



2018 Water Essay Contest

Metropolitan North Georgia Water Planning District presents the

City of Atlanta Award to

Mary Ellen Reagin

Mount Vernon Presbyterian School

Stormwater pollution

By: Mary Ellen Reagin

Many people claim that when they litter it does not affect the water. But the truth is, it does. Water is something we need daily. If you weren't allowed to use water as much as you normally do, what would you do? We need water. Stormwater pollution can ruin that if it gets really bad. Stormwater is the water that comes down when it rains. It comes down rooftops, down streets, and eventually into the drain where it goes off to the rivers, this is called runoff. On the way to the river stormwater collects tons of dirt and trash and chemicals and oils. "When it rains it drains" is a quote by the Metropolitan North Georgia Water Planning District that means any pollution left outside in the rain will be brought to the river.

We are very bad at keeping our streams clean and this is because of us not taking care of the environment. We need to be working harder to keep the land clean from pollution like, animal waste, cleaning products, litter, etc. because when rain falls it affects the water. Point source pollution is pollution that is always happening like pollution that comes from a factory where there is always pollution coming out of the factory. Nonpoint Source pollution is pollution that comes from water runoff after it hits the ground it picks up natural human made pollution. Most streams in the U.S. don't meet standard requirements for streams because of stormwater pollution. Stormwater pollution can make the water unsafe and make swimming and fishing unsafe and can hurt and/or kill animals living in the wild.

We are so bad at keeping our streams clean that we are even being told by the government. This might be a clue we need to get our streams in better shape.

There are more than one effects pollution has on the world, streams, and people another one is pollution makes it harder for Steam Cleaning Plants to clean our water for us to drink and use daily. Stormwater pollution gets into the stream so the water we drink comes from plants that take in stream water. Stormwater pollution then makes drinking water more difficult and more costly to clean. We need to help clean our water because most of us don't know how to live without drinking water. Water is used to drink, clean you, clean dishes, clothes, and water is used to have fun. Think about it: we can help the environment just by not littering, it's that easy. So why don't we clean up after ourselves.

There are tons of ways we can help save our water. If every single person threw away one piece of litter a day our world would already be much cleaner. One way we can make the environment cleaner is by keeping your pool clean to prevent draining often. Or throw dog waste and animal waste in the trash not the lawn. Another way is to not spill oil when you are filling up your car. You may also try to use a car wash service that reuses water rather than disposing water. If you ever cook you can dispose oil and grease in the trash instead of pouring them down the drain. Lastly you might want to try to dispose of cleaning products rather than pouring them down the drain. Cleaning water starts with us being more mindful of our pollution. Just by picking up one piece of litter you can make a huge impact on the environment.



2018 Water Essay Contest

Metropolitan North Georgia Water Planning District presents the

Cherokee County Award to

Bryce Jones

Woodstock Middle School

I Am Stormwater Pollution

By: Bryce Jones

I am Stormwater. I am rain and melting snow that does not soak into the ground. I flow over impervious surfaces like roads and roofs. I begin my life clean and pure, but as I flow, I pick up pollutants like trash, harmful chemicals like pesticides, fertilizers and other waste that is discarded where I will go. I take this with me on my journey to your rivers, lakes and surrounding watersheds. You have changed me. I am now Stormwater Pollution.

I do not mean to cause harm, but when you throw down your trash, salt, oil, and fertilizers, I cannot help but to take it to where I flow. Storm drains do not clean me of my pollution. These drains make it so I cannot saturate the ground where I have fallen, making the ground dry. This makes the land less usable. Storm drains put me into your water sources without proper filtration. I then cause harm to the organisms in them. Not meaning to, I create things like algal blooms that suffocate aquatic life. All the trash you throw down and I carry with me may get eaten by animals. This can cause them to choke or have other harmful issues. Polluted with all the insecticides, metals, and pesticides you use, I create poisons and diseases that kill wildlife. Lakes and rivers should be beautiful parts of your community, not dirty from trash and poisons.

