Attachment J

United States Department of the Interior



FISH AND WILDLIFE SERVICE
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Date: 6 August 2014

To: Jared Miller

From: Mike Montagne, Project Leader

Subject: Capes Dam

As the project leader of the Texas Fish and Wildlife Conservation Office (TXFWCO), I am writing in regards to the disposition of Capes Dam now that it is owned by the City of San Marcos. I have conferred with the biological community (TPWD, TSU, and Ecological Services (USFWS)) and we are all in agreement that biologically speaking, the removal of failing dam would be the most ecologically beneficial scenario to the San Marcos River system, and its unique flora and fauna.

Recent modeling completed by Dr. Thom Hardy and others at the Meadows Institute, for the National Fish Passage Program (NFPP), show that the removal of Capes Dam would result in multiple beneficial effects for the San Marcos River system. The removal of the dam would: increase the amount of habitat for Texas Wild Rice (available water depths less than 1.0 meter), increase flow velocity and reduce accumulation of fine sediments directly attributed to the existing backwater effects of the dam, and would likely increase sunlight penetration and consequently promote vegetation growth in more areas (fountain darters preferred habitat). The combination of these changes and the reconnection of downstream sections of the San Marcos River to the IH-35 reach would have a beneficial effect for fountain darters.

Removal of the dam would also help the City of San Marcos meet some of the Minimization and Mitigation Measures; Measures Specifically Intended to Contribute to Recovery (Section 5) spelled out in the Edwards Aquifer Habitat Conservation Plan.

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1. Reduce turbidity and sedimentation through the establishment of watershed management strategies. This will decrease erosion and subsequent sedimentation and filter runoff to enhance water quality. Remove silt and accumulated sediment from designated areas within the river to more closely match historical conditions.

According to Dr. Hardy's model, removing the dam would likely reestablish natural current velocities, remove fine sediment accumulation, and restore coarse sediment transport within the San Marcos River, thus providing improved habitat for vegetation growth and expansion.

In addition to the recommendation to remove Capes Dam, the USFWS would like to discuss the opportunity for the City to apply for a grant from the National Fish Passage Program (NFPP). The NFPP is a voluntary, non-regulatory effort that provides financial and technical assistance to remove or bypass artificial barriers that are impeding the movement of fish and contributing to their decline. As the administrator of the NFPP in Texas, I would be glad to assist the City of San Marcos with applying for a grant from the NFPP. These grants typically range from a few thousand dollars up to \$150,000 per project, which is likely more than enough for the removal effort.

Please contact me if you have any questions.

Mike Montagne
Project Leader, TXFWCO
USFWS

- 1. NOTE: If the City of San Marcos wishes to reduce sediment into and turbidity of the San Marcos River, while "enhancing water quality" then perhaps the *very first* thing to do is to <u>strictly enforce all rules and dis-allow all construction</u> of <u>any amount of impervious cover to be built directly in the 100 Year Flood Plain</u> of ANY river or creek located in the City of San Marcos.
- 2. The Fountain Darter, and all other species of fish in the San Marcos River are not adversely affected by the low-head dams and barriers like Capes Dam. This is because the Fountain Darter and other Central Texas Fish do not migrate upstream from the ocean to headwaters the way the salmon & coho of the American North west are required to do, in order to propogate. There does not appear to be any logical effort to explain to readers that Capes Dam poses any threat or problem to any fish or aquatic specie in any of the reports authored by Dr Hardy since the early 1990s.

If it were true that dams on the San Marcos River were disruptive to native fish, wouldn't the first Dam to be removed from the San Marcos River have to be Spring Lake Dam - since Spring Lake Dam would be doing the most harm of all, as high as it is (approximately 12') and as close to the Springs as Spring Lake Dam is.