

LAST UPDATED 2021

# RIVER-FRIENDLY GUIDE

Official Resource for Residents



## The goal of this guide

A NOTE FROM THE COORDINATORS...

Whether new or seasoned with the River-Friendly program, this guide seeks to provide resources that can assist you in making choices that promote clean water and a healthy environment! We tried to make this guide as visual as possible and include as many of our favorite, trusted sources of information. If you have a question that is not answered in this guide, feel free to reach out to your local River-Friendly Coordinator listed below. Happy reading!

**River Friendly Coordinator:**

Olivia Spildooren

[ospildooren@thewatershed.org](mailto:ospildooren@thewatershed.org)

609-737-3735 x21

**River-Friendly Coordinator:**

Lauren Theis

[ltheis@raritanheadwaters.org](mailto:ltheis@raritanheadwaters.org)

908-234-1852 x314

**River-Friendly Coordinator:**

Clea Carchia

[cleacarchia@outlook.com](mailto:cleacarchia@outlook.com)

908-472-6152

## Program Focuses

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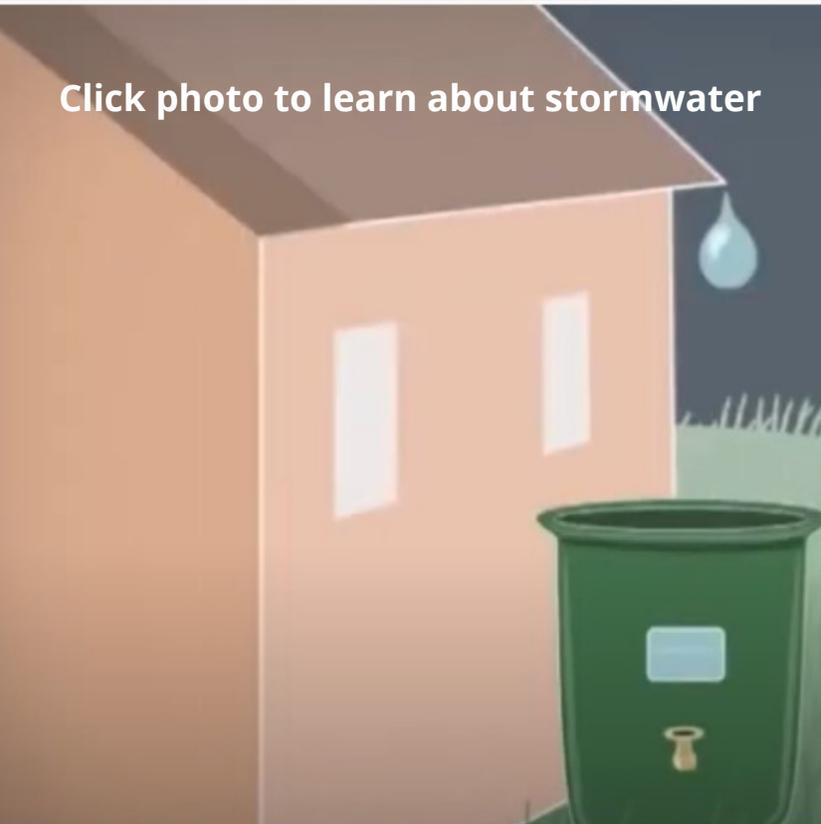
Additional Resources

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## Water Quality Management

Click photo to learn about stormwater



## Green Infrastructure

### *What is green infrastructure?*

Click [here](#) to learn about 8 types of green infrastructure and view local examples.

### *Looking for a landscape architect?*

The Watershed Institute has compiled [a list](#) of knowledgeable, experienced, and local professionals who we would suggest contacting for you next green infrastructure project!

## Road Salt

### *De-icing Alternatives*

This [article](#) from PennState Extension provides some guidance on what to and what not to spread when the snow begins to fly.

### *Want to help monitor?*

[You can help](#) The Watershed Institute's Watershed Watch Network quantify the impact of road salt by monitoring an stream or lake near you!





