DESIGN

Architecture has the power to strengthen community bonds, support a healthy lifestyle and enrich individual lives. The Red Bird Water Kiosk seeks to achieve all three of these on the site of the Red Bird Mission in the small town of Red Bird, Kentucky. The University of Tennessee College of Architecture and Engineering and Nursing are collaborating to remedy many of the health issues that are prevalent in Clay County through a three-year project. In addition to these coordinated education efforts, the Water Kiosk will be the first design–build intervention.

The Red Bird Water Kiosk Pavilion will provide municipal water to over 9,000 local inhabitants of the area who currently do not have access to clean water.

Research

Research the culture and needs of Clay County, KY, and develop integrative strategies to provide system-wide solutions.

**CONDUCTIVITY (μS/cm)**

- **Recreational Limit (300)**
- **Exceeds instruments limits**
- **Levels of conductivity were recorded with a range limit of 300 - 500 μS/cm which indicates hazard to aquatic life.**

**Fecal Coliform & E. Coli levels**

- **Recreational Limit (149)**
- **Exceeds instruments limits**

**Water Sources**

- **Clay County**
- **Knoxville**

**Build**

- **Finalize design**
- **Construction Documents**
- **Fabrication**
- **Begin construction**
- **Finalize construction**
- **Replication**

**Education**

- **How to Manuel** will provide insight into the research, design and construction of the Red Bird Water Kiosk Pavilion.

**System-wide Change**

- **Many other small towns lack clean water and require similar interventions.** Through education and replication, the unhealthy living standards that run rampant in Appalachia can be changed.

**Red Bird Water Kiosk Pavilion**

- **clean water**
- **clean life**

- **Red Bird Mission, The University of Tennessee College of Architecture and Design, Engineering and Nursing are collaborating to remedy many of the health issues that are prevalent in Clay County through a three-year project. In addition to these coordinated education efforts, the Water Kiosk will be the first design–build intervention.**

**Red Bird Water Kiosk Pavilion**

- **Kiosk is placed adjacent to the road for ease of water retrieval from vehicles.**
- **Second dispensing unit is placed under canopy for pedestrian users.**
- **Four bays are added to house a local farmer’s market.**
- **A wooden screen is added and a 225 g cistern will harvest rain water for the nearby greenhouse.**

**Research the culture and needs of Clay County, KY, and develop integrative strategies to provide system-wide solutions.**

- **Site Conductivity (μS/cm)**
- **Recreational Limit (300)**
- **Exceeds instruments limits**
- **Levels of conductivity were recorded with a range limit of 300 - 500 μS/cm which indicates hazard to aquatic life. High levels of conductivity indicate runoff from coal mining draining into the river.**

**Education**

- **How to Manuel** will provide insight into the research, design and construction of the Red Bird Water Kiosk Pavilion.

**System-wide Change**

- **Many other small towns lack clean water and require similar interventions.** Through education and replication, the unhealthy living standards that run rampant in Appalachia can be changed.

**Replication**

- **How to Manuel” will provide insight into the research, design and construction of the Red Bird Water Kiosk Pavilion. Educating the public about the benefits of clean water will improve health standards across the area. Continued education is critical to the long term success of the project. The use of over-the-counter materials and ease of assembly allows the opportunity for the Water Kiosk to be replicated elsewhere in Appalachia. Many other small towns lack clean water and require similar interventions.**