I am Stormwater Pollution. I cannot help what I do, but you can. You can help clean me up and cleanse me of pollution. You can do this in many ways, one of which is to preserve natural features like floodplains with natural vegetation buffers. Those buffers filter polluted runoff. Encourage builders and planners to use permeable concrete and paving so I can soak back into the ground before I become polluted. The simplest solution, however, is for you to be more careful and thoughtful about what you throw on the ground.

You could simply throw it away properly or, even better, recycle and reuse things. You could put down less pesticides and fertilizers and try not to put them down at all before it rains or snows. Washing your car less could also stop soap and other chemicals from getting into me. Picking up your pet's waste also helps to stop stormwater pollution. These are all great ways to help you and your environment stay healthy. This cannot be done without you. I cannot stop being myself, but I could be clean again. I could be prevented. I am Stormwater Pollution, and with your help, I can be Stormwater again.



2018 Water Essay Contest

Metropolitan North Georgia Water Planning District presents the

Clayton County Award to

Aniyah Patterson

Pointe South Middle School

Run-Away Stormwater

By: Aniyah Patterson

Can you recall the water cycle? In the final step, run-off, water from precipitation flows into other nearby water sources. This includes rivers, oceans, streams, and lakes. The run-off brings along everything it picks up, from the plastic water bottles in the streets to the bags in the lawn. This is a major concern.

Firstly, stormwater pollution -- what exactly is it? Stormwater pollution is the process in which trash and chemicals (such as oil) are brought by water (from precipitation) to nearby water sources. Littering and impure water going into the water drains are the main issues. When water hits a surface (as in streets and roofs), it flows from where it touched down and goes into a water drain. Most water drains can be found in concrete with iron bars providing a certain amount of space for water to get through. As water comes into the drain, it brings with it everything that its swept up. This can also arise when there isn't any real precipitation taking place, for example from washing a car next to a water drain. The dirt and soap will go with the water down the drain and into nearby water sources. Cutting grass can also have the same effect. When the grass is cut, the clippings go into the street. When it rains, all of this goes with water to other water sources.

Stormwater pollution can take a massive toll on our environment. Earth is made up of around seventy-one percent of water, yet only three percent is freshwater and only one percent is naturally available. Stormwater pollution gets into not only the ocean but the one percent of freshwater accessible. Most of the water we drink comes from lakes, streams, and rivers. The excess debris damages these sources making drinking water harder to filter. Though that's understandable considering the many things that get caught up in the water supply. Oils, plastic, cans, leaves, and animal droppings are just a few of the things that go down water drains.

Stormwater pollution may be prevented. For starters, being a little more cautious when using chemicals. When using oil, be sure to keep it as clean as possible. This would also apply to other chemicals. No mess means one less chemical in the drain. Another way to prevent stormwater pollution would be to pick up litter, and keeping natural things, like grass clippings and leaves, in the lawn. There would be less dirt in the water if done so. And finally, a way to prevent stormwater pollution would be to adjust the water drains, meaning reshaping the drains so less pollution can get through. Also, keeping the drains clean for rusty pipes or dirt that may dwell in the drain.

In conclusion, stormwater pollution has a negative effect on the environment. It also affects the area that it takes place in. This is why precautions for stormwater pollution must be taken.



2018 Water Essay Contest

Metropolitan North Georgia Water Planning District presents the

Cobb County Award to

Rebekah Ives

Simpson Middle School

Only Rain in The Storm Drain

By: Rebekah Ives

Just imagine, you're back from a long run around your neighborhood, and you decide to dip your sweaty feet into the nearby stream. You look down and you see a shimmering rainbow in the water; you think to yourself it must be the light reflecting, but then as you look down the river you quickly pull your feet out of the water. The once refreshing clear water that you played in as a kid is now disgusting and filled with pollution. This is called stormwater pollution.

