

Nature-Based Solutions to Flood Control in Harris County

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The Harris County Flood Control District is responsible for planning, designing, implementing and maintaining an extensive system of drainage and flood control infrastructure, including 2,500 miles of channels and over 200 stormwater detention basins. Given the area's terrain, climate and storm patterns, it's important that improvements to the flood control system are designed and maintained to work while also having appropriate regard for community and natural values. Nature-based solutions leverage the nature and power of healthy ecosystems to optimize infrastructure. Floodplain preservation, natural stable channel design, wet bottom detention basins with stormwater quality treatment wetlands, native tree planting, and avoidance and preservation of sensitive habitats are a few of the nature-based solutions used by the Flood Control District. Case study examples of these projects and design features will demonstrate how flood control infrastructure in Harris County provides more than just drainage to also create valuable greenspace, wildlife habitat, and improve water quality.