Wetlands project pioneered at CCISD's Education Village

February 14, 2014

A retention pond behind the Education Village in Clear Creek Independent School District has been transformed to a unique outdoor space that is part classroom and part environmental project.

With the guidance of the Texas Coastal Watershed Program and Texas Sea Grant, teachers, students and community volunteers created a floating wetlands area at the League City campus.

The project is the first of its kind at a Texas public school, according to officials. The floating wetlands showcase a new technique for improving water quality in stormwater detention and retention ponds while providing students with a hands-on way to learn about their local environment.

"Besides providing a great learning experience for the kids, we are demonstrating how water quality improvements with wetlands can integrate with flood control," said Mary Carol Edwards, a stormwater wetlands specialist at the Texas Coastal Watershed Program/Texas A&M AgriLife Extension Service and the project coordinator.

The islands are buoyant rafts of recycled plastic fibers on which wetland plants can grow. Roots work their way through the mesh of the islands and into the water, where they take up fertilizer and other contaminants washed into the pond with the stormwater. The rafts also develop communities of wetland microorganisms, which break down pollutants in the water. The islands are anchored and can rise and fall as the water level in the pond changes.

Students at Mossman Elementary School, Bayside Intermediate School and Clear Falls High School helped care for the plants in a greenhouse at Education Village.

Career and Technical Education students at Clear Falls made the concrete anchors. CCISD Students and community members of all ages volunteered in November to install the floating islands.

Visit clearcreekisd.smugmug.com/CCISD-Videos/2013-2014School-Year-Videos/i-5KhPqQf/A to watch a video with more information on the wetlands project at Education Village.