

Collaborative Native Seed Mix (NSM) Development Project with Harris County, Houston Wilderness and Texas Native Seeds (Tx A&M Kingsville)

Background: The Native Seed Mix (NSM) Development Project is a multi-year collaborative program facilitated by Houston Wilderness (HW), Harris County Flood Control District (HCFCD), and Texas Native Seeds (at Texas A&M – Kingsville) focused on development of an available and affordable regional **native grass seed mix** (NSM) to: 1) replace non-native grasses on Harris County’s future construction projects, 2) provide valuable ecosystem services and 3) increase 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, 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.

NSM Project Breakdown:¹ The NSM partners are now 2 and a half years into the process of testing the survivability of various native seed mixes –one in North Harris County and one in South Harris County - through the planting of viable seed mixes in ½ acre areas in the North site and 10’ x 10’ plots in the South site to evaluate seed performance on slope conditions. Plots of one native species and mixed native species are tested to compare effects of increased biodiversity on survivability and growth rates and created a NSM for the region to begin to use at scale. Sections at each site were prepped with hydro mulch to mimic current HCFCD protocol for soil stabilization following planting, the other



North HCFCF Site – half-acre plot

plots were left untreated for comparison analysis.

South HCFCF Site – basin plots

The North site results, to date, show invasive species like KR Bluestem to continue to be aggressive in the NSM plot areas and demonstrates an NSM planting in an established basin-style site which is more difficult, but the NSM is winning the battle so far. The South slope plots were reseeded in March 2023 after herbicide treatment was used on invasives in the previous year. The plots inside the established basin in the South site persist with high ground cover in heavy clay soil, demonstrating the success of the NSM. In March of 2023, an onsite meeting at the North NSM site with seed buyers and growers resulted in the creation of the Regional Access to Native Seed Mix (RANSM) Coalition. Priorities for this coalition include 1) connecting seed buyers and growers,

2) collaborating on a strategy for long-term supply of NSM, and 3) working together to ensure NSM availability for large-scale use in the region. In April of 2023, a workshop for interested stakeholders was held at the South site

Future Steps:

- First meeting of the RANSM Coalition in May 2023 brought seed growers and buyers together to establish a timeline for NSM species availability and discuss the annual needs of major regional stakeholders
- Texas Native Seeds to finalize the NSM for use by Harris County and HCFCD
- HW to schedule public relations events and communications on the NSM to stakeholders and interested entities



The RANSM Coalition