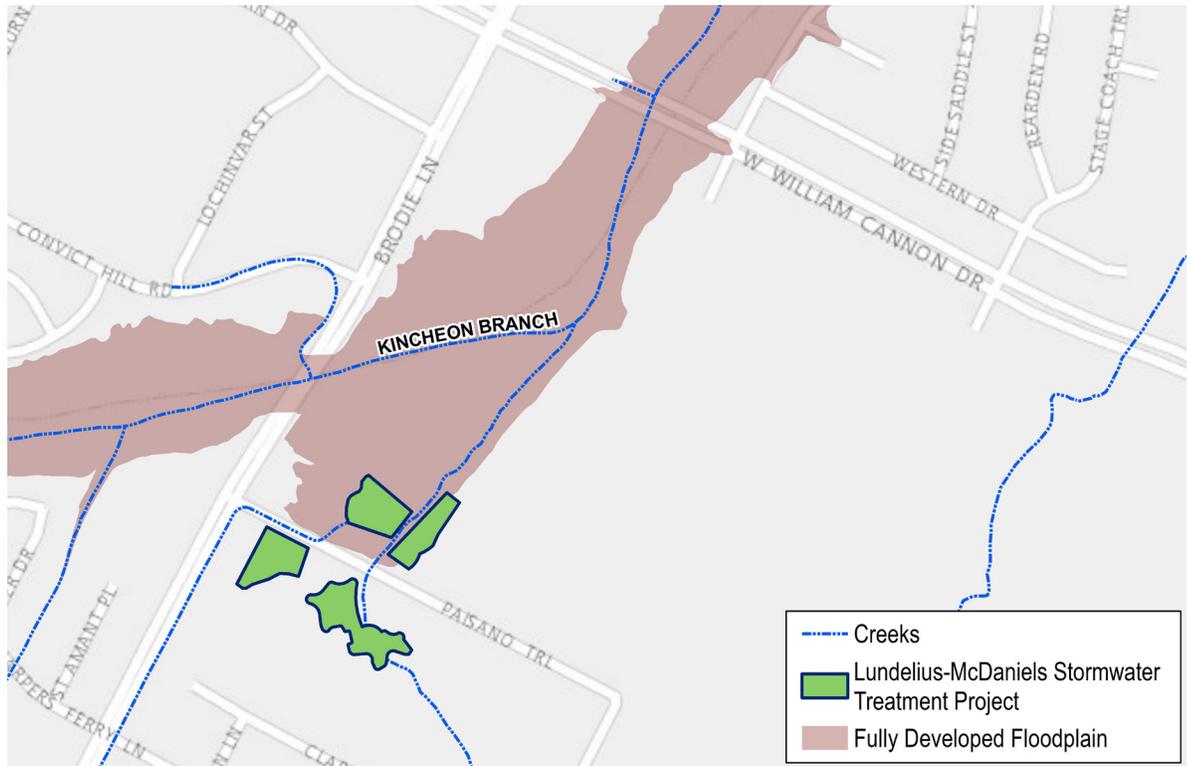




Lundelius-McDaniels

Stormwater Treatment Project



The Lundelius-McDaniels Stormwater Treatment Project is a multipurpose project constructed over the Edwards Aquifer Recharge Zone in southwest Austin. The project consists of a sedimentation basin, a biofiltration pond, and two vegetated filters. Together they work to treat approximately 133 acres of stormwater runoff entering the Dry Fork Sink, a major recharge feature for Barton Springs and the Edwards Aquifer.

POLLUTION PREVENTION

Prior to the project, the untreated flow from the 133 acres of primarily single-family residential development would drain to the Dry Fork Sink. Dye tracings showed that runoff entering the Dry Fork Sink could reach Barton Springs in less than 30 hours. As part of the Watershed Protection Master Plan process, the Water Quality Protection mission identified the Dry Fork Tributary as a high priority area.

ENVIRONMENTALLY EFFICIENT

The project's sedimentation basin, biofiltration pond, and vegetated filters encompass 28.3 acres of undeveloped tracts of land near William Cannon Boulevard and Brodie Lane. As part of the project, a wide variety of native plants were introduced to improve the riparian corridor by hindering the spread of invasive species and facilitating the development of sustainable native grasslands. The new treatment system filters pollutants and enhances the flow to the Dry Fork Sink. With low maintenance requirements and native subsoil, the biofiltration unit also provides aesthetic value, habitat for native plants, and cover for wildlife.



Lundelius McDaniels sedimentation basin and biofiltration pond.

Now completed, the system treats 100% of the inflow, capturing approximately 57,000 cubic feet of runoff and removing:

- 77% of the annual total suspended sediment load
- 64% of the chemical oxygen demand
- 41% of the dissolved nitrogen
- 57% of lead pollutions

LINKS

STORMWATER MANAGEMENT

The Stormwater Treatment program designs, implements, and evaluates engineered systems that reduce pollution in our creeks, lakes, and aquifers. The program seeks to use stormwater as a resource rather than a waste product.

ENVIRONMENTAL INTEGRITY INDEX (EII)

The EII is a program designed to continuously monitor and assess the chemical, biological, and physical integrity of Austin's creeks and streams. Currently, all watersheds are monitored on a two-year rotating basis.

GROUNDWATER

Much of west Austin sits above the environmentally-sensitive Edwards Aquifer. The Edwards Aquifer supplies drinking water to more than 50,000 people, feeds countless springs, including Barton Springs, and supplies water to the Colorado River.

FOR MORE INFORMATION

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