Attachment 1

LOCATION OF THE COLLECTOR WELLS

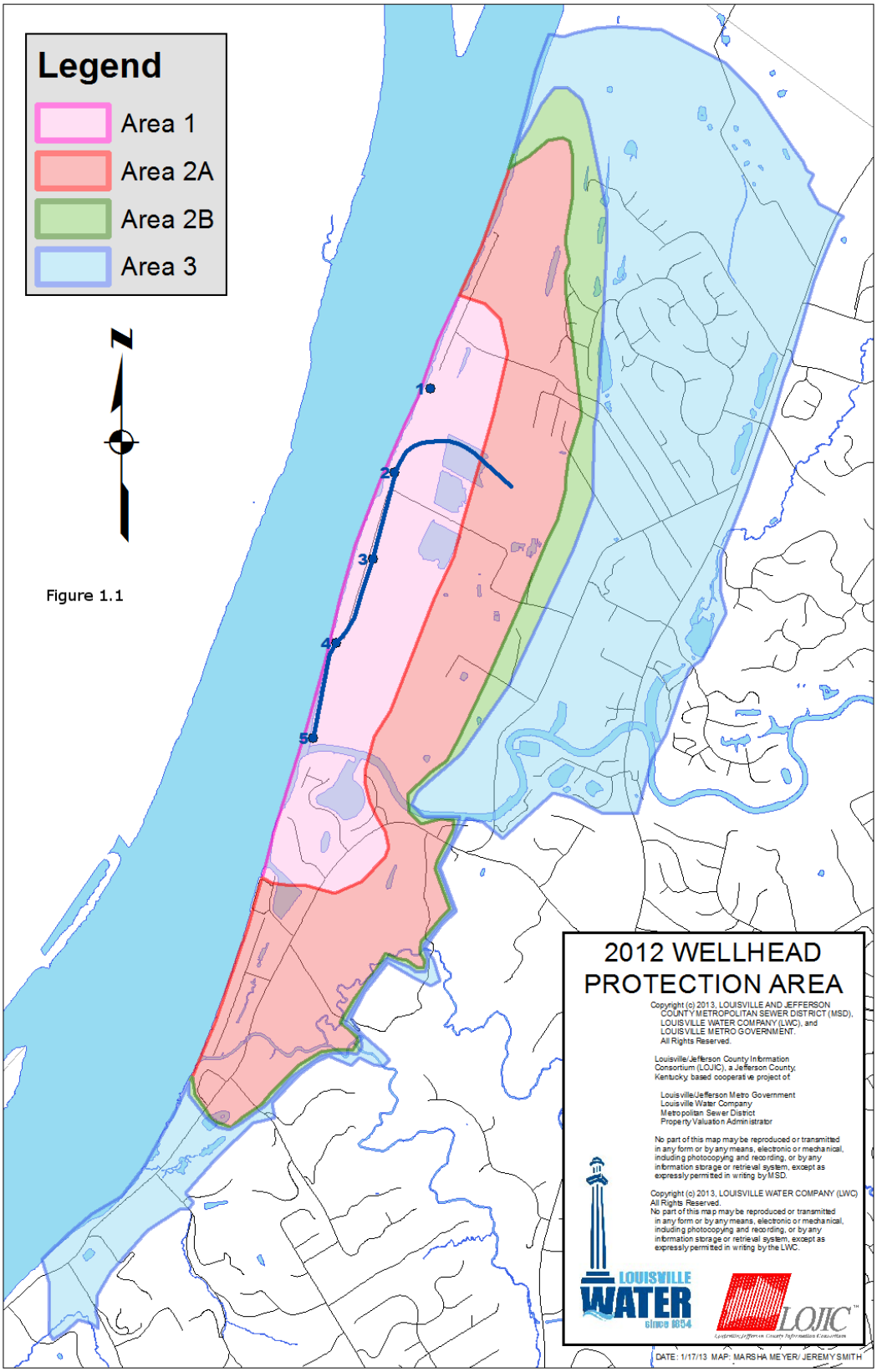
The B. E. Payne Plant is located in the northeastern portion of Jefferson County, Kentucky, near the City of Prospect, a small community contained within the Louisville Metro Area. Jefferson County is located along the northern border of Kentucky, and is centrally located, being fairly equidistant between the cities of Pikeville and Fulton. Three major interstate highways, I-65, I-64, and I-71 serve Jefferson County. The Ohio River, one of the country's largest rivers, comprises the northern border of the County.

The Louisville Water Company owns a large piece of property at the Payne Plant site. The property is a pie-shaped wedge that extends from River Road, off of US Highway 42, to the river, and from Timber Ridge Drive to Jacob School Road in width (approximately 1,200 feet of River Road frontage). The Water Company also owns a large section of property between Mayfair Avenue and Transylvania Beach Road.

The primary caisson of the original collector well, which is also known as the Demonstration Well (Demo Well) or the RFB Well #1 (Riverbank Filtration Well #1) is located in the northern corner of the property, and is approximately 100 feet from the Ohio River. All of the lateral collectors are located deep within the sand and gravel formations surrounding the river, and filling the bedrock valley. Four of the seven lateral collectors are directed towards the river, ending beyond the surface shoreline of the Ohio River; two of the collectors are parallel to the shoreline; and one is at a ninety degree angle toward the valley area.

