Collaborative Native Seed Mix (NSM) Development Project
Harris County

Background: Native Seed Mix (NSM) Development is a multi-year collaborative program facilitated by Houston Wilderness, Harris County Flood Control District (HCFCD), and Texas A&M University – Kingsville focused on development of an available and affordable regional **native grass seed mix(es)** to provide valuable ecosystem services and increased ecological resilience along riparian corridors in Harris County. Structurally mature and floristically complex native plant communities along riparian corridors will increase ecological resilience by 1) decreasing erosion along riparian corridors, 2) decreasing sedimentation in rivers and waterways, 3) increasing streambank productivity, 4) improving local water quality and supply characteristics, and 5) enhancing overall environmental functions and processes.

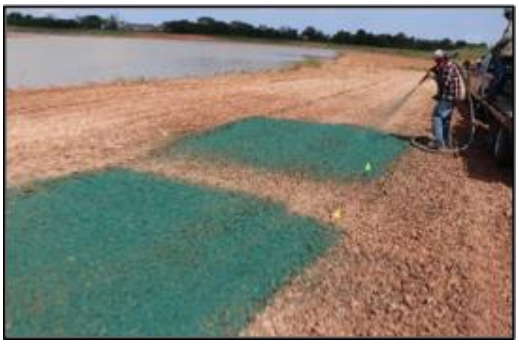
Native Seed Mix Development sites for Harris County Flood Control District

Figure 1. Site selection for the Native Seed Mix Development Project for the Harris County Flood Control District.

North HCFCD Site – plots & acre area

NSM Project Breakdown: [1] The NSM partners are now 9 months into the process of testing the survivability and growth rates of various native seed mix varieties – first through the use of 10' by 10' plots on two half-acre sites – one in North Harris County and one in South Harris County - to determine species survivability rates, and then through the planting of viable seed mixes in a ½ acre area near the plot locations. Plots of one native species and plots of mixed native species were tested to compare effects of increased biodiversity on survivability and growth rates of native seeds.

South HCFCD Site – plots (before & after)



Sections of the plots and then the acreage areas were prepped with hydro mulch to mimic current HCFCD protocol for soil stabilization following planting, the other plots/areas were left untreated for comparison analysis. Finally, after each plot was hand planted, a culti-packer was used to ensure adequate seed to soil contact and capping material was applied to individual plots/areas.

Future Steps: As half acre areas at each site are observed and analyzed by the NSM partners, benefit relevant indicators of the change in ecosystem services will be monitored throughout the project. Community meetings with interested parties will be facilitated by Houston Wilderness beginning in early 2022 to highlight the progress in creating a viable native seed mix(es) for use by Harris County along riparian corridors as well as other public and private entities in the region.

[1] February 2022