runoff. Every home, business and public landscape can be a place to slow, spread and sink rainwater and prevent dry-weather runoff. This approach also achieves benefits such as reducing water demand, sequestering carbon, and creating wildlife habitat. In addition, OFGs support resilient and healthy coastal communities and economies.

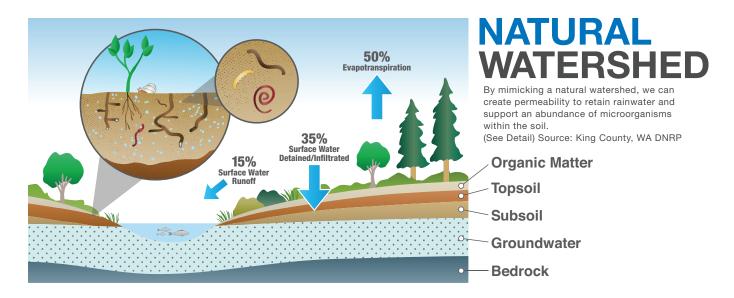
Since Surfrider's OFG program was created six years ago, volunteers in communities across the country are using it to share information, install gardens, train landscape professionals and seek to change government policy. Every site can be a part of the solution to pollution!



#### **URBAN RUNOFF: THE BIGGEST OCEAN POLLUTER**

**Urban and agricultural runoff** is the number one cause of ocean pollution. When water from sprinklers, a hose or rain flows onto compacted landscapes, driveways and parking lots and into the street and storm drains, it carries with it or picks up pollutants such as fertilizers, pesticides, automotive contaminants, plastic trash, cigarette butts and more. From there, it flows to waterways and the ocean untreated. Just one inch of rain falling on a 1,000 square foot roof or parking lot generates about 620 gallons of water; that same one inch generates 8 billions gallons of runoff in a city like Los Angeles, Calif.

**Reducing urban runoff** has an added importance in older cities that have combined storm drain and sewer systems. Heavy rains can overwhelm the capacity of the system, sending un-treated sewage to waterways and the ocean (newer cities have separated systems). Urban runoff also contributes to flooding and the erosion of streams and creeks.



**In undeveloped areas**, soil and plants absorb rainfall. When the soil is saturated, the water percolates down to aquifers and flows laterally into local streams. Plants tap this "soil sponge" during dry months. Water from plant "sweat" and soil evaporation, as well as evaporation from water bodies, returns water to the atmosphere to make clouds. This is the natural water cycle.

**Within the natural water cycle** are watersheds, or a geographic area in which all sources of water (rainfall, snow melt, streams, rivers, lakes, wetlands and ground water) drain to a common surface water body - generally the ocean in coastal areas. A watershed can be a large area or a small space like a home.

#### REVIVING THE NATURAL WATER CYCLE BY APPLYING CPR

The Surfrider Foundation advocates for simple and natural solutions to restore the water cycle and natural functions of watersheds to prevent pollution from reaching our oceans, protect local water supplies and reduce flooding. The OFG approach applies **CPR** – **Conservation, Permeability** and **Retention** – to every site:

**Conservation** of water, energy and wildlife habitat by using climate-appropriate and native plants as well as drip irrigation when necessary.

Permeability of soil and hard surfaces lets water soak in.

**Retention** of retain rainwater to filter it and use as a source of irrigation as well as reduce flooding and erosion of streams and creeks.

Creating healthy, living soil is the foundation of CPR. Why? Because soil microorganisms help filter pollutants, create spaces in soil for water to gather and plants to access during dry periods, and produce "pro-biotics" to protect plants. In addition, these organisms play a key role in the "carbon cycle." In this carbon cycle, plants absorb carbon dioxide (CO2), releasing oxygen and using carbon for their development or to "feed" soil microorganisms in exchange for the microorganisms giving them nutrients. Microorganisms coat the carbon with a glue, binding it to soil particles or holding it in a soil fiber "internet". Mulch is also a source of carbon for soil organisms. Once the soil internet is disturbed through such actions as tilling, the carbon is exposed to oxygen, forms CO2, and the CO2 is released into the atmosphere. So the more we cover soil with plants and mulch, the more carbon gets locked up and the less water gets evaporated.

