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By Greg Bowen The Herald-Zeitung | 0 comments

NEW BRAUNFELS — Flooding and water-quality issues on Alligator Creek east of New Braunfels will be among the topics discussed next Tuesday when the Geronimo and Alligator Creeks Watershed Partnership meets.

The partnership — a collaboration between citizens, cities, counties, and state and federal agencies — is working to develop and implement a watershed protection plan, which will be a blueprint for the improvement and protection of the watershed.

The meeting is open to the public.

It will be at 6 p.m. Oct. 12 at the Guadalupe-Blanco River Authority River Annex, 905 Nolan St. in Seguin.

Flood study

Ward Ling, a specialist with the Texas Agrilife Extension Service, said Wednesday that the partnership's flood study group is expected to present its latest findings on Tuesday.

The flood study group is drafting a floodplain protection plan for Alligator and Geronimo creeks. The \$330,000 effort, which began two years ago, will identify options for flood mitigation. Options being considered include more stringent floodplain development policies, land-use restrictions, re-grading and re-shaping of creek channels, and the construction of stormwater retention/detention ponds.

"It's a good first step," Ling said. The floodplain protection plan, expected to be completed by year's end, will likely be used by partnership members to seek grants to study specific flood mitigation projects.

Water quality

Ling said the partnership has been dealing mainly with water quality issues in the creeks, which will be the focus of the watershed protection plan.

Alligator, a dry creek that flows primarily after rains, and Geronimo, which flows perennially, have problems with elevated levels of E. coli bacteria.

"Anytime you have stormwater hitting the stream, the potential is there for excess bacteria," Ling said.

He said feral hogs, livestock, deer, septic tanks, pets and urban runoff are among the suspected sources of "bacterial loading."

The watershed protection plan should be completed by year's end.

"The plan is going to take into account a lot of different things to improve water quality," Ling said.

Geronimo also suffers from "nutrient enrichment" caused by too-high levels of nitrogen, likely because of inflows of fertilizers. High levels of nitrogen can cause algal blooms and excessive growth of aquatic vegetation.

The creeks

Alligator Creek begins in southeastern Comal County, just above Interstate 35. It runs southeast, traveling through a rapidly developing area of the Austin-San Antonio corridor. Typically dry, springflows enter the creek before it flows into Geronimo Creek near Seguin. Geronimo Creek in turns flows to the Guadalupe River.

The two creeks form an almost 70-square-mile watershed in Comal and Guadalupe counties within the larger Guadalupe River Basin. The upper portion of the Alligator Creek watershed lies in the extraterritorial jurisdiction, or ETJ, of New Braunfels. The lower portion of the Geronimo Creek watershed is in Seguin's ETJ.

According to the partnership, as development and population growth continue, the percentage of urban land use will rise and play an increasingly important role in the hydrology and water quality of the creeks.

Partners

Partners in the effort include the city of New Braunfels, Comal County, New Braunfels Utilities, the city of Seguin, Guadalupe County, Guadalupe-Blanco River Authority, Comal-Guadalupe Soil and Water Conservation District, Plum Creek Watershed Partnership, Texas State Soil and Water Conservation Board, Texas Agrilife Extension Service, Texas Commission on Environmental Quality, Texas Water Resources Institute, National Resources Conservation Service, and U.S. Environmental Protection Agency.