

US EPA ARCHIVE DOCUMENT

# The Local Landscape

## Emerald Cities

Building green and sustainable living has taken off in recent years and 2008 is proving to be no exception. The realization is setting in: our environment is not a separate time and place; we can't escape it by entering our homes and shutting the doors. All of our actions, down to the food we eat and electricity we use have an impact on our natural environment. In turn the air we breathe, the soil which supports the growth of our food and fresh water all contribute to supporting human health.

It's necessary that people realize that our actions can turn these life necessities into harmful constituents; the water, air and soil that support our survival is only as healthy and clean as we keep it. Perhaps paralleled with current economic stress, this realization that our environment is all around us and needs our support is spreading.



Reusable totes becoming part of everyday life—beyond the grocery store.

More and more people are looking to live 'greener' by changing their commuter habits, maybe remembering that reusable shopping bag and even desiring to rent or own a home that is more energy efficient, built more sustainably and in a more ac-

commodating location—perhaps closer to public transportation. This shift in living style can not only improve one's quality of life, but it can be more affordable in the long run.

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## Sanitary Sewer Overflows (SSOs)

The last thing vacationers want is high bacteria levels interrupting their summer swim plans or clambakes. It's the tough truth however, that Sanitary Sewer Overflows (SSOs) are still a big problem throughout the United States and even here in New England. SSO's are the overflow, release, or spill of raw or partially treated sewage from a system before it reaches a treatment plant. The release of this sewage contaminates water, including that which we drink and bodies of water

we use for recreation inland or along our beautiful shorelines. Exposure to bacterial contamination can spark viruses and pathogens which can cause serious illness. Unfortunately, wastewater treatment facilities across our region are quite outdated and very expensive to maintain and update. They need to become a priority for municipalities, states and the federal government to address. SSOs can result from blockages caused by roots, grease,

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# How to Go Green with LEED Neighborhood Development

Leadership in Energy and Environmental Design for Neighborhood Development (LEED-ND) is officially the first national system for neighborhood design and focuses on environmentally responsible, sustainable development for entire communities. The initial pilot projects are actually spread worldwide, with 238 registered projects underway in 41 countries including the United States, Canada, Brazil, Mexico, and India. An exceptional number are located in the United States. This program in-

tends to create, or improve, entire communities by integrating principles of urbanism, smart location and green planning and design.

Communities seeking LEED-ND certification must meet certain guidelines and follow an established but flexible checklist. Certified neighborhoods must successfully address or provide criteria such as greater walkability, smart location and opportunity for alternate transportation, increased parks and green space, close proximity to schools, mixed-

use development, green building materials, abundance of trees, smart roadway designs to decrease car emissions among many others. For some time now, there has been great focus on energy efficient buildings; LEED-ND addresses the gap in our efforts towards sustainability when we drive our cars from suburbia to our solar powered offices. Developers are already experiencing higher demand for environmentally friendly building and a great shift in demand has begun for more eco-friendly living.

## (cont.) SSOs

debris from storm drains and structural, mechanical and electrical failures. The likelihood of an overflow is heightened during rainfall when stormwater runoff is added to normal wastewater and overburdens the treatment system to the point that the plant operators have to let untreated wastewater go. That raw sewage is what causes beach closures in subsequent days.

The EPA has many enforcement and assessment strategies to eliminate overflows by encouraging and forcing when necessary, municipal sewer systems to come into full compliance. These policies have eliminated millions of gallons of raw sewage from plaguing communities. Problems still remain however and it's an issue at the forefront of environmental concern. In the event of an SSO, health warnings are sent to the community members.

Prevention of SSOs is necessary to protect public health and enhance the quality of life for communities. Cleaner water will significantly decrease the number of viruses, bacteria, and parasites which appear in high numbers following an SSO. This is especially important to the elderly and children who commonly have more suppressed immune systems and are more likely to suffer.



*Two overflowing manholes flooding a street and parking lot in Rhode Island with contaminated water.*

Prevention of SSOs is necessary to protect public health and enhance the quality of life for communities.

To find out more about SSOs and how to protect your communities please visit: [www.epa.gov/region1/topics/water/wwater.html](http://www.epa.gov/region1/topics/water/wwater.html)

Promote SSO knowledge in your community-promote water conservation when it rains!

