

Map Provided by Arkansas Watershed Information System

## Did You Know?

- Hamestring Creek is a 14.8 square mile sub-watershed of Clear Creek which is a 76.6 square mile sub-watershed of the 1700 square mile Illinois River Watershed.
- A sub-watershed is a part of a watershed that drains rainfall into a larger watershed.
- A watershed is an area that drains rainfall to a body of water such as a lake, stream, or ocean.
- The Clear Creek Watershed is designated as impaired from bacteria which comes from urban sources within the cities of Fayetteville, Springdale, Johnson and Tontitown.
- A stream is designated as impaired when it does not meet one or more designated uses.
- Designated uses for Clear Creek are: Primary Contact (swimming), Secondary Contact (canoeing), fish consumption, agriculture/industrial use, and drinking water.
- Excessive bacteria levels have impaired Clear Creek from meeting the primary contact designated use.
- The bacteria comes from many diffuse sources from across the watershed surface. One example is bacteria from pet waste in yards that gets washed into the creek when it rains.

## How Many People Live in the Hamestring Creek Watershed?

- 10,826 people or about 730 people per square mile live within the Hamestring Creek Watershed. If every one in three people owned a dog that would mean that there were 3,608 dogs in the Hamestring Creek Watershed and about 177 tons or 353,584 lbs of pet waste. Now that's a lot of pet waste to pick up!

## What is the Land Use of the Hamestring Creek Watershed?

- Urban areas account for 33 percent of the watershed.
  - Forest makes up about 30 percent of the watershed.
  - Farmland is 30 percent of the watershed land use.
  - About 7 percent of the watershed land use is transitional.
- \* Land use is a description of how the land is used or developed.

## What is a hydrologic budget?

A hydrologic budget is a description of the ratio of one hydrologic process to another. For example, in Arkansas we have an average annual rainfall of 49 inches per year and in Urban Areas 80% or 39 inches will runoff. In rural areas 5% or 2.5 inches will runoff and 95% or 38.5 inches will be used by plants or recharge ground water sources such as springs.

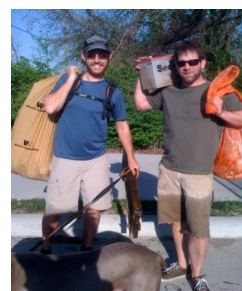
**Remember, it's everyone's responsibility to protect water quality. Find out the ways that you can protect and improve the water quality of Hamestring Creek on the other side of this fact sheet.**

# What is a Best Management Practice (BMP) ?

A best management practice or BMP is an action that any individual, group, or organization can take to protect or improve water quality. Any practice that is considered as a BMP has undergone scientific evaluation to ensure that the practice can work to reduce the amount of pollutants entering a body of water from the surrounding

## What are some BMPs that I can use that will protect and improve the water quality of Hamestring Creek ?

- **Pick Up Your Pet's Waste** - When your pet has to follow nature's call they don't have a sanitary toilet to use. When waste is not picked up and thrown away it will not be treated and will sit on the land's surface until it rains enough to carry the pollutants (nutrients and bacteria) in the waste to a nearby storm drain or stream. Once these pollutants are in a stream they can degrade the water quality resulting in an impaired stream that can't support all of its designated uses.
- **Do Not Remove Streamside Vegetation** - The streamside area, also known as the riparian zone performs critical functions such as stabilization of streambanks, filtration of pollutants, and shading of the water body. When vegetation is removed from the riparian zone streambanks are at risk for erosion, more pollutants can enter the stream, and the water temperature will increase. All of the functions performed by riparian zones are critical to maintaining good water quality and wildlife habitat.
- **Put Litter In It's Place** - When trash is not properly thrown away it will end up in a stream sooner or later where it will cause harm to water quality or aquatic life. A good way to prevent litter from ending up in streams is to encourage your friends not to litter and to report littering to the Keep Arkansas Beautiful Commission (1-866-811-1222) when you see it happen.
- **Soil Test Before Fertilizing** - Excessive fertilizer applications to lawns and gardens can degrade water quality when runoff from rainfall transports the extra fertilizer that wasn't used by the plants to a nearby storm drain or stream. The best way to prevent over application of fertilizers is to contact your local Extension Office (479-444-1755), ask for a free soil test kit, and test your soil to receive recommendations.
- **Do Not Store Trash or Hazardous Materials Near a Streambank** - In large rain events items stored near a stream or in its floodplain can be washed into the creek. Trash and hazardous materials can harm water quality.
- **GET INVOLVED !** - Join an Arkansas Game and Fish Commission Stream Team, the Illinois River Watershed Partnership, your local school environmental club, or another organization that actively works to keep our streams of Arkansas clean.



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For more information on how to be a steward or caretaker of your local stream contact the Washington County Cooperative Extension Office at (479) 444-1755.