In addition to changing landscapes, OFG is also applied to streets. Surfrider promotes changing city codes to allow making cuts in curbs of parkways (the landscaped area between the street and sidewalk) and creating planted basin. The basins absorb and filter water that would have flown directly to a storm drain.

Surfrider is leading an effort to encourage non-profits organizations, government agencies and the private sector to support one, unifying approach. Regardless of whether a person's watershed drains to a river, bay or ocean, we all live in a watershed. So applying CPR is really a "watershed approach."

#### **Surfrider Chapters Engaging and Creating Change**

We all have a responsibility to keep pollution from reaching our oceans, waves and beaches and not waste water. Surfrider's OFG program provides chapter volunteers with the tools and resources to offer broad-based education about pollution prevention as well as provide hands-on training, while installing gardens. Surfrider chapters have also become very adept at using their OFG generated solutions to promote changes to public policy and press government agencies to work together, and work with non-profits and the private sector to scale-up efforts.



#### HERE ARE JUST A FEW WAYS OFG VOLUNTEERS ARE GETTING INVOLVED:

**Talks** are given to a broad spectrum, from community groups to schools. Chapters have also contracted with landscape professionals to teach a class that goes into greater detail. Some regions have classes offered by public agencies that essentially teach Surfrider's Ocean Friendly Gardens program. For instance, in Southern California, the California Friendly Landscape Training covers: evaluating your site; building healthy soil; creating permeable surfaces and retain rainwater; creating habitat; selecting climate

appropriate plants; minimizing turf and maintaining it organically; irrigating properly and achieve zero dry weather runoff; and maintenance.

**Lawn Patrol** (neighborhood walk) takes its name from Dawn Patrol, the early-morning check of waves done by surfers to see if it's worth going out. The walk is led by a person familiar with OFG concepts and is open to anyone who wants to develop his/her understanding of what makes an OFG. It is also a way for volunteers to get involved and educate the public. We like to start at an existing OFG, reviewing the OFG principles and practices implemented. Participants walk the neighborhood with the OFG Sign Criteria on a clipboard to help them identify existing OFG elements at a home landscape and opportunities to do more. They can leave behind a flyer that has space to check-off OFG components that are implemented or write in the date of any upcoming OFG events next to the slots for them. Also, a chapter could offer to help with making a change to the landscape to make it an OFG, e.g., creating a swale and basin and directing the gutter downspout into it. A tracking sheet can be used to write down the addresses of homes with OFGs, or close to it, to follow up with.

Some chapters have followed a "series approach," with a class followed by a Hands-On Workshop (HOW) on Site Evaluation, then a Garden Assistance Party (GAP).

Garden Assistance Party (GAP) provides hands-on help to assist people in creating an OFG, relying on the project host to do their "homework." The host's jobs include: create a design that meets the OFG criteria; gather all materials ahead of time; ask neighbors and friends to join us at the Party; provide lunch; and pay it forward. Because Chapter's are made up of volunteers, they typically limit the size of the area to around 500 square feet. They also want to retrofit a site in a day. The GAP is aimed at those who have attended an OFG class or the equivalent, have a highly visible location, and invite their neighbors to participate - and spark a wave of OFGs in the neighborhood. Before someone contacts a chapter for help, they are asked to review and work through the GAP Questionnaire. For those who do not know where to start first, we recommend that they hire a landscape professional to assist with any and all steps: site evaluation, design, materials acquisition list, and workday oversight. The GAPs can be a good way for professionals who do not understand CPR to learn. For those who do, the GAPs can be a place to get referrals.