## Pesticides

### *Chemical alternatives*

Click [here](#) to choose from a list of common plant, insect, or rodent pests and learn how to manage them without using toxic chemicals.

### *Organic Tree and Lawn Care*

SavATree is leader in Central and South Jersey Tree and Lawn Services. They offer organic lawn care, tree maintenance, and much more. Visit their website [here](#) for more information.



## Fertilizers

### *Test before you treat!*

Doing a soil test will allow you to see if your yard has nutrient deficiencies. If not, no need to add fertilizer. If yes, you can target your fertilization to that nutrient and use it sparingly. Soil test kits can be purchased at your local [Rutgers extension office](#).

### *Cut it and leave it*

To reduce or eliminate the need for chemical fertilizers, use what you already have - grass and yard clippings! Click [here](#) to learn more from the NJDEP.



## Soil Testing

### *Where can I send my soil?*

We recommend test your soil before deciding on a fertilization plan. Contact your local **Rutgers Cooperative Extension Center** to see if you can purchase a soil testing kit. Or, follow instructions for **sending soil in your own package** and paying a testing fee.

### *What kind of soil do I have?*

You can easily perform an at-home soil type test by following the instructions written by Clemson Cooperative Extension **here**.

## Composting

### *Help! How do I start?*

Starting a compost pile in your backyard or in your kitchen can be a daunting task if you have no experience. Luckily Rutgers' NJ Agricultural Experiment Station has created a **webpage** that should help you get going!

### *Indoor Composting*

Not everyone has space to dedicate to a compost pile but did you know you can make an indoor pile? Click **here** to learn how to maintain an indoor worm composting bin.





## Micro Plastics

### *What is a microplastic?*

Checking the back of a shampoo bottle or facewash can be overwhelming when ingredients have unfamiliar and lengthy names. A great website called Beat the Microbead has a **guide** that you can reference for what names are associated with microplastics.

### *Check by brand*

If you are in the store and want to quickly check if a product has microplastics, you can go to **this website** and check by brand. This can also make it easier to know trusted brands in the future!

## Single-Use Plastics

### *What is single-use plastic?*

They are materials made from plastic which are meant to be discarded almost immediately after use. For example, plastic food wrapping to straws to bags.

Learn more from this great **National Resource Defense Council (NRDC) article**.

### *How can I reduce my use*

Single-use plastics are weaved so intricately throughout our daily lives it can seem impossible to untangle ourselves. Click **here** for 10 tips from the NRDC.





## Car Washing

### *Why should I not wash my own car?*

When you wash your car at home in the driveway, all the dirt, grime, grease, and oil get washed into storm drains which go directly to local waterbodies untreated. In addition, soaps that contain phosphates can cause excessive algae growth which uses up oxygen in the water and hurts aquatic organisms.

Commercial carwashes treat their used water which reduces pollution. In addition, most carwashes use 60% less water for the entire process than at-home rinsing alone. Learn more [here!](#)

## Proper Disposal

### *Chemical waste?*

Throwing old cans of paint or household chemicals in the garbage or pouring them out can lead to water pollution that is dangerous for animals and humans.

Click [here](#) to see when you can safely dispose of household chemicals in Mercer County.

### *Don't flush medication!*

Water treatment plants cannot filter out medications from water. In addition, they can cause reproductive harm to aquatic organisms. Click [here](#) to see where you can drop off medications.



# Water Conservation



## Rain Barrels

### *Why should I build one?*

Having a rain barrel on your property not only reduces the amount of runoff coming from your impervious surfaces and flooding but also helps you conserve water usage for plants or gardens by using what comes from the sky! If you want to learn more, view this [webinar](#) featuring local watershed professionals about rain barrels, rain gardens, and downspout planters!

### **How to Build One**

If you are interested in a fun DIY project, click [here](#) to see a how-to guide from the Environmental Protection Agency.

## WaterSense

### *What is WaterSense?*

WaterSense is a seal approved by the Environmental Protection Agency, assuring you that a product meets its criteria for water efficiency and performance. You can learn more about this by visiting the [EPA website](#).

### *Where can I buy these products?*

From toilets, to faucets, to sprinklers, you can click [here](#) to browse a list of WaterSense approved products.



