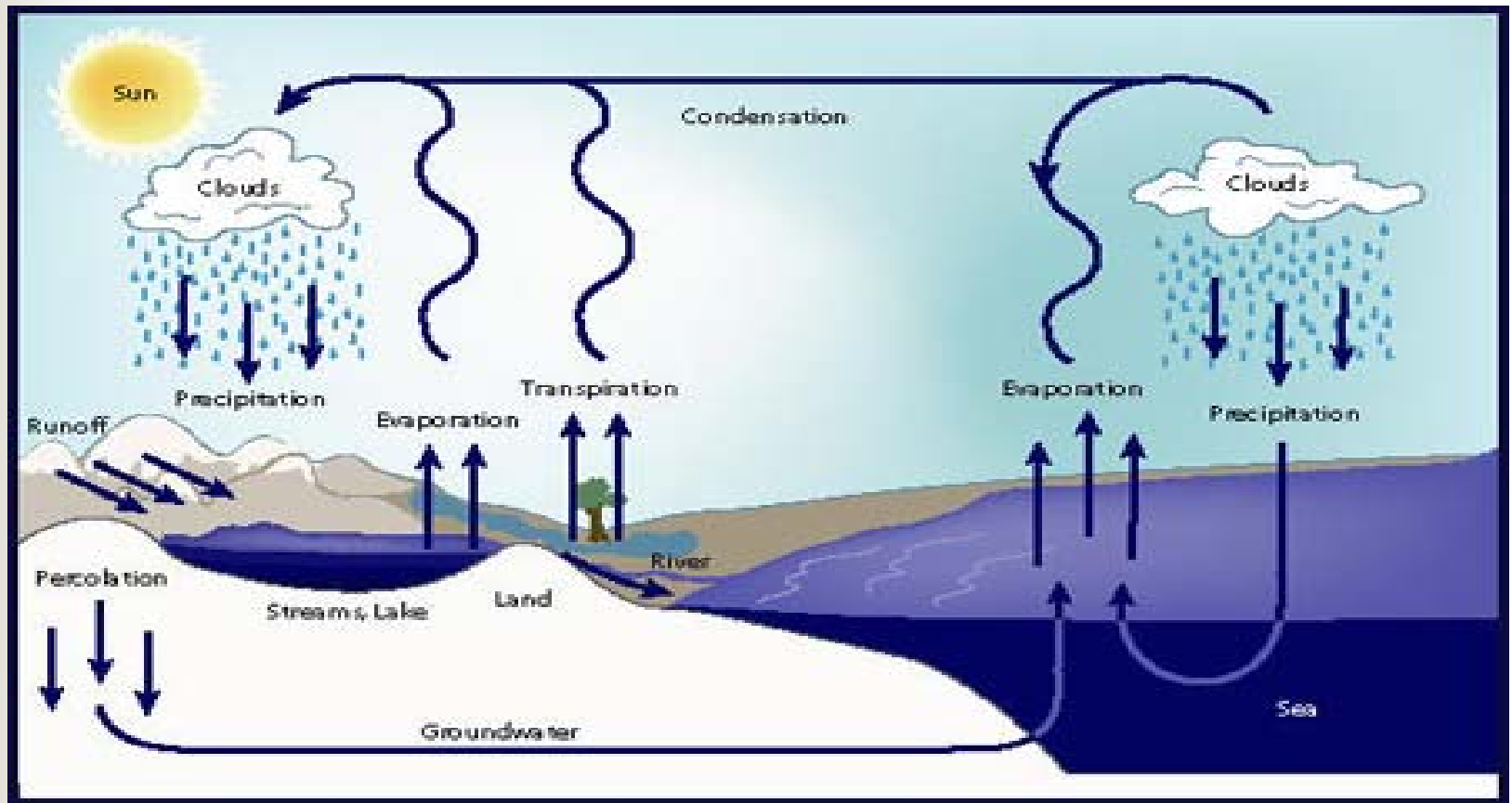


# North Carolina General Assembly Stormwater Collection



# The Effects of Stormwater Runoff





## What is stormwater runoff?

Most people think of stormwater runoff as strictly a flooding problem that occurs after a significant rainstorm. Think of the average North Carolina city, with its many parking lots and other impervious areas... A hundred years ago, naturally vegetated land surfaces covered most areas, this allowed the rain to soak into the ground. Now the rains wash over asphalt, carrying all the pollutants found along the way to the nearest water body. Flooding and the pollutants carried by run-off cause adverse negative environmental impacts. Stormwater runoff is the leading cause of water quality degradation in American waterways.



## What is a storm drain? What is a sanitary sewer?

- Storm drains are the openings you see along curbs and in streets and parking lots. They carry away rainwater and snowmelt and transport it through the system to nearby lakes and streams. Water and other debris that enter storm drains do not go to a treatment facility.
- A sanitary sewer takes household water and waste from toilets, sinks and showers, and transports it to a wastewater treatment facility. There, the water is treated and then discharged back to a lake or stream.



## How does stormwater get polluted?

- As stormwater flows over our lawns and driveways, it picks up fertilizers, oil, chemicals, grass clippings, litter, pet waste, and anything else in its path. The storm drain system then transports these pollutants, now in the water, to local lakes and streams. Anything that goes into a storm drain eventually ends up in a lake or stream.



## Protecting our Water

- Many people think that most water pollution comes from industries that dump chemicals into the water. The truth is our water can be harmed by things that we do everyday. When it rains, water washes over lawns, sidewalks, and streets. Besides litter, this water picks up chemicals found in lawn fertilizers, bacteria found in pet waste, and oil from cars. This polluted water then enters roadside ditches and the storm drains found in our streets. Large pipes under the ground connect the storm drains to the closest lake or stream — even the ones you don't see everyday!



## What is the purpose of the Stormwater Collection System of the General Assembly?

- Use captured rainwater and air conditioning condensate to irrigate the grounds of the General Assembly complex.
- Minimize the flow of stormwater from the General Assembly complex into Raleigh's stormwater system.
- Promote water conservation, stormwater control and environmental awareness in North Carolina.



## What are the planned uses and benefits of the Stormwater Collection System?

- Irrigation of grounds and gardens of the Legislative Building.
- Irrigation of isolated gardens throughout the state government complex.
- Provide water for decorative fountains around the Legislative Building.
- Reduction of nitrogen pollution into Raleigh's stormwater system.



## How the system works

- Drains on top of the Legislative Building catch rainwater and direct the water flow through an 18 inch pipe and into a filtration system that sifts out the sediment in the water.
- Also, condensate from the air conditioning system flows through the same 18 inch pipe and into the filtration system.
- After the filtration process, the water fills the underground concrete storage tanks located on the side of the building adjacent to Salisbury Street.
- After the tanks are filled, the excess water is directed to the stormwater drains located on the streets.



## How can You prevent water pollution?

- Help keep pollution out of storm drains
- Fertilize only as needed
- Carefully store and dispose of household cleaners, chemicals, and oil
- Clean up after your pet
- Practice good car care
- Choose earth friendly landscaping
- Save water



## Research and Other Information

- <http://www.ncleg.net/ncgainfo/cistern/cisternhome.html>
- <http://www.enr.state.nc.us/upclose/pages/stormwater runoff.html>
- <http://www.epa.gov/>