



Simplifying water treatment in Louisville Kentucky

PROJECT PROFILE CONSTRUCTION

CLIENT
Mole Construction /
Louisville Water Company

RANNEY COLLECTOR WELLS

Louisville, KY

SITUATION:

Louisville Water Company (LWC) is using Riverbank Filtration (RBF) along the Ohio River as a way to improve source water quality and reduce overall water treatment efforts at their B.E. Payne Water Treatment Plant. To do so, they planned to install four collector wells along the river to accompany an early collector well that was used to demonstrate the effectiveness of RBF. Because the area has a historical designation and due to aesthetic concerns from local residents, LWC developed an innovative design that used no pumps in the collector wells, instead connecting all four wells by gravity flow through a rock tunnel to a single central pumping station.

SOLUTION:

Ranney Collector Wells construction crews worked with the tunneling contractor and Layne to build the unique RBF system. The total RBF system now supplies up to 80 million gallons per day of high quality source water to the existing water treatment plant. The innovative project design was recognized by the American Society of Civil Engineers with their 2011 Opal Award for Outstanding Civil Engineering Achievement.

SERVICES EMPLOYED:

- + Ranney Collector Wells
- + Layne Heavy Civil
- + 60 GD Pump Station
- + Layne Geotechnical Construction
- + Bencor-Hydromill
- + Slurry Shaft Walls