# Water Conservation



## When to Water

### *Morning or night?*

Early morning (5 am - 9am) is best because it reduces the amount of water lost to evaporation. In addition, plants will dry quickly which reduces risk of fungal problems.

### **Using Water Wisely**

Freshwater is a finite resource so conservation should be practiced whether it is a drought year or plentiful rainfall. This **factsheet** from Rutgers Cooperative Research and Extension gives you tips and tricks for watering smartly gardens, lawns, and more.

## Additional resources

### *Want to learn more?*

In this section, we listed only a few of many ways to reduce water consumption. To learn more about household water use reduction or outdoor stormwater management, click [here](#) to visit a Rutgers Agricultural Station webpage.

You can also view this **EPA infographic** to learn about the energy and cost benefits of water conservation practices.





## NJ Native Plants

### *Why plant NJ natives?*

To be a native plant in NJ, they must have been found in the state before European settlement. Over thousands of years these plants have become well-adapted to the NJ climate, plants, and animals. This means NJ native plants are hardy and low maintenance which saves you time and money. If you are interested in adding some native plants to your landscaping, visit [Jersey-Friendly Yards](#) to learn more

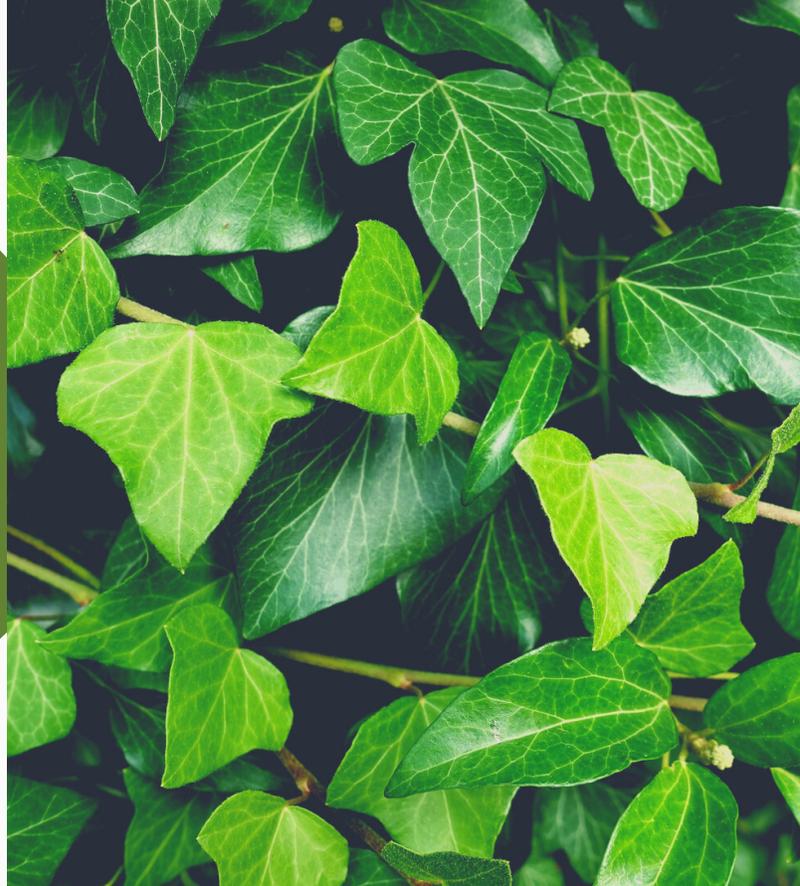
### **Where can I purchase them?**

Jersey-Friendly Yards has compiled a list of trusted nurseries by county [here](#).

## NJ Invasive Plant Species

### *Why avoid invasive plants?*

While many invasive plants may be unique and beautiful, their ecological and economic costs are tremendous. Invasive plants can easily out compete the native plants that native animals depend on for food, shelter, and reproduction- causing enormous ecosystem disruption. Economically, invasive plants cost more than \$120 billion in damages and control each year in the US. Click [here](#) to learn which plants to avoid planting in your yard.





