RAINWATER HARVESTING

Taking Care of a Rain Barrel
Rain barrels need regular maintenance so that they continue to work properly and do not become a breeding area for mosquitos and other insects.

To Maintain Your Rain Barrel

✓ Remove leaves, debris, or sediment from the rain barrel, screens, gutter, and downspouts, as needed but at least once per year, to prevent clogging.
✓ Clear vegetation and trees that overhang the roof to help avoid leaves and debris collecting in the gutters connected to the rain barrel.
✓ Use the collected water for irrigation and other non-potable use between storms to prevent overflows.
✓ Open the overflow spigot and direct the drainage to your property boundaries or other appropriate area if you will be away for an extended period.
✓ Inspect the filter screen to ensure there are no holes and it is securely fastened to keep out mosquitoes, as needed but at least once per year.
✓ Check stability of the rain barrel monthly to avoid injuries from a falling rain barrel.
✓ Disconnect and inspect the rain barrel for damage, cracks, and leaks before winter storage. Clean, dry, and store the rain barrel upside down or under a tarp until spring.

Stormwater runoff is rainfall that moves over paved or impervious surfaces, picking up pollutants like litter, oil, and animal waste along the way to the storm drain system. Stormwater management facilities help to remove pollutants from stormwater runoff before that water reaches the rivers and bays of Virginia Beach. This fact sheet provides information on a specific type of stormwater management facility and how to maintain it.

What is Rainwater Harvesting?
Rainwater harvesting is the process of capturing rainwater in rain barrels or cisterns for non-potable (non-drinking) use after a storm. On residential properties, rain barrels are the most common form of rainwater harvesting and typically capture rainwater from roof downspouts.

How Does Rainwater Harvesting Work?
Rainwater harvesting prevents stormwater from entering the storm drain system and allows it to be used for other purposes, such as irrigation. Water is captured from a surface such as a roof, conveyed to the rain barrel or cistern through pipes or gutters, stored, and is then available for use through a spigot or hose. Rain barrels may be placed on elevated stands to improve flow through a hose.

Rain barrels and cisterns require pretreatment such as a screen to keep sediment, leaves, and other debris from clogging the system. Rain barrels and cisterns also have an overflow system to divert excess rainwater when full.

Parts of a Rain Barrel

Screen
Downspout from roof
Overflow
Spigot
Elevated stand
<table>
<thead>
<tr>
<th>Problem</th>
<th>Likely cause</th>
<th>How to fix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rain barrel overflowing</td>
<td>Rain barrel was full before the storm or is too small for the roof area.</td>
<td>Empty the rain barrel between storms. Install additional rain barrels and connect in series if more than one barrel is needed for your roof area.</td>
</tr>
<tr>
<td>Cracks or damage</td>
<td>The rain barrel contained water when the outdoor temperature fell below freezing. The rain barrel fell off an elevated stand.</td>
<td>Repair damage if possible or replace the rain barrel. Remember to disconnect, clean, and dry your rain barrel in the winter. Check and stabilize the elevated stand to avoid potential injuries.</td>
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<tr>
<td>Mosquitoes</td>
<td>Screens may be missing or damaged.</td>
<td>Inspect, repair, and replace screens as needed. If you still find mosquitoes in your rain barrel, you may use insect dunks. A quarter dunk added monthly will treat a 55-gallon rain barrel.</td>
</tr>
<tr>
<td>Rain barrel leaning</td>
<td>The foundation may have shifted or is unstable.</td>
<td>Level the foundation and your barrel. Ensure the foundation is stable to avoid potential injuries from a falling rain barrel.</td>
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</tbody>
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Virginia Beach Stormwater Management Program
www.vbgov.com/stormwater-program
📞 757-385-4131
✉️ VBstormwater@vbgov.com

Hampton Roads Planning District Commission
www.askhrgreen.org
📞 757-420-8300
✉️ hrgreen@hrpdcva.gov

Virginia Beach Master Gardeners
www.vbmg.org
📞 757-385-8156
✉️ vbmghelp@vbgov.com

Virginia Stormwater BMP Clearinghouse
www.swbmp.vwwrc.vt.edu
✉️ BMPClearinghouse@deq.virginia.gov