Stormwater pollution is when the water that does not soak into the ground runs down the street, picking up litter, animal waste and pesticides. Then all this polluted water will either run down a storm drain and get dumped back into a nearby lake, stream, or river or just go to the stream to begin with. Polluted water has a big impact on our environment. The polluted water can harm wildlife that lives in the water and those who drink the water for hydration. This polluted water can also harm animals; if there was trash in the water a bird could accidentally eat it for food, then could choke and die. When the water has chemicals and oil from cars, birds who go deeper in the water to catch fish can end up with oil or other chemicals in their feathers. Later when they try to clean their feathers, they could end up ingesting the chemicals. The chemicals that they ingest can be very harmful to their organs.

So, how do we prevent this from happening? That's easy! There are rules that you can follow which will quickly make a difference. For example, don't dump anything in the streets or down a storm drain, pick up your animal's poop, sweep your driveway clean, and trash your trash; meanwhile, check your car and make sure it's not leaking any oil. You can even put special markings on your neighborhood storm drains to remind others to not dump anything down the drains. Doing these little things can prevent a lot of trash and chemicals from going into a stream. You and your neighbors can help keep our streams beautiful and healthy. So, remember: only rain goes down the storm drain.



2018 Water Essay Contest

Metropolitan North Georgia Water Planning District presents the

Coweta County Award to

Samuel Higgins

Evans Middle School

Stormwater Pollution

By: Samuel Higgins

Stormwater pollution begins as water from rain or melting snow that is not absorbed by the ground. It runs along the surface of the ground collecting pollutants like animal waste, pesticides, litter, oil, grease, and fertilizers. This most commonly happens when it rains on concrete or asphalt. The concrete cannot absorb the water, so it goes into things like storm drains or flows to the nearest water source. On its way to the water source, whether through the sewer or on the ground, it picks up many potential pollutants.

Polluted stormwater has many negative effects on bodies of water such as streams, rivers, ponds, lakes and even the oceans. The pollution can also make the waterways an unhealthy place to live, work, and play. One of the effects is that it harms and kills many aquatic animals in the area which it occurs in. The animals that survive are displaced because their habitats are destroyed as well. The pollution can make the water unsafe for drinking and make it harder to filter and cleanse. It may also make the waters very bad for fishing and can ruin the fishing industry of some places in extreme cases.

There are many things that can be done to help prevent stormwater pollution. Green Infrastructure is a way to approach water management which is more like the natural water cycle than what is normally seen in urban areas today. One example is to use permeable pavement systems for parking lots. Instead of typical asphalt or concrete, this system uses a system of concrete pavers, deep stone beds and groundcover to allow water to be absorbed instead of running off and collecting pollutants. Another example of this infrastructure is rain gardens in urban areas. Rain gardens are low areas where runoff can be strategically directed. The garden area will have a mix of soil, rocks, and plants that will filter the water before it reaches streams, rivers, and other bodies of water. Other ways to help prevent stormwater pollution are using less pesticides, using a car wash instead of washing your car in the street, and picking up animal waste.

In conclusion, stormwater pollution is a growing issue that harms local bodies of water in many ways, but its effects can be limited by cutting back on use of some everyday things, using innovative ideas instead of simple asphalt and concrete, and investing a little extra time and money into improving our planet.



2018 Water Essay Contest

Metropolitan North Georgia Water Planning District presents the

DeKalb County Award to

Nora Glass

Kittredge Magnet School

What is Stormwater Pollution?

By: Nora Glass

Imagine a water droplet falling from the sky, clean and pure. It falls onto the ground and starts to trickle downhill. As it rolls over dusty rocks and between blades of grass, it collects waste. Pesticides sprayed onto the grass, animal waste, spilled gasoline. As it slowly becomes a drop of toxins, it rolls further downhill until it comes to a creek and plop! it rolls right in. This creek is the source of water for the surrounding area. That droplet, along with others, has just contaminated everyone's water. Gross, right? I'm sure you wouldn't want to drink any water filled with dirty contaminants. Luckily for us, this water is cleaned before we drink it, but stormwater pollution is a big problem for tons of other reasons.