# Small Muni. Separate Storm Sewer System General Permits

EPA's 2003 small MS4 general permits expired on May 1, 2008. Municipalities covered under the 2003 permit will remain covered until EPA issues a new general permit applicable to the particular municipality. Municipalities must continue to implement the Storm Water Management Program (SWMP) required by the 2003 general permit.

After considering public comments, EPA anticipates that the final permits will be available in or around December 2008. Municipalities will be required to submit a new Notice of Intent (NOI). It is anticipated that the period after the effective date of the permit to submit an NOI will be 90 days.

The new small MS4 general permits will include the same six minimum control measures as the 2003 MS4 general permit as well as additional provisions to ensure water quality standards are

achieved. Changes are anticipated in water management programs of each the new MS4 general permit that will MS4 permittee in order to reduce the increase the effectiveness of storm- adverse effects of stormwater runoff.

It is anticipated that changes will include:

- An enhanced illicit detection discharge and elimination (IDDE) program with specific requirements to identify, isolate and remove illicit connections, thereby removing sanitary and other waste from the stormwater system,
- Monitoring of stormwater,
- An enhanced construction site stormwater runoff control program,
- Provisions that encourage the use of low impact design and green infrastructure techniques,
- Requirements derived from approved total maximum daily loads (TMDLs) to achieve specific water quality standards.

## New England's Youngest Earth Artists Celebrated!

Throughout this past May and June, EPA New England hosted four ceremonies, honoring over 1,000 young students ranging from Kindergarten to 6th Grade who competed in this year's Earth Artists poster and poetry contest. Representatives of EPA's regional office in New England presented certificates to students from five schools in New Hampshire, eight in Rhode Island, fifteen schools across the state of Connecticut and an incredible twenty-two schools in Massachusetts. Individuals and classes were recognized for their inspiring efforts and creative artwork that celebrated the earth and promoted ways to protect our planet.

EPA New England was also excited to host some special guest appearances; including the infamous Garbage Gremlin (EPA activity book character) who attempted to persuade the youngsters not to recycle as trash provides him with a comfortable and smelly home. Despite his best efforts, even the youngest participants proved they would not be swayed into believing that was a good idea! At the end of each ceremony, the Gremlin became inspired by the

wonderful artwork put together by the students and vows to now spread the message about how important it is to recycle.

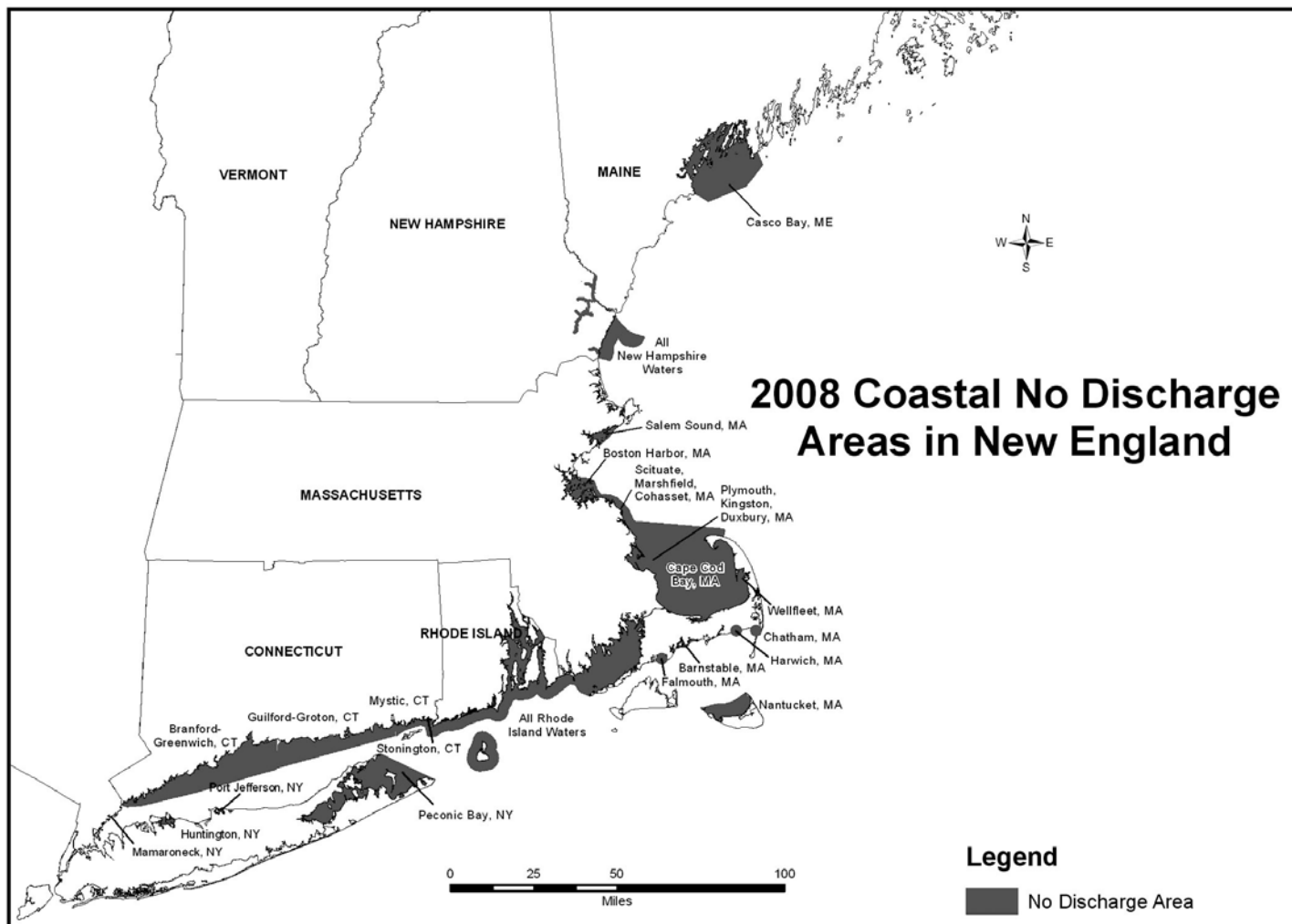
Massachusetts recipients also got a special visit from Wally, the great Green Monster of the Boston Red Sox. This past Earth Day a partnership began when the Red Sox in con-

