In the central part of Indianapolis within the combined sewer system, even a light rain storm can cause raw sewage to overflow and pollute Indianapolis waterways. Citizens Water is working to reduce raw sewage overflows to neighborhood streams. The backbone of Citizens’ plan is the Fall Creek/White River Deep Storage Tunnel.

Citizens will extend the deep underground tunnel along Fall Creek and White River to capture combined sewer overflows and carry raw sewage and polluted stormwater to Citizens’ Southport Advanced Wastewater Treatment Plant in southern Marion County.

New sewers along White River, Fall Creek, Pogues Run, Pleasant Run, and Bean Creek will connect with the tunnel, enabling Indianapolis to substantially reduce sewage overflows in all affected neighborhoods.

At more than 200 feet below ground, the entire 18-foot diameter deep tunnel will store more than 200 million gallons of sewage during and after wet weather, then slowly release the sewage to the wastewater treatment plant when capacity becomes available.

The tunnel system will be built in bedrock below the city using a specialized piece of equipment called a tunnel-boring machine. After the boring is complete a concrete liner will be installed in the tunnel. The lining will help keep groundwater out and keep sewage in the tunnel. By using the deep tunnel technology, disturbances to neighborhoods along the project route will be reduced.

The Fall Creek/White River deep tunnel will extend approximately 8.6 miles, beginning near the Indiana State Fairgrounds on the north, generally running parallel to Fall Creek and White River, and ending near the intersection of West Street and White River Parkway where it will join the Deep Rock Tunnel Connector project. The exact route of the tunnel is being determined during the design of the project to ensure long-term environmental and economic benefits.

**Estimated Project Cost:** $389 million (in 2011 dollars)

**Status:** Design 2011-2014

**Design Engineer:** Black & Veatch Corp.

**Construction Start Date:** 2016 (Projected)

**Anticipated Project Benefits:**

- Reduce raw sewage overflows to meet Citizens’ long-term control plan goals
- Capture raw sewage overflows that are flowing into Fall Creek and White River
- Store sewage during and after rainfall and transport them to the Citizens’ Southport Advanced Wastewater Treatment Plant
- Improve water quality and protect public health
- Achieve long-term benefits with a more “green” approach
- Minimize inconvenience to local residents
The Fall Creek/White River Tunnel project will connect to the Deep Rock Tunnel Connector, which is the first phase of the tunnel system and is currently under construction. Recent negotiations with the U.S. Environmental Protection Agency (EPA) and Indiana Department of Environmental Management (IDEM) for the consent decree will allow Citizens Water to save more than $700 million on the consent decree, and projects also will be constructed years ahead of the original schedule.

Deep tunnels are a proven technology. A number of large cities have built or are planning deep tunnels to reduce sewage overflows, including Chicago, Milwaukee, Cleveland and Columbus, Ohio.

**Facility Planning**

Facility planning for the Fall Creek/White River tunnel concluded in November 2009. During this phase, additional geotechnical studies were conducted to evaluate the bedrock and other groundwater conditions.

**Design**

The project design phase is underway using all the findings of the facility planning process.

**Construction**

Construction of the Fall Creek/White River Tunnel is expected to begin by 2016 and be completed by 2025.

For more information, visit our Web site at www.CitizensWater.com and click on Projects/Indianapolis Storage Tunnel in the upper menu.