If you didn't know, stormwater pollution is when water is contaminated and pollutes other water. The cause, or pollutant, could be pretty much anything dirty that doesn't belong in water. Stormwater pollution can cause problems not only for us, but small critters. Pollutants make their way into streams and creeks everywhere. And besides, even if our water is cleaned, think of the small minnows and tadpoles in that creek. Grease and things like that can't be good for them. And this water may be processed so that we can drink it, but it costs a lot of money to clean dirty water. The dirtier it is, the more expensive to clean.

Unfortunately, stormwater pollution is made a bigger problem by humans. Normally, water soaks into the earth, so there isn't that much runoff. However, when people build things like parking lots and buildings, there isn't much soil left to soak up all the extra rain water. So what does it do? It runs off and picks up all sorts of junk.

There are two types of stormwater pollution, non-point source and point source. Point source is when the pollution is traceable from one source, like when a factory pours all their waste into a nearby river. The other type, non-point source, is less obvious. It is when you can't tell straight off what the source of contamination is. It is the type described in the scenario above, where water picks up many pollutants.

So, what can be done about it? Well, maybe a good start would be to build more parks and less pavement. Also, major companies should probably stop dumping litter down the drain. However, these are all big things that most of us don't have much control over. What can your average citizen do? Well, any person can help contribute by watching their use of materials that are bad for waterways. If you have chemicals, grease, trash, car oil, medicine, or anything of the like, you should dispose of it in the correct way. In conclusion, stormwater pollution is very bad for the environment and we should do whatever we can to help stop it!



2018 Water Essay Contest

Metropolitan North Georgia Water Planning District presents the

Douglas County Award to

Sarah Leigh

Brighten Academy

Stormwater Pollution and Our Environment

By: Sarah Leigh

Have you heard about stormwater pollution? It's bad. It causes all types of horrible things. Some of which, we cause. So, in my essay, I will be telling all about stormwater pollution and all the bad things that it does to the environment.

But before I can explain, I need to answer one question: What is stormwater pollution? To begin with, stormwater is just rainwater after it hits the ground. Stormwater pollution is all those things that get carried down stormwater drains. Stormwater drains are those little openings on the ground that carry all the rain to the nearest body of water by you.

So, big question: What causes stormwater pollution and how can we stop it? There are a lot of ways we can do that, but I'll answer that question by giving three real life problems and solutions, put into scenarios, using real people, so it's easier to understand.

Scenario One: My Dad is mowing the lawn. He cuts the grass and it all goes on the street and the hill. He finishes mowing the lawn and goes back inside the house. Sounds harmless, right? But it harms the fish. So, the next time it rains, all the grass is going to go down the storm drain and pollute the fish. All that sushi will be gone. But there's a way to save sushi! The next time my Dad mows the lawn, he can use a gardening tool to clean up all the grass, put it in a bag, and throw it away. So that way, the fish used to make sushi don't have to be wasted!

Scenario Two: On Saturdays, my Dad washes the car. He gets all his soaps out, so the car is clean and shiny when he's done. He goes on scrubbing, washing off all the soap with the hose. He finally finishes washing the car, packs up his things, and heads inside. How did he harm the environment? You guessed it: The soaps. All those soaps have chemicals used to make them, and all those chemicals go straight down the storm drain, and into the nearest river by me. How do we stop this? Go to the car wash! As obvious as it sounds, that's my solution! Car washes are not allowed to let all the chemicals go down the storm drain, so it's the perfect solution!

Scenario Three: We all are responsible for this: Littering. How does it affect sea life? Just like all the other scenarios, the litter that fits down the storm drain gets carried to the nearest body of water near you. All those things like cans, bottles, glass, wrappers, food, plastic rings, all that icky stuff kills the fish, and that is not good for our environment.

Now that you have been told about stormwater pollution, how do you think you can stop it? Do you think there are more ways to stop stormwater pollution? How do you want to contribute to this cause? All these are questions that are up to you to answer. Help these poor fishes. Do your part in taking better care of sea life and our environment!



2018 Water Essay Contest

Metropolitan North Georgia Water Planning District presents the

Fayette County Award to

Tito Alofe

Rising Starr Middle School

for your exemplary essay that explores our stormwater pollution.

