

University to give most of Spring Lake back to nature

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The University will partner with the US Army Corps of Engineers to transform the Spring Lake peninsula to a more natural state.

"Basically the project will restore the aquatic and terrestrial habitats throughout Spring Lake which have been degraded over the years by the construction and operations of the Aquarena Center," said Associate Vice President of Facilities Pat Fogarty of Texas State University. "The structures and facilities associated with Aquarena Center will be removed. Basically we're going to remove everything on the peninsula except that (which) is needed to support the operation of the glass bottom boats and the diving program."

Regional Technical Specialist for the Army Corps of Engineers Jeffry Tripe said he did not know when construction funds might become available because the Corps and Congress have yet to determine how much funding will be available for the construction phase of the project.

"Ideally this plans and specs phase will last about a year, and then as soon as we're done with that we'll be ready for some construction funds," said Tripe. "If there's no problems and we get funding, we're looking at probably a year and a half out we'll start construction."

He said the Corps often has insufficient funds to move forward with projects already initiated, though because the aquatic ecosystem restoration project at Aquarena Center is "probably" a high-priority project, it is not likely that federal funds for the construction phase will be lacking.

"It's got five threatened endangered species in the area that will benefit from restoration," said Tripe. "It's a unique area, it's a spring-aquifer-type area... And it's unique in that it has a lot of cultural resource and background history...so getting that area back to a more natural, native-type setting will definitely be a plus."

A federal law – The Water Resources Development Act of 1996 – authorizes the US Army Corps of Engineers to carry out projects for aquatic ecosystem restoration and protection. According to a report published by the Corps, the project at Spring Lake will entail "demolishing 19 structures, relocating 3 structures off-site, leaving 6 structures in place, establishing native prairie vegetation, removing exotic vegetation, installing a vegetative buffer zone, and constructing trails and a restroom." Fogarty said the "vegetative buffer zone" will be intended to keep people from the edge of the lake. He said 22 acres of lacustrine habitat, 10 acres of peninsula flood plain and nine acres of riparian habitat will be restored. Fogarty said Wetlands Walk will not be demolished. The old inn and other structures on the hillside bank of Spring Lake will not be removed.

According to the Army Corps of Engineers' Integrated Detailed Project Report and Environmental Assessment, construction associated with project might result in the harming or killing of up to 732 San Marcos Salamanders and 965 Fountain Darters, two of the eight endangered species living in the San Marcos region of the Edwards Aquifer.

"Critical habitat for the San Marcos salamander, fountain darter, and Texas wild-rice could experience temporary degradation during construction, primarily due to increased turbidity and sedimentation," the report states. "However, the (National Ecosystem Restoration) plan would improve aquatic habitat in Spring Lake and the San Marcos River providing a long-term benefit to protected species."

According to the report, removal of structures submerged in Spring Lake "would create an additional 4,600 square feet of Critical Habitat and potentially uncover spring openings that could be colonized by federally-protected species."

Before 19th century settlers created Spring Lake Dam, early travelers to the region reported the springs spewing water several feet into the air. The aquatic ecosystem restoration project will not involve removing Spring Lake Dam. Professor of aquatic resources Walter Rast said removing the dam would eliminate Spring Lake and the nearby wetlands, thereby harming some of the species that have become acclimatized to the dam's presence. Rast said he doubts the dam will soon be removed.

"The canoeing groups would love to see it gone," said Howard. "They wouldn't have to portage anymore, and it would be a faster ride, probably."

Executive Director of the San Marcos River Foundation Dianne Wassenich said most of the dams on the river will be removed someday. She said demolishing Spring Lake Dam, thereby fully restoring the San Marcos Springs to their natural state, would have to be done over a period of years.

"(U.S. Fish and Wildlife Service) would have to be very careful to protect the endangered species during the process," said Wassenich. "So I don't see it happening in my lifetime."

Tripe said an increase in the de-watering of Edwards Aquifer could occur if pressure on the springs currently supplied by the lake via the dam were eliminated.

According to Texas State University's website, the total projected cost of the aquatic ecosystem restoration project at Spring Lake is \$2,509,214. Thirty-five percent of funding will come from the University and the US Army Corps of Engineers will provide 65 percent in the form of a grant. The City of San Marcos applied for the grant in 2003.

"We want to do some restoration all along the San Marcos River, to limit access to (some) places to protect the river and then really restore more of it to its natural setting, get rid of some of the unsightly concrete areas that worked 50 years ago but don't work today," said City of San Marcos Communications Director Melissa Millecam.

City Watershed Protection Manager Melanie Howard said the project would involve the restoration of land from City Park to I-35. Howard said recreational activities on the San Marcos River constitute the greatest source of negative environmental effects, such as bank destabilization, erosion, compacting of the river bottom and loss of aquatic vegetation. Howard

The city's Preliminary Restoration Plan calls for the revitalization and sustainment of about "22.0 acres of riparian woodland habitat, 6.0 acre of tall grass prairie habitat, 4.0 acres of emergent wetland habitat and 16.0 acres of aquatic habitat..." The plan estimates the total project cost at \$4,540,000, 35 percent of which would be paid for by the city.

"The city is in the process of developing the feasibility report, which is really phase one of this process," said Howard.

Phase two involves design work, which Howard said cannot occur until Congress authorizes more funding for the project.

"If they don't give it, then we're dead in the water," said Howard.