Hands-On Workshops are professionally led, part in-class, part in-field trainings to educate and train people as part of a professionally designed garden installation or retrofit. HOWs are geared toward everyone: OFG class attendees, Surfrider members, other non-governmental organizations, government agencies, and landscape professionals. They also help grow a cadre of trained sustainable landscape practitioners. Topics covered include: site evaluation and analysis; turf removal and soil remediation through sheet mulching, plus rainwater capture and rain garden design; proper planting & installation of drip irrigation & correct installation & programming of weather-based irrigation controllers; stewardship (maintenance). **Other OFG resources** are provided to Surfrider chapters as well as to the general public through the OFG webpage on the Surfrider website: yard sign criteria (standards) and yard sign; an Activist Toolkit on how to run activities; online map to display OFGs; blog posts about events; and DIY info. There is also a national OFG Facebook page.

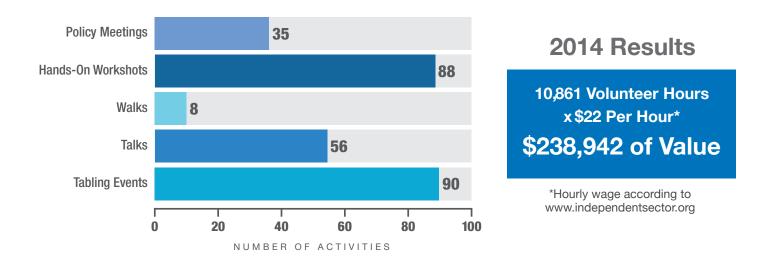
OFG is a very diverse program. Each Surfrider chapter is able to design and implement their program to best utilize their available resources and meet local needs. Some chapters simply post information on their website and hand out OFG brochures. Other chapters conduct talks and walks. Those with sufficient capacity partner with local government agencies, coastal organizations and neighborhood associations, and landscape professionals to conduct workdays. Whether they have low or high capacity, chapters have advocated for changes to government policy. Many chapters also have programs established in local schools, and are educating students about local water quality issues and promoting a coastal stewardship ethic.

To learn more about each of the program activities, visit the OFG Activist Toolkit.



## 2014 Program Activity & Results

This report covers all Ocean Friendly Gardens programming data collected during the 2014 calendar year.





The Surfrider Foundation's Ocean Friendly Gardens Program Coordinator, Paul Herzog, not only supports chapters in launching and running OFG programs throughout the U.S., he works with academia, coalition partners and governmental organizations to generate awareness about the importance of the program and its integrated watershed approach to water. Here are a few highlights from 2014:

**Education.** With the Southwest in the midst of a record-setting drought, Herzog worked with several local and national water agencies to accept Surfrider's watershed approach. In November of 2014, the Natural Resources Defense Council released a comprehensive report created by a coalition of 15 environmental groups, including the Surfrider Foundation, in response to the California drought, identifying a suite of recommendations.

**Appointments.** Since 2012, Herzog has been working with the Landscape Committee of the California Urban Water Conservation Council (CUWCC), the state's leading association of water conservation agencies, helping shift the Council's focus from irrigation efficiency to the watershed approach. The Council hosted two symposia with four state agencies to promote the watershed approach and Herzog was a speaker at both symposia. Recognizing Surfrider's efforts, Herzog was invited and accepted an invitation to become a member of the Council's Board of Directors.

**Advocacy.** Herzog presented at the 2014 Independent Technical Panel, whose advice to the California State Legislature and Governor has resulted in new laws. As a result of Herzog's presentation and that of CUWCC, the Panel's focus on landscaping in 2015 will include the watershed approach and multi-agency government collaboration.

**Legislation.** In 2014, Herzog guided the Surfrider Foundation to lead a coalition of 20 environmental organizations to support California Assembly Bill 2104, to protect a homeowner association member from HOA board fines and legal actions when seeking to replace turf grass with climate-appropriate plants.

