

The watersheds in District 7 are considerably urbanized, with large amounts of commercial development along the major highways and corridors. In the northern half of the district, Walnut Creek has bacteria levels that exceed state standards for what is safe for recreation. Stakeholders have developed an implementation plan to reduce the bacteria levels through a variety of solutions. In the southern half of the district, the development within the Shoal Creek watershed was almost entirely built out Gilleland prior to the adoption of any watershed protection regulations for drainage or water quality. This older development is generally characterized by:

- Uncontrolled, polluted stormwater runoff and significant degradation of water quality. High priority water quality problems are shaded green on the map below.
  - Encroachment and alteration of natural waterways, which results in eroding stream banks and threatened property. High priority erosion problems are indicated in yellow on the map below.
    - Placement of structures within harm's way in the 100-year floodplain, with high priority flooded structures and roadways shown in red on the map below. Flooding along the Hancock Branch of Shoal Creek is among the top priorities in the city.
      - Undersized, deteriorating storm drain systems, which contribute to localized flooding. Major clusters of drainage complaints are shown in blue on the map below.

Creek Health

Táylor Slough N

Watersheds

Very Bad

Very Good

Harris

Decker

Elm

check out the Find Your Watershed tool:

## **40%** Impervious Cover 25% Tree Canopy Cover

Fair

Rattan

Walnut

District

Little

Walnut

Buttermilk

edwards Aquifer

Rechargez

Shoal

Waller







The Watershed Protection Department addresses drainage and environmental problems using a three-tiered approach of capital improvement projects, programs, and regulations. Examples of these strategies in District 7 include:

- <u>Capital Improvement Projects</u>: Areas south of US 183 in this district were largely developed before watershed regulations were in place, and thus capital improvement projects are a critical tool. Watershed Protection has already completed numerous projects in this district, including stabilization of eroding stream banks, storm drain improvements, and multiple regional flood detention and water quality ponds, mostly concentrated in the upper portion of the Shoal Creek watershed to help mitigate downstream flooding. Projects are planned for the next five years as well, including restoration of the Hancock Branch of Shoal Creek along Arroyo Seco, the upgrade of a low water crossing at McNeil Drive, and improvements to stormwater conveyance within Transit-Oriented Development (TOD) districts.
- <u>Programs:</u> Given the numerous transportation corridors and commercial land uses in this district, the City's Spills and Complaints Response Team is an important program. The team responds to hazardous and non-hazardous material spills and citizen pollution complaints to prevent and mitigate polluting discharges that could affect Austin's creeks, lakes, or aquifer. Staff manages a 24-hour Environmental Hotline (512-974-2550) to ensure rapid response and reduce potential environmental impact. Another key program in this district is the maintenance of City-owned water quality and flood detention ponds, such as the regional pond pictured below, to ensure they operate effectively — providing flood protection, water quality control, and erosion control both within and downstream of the district.



 <u>Regulations:</u> Due to the substantial build-out of the watersheds in this district, regulations will mostly apply to redevelopment projects, which are required to build water quality ponds and protect against additional erosion and flooding. Most of the development north of US 183 in this district was constructed after the adoption of watershed protection safeguards, resulting in significantly less encroachment of required stream setbacks. Keeping development safely back from waterways reduces the need for future capital projects.

More information on projects, programs, and regulations can be found at <u>austintexas.gov/watershed</u>



Photo of the Upper Shoal regional water quality and flood detention pond in the Shoal Creek watershed.