Four additional collector wells have been constructed, all of which follow the same general design, as the original collector well. These four wells, however, have no tower for pumping equipment, as previously designed, but are constructed so as to be near or at ground level.

The Louisville Water Company has constructed a large tunnel, drilled into the bedrock at approximately 120' depth and 10' in diameter that stretches from a central pumping station down toward the last collector well, which is located across Harrods Creek from Captain's Quarters. Please see Figure 1.1.


Legend
Area 1
Area 2A
Area 2B
Area 3
N
1
2
3
4
5
2012 WELLHEAD PROTECTION AREA
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Louisville Water Company
Metropolitan Sewer District
Property Valuation Administrator
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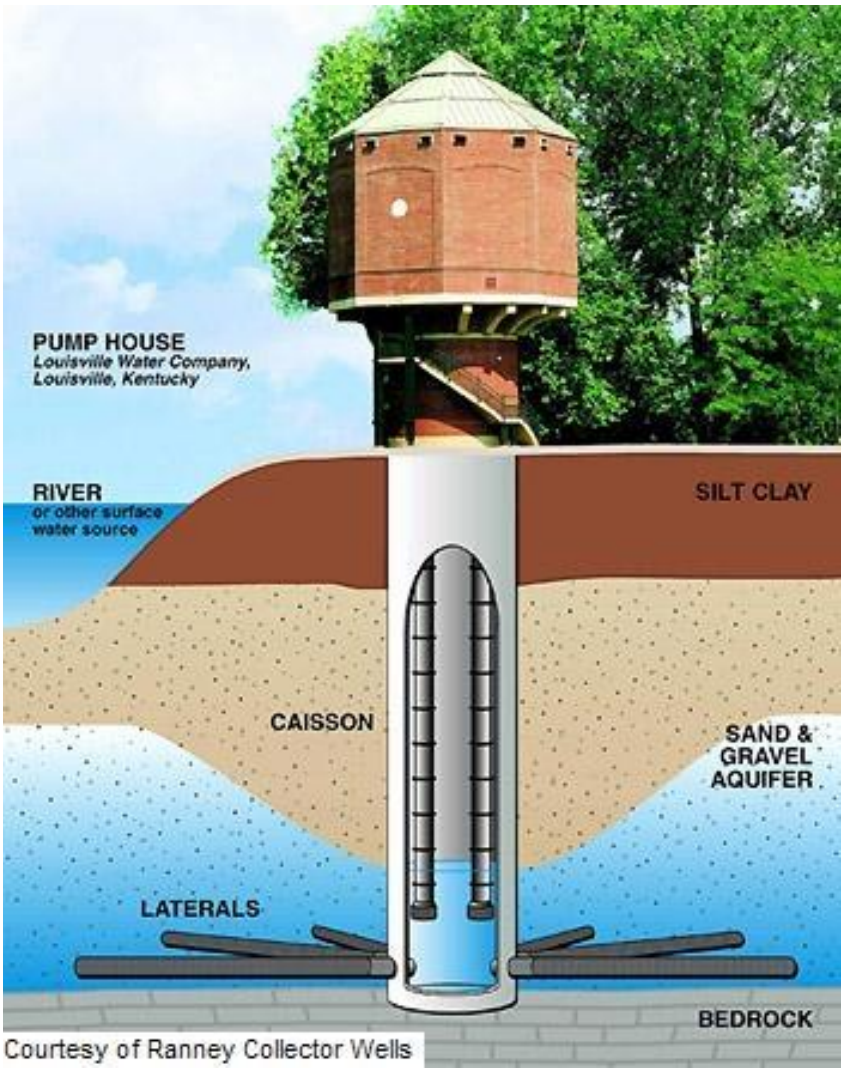
LOUISVILLE WATER since 1854
LOJIC
DATE: 1/17/13 MAP: MARSHA MEYER/ JEREMY SMITH

Figure 1.1



Courtesy of Ranney Collector Wells

The wells are constructed approximately 1,500' apart, and drilled into the bedrock to the tunnel. The tunnel serves as a collector for the groundwater entering the well through the "fingers" of the wells, placed at angles from the central caisson.

The tunnel serves as a collection point for the groundwater, and is transported to the central pumping station at the B. E. Payne Plant.

The fingers of the wells are placed at various intervals around the central caisson in the center.

This picture, at left, depicts the original well design of the demo well, also known as Well #1. It differs only in that it is not attached to the tunnel, and has a large well house, with two wells on the top.

This picture more accurately depicts the construction of the four new wells, drilled within the Ohio River Valley alluvium, and shows the tunnel connecting the wells. Water enters the tunnel from gravity drainage, and is pumped from the tunnel at the pump station, located near the mixing basins at the B. E. Payne Water Treatment Plant.

The addition of four new wells significantly increased the size of the Wellhead Protection Area, as may be seen in Figure 1.1.

The B. E. Payne Plant, which is a surface water treatment plant, is located in the eastern third of the property, near River Road. Between the treatment plant and the well, are three large backwash basins that are used to collect the sediments generated during the treatment process. An additional backwash basin is located across Mayfair Avenue, roughly parallel to Transylvania Beach Road.

The northeastern portion of the county near the City of Prospect is an area of high growth that is primarily residential and commercial in nature. There are few industrial sites within this area. At present, the B. E. Payne Plant, which was completed in 1973, is undergoing renovations and updates. The overall environmental impacts of construction activities at the Payne Plant are expected to be minimal.