



The Chicago region uses 2.4 billion gallons of water a day, which is more water than 4,500 Olympic swimming pools. Every drop of water used and consumed in Chicago comes from Lake Michigan, a finite resource. Rain barrels divert stormwater from the city's sewers, reducing the incidence of combined sewer overflows (CSO's) that can pollute the region's waterways and back up into residents' basements. Rain water can be used as an alternative to tap water in several situations like watering the garden, cleaning garden tools and washing recreational equipment like bikes.

Did you know?

Lawn and garden watering can make up 40% of your water use during the hot summer months. A rain barrel can significantly reduce the amount of water you consume.

The Chicago Department of Environment (DOE) offers rain barrel rebates to residents through the Chicago Sustainable Backyard Program. **Coordinate with C3 and DOE's Sustainable Backyard Program to organize a rain barrel workshop in your neighborhood.** *Note: This event can also be combined with a compost bin and native plant and tree workshop.* Advertise to community members, neighbors, co-workers, gardeners at your local garden, and members of housing and community development organizations. During the workshop, demonstrate how to properly install and maintain a rain barrel. Consider suggesting that people track the amount of water used from the rain barrel on a weekly basis. The amount of water collected in the rain barrel is directly proportionate to the amount of water they can divert from the sewer system. After the workshop, follow up with workshop attendees. Consider collecting the following information in your follow up: has the rain barrel been purchased? Has the rebate and receipt been returned to the DOE? Has the barrel been installed? Is installation assistance needed? Determine if your team has the capacity to assist community members with installation after the barrel has been purchased. If so, set up a system for providing hands-on installation assistance in your community.

Timeline:

- **Project Proposal due to C3 Liaison:** 1 week after the Community Organizing class
- **Part I: Preparation:** 1-2 months
- **Part II: Workshop Day:** 1.5-2 hours
- **Part III: Follow up and Tracking Environmental Benefits:** 2-3 hours, 1-2 weeks after distribution
- **Part IV: Final Report due to C3 Liaison:** 2 weeks after your project is complete

Materials:

- Demonstration rain barrel
- Demonstration downspout elbow extender
- Copies of the Sustainable Backyard rain barrel rebate form
- Copies of the local vendor list
- **Rain Barrel Installation and Maintenance** guides
- **Rain Barrel** PowerPoint presentation
- **Stormwater Management** brochures
- Flood preparedness brochures

Things to Keep in Mind:

- Installing a rain barrel in the appropriate location is crucial. Choose a downspout on your house or garage that is in close proximity to the plants you water most. Place your rain barrel on a permeable (e.g. landscaped) surface that allows overflow from your rain barrel to soak into the ground, not your neighbors' property. Otherwise, placing the rain barrel on an impervious (e.g. paved) surface will result in an overflow from the barrel during heavy rains that could pool or seep into your house or garage foundation.

To make the City's Sustainable Backyard Program fair for all residents, please keep following in mind:

- The City offers a rebate of 50% off (up to \$40) on any rain barrel purchased.
- Limit one rebate per household, per year.
- Rebate recipients must be Chicago residents.



Part I: Preparation:

~1-2 months

1. **Become an Expert!** Read through the **Rain Barrel Installation and Maintenance** handout, and review our **Rain Barrel** PowerPoint (request an electronic copy from your C3 liaison). Review the C3 Speakers Bureau Rain Barrel Toolkit found on the C3 blog for presentation pointers and talking points. Perhaps you can install a rain barrel at your home so you can better advise workshop participants. Finally, consider volunteering at a DOE Sustainable Backyard workshop or roundtable to gain additional knowledge.
2. **Define your project vision and goals.** What do you hope to achieve by doing this project? How many community members do you hope will participate? What environmental benefits do you hope to achieve? A reasonable goal would be to distribute about 30 rain barrel rebate forms.
3. **Gather a project team.** Refer to the **Building Your Project Team** worksheet in your Project Development Workbook. Your project team can help you plan, prepare and implement your workshop, or they can simply volunteer to help out on the day of the workshop by signing in participants, handing out brochures, and/or demonstrating how the barrels work. Determine if your project team has the capacity to provide rain barrel installation assistance for neighbors that need additional help.
4. **Find a location and set up a date and time for your workshop. Before setting the date, work with your C3 liaison to set a date and time to pick up a demonstration rain barrel/compost bin and presentation materials at the Center for Green Technology.** Identify a venue in the community that would be appropriate to hold a workshop. An appropriate location will have enough space to hold 30+ people, such as a library community room. Make sure to contact the appropriate person at the venue to check availability and set up a date and a 1.5-2 hour block of time when you can give your presentation (e.g. 10 am – 12 pm on a Saturday). Work with your C3 liaison to set up when and where your workshop will be conducted. Possible locations include:
 - A Chicago Park District field house (ask C3 staff for help)
 - Your local Chicago Public Library
 - Neighborhood community center
 - Local church
 - Local school
 - Local community garden
5. **Advertise.** Post on the C3 blog and calendar, post on the C3 Facebook page, create a Facebook event, post on sites like Foresight Design and Chicago ReGen, stop by your local community garden, put information in community and aldermanic newsletters, or drop off flyers at local organizations. Make sure to include the following information on all promotional materials:
 - Location, date and time of workshop.
 - Pertinent information about the rebate program (rebates only available to Chicago residents; limit one barrel per household per year).
 - RSVP request contact information.
6. **Order presentation materials through your liaison at least 3 weeks before the workshop.**

