

ASK YOUR COMMISSIONER: Why do we need Green Infrastructure in Rumson, and should I use it in my own yard?

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As residents of this beautiful peninsula surrounded by the Navesink and Shrewsbury Rivers, we treasure our rivers and the marine life it brings. We take for granted that the rivers will be clean and safe for wildlife and recreation, without realizing the harmful impact our everyday human activities have on the waterways. Both rivers receive massive amounts of stormwater runoff from adjacent impervious surfaces, such as roads, sidewalks, roofs, parking lots, and packed dirt. This runoff contains the common suburban pollutants deposited on those surfaces, such as auto emission particulates, pet waste, engine oil, yard herbicide and fertilizer residues, plastics from car tire wear, litter trash, and more. The pollutants are carried into the rivers where they degrade water quality, causing decreased oxygen levels, algal blooms, and fish kills. Marine life is severely affected, with declining aquatic populations and species diversity. The Navesink in particular has been targeted by the NJ Department of Environmental Protection as a river that needs remediation.

Green infrastructure is a general term for techniques used to manage this stormwater runoff and improve water quality. The idea is simple - to slow down the water flow so it has an opportunity to infiltrate surrounding soils for plant absorption and root filtration of pollutants. Capturing stormwater flow before it enters our rivers also allows it to percolate down to replenish the groundwater and stream base flow. Stormwater is treated as a resource to recover, instead of a nuisance to manage. Green infrastructure methods include installing rain gardens, bio-retention basins, or vegetated swales to contain the stormwater and reduce runoff. Other green techniques include capturing rainfall from gutters and roofs in rain barrels, planting trees, and installing pervious paving, sand filters, or plantings to allow water to infiltrate through.

Rain gardens in particular are an effective and attractive solution for homeowners to use, as they can be designed to accommodate a site's unique configuration. They are shallow, landscaped depressions of varying sizes, which temporarily collect rainwater until it filters down through the soils. Not only does this help our rivers, but it also reduces flooding in homeowners' yards. Rain gardens are practical and can be installed independently by homeowners as well as municipalities and businesses. And once established, they require less maintenance than a lawn, since they don't need to be mowed or watered. Detailed installation information can be found at <https://www.jerseyyards.org/create-a-jersey-friendly-yard/rain-gardens/>.

Homeowners can inexpensively and expeditiously install rain gardens specifically tailored to their property size and location. They can fill their gardens with plants that highlight their preferences and compliment their yards, reflecting their personality. Using native

plants, which we strongly encourage, will reduce maintenance for inexperienced gardeners while increasing the likelihood of plant survival as they are hardier, better suited to our climate and soils, and will require less care and water than more conventional landscaping plants. Detailed descriptions and photos of lovely native plants, including flowering varieties, can be found on the Rumson Environmental Commission website at <http://rumsonnj.gov/env/native-plants.html> Native plants also create a local wildlife habitat by providing food and cover for birds, insects, and butterflies. Fostering these enchanting pollinators will help your garden and the peninsula too. Creating your own personal rain garden is a beautiful solution for protecting our rivers and our peninsula, and we highly recommend it as an effective tool for homeowners.