## Bird Houses

### *Do-it-yourself (DIY)*

Building a birdhouse can be a fun project to take on for the beginner or experienced craftsman, on your own or as a family activity! To get started, follow the National Audubon Society's step by step instructions and material list [here](#).

### Where to hang your new house?

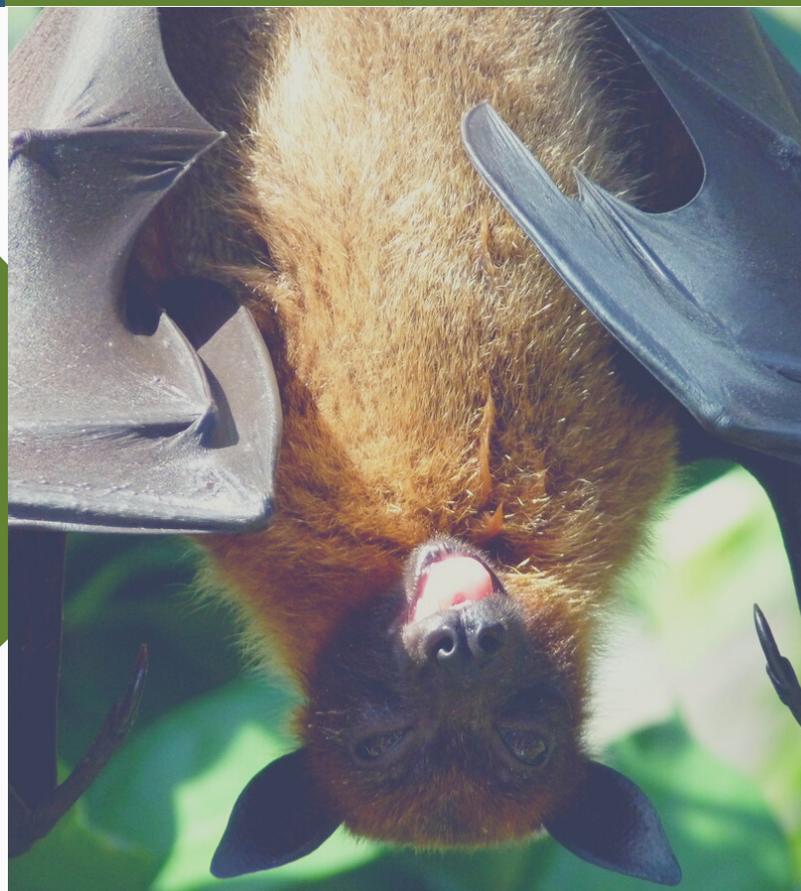
Different bird species prefer different nesting habitats. Depending on the type of birds local to your area or that you are trying to attract, refer to this [nest box placement guide](#) provided by the New Jersey Audubon Society.

## Bat Houses

### *Why build bat houses?*

Bats often get a bad reputation from movies or stories that equate them to aerial vampires that should be feared. In fact, bats should be welcomed and celebrated for their vital contributions to ecosystems such as eating insects harmful to humans like mosquitos, as pollinators or as seed dispersers.

To learn more about bats and bat houses, visit the [Bat Conservation International](#) website.





