

2017
Biological and
Water Quality
Monitoring
Reports



Biological Monitoring Program

- ▶ 2017 represented the 18th consecutive year biological monitoring activities have been conducted in the San Marcos and Comal systems.
- ▶ Spring and Fall comprehensive sampling occurred in 2017. There were no critical period events.
- ▶ Generally, the habitat and species appear in excellent condition during this transitional flow period.



Biological Monitoring Program Comal Springs



- ▶ Water temperature and DO
- ▶ Native aquatic vegetation continues to reap benefit of HCP restoration
- ▶ FD populations continue to follow healthy trends in size and abundance
- ▶ Comal salamanders were highest observed to date (Fall 2017)
- ▶ CSRB counts were low



Biological Monitoring Program: San Marcos Springs

- ▶ Texas wild-rice coverage was recorded at highest levels to date
- ▶ Normalized fountain darter metrics were below long-term averages
- ▶ San Marcos salamanders consistent with long-term averages
- ▶ Conditions in Spring Lake remain excellent



Biological Monitoring Program: Fish Tissue Analyses

- ▶ Comal: Mosquitofish, Sunfish, Largemouth Bass at Landa Lake and Lower River
- ▶ San Marcos: Mosquitofish and Largemouth Bass at Spring Lake and I-35.
- ▶ Fish tissue, plasma, and water tested for pharmaceutical chemicals.



PARAMETER	METHOD	METHOD DESCRIPTION	DETECTION LIMIT	REPORTING LIMIT	UNIT ^a
PCBs	8082A	GC	2.8	10	µg/Kg
PAHs	8270D	GC-MS SIM	.01-.1 ^b	.1-1 ^b	µg/Kg
PPBDEs	8270D	GC-MS	.01-.05 ^b	.1-1 ^b	µg/Kg
SVOCs	8270D	GC-MS SIM	10-200 ^b	40-400	µg/Kg
Metals	1631, 6010C, 6020A, 7742	CVAA, ICPMS, AA	0.1	1	µg/Kg

^a µg/Kg=micrograms per kilogram.
^b detection and reporting limits vary by congener or analyte.



Water Quality and Biological Monitoring Contracts

- ▶ Both of the current EAHCP Water Quality Monitoring and Biological Monitoring contracts expire at the end of 2018.
- ▶ The rebid of the contracts will go through normal EAA procurement procedures with a public RFP issued in May/June.



Water Quality and Biological Monitoring Contracts

► Biological Monitoring

- The EAA will accept proposals through the term of the ITP.
- The SOW will closely resemble the current monitoring program which was adjusted per a work group in 2016.
- Depending on results of the CSRB work group, the contract may need to be amended.



Water Quality and Biological Monitoring Contracts



Water Quality Monitoring

- ▶ The EAA will accept 2 year proposals covering 2019-2020.
- ▶ The SOW will closely resemble the current monitoring program which was adjusted per a work group in 2016.
- ▶ The EAHCP will conduct a work group in 2019 examining the water quality monitoring program. In 2021, a new contract will go into place extending through the term of the ITP.