# Conclusions

Based on the work of Surfrider chapters and staff, below are some conclusions about what we look forward to working on in 2015:

#### Using the watershed approach

There are numerous slogans and brands for landscaping programs, leading to confusion and a lack of collaboration among program managers, government agencies and the private sector. Surfrider is promoting the watershed approach. It applies the principles and criteria of Conservation, Permeability and Retention (CPR) to every property, large or small, urban or rural. Following one message makes education and marketing effective. Also, the CPR criteria can be translated into metrics that government agencies can apply to every property, collecting data to help meet their regulatory requirements, e.g., stormwater permits, water supply, green/food waste reduction, flood control, and greenhouse gas reduction.

#### **Applying CPR**

Cities like Seattle, Wash., offer a rainwater-harvesting rebate that is based on the square footage of roof area directed into the landscape or a cistern. Like other older cities that have combined stormwater-sewer systems, they are driven by reducing stormwater going into these systems and also filtering water that does make it into waterways. Currently in California, there is no city with a rebate program that promotes the watershed approach; instead they simply require replacing turf grass with climate-appropriate plants, mulch and efficient supplemental irrigation. Surfrider is encouraging all cities to require the watershed approach in their rebate programs.





#### Scaling up

There is a need for mass-scale removal of turf grass as well as installing simple swales and basins to sponge up rainwater. Most property owners want to hire someone to do this. Surfrider believes we need a large workforce that can deliver these services at a reasonable price. By hosting workdays, Surfrider staff and knowledgeable chapter volunteers can help train professionals. But institutionalized training programs are needed to build a workforce.

#### **Sharing what works**

Government bureaucracy and overly engineered approaches continue to present roadblocks for implementing the smallscale, natural solutions that Surfrider promotes. Some non-profits and cities have forged ahead with practices like parkway curb cuts that require only a simple city permit. Surfrider chapters are sharing this information with cities that are cautious, showing them that all properties can be a part of the solution to pollution – which has the additional benefit of engaging more people.

#### **Developing partnerships**

Surfrider chapters, in general, have limited capacity, relying on volunteers to administer programs where other groups may have paid staff to do so. To ensure consistently high levels of quality programming, and leverage the resources of other groups with similar objectives, we continue to look for ways to collaborate and partner. For example, a partner could help coordinate activities, with Surfrider contributing its program collateral and volunteers. This would make it easier for Surfrider volunteers to plug in for a two hour activity.



The following case studies describe how chapters are implementing Ocean Friendly Gardens programs. They are good examples of how the chapters are raising awareness about water pollution issues in their communities, building demonstration gardens and advocating for changes to government policies.

### Maui, Hawaii

Surfrider-Maui, HI Chapter activists had been bummed for years by seeing polluted runoff from beach parks stream into the ocean. Showers at the parks flow untreated to the ocean. Parking lot runoff can do the same, picking up car exhaust, oil, and more.

The Chapter Ocean Friendly Gardens Program chose a high profile park to solve the problems by creating an OFG. Pohaku Beach Park, aka "S-Turns," is located near two hotels and lots of condos. It gets a constant flow of traffic from surfers as well as tourists checking out turtles that like to lie on the nearby beach. Last winter, it rained for 6 months (it's outside of the "Lahaina dry bubble").

With a looming project completion deadline, and not knowing how many volunteers would show up, the decision was made to bring in professional help: a mini-excavator to help prep the site. Kimo at Truth Excavation, a former Maui Surfrider Executive Committee member, provided an employee (Isi) to operate the excavator.

Scott Lacasse, owner of One If By Land Environmental Design LLC and a Garden Resource Teacher at Montessori School of Maui, designed the gardens. The design is straightforward, efficient and beautiful: slowing down, spreading out and sinking water into planted swales so it can be filtered and absorbed by soil, plants and mulch. On a Saturday morning, 40 volunteers gathered at the Park for a Garden Assistance Party (workday), lead by Scott. Activists from Surfrider were joined by experienced volunteers with sister non-profits, West Maui Kumuwai and Malama Maui Nui (Surfrider Maui collaborates with MMN on beach clean ups)

Funding came from a grant through the Hawaii Department of Aquatic Resources via their cooperative agreement with the National Oceanic and Atmospheric Administration's (NOAA) Coral Reef Conservation Program.

