

## Support HB 2619 / SB 1118 "On-the-Ground Conservation" for a Resilient Texas

HB 2619 / SB 1118 creates an "On-The-Ground Conservation" program, directing the Texas State Soil and Water Conservation Board to take steps to support specific practices on private lands. It explicitly addresses soil health, improving resilience to weather extremes and natural disasters, sequestering carbon in the soil, and several other areas that are only indirectly addressed under the Board's current programs. The new program will provide numerous benefits, particularly in the areas of urban flooding and agricultural drought.

Healthy soil management involves techniques that increase the organic matter in the soil, such as cover cropping, no-till, and rotational grazing. Healthy soils act as a sponge, capturing water during rainfalls and storing it for slow release as needed. Healthy soils thus reduce irrigation demand, improve drought resilience, improve aquifer recharge, and mitigate downstream flooding.

It's well accepted that maintaining natural spaces like open land and wetlands can decrease flood losses.<sup>i</sup> And there's growing evidence that <u>how</u> the land is <u>managed</u> can make a major difference. During a rainfall event, healthy soil management is the difference between infiltration of 1 inch of rain taking over 31 minutes (regularly tilled cropland) versus 7 minutes (regular "open space" pasture land) versus **10.1 seconds** in rotationally grazed (healthy soil) land. (*video demonstration*)<sup>ii</sup>

Healthy soils not only absorb water quickly, they can absorb a lot more of it. Every 1 percent increase in organic matter results in as much as 25,000 gallons of available soil water per acre. With 126.5 million acres in agricultural production in Texas,<sup>iii</sup> healthy soil management practices could result in as much as 3.1 **trillion** gallons of additional stored water for every 1 percent increase in organic matter. Some of this stored water will gradually recharge aquifers, and the rest is available to keep plants healthy and productive.

Without action, both droughts and floods will increasingly harm Texans and our economy. The 2017 Texas State Water Plan estimates that Texas could have a statewide water shortage that would cost \$151 billion in estimated economic losses by the year 2070.<sup>iv</sup> According to the Office of Texas State Climatologists, Texans can expect warmer weather, urban flooding, and increased impact from hurricanes through 2036.<sup>v</sup> Hurricane Harvey alone caused an estimated \$125 billion in damages.<sup>vi</sup>

Healthy soil management ultimately increases the productivity of the land, benefiting the farmers – but the initial up-front costs are a significant barrier. The bill leverages federal funding (such as the \$4.631 billion available through federal programs like the NRCS)<sup>vii</sup> to assist. Farmers often also need technical assistance and information from trusted sources, such as the Soil & Water Conservation Districts.

HB 2619 / SB 1118 will support farmers and other landowners interested in building healthy soils, making Texas more resilient to both storms and droughts.

For more information, contact Judith McGeary, Executive Director, Farm and Ranch Freedom Alliance, Judith@FarmAndRanchFreedom.org, 512-484-8821 (cell)

<sup>i</sup> https://today.tamu.edu/wp-content/uploads/sites/4/2018/11/Urban-flooding-report-online.pdf

<sup>ii</sup> https://www.youtube.com/watch?v=IqB4z7lGzsg&feature=youtu.be

https://www.nass.usda.gov/Quick\_Stats/Ag\_Overview/stateOverview.php?state=TEXAS

<sup>iv</sup> Texas Water Development Board, 2017 State Water Plan. Available at: https://www.twdb.texas.gov/waterplanning/swp/2017/doc/SWP17-Water-for-Texas.pdf?d=5014.785000006668 (page 3)

<sup>v</sup> https://www.texastribune.org/2020/03/05/study-future-texas-depends-climate-preparedness/

<sup>vi</sup>National Oceanic and Atmospheric Administration. Available at: https://coast.noaa.gov/states/fastfacts/hurricane-costs.html

vii https://www.usda.gov/sites/default/files/documents/usda-fy2021-budget-summary.pdf