

2016 Edwards Aquifer Habitat Conservation Plan Work Plans					
Comments/Responses					
Comment	Comment Submitted by	HCP Comment/Response	Responsible Responder	Comment Incorporated? Y/N	Permittee Comments
Measures 5.3.1 & 5.4.1 - This measure states that "an increase of 8,000 m2 of [Texas Wild-rice] over the first phase of the EAHCP (2013 - 2019) ..." is required to meet the long-term biological goals. SAWS disagrees with this statement. There is no timeline to meet the long-term biological goals in the EAHCP. Since the minimum total target of Texas Wild-rice has been met in 2014, 2016 efforts in reaches where the goals in Table 4-10 have been met should focus on maintaining that target in those reaches and allowing natural expansion and growth to accomplish the remainder of the biological goals. 2016 efforts should focus on those reaches not yet meeting the goals set in Table 4-10. SAWS agrees with the statement on Page 3 that persistence of the gains in area of Texas Wild-rice has not yet been demonstrated. However, targeting the "maximum threshold" is unnecessary because it is a target which ignores natural growth and expansion. Natural growth and expansion are the responsible means of meeting the maximum threshold. Meeting and maintaining the minimum areal coverage by reach is the proper goal.	SAWS	Referred to SM/TXSTATE	SM/TXSTATE	N	Achieving the biological goals prior to Phase II has been in every approved work plan. Meeting the biological targets during Phase I is the most responsible approach rather than incurring the risk of not meeting the targets during Phase II. In 2016, the focus is on reaches downstream where we have not achieved minimum targets, while maintaining existing efforts in upstream reaches to ensure expansion of the Texas wild rice and other native species. During the Provision M shut down of work in the river, extensive stands of Texas wild rice were lost to non-native reinvasion that has required re-working these same areas. This is empirical evidence that does not support SAWS contention that natural growth and expansion will result in reaching maximum targets. At a minimum, gardening of treated sites must be continued. Striving for the maximum targets is the logical and rational approach that provides the maximum ecological buffer against stressful conditions. From an ecological risk perspective, starting at the maximum is demonstrably better than starting at the minimum.
Measures 5.3.6/5.4.4 - The EAHCP states on page 5-26 "The City of San Marcos will remove sediment from the river bottom at various locations from City Park to IH-35 [emphasis added]." Therefore, the proposed sites in the Lower San Marcos River are ineligible for EAHCP funding. Additionally, the City and University state on Page 5 that the coverage for sediment removal under the sand and gravel permit from the Texas Parks and Wildlife Department (TPWD) stops at IH-35. The labels for figures under this measure are out of numerical order (Figure 2 first, followed by Figure 1).	SAWS	Referred to SM/TXSTATE	SM/TXSTATE	Y/N	I will make the figure adjustments (thank you!). However, because the EAHCP does not specifically mention removal of sediment below IH35 is not justification for not removing fine sediment when it is necessary meet the projected biological targets in these reaches of the San Marcos River. Given the high correlation between fine sediment and the distribution of non-natives, it is rational to consider these efforts under adaptive management. Additionally, fine sediments must be removed prior to planting Texas wild-rice, which is required by the EAHCP in the segment downstream of IH-35.
Measures 5.3.8/5.4.3/5.4.12 - Update Table numbers (text on Page 7 references Table 3 - should it be Table 27). Figure 3 on Page 9 is unit-less - is the level of effort being expressed in terms of labor-hours? Repeated treatments? Money spent? Some combination of these? The statement made in the estimated budget section (that maintaining the recently restored areas of natural aquatic vegetation, and expanding into new areas of nonnative aquatic vegetation requires additional labor and effort) as justification for the budget request is interesting. The EAHCP is maintaining recently-restored native aquatic vegetation	SAWS	Referred to SM/TXSTATE	SM/TXSTATE	Y	I added the following text to Figure 3 ". Each color box represents increasing labor hours with blue = one week and red = eight weeks". The budget allocated for the Comal system's removal of aquatic non-native plants and planting of natives includes two separate line items from Table 7.1. \$100K is allocated for Landa Lake and Comal River aquatic plant restoration while \$125K is allocated for aquatic plant restoration in the Old Channel. So New Braunfels has a total of \$225K to restore aquatic plants. San Marcos has \$125K.
