



JEFFCO H₂O NEWS

ISSUE 12 - SUMMER/FALL 2015

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Taking a 180 on Stormwater



For thousands of years, stormwater has been viewed as something that needs to be carried away from inhabited areas as quickly as possible to prevent potential hazards such as flooding. While most ancient drainage systems handled both waste and stormwater, the first known drainage system built to handle just stormwater was constructed by the Indus civilization which thrived in the Indus River Valley from about 2300 to 1300 BC. Fast forward to modern times. While modern stormwater drainage systems are effective in removing stormwater from paved areas and carrying this untreated water directly to local waterways, there are some unintended consequences. Many US communities have experienced a significant increase in development which has placed a proportionate burden on existing infrastructure. This growth also means that the amount of impervious surfaces such as paved areas and roofs have increased as well, disrupting one of the natural functions of land which is to allow stormwater to soak into the ground. This reduction in opportunities for stormwater to infiltrate has resulted in a dramatic increase in the amount and velocity of runoff traveling through the storm drainage system and entering rivers, creeks, lakes, streams and oceans. Since anything on the ground (oil, grease, yard chemicals, pet waste, litter, etc.) can be picked up by stormwater and washed into the stormwater drainage system, stormwater pollution has become the number one pollutant in our nation's waterways. Many older communities also are experiencing costly issues with deteriorating and insufficient infrastructure to manage the increasing stormwater demands

placed upon it. These economic realities as well as federal water quality guidelines have encouraged them to rethink the old model of getting rid of stormwater as quickly as possible and explore some new approaches. And faced with changing weather patterns which continue to bring more severe storms, heat, floods, and drought, states, regions, and communities are looking for ways to more efficiently manage stormwater and *utilize it as a resource rather than a liability*. One approach is introducing green infrastructure into the built environment. So what exactly is green infrastructure? [Continue reading](#) . . .

What's Happening?

Rain Barrel Workshop - July 25 - Birmingham Botanical Gardens, 9:30 am to 12 pm. [Register](#) to build a rain barrel, buy the components to build at home, or purchase a ready to use rain barrel. Offered by Jefferson County, Birmingham, Alabama Cooperative Extension System, and Alabama Environmental Council.

Jefferson County National Night Out - August 4 - This family friendly event encourages partnerships between neighborhoods and the Sheriff's Office to enhance safety and crime prevention. For a list of locations and times, visit the [Sheriff's Office Facebook page](#) or call 325-1450.

Valley Creek Cleanup - August 22 - Join other volunteers and help clean up [Valley Creek](#), 8 am - 12 pm. Free t-shirt and hot dog lunch for volunteers.

Birmingham Electronics Recycling Day - August 26 - Linn Park, 7 am to 2 pm. Click [HERE](#) for a list of electronics that will be accepted at this free event.

Brown Bag Seminar Series - Birmingham Botanical Gardens, 2612 Lane Park Road, Birmingham. This free [seminar](#) series continues through October. No reservations are required; light refreshments provided.

It's Bigger than Litter



It started a few years ago with several communities and a handful of volunteers who were tired of seeing litter on Jefferson County roadways and wanted to make a difference. In 2013, the Storm Water Management Department, in conjunction with the Alabama People Against a Littered State (AL PALS) spring cleanup, coordinated 9 roadside litter cleanups with 241 volunteers who removed nearly 25 tons of litter from County roadways. Last year, 1,659 volunteers removed 85 tons of litter in 45 cleanups. And so far this year, 1,089 volunteers removed 73 tons of litter in 43 cleanups. These volunteers have made a huge difference in the cleanliness and safety of Jefferson County communities, and their efforts are greatly appreciated. But the sheer fact that we have that amount of litter along our roads is pretty embarrassing. Maybe you litter, or know people who do. Maybe you've never given much thought to what happens to litter once it leaves your hand. Plastic and glass can stick around for millions of years. Aluminum cans and disposable diapers can hang out for 500 years. Even organic waste like paper takes months to decompose. Rain can wash lots of this stuff into local waterways. Plus, litter in

communities [breeds crime](#). Yep, that fast food bag you didn't want in your car tells criminals our residents just don't care. The fact is, it's ridiculously easy not to litter. Just repurpose a plastic grocery bag and use it as a car litter bag. When you stop at a gas station, shopping area, or at home, it only takes a few seconds to empty the bag into a trash receptacle. If you have a truck, make sure your load is secure and keep loose trash out of the truck bed.

Pantry Raid



Summer is here, the lawn is lush, the garden is yielding flowers and vegetables, and the bugs are munching away on your landscape. Before heading to that huge wall of yard chemicals at the nearest big box store, there are a few points to consider. First, what exactly is dining on your plants? The Alabama Cooperative Extension [Plant Diagnostic Lab](#), housed at the Birmingham Botanical Gardens, is a great resource to help you identify what is affecting your plants and the best way to treat the problem. If your yard is host to beneficial insects and pollinators, it may make more sense to show a little tolerance for a few chewed leaves rather than killing all insects since pesticides don't just kill the 'bad bugs'. If your yard has been invaded by bugs that are not beneficial and are doing some real damage to your plants, you may wish to try some homemade [remedies from your pantry](#). [Common items](#) like dish detergent, garlic, hot pepper sauce, or baking soda can be mixed into a spray solution and applied to plants to deter or kill bugs. They are less expensive than commercial pesticides and nontoxic to people, pets, soil, and water. If using commercial pesticides, always follow package directions.

The Invaders



Source: US Dept. of the Interior

They start out small, often unnoticed: a little leaf here, a vine tendril there. But before you know it, your landscape is being overtaken by invasive plants. Kudzu, privet, honeysuckle - these are just a few plants labeled as invasive that thrive in Alabama. So what's the big deal? An [invasive](#) is a nonnative plant which spreads and threatens the survival of native plants and crops, or affects human health. (Not all nonnative plants are invasive - think cotton and peanuts.) Alabama provides a long growing season and mild winter which help these invaders thrive. In fact, invasives are such a serious threat to native ecosystems that there are federal, state, and local [agencies](#) devoted to controlling or eliminating these pests. For home landscapes, the best solution is to be on the lookout for invaders and deal with them as quickly as possible. Chemical free solutions include digging up the plant, root and all, putting it in a plastic bag, and placing it in the trash - or covering the affected area with a layer of cardboard topped with mulch to prevent the plant from getting any sunlight. If the invader already has become established and is spreading, carefully and selectively applying an herbicide such as glyphosate, which is absorbed by the plant rather than lingering in the soil, can help eliminate the problem while having minimal potential impact on water quality if you carefully and accurately follow package directions. Remember to avoid applying yard chemicals just before or during a rain event and use only what you need.

To report suspected water pollution in unincorporated Jefferson County, call 205.325.5792!

If you have questions or comments, or would like to schedule a presentation for your neighborhood or organization in unincorporated Jefferson County, please email diclementel@jccal.org or call 205.325.8741.