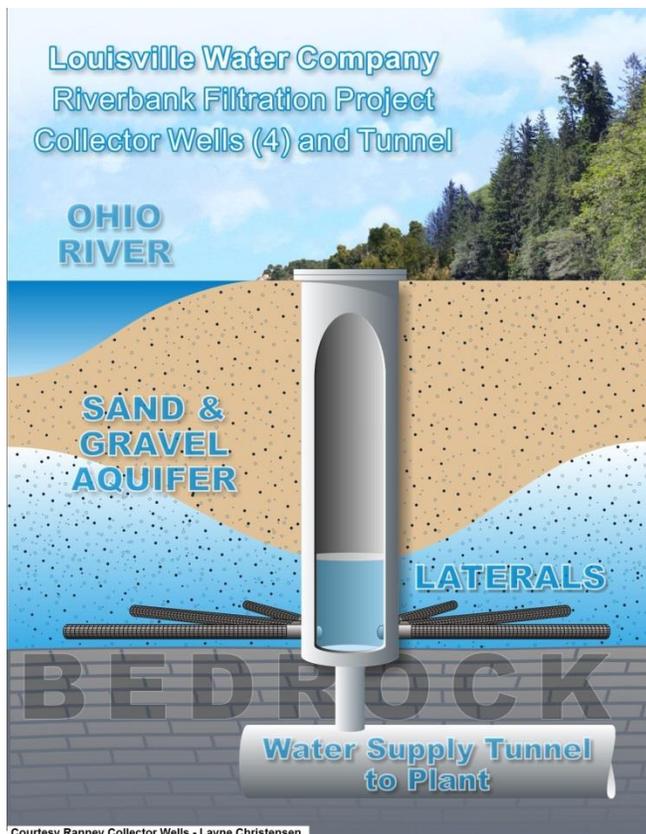




Wellhead Protection

Since 1860, Louisville Water has provided high-quality drinking water to the community. Today, Louisville Water provides water to about 850,000 people in the Louisville Metro Area, and parts of Bullitt, Nelson, Oldham, Shelby, and Spencer counties. Louisville Water also operates treatment facilities in Southern Indiana and Fort Knox, Kentucky.

Louisville Water relies on surface water from the Ohio River and a “green” supply of water from Riverbank Filtration (RBF) wells. Louisville Water was the first utility in the world to combine a gravity tunnel with wells as a source of drinking water. The project won the International 2011 Outstanding Civil Engineering Achievement Award.



RBF uses the sands and gravels found deep in the Ohio River Valley as a natural filter. The collector wells move the water to a tunnel, where it is pumped for treatment.

What is Wellhead Protection?

A wellhead, like the capped wells shown above, is the point on the ground surface where a well is physically located. Groundwater flows from all directions, to the well. Along the way, groundwater **may** pick up and transmit contaminants. Wellhead Protection is a plan to identify, inventory, and manage the potential contaminants that **may** enter the groundwater and be transmitted to a public water supply well. Louisville Water is updating and implementing the Wellhead Protection Plan for the Prospect, Kentucky area. The first step is to inventory the potential contaminants that may be located within the Wellhead Protection Area.

The Wellhead Protection Area

The Wellhead Protection Area (WHPA) is determined by the time of travel of potential contaminants. The furthest extent of the WHPA represents the “steady state”, where normal groundwater flow is in effect. This represents a time-of-travel of 20 years. For example, a contaminant poured onto the ground at the very edge of the WHPA would take 20 years to travel through the formations into the well. This large area is called WHPA-3.