Measures 5.3.3/5.4.3 - Weren't floating vegetation mats lifted off the stands of Wild rice in the past, not pushed? Has pushing the mats been shown to be more effective and not as destructive as once thought?	SAWS	Referred to SM/TXSTATE	SM/TXSTATE	N	Floating mats were lifted rather than pushed from the TWR stands as this method was less damaging and recommended by the TPWD. However, lifting is not the verb used to describe this action in the EAHCP, so that may be an issue that we need to work through - to be decided by the Implementing Committee.
Measure 5.3.7 - What are the TPWD's recommendations regarding the permanent access points? What is the division in costs between inspecting these structures, a task contemplated in the EAHCP, and meeting these recommendations, which are not included in the EAHCP?	SAWS	Referred to SM/TXSTATE	SM/TXSTATE	N	Section 2.4.3 authorizes infrastructure maintenance and repair to access points. All repairs proposed by TPWD to existing access points are minor construction. Maintenance for the purpose of public safety is the purpose of the ongoing funding for measure 5.3.7.
Measure 5.7.6 - Few of the Target 2016/Performance Measures seem to require so much funding. Are the funds instead intended for the stormwater detention ponds and drainage modifications? If so, funding has been included in the EAHCP in each of the past two years, yet these have not yet been constructed. Why? If not, why are these mostly administrative or ministerial tasks so costly?	SAWS	Referred to SM/TXSTATE	SM/TXSTATE	N	TSS and nutrients are a concern to the San Marcos River as it is situated in the "fastest-growing small city in the nation". Other than the water quality protection regulations over the recharge zone, the city does not have water quality protection at this time. Addressing water quality is critical to protection of the listed species in a rapidly developing environment. The WQPP has identified many potential water quality retrofits (constructed water quality controls treating existing development) throughout the City of San Marcos and on the Texas State University campus (133 total). . The retrofits analysis is close to being a master plan for water quality control implementation for both the City and University in that it identifies, models, prioritizes, and recommends cost effective retrofits to be implemented for the foreseeable future - and even provides some preliminary engineering for the most promising. Preliminary cost estimates and concepts were prepared for 18 retrofits identified as high-potential and their location and cost estimates are listed below:*Please see attached table The sum of the average capital costs for all unique projects (excluding multiple scenarios) for the City of San Marcos is approximately \$19.5 million while the sum for Texas State University - San Marcos is approximately \$13.4 million. In 2015, the WQPP funded the water quality basin design at the Lion's Club parking lot next to the river, it will be constructed this summer, and will treat runoff from a large parking facility that used to drain directly to the river. Some of the above listed water quality projects will be included in the Upper San Marcos River Watershed Protection Plan EPA 319 grant application that will be submitted by August 1. This grant will seek on the order of \$2M to build projects along and near the San Marcos River. Planned WQPP efforts include preparing final construction plans for these measures. The EPA 319 grant requires a local match and every \$1 spent by the local sponsor yields \$1.5 dollars, thus, the WQPP can bring significant grant construction funding to protect the river. Finally, other identified WQPP water quality basins will be included in the City of San Marcos Watershed Master Plan that will be complete this fall. This 20-year capital improvement program will construct water quality measures and also link flood and drainage enhancement projects to yield multiple benefits from each constructed improvement. Again, the WQPP designs and future water quality planning will assist the City in stretching their funds to maximize stormwater quality treatment throughout the WQPP area in San Marcos. The work plan was intentionally written to be broad in scale and scope to allow flexibility in developing regulatory criteria for the City of San Marcos Land Development Code revisions, preparing conceptual water quality retrofit project designs, and assisting the City and Texas State in water quality education and enhancing their stormwater management operations. The WQPP team has worked extensively with the City in the Land Development Code revision process with the updated Code scheduled for completion later this year. If water quality measures are included as suggested, all new development within the WQPP boundary will have less water quality impact on the river and aquifer, thus benefiting the species.