# Get RainReady with RAIN BARRELS





In RainReady<sup>SM</sup> communities, better water management means that homes, schools, and businesses are prepared for rain—whether too much or too little. RainReady programs keep residences secure and dry, services running, and rivers and lakes clean.

#### **THE ISSUE**

After stormwater falls on your roof and travels down your downspouts, it combines with wastewater from your house and flows to the city's sewer. As shown in the diagram to the right, this can lead to basement flooding and street ponding.

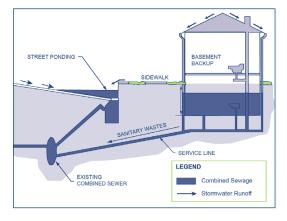
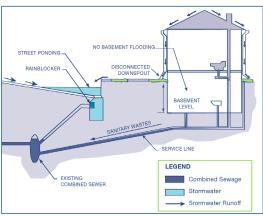


DIAGRAM:
BASEMENT FLOODING
During heavy rains, the
sewer system can become
too full, causing untreated
combined sewage to both
back up into basements
and the street and flow
into the river system (this is
called a combined sewer
overflow or CSO).

#### WHY INSTALL A RAIN BARREL AT HOME?

- Rain water is free!
- Your plants will thank you. Tap water contains chlorine, which, while important for keeping our drinking water safe, can inhibit the health of our plants.
- When combined with your neighbors' efforts, disconnecting your downspout and installing a rain barrel reduces the risk of basement flooding in your area.
- Keep water in the natural water cycle and increase groundwater supply by directing water to your yard instead of the sewer system.
- Improve water quality in the Chicago, Calumet and Des Plaines Rivers by helping to prevent combined sewer overflows.



#### **DID YOU KNOW?**

CHICAGOANS CONSUME OVER 500 MILLION GALLONS OF WATER PER DAY! THAT'S EQUIVALENT TO OVER 800 OLYMPIC-SIZED SWIMMING POOLS.

DIAGRAM: DISCONNECTED DOWNSPOUTS+ **RAINBLOCKERS** Keeping stormwater out of the sewers helps to prevent basement back-ups and CSOs. Disconnected downspouts, if directed to pervious surfaces, allow stormwater to soak into the ground, Rainblockers. placed in the catch basins by the City of Chicago, also help by slowing the flow of stormwater entering the sewers, causing temporary street ponding of stormwater. Additional features, such as rain barrels, permeable paving, deep-rooted landscaping and green roofs also help to keep water out of the sewers.

#### **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.

For more information visit rainready.org or contact info@rainready.org.





# **CONVENTIONAL LANDSCAPING**

- 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.

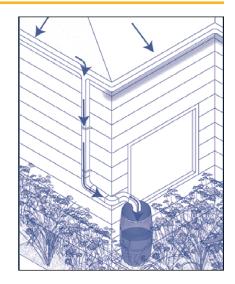
# **SUSTAINABLE LANDSCAPING**

- 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.

# IS IT APPROPRIATE FOR MY YARD?

Before you begin, decide whether or not it is appropriate to disconnect your downspout. In a typical half-inch storm a 1,000 square foot roof will produce about 312 gallons of water, while most rain barrels hold about 55 gallons. Consider where you are directing that water.

- The area surrounding the disconnected downspout should have enough permeable surface to soak up water overflowing from your barrel. Your barrel WILL overflow! Consider planting trees and other leafy, deep-rooted plants nearby.
- Consider the slope of your yard. Overflow should not run toward your foundation or onto your neighbor's property.
- Stormwater should not flow over walkways since the water may freeze in cold weather and cause slippery conditions.





# MATERIALS YOU'LL NEED

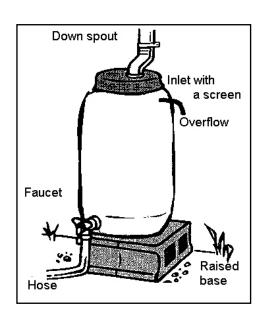
- Downspout elbow(s)
- ✓ Raised base: cinder blocks, bricks or wooden platform
- ✓ For aluminum downspouts: hacksaw, screws, screwdriver
- ✓ For PVC downspouts: hacksaw, PVC cement
- ✓ OPTIONAL: hose to attach to spigot, downspout diverter





# DISCONNECTING YOUR DOWNSPOUT + INSTALLING YOUR RAIN BARREL:

- Choose a downspout near your garden and with the above considerations in mind.
- Secure your downspout to the house with a bracket.
- Cut downspout using a hacksaw in two places: (1) at least 4 inches above the top of your rain barrel (remember to account for the length of elbow and raised base if you're using one) and (2) a few inches above the ground. Save the removed piece of downspout in case you decide to reconnect over the winter.
- Attach downspout elbow with screws or PVC cement.
- Plug the sewer standpipe (the open hold where your downspout once was) with a rubber plug.



# USING AND MAINTAINING YOUR RAIN BARREL

#### DO NOT DRINK THE WATER!

Empty your barrel frequently; depending on the size of your roof and rain barrel, a ½" rain may cause barrel to overflow.

Common rain barrel issues are generally the result of neglect. Your rain barrel will only attract insects or become stagnant if it is left unattended for long periods of time.

Regularly check for leaks, obstructions, debris and integrity of screen.

Before temperatures fall below freezing, barrel should be drained and spigots left open, stored upsidedown, or stored indoors to prevent freezing and cracking. Some rain barrel users reconnect their downspout in the winter using the straight piece of pipe left over from the disconnection process.

Maximize your stormwater efforts by planting deep-rooted perennials or trees in your yard!





# RainReady LANDSCAPING TIPS

## **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**

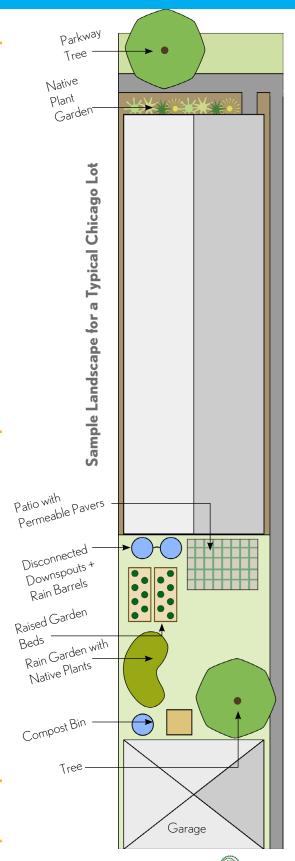
Determine your soil type before you purchase new plants or trees and check with your local garden center for species adapted to your soil type. If you are planning to grow vegetables, build a raised bed or have your soil tested to ensure it is safe for growing vegetables.

#### **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 lawncare 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.



ARE YOU RAINREADY? IS YOUR COMMUNITY RAINREADY?

LEARN MORE AT WWW.RAINREADY.ORG

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