Special thanks goes to Tova Callander of West Maui Kumuwai for bringing the idea for the project to the Chapter, for helping to write the grant, and for sharing her considerable knowledge about working with the County of Maui. Also, thanks to Employees at Hawaiian Paddle Sports and Maui Kayak Adventures for helping repairs some irrigation issues.

Surfrider Maui is also responsible for maintaining the Ocean Friendly Garden. The Chapter will rely on active members who live in the area, as well as the surrounding community and local surfers.

Click here for the complete story.



**CLICK HERE** for more information and to view the report on the Ocean Friendly Gardens map.







## San Diego, California

A private water retailer named California American Water (Cal Am) approached the Surfrider-San Diego Chapter's Ocean Friendly Gardens Program about helping turn a water guzzling area of Montgomery-Waller Park and its runoffproducing parking lot into an example of an Ocean Friendly Garden. Cal Am provides water to the Park. Patrick Pilz, Cal Am's Field Operations Manager, is familiar with Surfrider: he is part of a team implementing a state grant-funded sustainable landscape program, and the team includes Surfrider, another non-profit, and several government agencies such as the City and County of San Diego. The Chapter jumped at the chance to do a project at such a high profile, public space. They had already helped successfully retrofitted half-a-dozen residential landscapes in their region over the past five years.









Water from the turf grass and rainwater runoff from the parking lot had been directed to the street, down a storm drain and directly to the ocean, carrying all pollutants along with it. The vision was to replace 2,000 square feet of grass with an OFG, and direct runoff from the parking lot to it through a cut in the curb.

The public was told about the project and encouraged to participate when they attended a garden class. The retrofit of the park was accomplished through a series of three Hands-On Workshops (H.O.W.) lead by G3/Green Gardens Group.

Diane Downey (G3's San Diego Regional Coordinator) and Jeremy Sison (G3 certified pro, and landscape architect) led the workshops. They are also both Surfrider-San Diego OFG Committee members. Surfrider-San Diego Committee members also helped publicize the class and HOWs, and Cal Am created a cool all-in-one flyer for the events. Cal Am took care of H.O.W. registration and food for H.O.W. volunteers.

The first H.O.W. was on Site Evaluation, the second on turf removal and soil building through sheet mulching and rain capture, and the third on planting and irrigation.

The City Parks Department helped with site prep, removing the grass and cutting the curb. The project team learned that the water was not infiltrating well enough, so a follow-up H.O.W. was conducted to drill a dozen holes (aka augering) in the basin, back-filling with compost tea and mulch, then installing water-loving plants in the basin.

Cal Am picked up the bill for the H.O.W.s as well as compensated the City to cover the materials and site prep. Additional funding came from the project qualifying for the regional turf replacement rebate of \$2/square foot.

Check out this awesome video and time-lapse of the project!

Click here for the complete story.



**CLICK HERE** for more information and to view the report on the Ocean Friendly Gardens map.

## **Portland, Oregon**

The year-and-a-half process to develop the Peninsula School Rain Garden shows the importance of patience, utilizing Surfrider chapter resources, and developing partnerships. The project team had to address significant issues: flooding problems in a school courtyard, clogged storm drain piping, and a small budget.

After Surfrider-Portland Chapter was awarded a \$10,000 Community Watershed Stewardship Program grant, planning and design meetings got started between the project partners. Jocelyn Gary, a schoolteacher and the Surfrider-Portland Ocean Friendly Gardens Program Co-Chair, developed the 3 units of curriculum used to teach two 5th grade classes about OFG:

Unit 1 - What a rain garden is and its benefits;

Unit 2 - Assess the courtyard and research native plants; Unit 3 – Learn about landscaping, develop a plan for the site, and design a rain garden.

Jocelyn's principal asked her to attend monthly Parent Teacher Association (PTA) meetings to keep the parents and community members updated on the progress of the garden. They learned about Surfrider Foundation and volunteered in many ways – even during the day to help teach the classes. Two parents started rain gardens in their own homes because of this project!