Provide your liaison with the following information:

 - Quantities of any handouts/brochures you will distribute.
 - Number of rebate forms needed.
 - Logistical details to ensure prompt pick-up of demonstration material.
 - Please note: a Home Depot gift card will be included for the purchase of a downspout extender.



7. Work with your project team to prepare for your workshop.

- **Plan and practice your rain barrel demonstration.** Prepare and practice the demonstration ahead of time with your team, and make sure everyone involved is very familiar with barrel installation, placement and use so they can answer questions. We suggest the following resources to help you prepare the demonstration.
 - Refer to the **Rain Barrel Installation and Maintenance** handout.
 - Review the **Rain Barrels** PowerPoint presentation as a group.
 - Talk to friends/neighbors who already have a rain barrel.
 - Volunteer at DOE's Sustainable Backyard workshops and events.
 - Consult your C3 liaison with questions.
- **Plan how the workshop day will work.** Consider the following:
 - Designate roles for each member of your project team.
 - Plan for adequate car and bike parking (encourage public transit, biking and walking).
 - Set up a sign-in table so you can track participation and collect follow up contact information.
 - Create a transit plan to assist the rain barrel raffle winner in case they are without access to a car.
- **Gather materials to hand out to participants and to use as a demonstration.** We recommend:
 - A rain barrel for demonstration
 - An elbow downspout connector for demonstration
 - **Rain Barrel Installation and Maintenance** handouts and other brochures.
 - Nametags for project team members who are helping with the event.

Part II: Workshop

1.5-2 hours: 30 minute set up; 1 hour demonstration; 30 minute clean up

1. Arrive 30 minutes early to set up.

2. Put all of your hard work and planning into action. With the help of your team:

- Sign in everyone who shows up to the workshop and record their contact information. Let them know you will contact them in a few weeks to help with troubleshooting.
- Set up a rain barrel raffle system, including tickets and a receptacle to hold the tickets.
- Hand out the **Rain Barrel Installation and Maintenance** guide and other brochures.
- Discuss the benefits of stormwater management and water conservation provided by rain barrels.
- Demonstrate how to install/use the barrels, explain proper rain barrel placement, and answer questions.
- Hand out rain barrel rebate forms.
- Conduct rain barrel raffle. Winners must be present. Determine whether the winner needs help getting their barrel home.
- Collect remaining presentation materials and return to CCGT.

Part III: Follow-Up and Tracking Environmental Benefits:

~2-3 hours; a week or two after the workshop

1. **Follow-up with participants.** Once your participants have had time to purchase and install their rain barrels, contact them to ask how their barrels are working and track environmental benefits. We suggest that you either call or send each participant a short survey. Make sure to ask:
 - Has the rain barrel been purchased?
 - Has the rain barrel been installed?



- What are the obstacles to installation and use? Suggest solutions and if you are comfortable, offer to assist with installation.
 - How does the rain barrel function? Does the barrel have any problems with drainage, attracting mosquitoes, leakage, or excessive overflow? Recommend solutions and contact your liaison with any unanswerable questions.
 - How often is the rain water used and for what purpose? How often is the barrel emptied? Weekly? Monthly? Encourage folks to use the water. The more water used, the more water collected and ultimately, the more water conserved.
 - Has the rebate form been completed? Is another copy needed?
 - Consider starting a rain barrel brigade with your project team to assist your neighbors with their barrels.
2. **Calculate environmental and community benefits.** Based on your workshop and the participants' survey responses, estimate the benefits of your project. Be sure to include:
- The number of workshop/project participants.
 - The number of rebate forms distributed.
 - (C3 does this for you) How many gallons of water your project diverts from storm sewers each month. Considering that Chicago's average rainfall is 3 inches per month and a typical 1,000 square-foot roof accepts 620 gallons during a one-inch rain storm, a barrel installed at a typical 4-downpout home can divert 465 gallons of water a month. (Not all of this water is actually used – some of it overflows and is absorbed by the permeable surface under the barrel). Therefore, if you assume that it rains 3 inches per month and each barrel is installed at a typical home, you can estimate how much water the barrels divert from the sewer using the following equation:

Gallons of water diverted per month = Number of barrels installed X 465

- (C3 does this for your too) How many gallons of water your project saves per month. Assuming that a rain barrel is emptied 3 times per month and that the barrels is full each time it is emptied, a barrel can conserve 165 gallons of water per month. Therefore, you can estimate how much water the rain barrels conserve each month using the following equation:

Gallons of water conserved per month = Number of barrels installed X 165

Better yet, you can tweak this equation based on the past month's rainfall and how often your participants use their rain barrels.