**Find a watershed photo**

## Watershed Institute Green Infrastructure (WIGI)

### *Looking to install green infrastructure?*

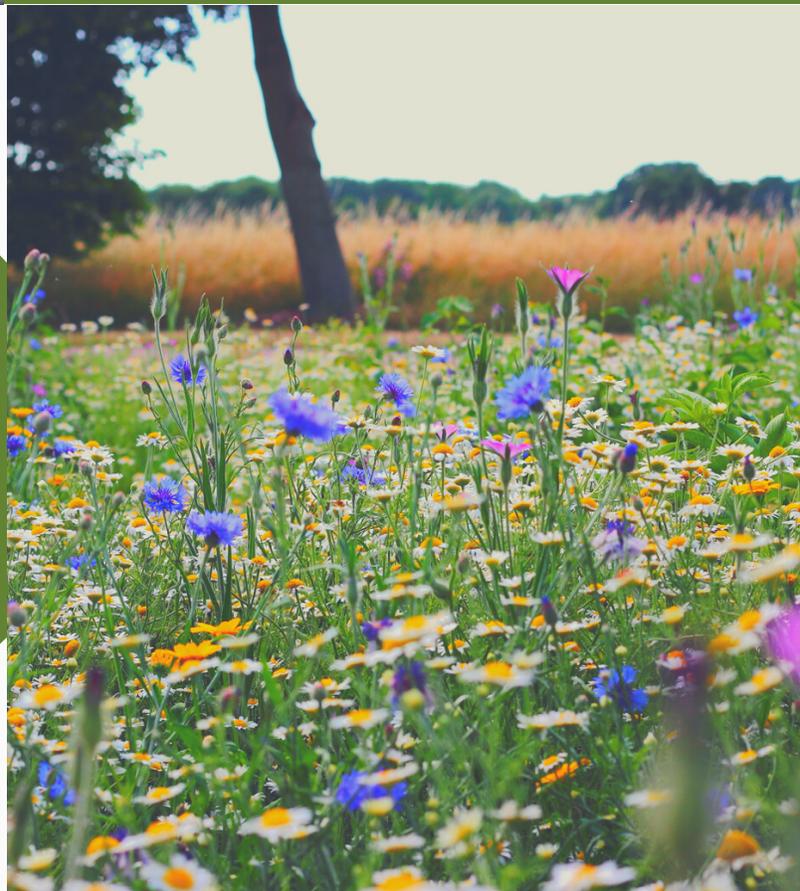
Whether installing a rain garden to green roof, you want to look for a landscape architect that you can trust will do a good job. WIGI professionals have undergone a voluntary certification program in conjunction with Chesapeake Bay Landscape Professionals which involves a field practical and written test. Click [here](#) to see a list of skilled and knowledgeable professionals for your next project!

## Low-Mow Lawns

### *Why replace your lawn?*

Grass lawns provide little food or habitat to local wildlife and require a lot of environmentally unfriendly maintenance such as frequent mowing with gasoline-powered machines, high water consumption, and often chemically treated with pesticides or fertilizers.

Consider shrinking your yard's square footage to reduce environmental impact and plant a meadow instead! This could consist of native grasses or wildflowers. To learn more, see [American Meadows complete guide](#) to growing wildflowers!





## Stream Clean-Ups and Other Events

### ***Want to get involved?***

The Watershed Institute hosts a Stream Clean Up annually in the spring. Each year hundreds of volunteers work together to clear away thousands of pounds of trash from local streams.

Throughout the year The Watershed Institute hosts programs for nature lovers of all ages. Click [here](#) to see how you can get involved, continue learning, and help out your community!

## Empowering Local Action

### ***Where to start?***

There are many ways in which you can help protect your watershed and getting involved in your local environmental commission is one of them! Change starts in a community, from managing polluted storm water to constructing green infrastructure.

Click [here](#) to learn more about making a local impact.



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## What next...

### A NOTE FROM THE COORDINATORS...

We hope this guide was helpful in providing answers to common River-Friendly questions or taught you something new (we definitely learned a ton while doing research for this guide)!

Everyone is at a different stage of their River-Friendly journey so we encourage you all to keep learning, stay curious, and start conversations with friends, family, even neighbors about what you have learned about making choices that promote clean water and a healthy environment.

Thanks for reading!



## Featured Sources

[American Meadows](#)

[Bat Conservation International](#)

[Beat the Microbead](#)

[Beyond Pesticides](#)

[Clemson Cooperative Extension](#)

[Environmental Protection Agency](#)

[Greater Mercer Public Health Partnership](#)

[Jersey-Friendly Yards](#)

[Mercer County Improvement Authority](#)

[National Audubon Society](#)

[National Resource Defense Council](#)

[NJ Department of Environmental Protection](#)

[Penn State Extension](#)

[Rutgers NJ Agricultural Experiment Station](#)

[Rutgers Cooperative Extension Center](#)

[SavATree](#)

[The Watershed Institute](#)