# Water Resources Task Force discusses Phase I of plan

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Being "The Birthplace of Rivers," Pocahontas County has an abundance of water flowing through rivers, streams and creeks, above and below ground.

In order to maintain such a vital component of life in the county, the Pocahontas County Water Resources Task Force (WRTF) is in the process of creating a Water Resources Management Plan (WRMP). The plan will offer a proactive approach to maintaining and protecting the water resources of the county.

At the first stakeholder meeting of the WRTF May 12, members of the task force shared plans for Phase I of the WRMP with members of the community, including farmers and landowners, local government, business owners and environmental agencies.

Volunteer Lynmarie Knight explained the process and the task force's mission statement.

"We really desire for this plan to be a usable document, a planning tool that can be used by everyone with the responsibility for water resource management, whether that means landowners, farmers, local government, or agency representatives," Knight said. "This is a true grass roots effort to put together water resource management."

The WRTF mission statement is: to identify, inventory and monitor Pocahontas' water sources and uses; to promote awareness and foster wise use of our water resources; to protect the quality of life and economic vitality of Pocahontas County; and to contribute to the management and protection of West Virginia's water resources.

With that in mind, project manager Fritz Boettner of Downstream Strategies explained what resources will be used to complete Phase I of the plan.

"We're starting with the assessment, looking at the readily available data we have, consulting with experts, get a baseline of our resources now and all that we need to go into Phases II and III," Boettner said. "Once we have that baseline, we can begin to populate some tools that we can use in the future phases, which are a GIS (Geographic Information System) and database."

When all the data is collected for Phase I, a report will be published that outlines the status of water resources in the county and plans to maintain and extend the longevity of those resources.

Boettner said the plan will be a living document which will be revised through the years.

"We will revisit this plan every four to five years to see where we are and if there are new goals to add," he said.

Assisting Boettner with data collection are Nicholas Zegre, Assistant Professor of Forest Hydrology at West Virginia University and Jeff Bray, a geology, groundwater and karst specialist with the Department of Geology and Geography at WVU and Maxwelton GeoSolutions, Ltd.

Zegre explained the overall goal for surface water assessment.

"We are going to start with looking at inventory assessment and gaps and starting with identifying boundaries of watersheds," he said. "We have a lot of significant watersheds we have to consider. To do this, we're going to identify predominant surface water and climate monitoring stations."

Both stream gauging stations and climate stations in Pocahontas County monitor river stages, humidity, precipitation and air temperature.

"With this, we will look at incoming precipitation and outgoing surface water and compare that to the time of year and determine when Pocahontas County may be susceptible to having a water scarcity or flood threat," Zegre said.

He added that there are a lot of other contributors to stream gauge data through the West Virginia Stream Gauging Council. The task force is in the process of doing an inventory of the data and understanding what will be useful to the management plan.

Bray spoke about data collection on groundwater and karst areas in the county.

"The goal is to ascertain the current state of groundwater resources in Pocahontas County, especially in the karst areas," he said. "We've got a lot of strangeness going on with where the water is going and what's happening underground."

Unlike surface water, groundwater patterns are more difficult to identify because of the intricate flows in caves and underground. Bray said there is a lot of private data, including the locations of private wells, which will help in groundwater flow monitoring.

"The only way to really understand what impacts there could be to groundwater is to understand where that groundwater is flowing more freely and less freely," he said.

One test, dye tracing data, will be integral in mapping the flow of groundwater.

"A lot of times with groundwater in karst areas, it goes into a sink hole and just disappears and pops out on the other side of the mountain and you don't know where it is," Bray said.

The number of individual streams inside a cave system or underground may be a surprise, Bray said, showing a map with more than a dozen streams in one section of a cave.

Once the data is collected and a report of Phase I is completed, the task force will continue to Phase II: Inventory and; Phase III: Assessment. Phase I is due to be complete by September 2011.