

flow. For West Buttrick Creek, storm event sample analysis includes both nitrates and phosphorus. “Our aim is to evaluate baseflow conditions and compare them to wet weather sampling to evaluate stormwater runoff and non-point source contributions,” says Sutphin.

What does it take to monitor an area?

Picking a sub-watershed is important. It takes data and experience to pick a useful watershed for a given task. In the map you can see the many different sub-watersheds that make up part of the Raccoon River Watershed. There are many different sub-watersheds that make up the Raccoon River Watershed. Livestock numbers are limited, and are mostly hogs. Once the 27,000-acre sub-basin – West Buttrick Creek – was selected, more targeting of the programming described earlier could be implemented and evaluated.

Local leadership required

Because every watershed has its own unique concerns, goals and objectives, every watershed needs local leadership in order to get a project off the ground and running effectively. Mike Bravard says that starting a watershed project and getting others to sign up can be as simple as getting them to see the upside on their farm.

“We signed up for the West Buttrick Creek Watershed Project just to see if we could cut down on nitrogen use and still not lose any yield. Because of the results we’ve seen, in the future, we’ll probably do less fall nitrogen and more in-season side-dressing of nitrogen – when the corn actually can use it. The goal is to learn more every season and keep fine-tuning our operation. If I had any advice for others, it would be to test what you believe in – either way. If you really believe that you can or cannot use less nitrogen in your operation, run a strip test on your own farm and find the truth,” he says.

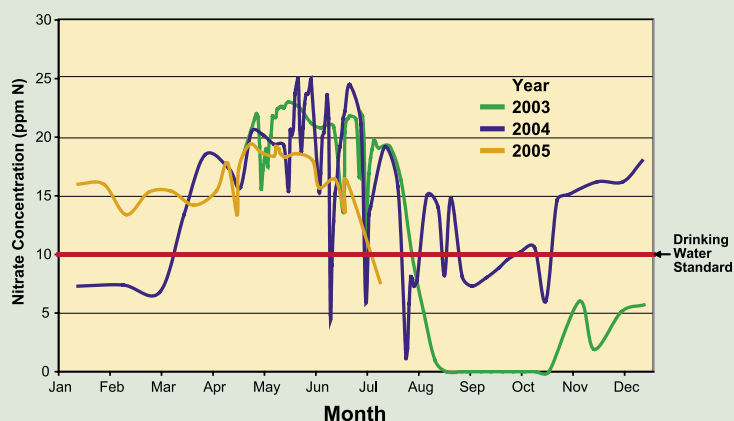
“The impact of a watershed project can extend well beyond your own farm. I was in the office of one of our area agricultural retailers and overheard them taking an order for nitrogen application, even though there was a forecast for heavy rain overnight. When I asked the retailer if he knew how nitrogen is affected by rain, and if he was concerned about the rain in the forecast, he said, ‘no.’

“After we talked about it, he asked me for more information. I told him to call Tracy Blackmer at the Iowa Soybean Association. He did, and Tracy came up the next day and had a great conversation with him. In my mind, that’s ‘on-the-ground’ impact that wouldn’t have happened without my being involved in this project.”



Automated water monitoring equipment used in ISA watershed programs collects and stores data that can be transmitted electronically. *Photos: Keegan Kult*

**West Buttrick Creek Monitoring Station 1
Nitrate Concentration (April 2003- July 2005)**



Iowa Soybean Association water monitoring in West Buttrick Creek shows that nitrate-N concentration in the watershed varies, but in general, is above the accepted drinking water standard of 10 parts per million. Concentrations can vary year to year due to weather and rainfall patterns.