Stormwater Pollution, Its Effects, and How to Prevent It

By: Tito Alofe

For most of my life, I have watched rain wash over the surface of the earth and flow all over the place until it is consumed by the convenient sewers near my house. I had neither realized the harm that was caused by this never-ending cycle of rain being taken by sewers nor the many ways I could take action to stop this.

Stormwater pollution is caused by rainwater and or snowmelt that flow over impervious surfaces rather than permeable surfaces that would absorb the water. Because this water is not absorbed, it flows freely and is called runoff which inevitably picks up pollutants on the way to the sewer and ends up polluting our rivers, lakes and streams. While it seems unavoidable at first, stormwater pollution can be prevented if we all take action.

Rivers, lakes, and streams can be contaminated by effluent from storm sewer systems. Contrary to the popular belief that sewers are all the same, sanitary sewer systems and storm sewer systems are very different. Sanitary sewer systems drain water used in our homes from sinks and showers and sends them to septic tank for basic decontamination by filtration. It is storm sewers that cause the pollution problem. While they prevent flooding, they empty into local bodies of water, carrying harmful substances with them. This pollution affects aquatic ecosystems and communities in the polluted waters, decreases the population of marine life and the practicality of aquatic activities such as fishing and swimming.

Unbeknown to many, there are even laws against stormwater pollution. Section 301(a) of the Clean Water Act of 1977 explains, 'the discharge of any pollutant by any person shall be unlawful' unless the discharge is in compliance with certain other sections of the CWA". It continues to clarify the specifics and ramifications that come with the Act, however that chunk of the CWA explains that polluting water is not only unethical but also illegal.

Stormwater picks up dirt from construction sites, oil from cars, and even air contaminants thus, it is important to keep in mind things that we can do to prevent it. One effective way to help stop stormwater pollution is installing a rain barrel. They capture rain from roof runoff. Barrels are practical, effective, and easy to use. They protect water from contaminants on the ground and provide users with a supply of fresh rainwater that is useful for gardening and possibly drinking. To lower the amount of pollutants that runoff can come in contact with, one can bike or share car rides in order to reduce oil leakage from cars, never litter no matter the circumstances, and pick up noticeable pollutants on the ground. More drastic ways of preventing stormwater pollution include draining pools into sanitary rather than storm sewer systems and planting a rain garden which absorbs rain water rather than it flowing freely as runoff.

Although stormwater pollution is a big problem affecting communities, we can freshen our water sources by using and saving water more practically.



2018 Water Essay Contest

Metropolitan North Georgia Water Planning District presents the

Forsyth County Award to

Matthew Wortel

South Forsyth Middle

The Frog

By: Matthew Wortel

Here comes the rain! I climb onto the nearest piece of wood as I am rushed down the steep driveway into the street gutter. Sticks and debris rush past me on a race to the storm drain. A soda can and plastic bag almost knock me off but I am able to hang on. Faster and faster I go as the accumulation of debris behind me grows. I drop down the storm drain into a swirling wave of water until I reach my final destination, a pond. The water is glistening with oil and has a terrible smell. Floating all around are grass clippings, trash and debris. I hop on one of the few surviving lily pads and plan my departure to cleaner waters.

The moral of the story is that every time it rains, our bodies of water become more polluted. Stormwater is water from rain, melted snow or ice. Stormwater pollution is all the things in stormwater that should not be there and have an adverse effect on our lakes, streams and rivers. Some stormwater does not soak into the ground and runs off to lower ground, carrying pollutants with it. Unlike the water poured down your drain in your kitchen, stormwater is not treated before it flows into our bodies of water.

It's not just our environment that we're hurting, it's also the living things. Chemicals and oils can hurt and even kill plants and animals, and even make us very sick. In the entire world, only 3% of water is freshwater and of that less than 1% is suitable for drinking. Knowing this, shouldn't we all be worried about the future of our water? Doing our part and making small changes on a daily basis can make a huge difference in the long run for our water.

