Program Implementation

“Cooling” College Station: A Tree Planting Initiative

Resilience in Practice: College Station, TX

The City of College Station, Texas, like many communities impacted by climate change, has experienced rising temperatures in its urban areas, where hard surfaces such as pavements and buildings trap and retain heat. Urban heat islands lead to higher energy costs, increased air pollution, and a heightened risk of heat-related illnesses for the city’s most vulnerable residents.

To tackle this issue, College Station began by identifying hot spots using publicly available data from United States Geological Survey (USGS) Landsat heat maps, creating aggregate maps that highlighted the ten hottest half-mile grid squares within the City. Due to limited planting options on private and state-owned properties, they prioritized City-owned land for their initiative. Planning & Development Services collaborated with other City departments such as Parks & Recreation, Public Works, and Capital Projects to determine feasible tree planting locations, factoring in parks planning, drainage, and other constraints. This collaborative effort produced a list of priority areas on City-owned properties where trees would have the most significant cooling effect. The “Cooling” College Station Five Year Planting Plan for Urban Heat Mitigation aims to moderate the impacts of extreme heat in the City.

In partnership with Texas A&M Forest Service and conservation-based organizations, College Station has launched its plan to plant 4,787 trees over five years, with a goal of planting 958 trees per year. The plan also includes a residential planting program, offering discounted trees to residents, which will add 2,500 trees on privately-owned properties across the city. By increasing their tree canopy, College Station aims to reduce urban heat and improve air quality, building a cooler, healthier, and more resilient city for the future.