- Any publicity you received (e.g., 1 community paper write-up about your project)

Part IV: Fill out your Final Report online (As soon as follow-up is complete)

As soon as you've calculated environmental benefits, please fill out your **Final Report** online. Corresponding materials such as digital photographs, outreach flyers or posters, press releases, or news clippings should be emailed to conservation@cityofchicago.org or to your liaison directly.

Rain Barrel Installation and Maintenance

City of Chicago Departments of Environment and Water Management

Placing Your Rain Barrel

- Choose a downspout on your house or garage that is close to the plants and garden you water most, and where your rain barrel's overflow will soak into your own yard, and not your neighbors' property.
- Place your rain barrel on a pervious (e.g., landscaped) surface that allows overflow from your rain barrel to soak into the ground. If placed on an impervious (e.g., paved) surface, rain barrel water overflow during heavy rains could pool or seep into your house or garage foundation.
- You may want to place the rain barrel on concrete blocks if you are going to use a hose to direct water to your garden (gravity will help move the water), or if you want to fill up a watering can from the spigot (so the can fits underneath the spigot).

Connecting Your Downspout to Your Rain Barrel



Tools: Rain barrel, hacksaw, aluminum downspout with 6 screws and a screwdriver, or PVC downspout with PVC cement.

- Place your barrel near the downspout you have selected, and plan out how you will direct the downspouts.
- Disconnect your downspout from the sewer system by sawing the downspout above where the top of the rain barrel will be, leaving room for the elbow to be attached.
- Attach a downspout elbow to the end of your downspout so that water from your downspout is directed into the rain barrel through the plastic screen vent on top.
- If you have an aluminum downspout, secure it to the elbow with screws.
- If you have a PVC downspout, secure it to the elbow with PVC cement.
- Place your rain barrel under the downspout elbow.
- Optional: Attach a hose to the spigot, and/or to the overflow hole on the top-side of the barrel. Make sure that the overflow is directed into your own yard.

Using Rain Barrel Water

- Water your flowers, trees, shrubs, and lawn.
- Wash your car or pets. Rinse hands and feet, tools, or muddy boots.
- Keep your rain barrel lid on tight at all times to prevent children and animals from entering or falling in.
- DO NOT DRINK WATER from your rain barrel.

Rain Barrel Installation and Maintenance (continued)

City of Chicago Departments of Environment and Water Management

Maintaining Your Rain Barrel

- Keep your rain barrel spigot closed when you are not using the water so that the rain barrel can collect water. Overflow water will spill from the black vent on the top and the overflow hole on the side near the top.
- Regularly check your gutters, downspouts, rain barrel water intake screen, rain barrel mosquito screen and rain barrel spigot for leaks, obstructions or debris.
- Keep your rain barrel lid sealed.
- Drain your rain barrel before temperatures drop below freezing.
- In the winter, keep your rain barrel spigot open so that water does not accumulate in the rain barrel and freeze.

Preventing Mosquitoes

Your rain barrel should be equipped with a mosquito-proof screen over all openings to keep mosquitoes and other insects out.

- Place your barrel on a pervious (water-absorbing) surface, so that overflow water soaks into the ground instead of pooling on paved surfaces.
- Keep your rain barrel lid sealed.
- Keep your barrel free of organic material.
- During the rainy season, every 3-4 days use your hand to splash off any water that may collect on the top of the barrel. Mosquitoes need at least 4 days of standing water to develop as larva.
- If you believe mosquitoes are breeding in your rain barrel, empty your barrel completely. This will kill all mosquito larvae that may be in your barrel. If your mosquito netting is intact and there are no leaks, your rain barrel should be mosquito-free.

Disclaimer

With proper installation, maintenance and use, your rain barrel should function properly. The City of Chicago, the Chicago Department of Environment and the Chicago Department of Water Management assume no liability for the installation, maintenance or use of your rain barrel. We are not responsible for any rain barrel malfunction, property damage, or injury associated with your rain barrel, its accessories or contents.

Further Contact

If you have any questions or comments regarding rain barrel installation or maintenance, please contact the Chicago Dept. of Environment at **(312) 743-WATER (9283)** or rainbarrel@cityofchicago.org. More information available at www.cityofchicago.org/rainbarrel.