Simple things such as having your downspouts drain on to grassy areas rather than concrete, washing your car at commercial car washes where the wastewater goes to a treatment plant, and securing trash cans so nothing falls out are simple ways to eliminate some of these pollutants. Using chemicals correctly when treating your lawn, bagging grass clippings and leaves, and picking up after your pets also helps.

Next time you are on a walk and see trash lying on the side of the road, pick it up. Think of where it may end up if you don't. Georgia has many beautiful lakes, streams, and rivers. Wouldn't it be a shame if they ended up so polluted that people could no longer enjoy them? We have some of the fastest growing counties in the United States. More people means more pollution. Educating people on the little steps to prevent stormwater pollution can make a huge difference in keeping our lakes, rivers, and streams beautiful, healthy and clean. Take it from the frog, no one benefits from polluted water.



2018 Water Essay Contest

Metropolitan North Georgia Water Planning District presents the

Fulton County Award to

Afsheen Fatima

Amana Academy

Stormwater Pollution

By: Afsheen Fatima

Have you ever seen a piece of garbage on your sidewalk and never bothered to pick it up? Or maybe you harmlessly put some fertilizers on your plants not knowing where that fertilizer would wash off to when it rains. Well let me tell you, it is nowhere good! When it rains, stormwater runoff can collect pollutants when going into our sewage systems. That runoff water is then put directly into our rivers, lakes and streams which causes them to become polluted. This type of pollution is called stormwater pollution. Stormwater pollution has a major impact on the health of our rivers, lakes and streams.

There are many things that can cause stormwater pollution. Some of the major aspects that cause stormwater pollution is litter or garbage such as cigarette butts, cans, food wrappers, plastic bags, and/or paper. Another major aspect that can cause stormwater pollution is chemical pollution which is when chemicals such as fertilizer or oil enter our sewage systems which are then put into our rivers, lakes, and streams. This is very bad for the health of our rivers, lakes, and streams since that means chemicals are going into the water which we use for drinking purposes.

Polluted stormwater has a major impact on not just our rivers, lakes, and streams but on communities living downstream of us also. If we keep on using all of these harmful fertilizers and we keep on littering, we then cause more stormwater pollution to occur. That means that communities that live downstream of won't have access to that much clean safe water to drink because all of their water sources are being polluted. This causes many problems for those communities that live downstream of us because that means that they will have to put more of their money into their water treatment facilities in order to get access to safe, clean water to drink.

Even though stormwater pollution is a very major environmental issue there are still ways we can help prevent it. For example, we can try to reduce using fertilizers on our plants or just get plants that don't need fertilizer. We can also try to pick up any trash that we see lying around on the street. Construction companies can also help out by following the erosion and sedimentation control plan when building any structure. This is so that no sediment or rocks go into our rivers, lakes and streams.

In conclusion stormwater pollution has a major impact on the health of our rivers, lakes, and streams. There are many causes to stormwater pollution that are very dangerous for our water sources. Stormwater pollution effects not just our rivers, lakes and streams but also the communities that live downstream of us. However, there are many ways we can prevent stormwater pollution from affecting both our and our rivers', lakes' and streams' health.



2018 Water Essay Contest

Metropolitan North Georgia Water Planning District presents the

Gwinnett County Award to

Kayla Mehok

Hull Middle School

North Georgia Stormwater Pollution Essay

By: Kayla Mehok

People go to their nearby lakes, rivers, and streams for vacation with friends and family. You might be thinking the water around you is beautiful and magical, but it could very well be contaminated! In everyday life people wash their cars, take out the trash, and mow their lawns. But these activities can cause pollutants in our nearby water sources.

Stormwater is water that comes from storms and runs off of certain surfaces like driveways, yards, and streets. While the stormwater flows it carries and collects waste, pesticides, and other pollutants. Eventually the stormwater flows down into streams, rivers, and even lakes! This can affect the water by growing harmful algae and killing the aquatic life by polluting the areas they live in. Also, some animals would not be able to drink from these waters, because they could die from the pesticides. Bacteria in sewer systems can make lakes, rivers, and streams unsafe for humans to fish or swim in. These bacteria can cause diseases such as hepatitis, dysentery, and respiratory illnesses.