junction with the Natural Resources Defense Council, were presented with an EPA Environmental Merit Award. (See back cover to learn how the home of the Green Monster is going greener!). Wally stopped by to hand out awards and pose for photos with the next generation of planet protectors.



(Mrs. Fisher and Ms. Conway's class poster at the Little Red Hen Preschool in East Greenwich, RI) Look for the 2009 contest brochure coming this fall!

# Safe Swimming: How Clean is Your Beach?



It is difficult to imagine what New England would be like without fishing, swimming, and boating which are all valuable to us. Unfortunately, everyone must still pay attention to bacteria levels before entering the water and consuming fish. Sanitary Sewer Overflows (SSOs), or Combined Sewer Overflows, (CSOs) from inadequate municipal treatment plants still release raw sewage into our beautiful waterways, severely decreasing water quality and preventing the carefree enjoyment from swimming and fishing. This bacterial contamination is just one of many serious environmental issues affecting the quality of our waterways. Regular stormwater discharge, runoff and pollution coming from onshore sources as well as boats can also affect the health of our coasts.

Since 2001 New England coastal communities have been benefiting from EPA's "It's a Shore Thing" campaign. The number of coastal beaches with water quality monitoring has almost doubled to 800 beaches. Every year EPA New England provides state grants to improve and increase the sampling efforts along New England's coastline. This monitoring is first step towards discovering:

**Is bacterial contamination present?**  
**Does it get worse when it rains? Why?**  
**Where could it be coming from?**

Enhanced efforts help to ensure that the public stays out of the water when it's not safe. EPA is working closely with state environmental and public health agencies to develop and implement this campaign under its new

Beach Initiative to reduce the pollution levels that cause beach closures in New England.

Efforts are also progressing to reduce the flow of sewage from boating to coastlines. Last summer Connecticut made it illegal to discharge untreated sewage from boats along its entire shoreline and work is being done to implement similar regulation in northern Maine, north of its first No Discharge Area in Casco Bay. Recent successes include the No Discharge Areas of Boston Harbor and Cape Cod Bay. The cleanliness of the water we use for boating, swimming, and fishing is just as vital to our health as is the quality of the water we drink. To find out about no discharge zones and beaches in your area please visit: [www.epa.gov/region1/topics/water/on-thewater.html](http://www.epa.gov/region1/topics/water/on-thewater.html)

# Recognizing New England's High Performing Wastewater Treatment Facilities

Every year, the EPA takes time to recognize facilities within various towns and cities which have displayed outstanding and innovative achievements in treatment of wastewater and pollution abatement. The Operations and Maintenance (O&M) Awards are granted throughout New England in several categories. This award program is intended to increase public awareness of contributions to facilities, projects and programs that make our waste water clean once again.