Surfrider-Oregon Policy Manager, Charlie Plybon, and Jocelyn brought a preliminary design to Surfrider member Allan Schmidt, who volunteered to develop to-scale computer drawings for the school district. General contractor, Todd Blossom of Blossom Earthworks, was hired to lead the project. Jerad Lillegard was assigned as the school's project manager.

Jerad was put in charge of fixing a large sinkhole and replacing an underground storm drain pipe that was clogged with tree roots. The school district began to see that the \$10,000 grant was insufficient and helped with excavation, grading, permits, and plumbing for the project.

There was a work party with lots of parents and students, and four Surfrider volunteers. Working in 96 degree heat, they completed a pathway, got a basalt rock fence installed, and tilled the ground and mixed the soil for planting. Two weeks later, the plants were brought to the school by Todd and his crew, and a group of volunteers got them laid out in the courtyard for planting preparation. On the following Monday, the two now-6th grade classrooms planted the plants to the rain garden and it's finally installed.

Click here for the complete story.



**CLICK HERE** for more information and to view the report on the Ocean Friendly Gardens map.









## South Jersey, New Jersey

Surfrider-South Jersey activist, Bill Steumpfig, attended the 2013 Surfrider-East Coat Chapters Conference to learn more about the Ocean Friendly Gardens Program. Bill's interest was sparked partially by plans to re-build his home in Ocean City, New Jersey that was destroyed by Super Storm Sandy. When an Ocean City Councilman proposed requiring grass and irrigation in the parkway strip for new development and major redevelopment in order to "improve flood mitigation," Bill got angry. This strip is typically just 3 feet wide and sprinklers would spray onto the street, creating runoff & wasting water. The city code requires a raised wooden border next to sidewalks and cement walkways to keep required mulch in place. An Ocean Friendly Gardens approach was needed.

Bill presented a plan to the Chapter that had short-term goals of getting their sphere of influence to apply OFG ideas to their own yards, and longer-term goals of getting municipalities to adopt more responsible guidelines to control runoff through OFGs.

As a barrier island, Ocean City can be prone to flooding. According to the councilman who introduced the grass and irrigation proposal, the sod would both help reduce flooding and keep the grass looking good, given that the majority of homes are vacation homes. The local resident whom the councilman credits with inspiring him to craft the ordinance was concerned with people filling in the parkway strips with concrete. Ironically, the native plants she has installed in her strip would not be allowed under the proposal. As reported by the PressofAtlanticCity.com, another councilman countered that irrigation systems were not needed in a wet climate, saying that: "It's like buying a car with a roof rack when you don't need it."

The City Council passed the first reading of an ordinance. Bill sprung into action and spoke at the second reading at a following OC City Council meeting, promoting the use of native plants and how to conserve water in yards. It paid off. The Council tabled the proposed grass/irrigation ordinance and agreed to meet with Bill to discuss a way forward. OFG was introduced and well received. Bill met with many likeminded people after the meeting. The Council seemed to like his low-key, but urgent approach.

Bill then spoke about OFG at the Ocean City Environmental Commission and found support. Two OC councilmen were there and listened to alternatives to grass and irrigation. Bill presented OFG ideas, along with photos of existing native yards in Ocean City. Everyone thought that the grounds of the local community center (Bayside Center) should be retrofitted to be an OFG and use natives! This would serve as environmentally friendly examples for homeowners and landscapers. Bill sees it as a great opportunity for Surfrider to do an OFG and spread the methods all over OC.

The next step is to work with the councilmen on a set of guidelines that includes responsible plant and water use. Bill will look to one Surfrider member who is a landscaper that wants to push OFGs. Bill also knows of a few nurseries that are good sources for native plants and will help fund projects.