There are many things that we can do to help with stormwater pollution. A more natural way to dispose of stormwater is called "Natural Stormwater Management." We can use soil and vegetation to cycle water in a more natural way. For example, a green roof will allow surface runoff to feed the grass naturally with little contamination. Another example would be a floodplain with natural vegetation that could protect a stream or river from polluted runoff.

These examples can decrease the pollutants that go into the runoff that may eventually end up in our drinking water. Cities can do a lot to help their residents use more natural ways to improve the quality of stormwater runoff and make it more cost effective to do so.

There are other types of water that create runoff, not just rain or snowfall, so there are other ways to prevent polluted runoff that may not be as "natural". One way would be to wash your car in your yard instead of the driveway and also use non-toxic soap. This would allow the ground to absorb the soap and dirt from the car instead of sending it through the drain in the driveway eventually getting into streams and rivers. If you mow your lawn less often and keep the grass higher, this will keep weeds from growing and retain moisture in your grass.

My friend and I have created a club to try to come up with solutions to help with pollution of stormwater runoff. We have planned to go around to our neighborhoods to pick up trash and animal waste to help the environment. We'd also like to create a flyer to distribute to our neighbors with helpful suggestions we can do together to prevent the pollution of stormwater runoff. I hope that if we can help the environment, you can too!



2018 Water Essay Contest

Metropolitan North Georgia Water Planning District presents the

Hall County Award to

Caroline Gottsman

Lakeview Academy

Stormwater Essay

By: Caroline Gottsman

Stormwater is a major pollution problem in the world. It infects our water and is harmful to animals, humans, and the environment. Trash, litter, harmful pesticides and fertilizers, and much more infiltrates into bodies of water and becomes hurtful to every living thing in the water. It affects everything from the fish in the water to humans on the land. Regional Stormwater, a great educational website about stormwater, said that this polluted water can lead to bacterial and viral infections when people and pets drink or come into contact with it.

That is just the tip of the iceberg. Stormwater is destructive to our environment and needs to stop. So, the big question is, what are solutions for stormwater pollutions?

Before coming up with solutions for stormwater, we must know the sources. North Georgia Water, an expert stormwater research website, defines stormwater runoff as water that falls on any developed land, such as parking lots, streets, or rooftops, that it cannot soak into. Then, the water flows over the land and picks up bacteria and waste along the way. Next, it drains into the nearest body of water. Oil or fuel can also drain into a body of water. These toxic liquids poison living organisms and our water.

Many people have come up with some solutions for stormwater pollution and it is time they are put into action. Regional Stormwater listed the following as simple ways you can help: cover barren areas with grass, mulch or other vegetation, scoop up your dog's feces even if it is in your own yard, clean up the fertilizer that spills on driveways and sidewalks, wash your car in the grass and volunteer to help keep water clean. There are some simple ones such as do not litter and change to a harmless fertilizer. These are all great ways to keep the water clean and everyone safe. There are many more solutions to prevent stormwater pollution.

Some of you might be wondering: How does this affect the impact of polluted stormwater? Right now, stormwater pollution is infecting new waters every year and has many awful effects on the environment. According to Clean Water Campaign, a water protection and information website, there are many ways that stormwater negatively affects water. It can take important oxygen from plants, fish and other marine animals. It can make water dangerous for humans to swim in and can pose a health risk to every living thing near it. New solutions to stormwater pollution can decrease such drastic affects and save many plant and animal lives. Every small step to cleaner water helps!

Clearly, stormwater pollution is dangerous to all living things and it destroys the environment. The effects on the environment are awful and harmful. These new solutions can solve some of the problems that stormwater pollutions pose. So, every time you get the chance clean up your surroundings by using some of these simple solutions and help save our water!