The 'Most Improved' category recognizes exceptional efforts by treatment plant personnel and local officials to get a facility back into compliance under a technology assistance program. More often than not, and particularly with the smaller facilities, conscientious operators and staff continue to perform exceptionally well with limited resources.

Last January EPA New England Regional O&M Excellence Awards were received by 11 publicly owned wastewater treatment plants for their commitment to improving water quality.

“ The professionals operating these wastewater treatment plants, as well as the municipalities and the state environmental agencies that support them, are vital to keeping our environment healthy. I am proud to give them the credit they deserve. ”  
—Robert W. Varney, Regional Administrator

## 2007 Award Recipients

- Bristol, New Hampshire
- Fall River, Massachusetts
- New England Interstate Water Pollution Control Commission (NEIWPCC)
- Vermont Department of Environmental Conservation (VTDEC) (Paul Olander)
- Pepperell, Massachusetts
- South Burlington, Vermont – Bartletts Bay Facility
- South Kingstown, Rhode Island
- Massachusetts Department of Environmental Protection (Thomas Bienkiewicz)
- New Hampshire Department of Environmental Services (Thomas White)
- Warren, Rhode Island
- Windsor Locks, Connecticut

## (cont.) Emerald Cities

As global environmental issues continue to garner greater attention, they also shed light on how individuals can act and live in a more sustainable manner and improve their environment closer to home. Municipalities may already be familiar with Smart Growth and LEED certification for buildings, now in addition EPA and the U.S. Green Building Council have expanded the LEED program to certify entire neighborhoods and communities. While this effort is only in the pilot phase, EPA encourages that municipalities look towards the developing criteria and watch the progress to stay ahead of the curve and perhaps apply these concepts to their own communities. LEED certified neighborhoods are the new emerald cities; safer, 'greener' and healthier places to live.

The re-creation of an entire neighborhood is a rare project; working well for areas following a natural disaster or in areas of large space and high redevelopment potential such as decommissioned military bases. For existing and thriving neighborhoods that could benefit from becoming greener, Look into EPA's web toolkit and planning guide called 'Green Communities', designed to improve sustainability. With a strong focus on ways a community can become

more energy efficient; it promotes a five step model for assessment and implementation, offering communities a planning approach for building green.

Building green is an investment, but it has proven to provide long lasting economic and social benefits. Green communities can become healthier and more diverse, not to mention provide more economic opportunity. This green program provides technical assistance as well as various funding and grants. While more people each day are beginning to be more healthy and eco-friendly, the Green Communities guide allows individuals to move above and beyond this act alone, joining others to truly live in a better place. To learn more about building green communities and funding please visit [www.epa.gov/greenkit/index.htm](http://www.epa.gov/greenkit/index.htm)

Ask your community these questions:

1. Where are we now?
2. Where do we want to be?
3. How do we get there?
4. Let's go!

# Red Sox Recycling Champs

The Natural Resources Defense Council (NRDC) has teamed up with Major League Baseball and EPA New England's hometown Boston Red Sox to address the significant environmental issues associated with bringing hundreds of thousands of fans together at Fenway park each season. NRDC developed a "Greening Advisor" for Major League Baseball to apply at stadiums across the country. Tapping into their expertise and advice, the Red Sox have initiated a major, 5-year effort to make Fenway Park one of the greenest destinations in baseball. With NRDC's help, the Red Sox organization is aiming to recycle plastic drink containers used in the park and reduce greenhouse gas emissions by 20 percent. The Red Sox have enlisted local university students to make up "Green Teams" who will be present

at every game at Fenway to roam the stands and help fans recycle their plastic cups and bottles. The Red Sox have also enlisted the talents of their greatest resource—their World Series Championship team—to encourage fans to do their part by recycling at the ball park and at home. Other projects underway include installing solar panels to help heat hot water and installing energy-efficient LED lighting displays in the park, which use just one-tenth the power of equivalent, traditional lighting displays. While many teams are going green as they build new stadiums, the Red Sox organization has made a challenging commitment: to transform the 96 year old historic ballpark into a modern, green, environmentally-friendly place. GO SOX!!

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For an A to Z list of activities and kid friendly information for a rainy day this summer check out:

[www.epa.gov/kids/atozindex.htm](http://www.epa.gov/kids/atozindex.htm)