Photo credit: Press of Atlantic City



## **Cape Fear, North Carolina**

As part of their annual planning process, the Surfrider Club at the University of North Carolina-Wilmington (UNCW) wanted to implement at least one of each of the Surfrider suite of programs. They had not done an Ocean Friendly Garden installation. Club member Kathryn Sisler Waple stepped up to take the lead. She and Club Advisor Sean Ahlum, (the Club's founder and Surfrider-Cape Fear Chapter member), were keen to do a high-profile project. So they started talking with community members and connected with a food coop in a high profile shopping center. As it turned out, UNCW owned the theater and parking lot across from the shopping center, on the other side of the grassy lawn. They had stormwater regulations with which to comply if they wanted to build on the property.

Sean connected with UNCW staff as well as Erin Carey, Watershed Coordinator for the City of Wilmington's Stormwater Services. Erin had heard about the project idea from Co-op staff and that it was not yet off-the-ground. Erin and UNCW staff were successful in getting grant money. Then, in 2013, Erin met North Carolina State University (NCSU) Professor Dr. Bill Hunt at one of Dr. Hunt's trainings. Dr. Hunt is with NCSU's Urban Stormwater Management unit in the Department of Biological and Agricultural Engineering and a national leader in natural solutions. Dr. Hunt liked the site because a simple, effective design could be implemented by his senior-level students. Dr. Hunt agreed to include the project in the list the students could choose from for their senior design project.

A team of students found the project very interesting! They both surveyed the land and created a design. In addition to all the elements to mimic the original conditions of the site, the design called for an outlet drain to a stormwater pipe in case there was a rainstorm of 4 inches or more. The most polluted part of a storm, known as the "first flush," comes in the first 1-2 inches.

So in April 2014, construction began. Cuts were made in parking lot curbs to allow water to flow from the parking lot into the garden.

The City of Wilmington donated crew labor, materials, and equipment. At the community workday, 20 volunteers worked for 8 hours! Led by crew leaders, they planted all native plants (most of the volunteers planting were UNCW students), installed swales to slow down, direct and absorb the water, and applied mulch. Grant monies paid for plants and for the students' travel. The installation got some great tv coverage, too. The garden was completed in early May 2014 and "went to work" quickly! Sean was on-site during rainstorms and a hurricane, and saw that the garden sponged-up 2-3 inch storms. To help educate visitors, signage will be installed.

The garden serves as both an educational and functional centerpiece for the Surfrider Chapter as well as the Heal Our Waterways Program, the outreach and project management component of the Bradley and Hewletts Creeks Watershed Restoration Plan.

Click here for the full story.



**CLICK HERE** for more information and to view the report on the Ocean Friendly Gardens map.







## First Coast, Florida







This project got started when Surfrider-First Coast Chapter Ocean Friendly Garden Chair, Paul Hayden, got a request from Fletcher Middle School Art Teacher, Chris Hicks (in Jacksonville Beach, Florida). Chris needed help turning three garden spots at the School into "Ocean Friendly Butterfly Gardens." Chris had been thinking of doing a garden project and heard about how well-received Paul's previous talks were.

The project was completed over three days, with a donation for materials from the First Coast Chapter, the oversight and assistance from Chris, the hard work of over 300 of his art students, and invaluable time and expertise from Donnie Pellicer of Native Roots Landscape and Design of Jacksonville.

First, Paul educated the students about the mission of the Surfrider Foundation and the tenets of the OFG Program. It was refreshing to see just how interested and inquisitive the students were and how hard and cheerfully they worked.

Then, the site was transformed:

**Conservation** - Donnie chose all Florida native plants, which will also attract beautiful butterflies. As a matter of fact, no sooner than the plants had arrived then a butterfly found its host plant and settled in.

**Permeability** - Soil was un-compacted, then the kids removed mulch that was not ocean friendly and replaced it with natural pine straw.

**Retention** - All of the irrigation for the plants will come from rain and run off. There are low points in each garden to help slow down and absorb runoff.

The school will handle the maintenance for the most part, but Donnie and Paul told Chris they would be available for help and advice where needed.

Click here for the full story.



**CLICK HERE** for more information and to view the report on the Ocean Friendly Gardens map.



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