2018 Water Essay Contest

Metropolitan North Georgia Water Planning District presents the

Henry County Award to

Charlotte Gilreath

Strong Rock Christian School

SOCIETY'S SLIPSHOD SPOLIATION

By: Charlotte Gilreath

Stormwater pollution is jeopardizing our community. The Government Environment and Planning website describes Stormwater pollution as water from rain or water flow over terrain such as: rooftops, bare soil, and paved areas. As it discharges, stormwater runoff collects and transfers the surplus collected each day including: waste, dilapidation, litter, pesticides, and other pollutants. Stormwater pollution poses a problem to our environment because there are numerous forms of stormwater pollution. The stormwater pollution impacts my neighboring communities, minimizes development of our community, and creates a problem for my society and me to resolve.

There are four forms of stormwater pollution. There is "manmade pollution" consisting of plastic bags, paper sacks, and cigarette butts. Also, there is "chemical pollution" such as oil, fertilizers, and detergents. Thirdly, there is "natural pollution" containing leaves, waste, and soil. Finally, there is "sediment pollution" (soil erosion). When the community grows, and buildings are being constructed, the leftover rubble collects and flows into storm drains which then flows into our streams.

Some ways to prevent stormwater pollution are to properly store materials like bulk. Products like bulk (sawdust, gravel, chemicals) should be stored in sheds or covered with a waterproof cover. Facilities such as power plants and lawn suppliers are the main contributors to the issue at hand. Steps employers can take are to add a course to the orientation classes explaining the necessity of proper storing of bulk and the consequences of improper storing. This can cause two things - raising awareness of stormwater pollution and motivating positive action to occur.

As a young person growing up in Henry County, some easy steps we can take are cleaning up our pet's waste and washing our parent's car on the lawn or on gravel. You can also post a map of the flow of the pollution on your fridge or on the door to your classroom. This allows your classmates to understand storm pollution and to take steps to minimize this problem. A lot of small steps working together can have a big impact on the problem.

Henry County has taken multiple steps to limit the amount of stormwater pollution. The Henry County Management website has a page where you can report your issue concerning stormwater pollution. Henry County also has manuals explaining the importance of proper prevention tactics and solutions to stormwater pollution. An unknown essayist says: "Stormwater pollution is one of the main factors the contribute to the growing polluted world." Although my county has stormwater pollution management programs, I urge my community to come up with more prevention programs.

Stormwater pollution is a worriment to our community. It causes long-lasting effects such as health problems, burdens our economy, and limits neighborhood involvement throughout the world. Stormwater pollution poses as a problem to our environment because there are numerous forms of stormwater pollution, it affects my neighboring populations, it minimizes the amount that we can develop our community, and it poses as an issue for my society and me to find ways to rectify.



2018 Water Essay Contest

Metropolitan North Georgia Water Planning District presents the

Rockdale County Award to

RubyJean Ruhani

Edwards Middle School

Watershed Pollution

By: RubyJean Ruhani

Stormwater pollution is when stormwater runoff collects potential pollutants as it flows and deposits it into waterways. It can collect things like litter, salt, fertilizers, oil, soil, pesticides, and other pollutants. There are many possible pollutants and they are all equally harmful to the environment and all bodies of water the water may flow into.

This impacts the health of our rivers, lakes, and streams because it pollutes them and makes them dirty and unhealthy. Some rivers are used for drinking water and crops. If this water is polluted it can harm people and lead to water scarcity. Water being polluted also causes animals and plants to die which can impact the agricultural aspect of a society. This can also spread diseases. For example, if an ocean is polluted by stormwater runoff then any seafood that comes from it can be harmful to the people eating it. Pollution can also disrupt the food chain and affect the people that get food from the ocean. Stormwater pollution can impact our waterways negatively in several ways. This shows that we need to work hard to prevent it.

We can prevent stormwater pollution by throwing trash away in the right place and not littering. Try to use the smallest amount of pesticides and fertilizers possible to prevent it from polluting the runoff. We can also prevent stormwater pollution by keeping pollutants out of the storm drains. Also using a car wash instead of washing your car outside because the dirty water from the car can get into storm drains and pollute the water. Always make sure to keep your sidewalk and driveways clean. Another thing you can do is clean up after your pets.

Storm drains are not for your trash or chemicals you need to dispose of. In conclusion, stormwater pollution is harmful to many things in our environment and waterways.