

GET RAINREADY WITH ENHANCED WATER QUALITY



WHAT IS IT?

The water we drink, use to flush our toilets, and wash ourselves comes from the earth and returns to it. Within this *water cycle* urbanization and development has greatly impacted water quality—the cleanliness and purity of water. This impact is often associated with *nonpoint source pollution (NSP)*. This is different from other types of pollution because it comes from so many different variables (such as human waste, runoff, pesticides, litter on the street, etc.) whereas industrial and sewage waste often directly enters the water source on site.¹ Because runoff water picks up pollutants it becomes increasingly important to catch the pollutants before it enters the ground through the implementation of green infrastructure.

WHY SHOULD WE CARE?

When it rains on dirty streets, we flush our toilets, water our lawns with fertilizers we are contributing to poor water quality. As water enters the ground directly, or through sewers, it picks up everything with which it comes in contact. Water is soluble and mixes with chemicals we put on our ground and becomes NSP, which is hazardous to our health. While we rely on water treatment facilities, home water filters, and other water cleaning devices, we are not solving the problem of NSP on our water sources.



WE CAN HELP

If you or your community are interested in getting RainReady, CNT staff members are available for presentations and for case-by-case technical assistance. Our presentations explain the benefits of rain readiness and outline their key elements, including needs assessments, financing, and supportive policies.

TO LEARN MORE ABOUT
THE PROGRAM, VISIT:
WWW.RAINREADY.ORG

 Rain Ready

 @RainReadyPlan

#RainReady #FloodVictim

CONVENTIONAL LANDSCAPING VS. SUSTAINABLE LANDSCAPING

CONVENTIONAL

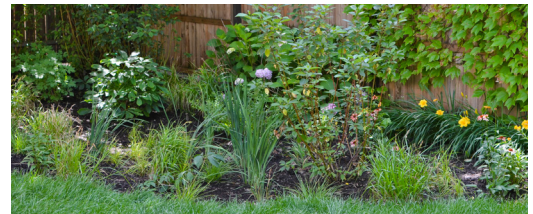
- Generates stormwater runoff and puts stress on our sewers while wasting treated water.
- Can be expensive to maintain and requires new planting annually.
- Sometimes includes exotic and invasive species.
- Can require the use of fertilizers and pesticides.
- Yearly planting, fertilizing and maintenance generates excess waste.
- Does not impact home energy efficiency.
- Often promotes materials shipped from far away at great cost.

SUSTAINABLE

- Minimizes stormwater runoff and utilizes valuable rainwater for irrigation.
- Minimizes maintenance costs by utilizing perennials and long-term landscape planning.
- Designed with native species that have adapted to survive in our climate and do not require fertilizers or pesticides.
- Native plants maintain four-season appeal by attracting and sustaining our native birds and other wildlife year-round.
- Low-maintenance means low-waste. The waste generated is composted and reused throughout the landscape.
- Promotes home energy efficiency. Trees provide shade in summer and block winds in winter.
- Supports our local businesses by employing a greater number of small facilities, hand labor and ongoing maintenance

MATERIALS

RainReady has a number of Guides and DIY instructions on **Green Infrastructure** that can improve water quality. The best thing to do is **plant deep rooted** flowers, grasses, etc. that will soak in the water, trap the chemicals, and release clean water back into the environment. Buy **tap water filters** for you home to improve water quality.



ON SATURDAY, JANUARY 16TH 2016, PRESIDENT BARACK OBAMA DECLARED A FEDERAL STATE OF EMERGENCY IN FLINT, MI DUE TO TRACE AMOUNTS OF LEAD IN CHILDREN'S BLOOD DUE TO POOR WATER QUALITY. ²

Other cities face serious threats. According to the Natural Resources Defense Council, "In Atlanta, Chicago, Detroit, Houston, Los Angeles, New Orleans, Newark, Philadelphia, Phoenix, San Diego and Washington, D.C., source water is threatened by runoff and industrial or sewage contamination." ³

IMPLEMENTATION



DRINK LOCALLY:

When going out, on a hike, or at work fill up a personal water bottle with tap water. Ask for tap water at restaurants. Drinking from your tap, i.e. drinking locally reduces water miles traveled and energy usage.



