Making Your Yard RainReady

In RainReady℠ 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.

Your yard offers many quick and affordable opportunities to manage flooding, water scarcity, soil erosion, and pollution. You may need an expert to assess the problems and recommend customized solutions, particularly in the case of flooding, since there may be multiple issues affecting your property simultaneously.

RETAINING WATER ONSITE:

By capturing the rain that runs off your yard or roof, you can reduce the risk of it being siphoned into your home or the homes of your neighbors. Onsite retention also reduces the need for irrigation and the impact of drought, and many improvements can attract wildlife.

There are several ways to capture rainwater, such as rain gardens, swales, dry wells, and permeable paving. Rain gardens, for example, can receive the runoff from your downspout. They are also attractive, easy to build, and good for wildlife when planted with native vegetation. Traditional lawns, in contrast, are poor at capturing rain, since they act more like impervious surfaces.

In order to capture as much runoff as possible, make sure that your retention site is at least five or six feet away from your building foundation and that it is located at a low point in your yard. You can also use a French drain to transport runoff from the building to your retention site.

Rain barrels and cisterns are also useful for capturing rain that can be used to water plants. Because of their relatively small capacity, you may need to empty them after each rain event.

PLANT AND LAWN CARE:

Photo credit: Joy Stewart

Although they are the standard in many places, single-species grass lawns (often composed of Bermuda or Rye grass) are poor for water management. Because of their large surface areas and limited ability to absorb water, conventional lawns act like impervious surfaces and contribute to flooding. Lawns are also susceptible to drought, demand regular watering, mowing, and weeding, and require fertilizers and herbicides that pollute rivers and streams.

Plants that are native to your area are better adapted to the local climate than non-native plants, so they are also better able to handle flooding or water scarcity. Additionally, native plants are typically more attractive to wildlife, better at preventing soil erosion, and contribute to less pollution than traditional lawns.

In drought-prone areas, xeriscaping offers an alternative to conventional landscaping. Xeriscaping is landscaping and gardening that reduces or eliminates the need for supplemental water from irrigation. You can employ this technique by limiting turf areas, irrigating efficiently, using mulches, and selecting native, zone-appropriate plants based on the regional climate.

RE-GRADING AND SEALING:

If you find that runoff is pooling against the side of your house, re-grade the land so that water drains away from it. Make sure that sidewalks, patios, decks, and driveways haven't shifted over time, as such movement can cause water to drain toward your home. A rule of thumb for grading is that land should slope downward one inch per horizontal foot for at least six feet from your house.

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If the concrete near your house does not slope away from your house, you can either replace it or "mudjack" it. This process involves pumping a mixture of "mud" underneath the settling slab in order to lift and stabilize it. The injected mixture of water, soil, sand, and cement will cure to create a solid, stable fill.

Seal any cracks with waterproofing compounds to prevent water from entering the foundation. If there is a risk of water entering your home through window wells, you may need to cement the windows, raise them, or buy window well covers.

REMOVING DRAINAGE BLOCKS:

Most homes are designed so that stormwater can flow away from the building towards common drainage areas near the lot line. Water should either flow to a drainage ditch or storm sewer in the front yard, or a drainage area in the back yard. Make sure that this flow of water isn't blocked by sheds, fences, or other structures—either on your property or that of your neighbors. Remove wood piles or mulch from drainage areas, since they float and can block inlets and sewers. Also make sure that the grates on your street are clear of any debris.

GUTTERS AND DOWNSPOUTS:

The water from your gutters can overwhelm sewer systems and increase the risk of flooding in a neighborhood. If the downspouts from your gutters are connected to the sewer system, have them disconnected and extended at least five feet away from the foundation of your home with an elongated pipe. This is one of the quickest and most cost-effective ways to reduce the risks of flooding caused by basement and sewer backups.

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WALLS AND BARRIERS:

When water flows to a low entry point like a basement stairwell or patio door, constructing a low wall or re-grading the land around this point can keep water away. If the water level does not recede within a few hours, an internal drainage system with a pump may be needed to handle seepage.

Artificial barriers like floodwalls can effectively repel water from properties affected by overland flooding. A floodwall can surround an entire structure or protect individual openings, such as doors, windows, and basements. In some shallow flooding areas, a simple floodwall can effectively protect a vulnerable portion of the structure, but maintenance of the barrier is required to address settling or cracking that will occur over time.

DOES YOUR COMMUNITY HAVE A RAINREADY PLAN? LEARN MORE AT **WWW.RAINREADY.ORG**

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