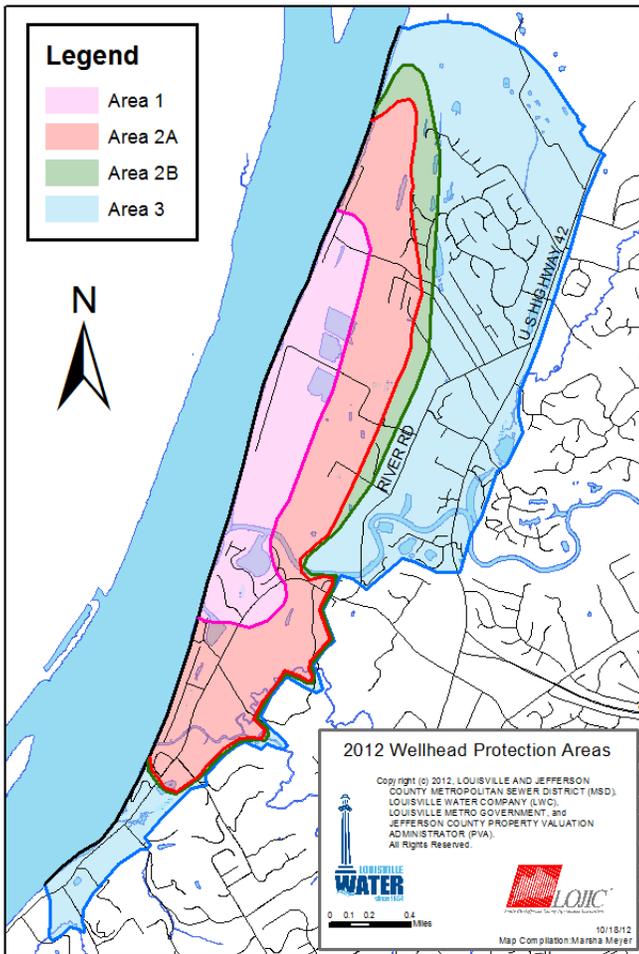
The second level of protection represents the 10 year time-of-travel, and is labeled WHPA 2B. Potential contaminants located in this zone take 5 to 10 years to travel into the well.

The third level represents the 5 year time-of-travel, and is a higher level of protection within the aquifer, the sand and gravel formations that contain groundwater. Potential contaminants located within this zone take 6 months to 5 years to travel into the wells.

The highest level of protection is represented by the area immediately surrounding the well field. Within this area, potential contaminants take 6 months or less to enter the wells.

Find your WHPA

Use the map below to find your WHPA:



Area 1	6 month time-of-travel
Area 2A	5 year time-of-travel
Area 2B	10 year time-of-travel
Area 3	20 year time-of-travel

How will Wellhead Protection affect you?

Wellhead Protection is a community effort! The management strategies developed for the WHPP take advantage of common sense, easily implemented practices to reduce the risk of groundwater contamination. These are called Best Management Practices. The strategies will not limit activities on your property.

What are potential contamination sources?

Although it is common practice to associate contamination with highly visible activities, such as landfills, gas stations, or chemical storage areas, many potential contaminants come from every day activities. The use of lawn and garden chemicals, storm-water runoff from roads, parking lots and driveways, household accidents, or septic systems may also contaminate groundwater. You can help protect the groundwater quality by using

Best Management Practices, using environmentally friendly products, and reporting all spills and accidents!

Pollution Prevention Begins At Home

All of us may contribute to groundwater pollution through daily activities. Fertilizers and pesticides run off lawns with rainwater. Motor oil washes off roads, parking lots and driveways into storm sewers. Together these small sources of pollution add up to make one of the leading sources of pollution in the nation – non-point source pollutions. Louisville Water relies on you, to help prevent groundwater contamination:

- Use Best Management Practices in your home and lawn
- Report spills immediately - **Call 911**
- Use environmentally friendly products whenever possible
- Use pesticides wisely
- Properly use and dispose of hazardous materials

Other ways you can help:

Visit the Louisville Water webpage for Wellhead Protection to learn more about protecting our valuable groundwater resources:

<http://www.louisvillewater.com/water-quality/wellhead-protection>



Louisville Water Company

550 South 3rd St.
Louisville, KY 40202
Phone: 502-569-3600

For more information, contact:
Rob Newman, PG
Wellhead Protection Specialist
502-569-3600, ext. 1809
rnewman@lwcky.com

www.LouisvilleWater.com