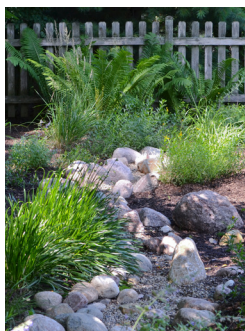
REUSE AND REDUCE BEFORE YOU RECYCLE:

Before you buy water bottles or recycle them, consider reusing them. Also reduce your water consumption in the restroom through graywater loop systems, shorter showers, and more. There's nothing wrong with "if it's yellow, keep it mellow." Reuse/Reduce first.



CLEAN UP YOUR LAWN:

We don't mean with soap and water. We mean taking out the hazardous chemicals you use to help your lawn grow. Consider greener alternatives instead, like compost. For more information see our Factsheet on Natural Lawn Care.



FILTER YOUR WATER:

While filtering the water you use from the tap is important, the water from your home is more critical. By implementing green infrastructure (GI) on your lawn you can be solution, not the problem. Check out our DIY GI Factsheets.



LOBBY FOR ENHANCED WATER QUALITY:

Ask locally, state, and federally elected officials how they are ensuring cleaner water for your community. If their answers are seeming a little gray follow up with how they are implementing green infrastructure to beautify and conserve land and water.



AN UNLIKELY SUCCESS STORY

Love Canal was supposed to be a Model Town at the turn of the century. The ditch built for the canal left open until the 1920s it began being filled with hazardous chemicals for the next 30 years by the city. It was covered by the Hooker Chemical Company in the early 1950s, sold, and developed into a community. Over time the chemicals began to leach into the ground and water supply causing cancers, birth defects, and worse things. It was declared a federal state of emergency and slowly cleaned up.⁴

Why a success? It ushered in the Comprehensive Environmental Response, Compensation, and Liability Act (Superfund) and a new era of Environmental Activism.⁵

UNDERSTANDING YOUR SITE

LAYOUT

Take a good look at your site. Note the placement of existing plants and trees, paved areas, buildings and power lines. Take a few days to monitor which areas get full or partial sunlight and take note of low spots that tend to collect water during rain storms.

SOIL

Determine your soil type before you purchase new plants or trees and check with your local garden center for species adapted to your soil type. If you are planning to grow vegetables, build a raised bed or have your soil tested to ensure it is safe for growing vegetables.

SUN

Before you buy new plants or trees, be sure to note the sunny and shady areas of your yard. Each species has its own sunlight requirement and should be planted accordingly. Look for opportunities to use trees for shading a seating area or the windows of your home.

SUSTAINABLE LANDSCAPING TIPS

- ✓ Use locally-sourced and recycled materials where possible.
- ✓ Avoid impermeable surfaces. Utilize permeable materials where possible.
- ✓ Use homemade compost instead of store-bought fertilizers.
- ✓ Practice Integrated Pest Management instead of applying pesticides.
- ✓ If you choose to keep a lawn, utilize natural lawn care practices.
- ✓ To maximize energy savings, strategically plant trees to serve as wind-blocks in the winter and shade your home in the summer.
- ✓ See www.chicagohomecomposting.org and www.landscapeforlife.org for more information.



RACHEL CARSON, AUTHOR OF SILENT SPRING, SAID IT BEST: **"IN AN AGE WHEN MAN HAS FORGOTTEN HIS ORIGINS AND IS BLIND EVEN TO HIS MOST ESSENTIAL NEEDS FOR SURVIVAL, WATER ALONG WITH OTHER RESOURCES HAS BECOME THE VICTIM OF HIS INDIFFERENCE."** WE'RE HERE TO TURN THAT INDIFFERENCE INTO ACTION!

(1) <https://www.epa.gov/polluted-runoff-nonpoint-source-pollution/what-nonpoint-source>

(2) http://www.nytimes.com/2016/01/18/us/obama-flint-michigan-water-fema-emergency-disaster.html?_r=0

(3) https://thewaterproject.org/bottled_water_wasteful (4) <http://www.epa.gov/aboutepa/love-canal-tragedy>

(5) https://www.geneseo.edu/history/love_canal_history

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