# EnviroFlux Offers A Better Way To Assess Groundwater Contamination

University of Florida

## Tracking contaminated groundwater is no easy feat.

When groundwater is contaminated, the traditional approach has involved obtaining random “grab samples” that gauge concentrated contamination levels at and around the contamination site.

While this method can determine localized concentration levels of contaminants, it offers no clear picture about how much or how fast the contaminants have spread to other areas via groundwater. It’s kind of like looking out the window on a rainy day: you can see the precipitation in your own neighborhood, but you have no way of knowing whether rain has spread throughout the rest of the county or state.

But in 1999, a trio of University of Florida scientists devised a clever technology that would change all of that.

> *Michael Annable, Ph.D., Kirk Hatfield, Ph.D., and Suresh Rao, Ph.D., developed what is called the “Passive Flux Meter”*

(PFM), nylon tubes filled with absorbent materials, also known as sorbents and tracer materials. PFMs are inserted into monitoring wells near the contaminated areas, where they intercept the flow of groundwater. The sorbents retain the dissolved contaminants in the groundwater, while the tracers gradually leach out of the nylon tube. After one to four weeks, the PFMs are removed and analyzed. The contaminants can be analyzed to determine the time-averaged flow of contaminants, while remaining tracers are analyzed to determine the overall flow rates of the groundwater that has been contaminated.

In 2005, a privately held company, EnviroFlux, was founded by the three inventors, as well as entrepreneurs Jared Kennedy and Matt Tilman. Based in Gainesville, Fla., EnviroFlux secured an exclusive license from the University of Florida to commercialize the technology. EnviroFlux markets its products and services to environmental consulting firms, and it plans to license its PFM technology to environmental firms around the world. For more information, visit www.enviroflux.com.

This story was originally published in 2007.

**To see available technologies from research institutions, click here to visit the AUTM Innovation Marketplace.**