## 2017 Lake Management Activity Timeline for Crooked Lake

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## **Restorative Lake Sciences**

Due to the fact that invasive aquatic plant species such as Eurasian Watermilfoil (EWM), Starry Stonewort, and Curly-leaf Pondweed colonized Crooked Lake last year, these species will be monitored in 2017 and spot-treated with the appropriate herbicides. RLS will oversee the aquatic herbicide treatments and assure that they are targeting invasive aquatic vegetation only. They are a current threat to the native aquatic vegetation biodiversity of the lake and must be managed.

The lake experts at Restorative Lake Sciences (RLS) will be on the lake many times this season. They will be monitoring the augmentation well water for possible contribution of nutrients to the lake which may be exacerbating much of the observed EWM growth throughout the lake. Additionally, RLS will be monitoring the efficacy of the Laminar Flow Aeration (LFA) system and reporting the results to date at the Crooked Lake Texas Association (CLTA) Annual meeting in May.

Evaluation of the LFA has included MDEQ-required parameters such as water temperature, dissolved oxygen, pH, conductivity, and water clarity. Additional parameters such as total suspended solids, chlorophyll-a, total and ortho-phosphorus, muck loss, and aquatic vegetation biovolume and aquatic plant relative abundance will also be measured. Additional methods for evaluating LFA are also being investigated. RLS will be evaluating these parameters again in 2017 and will make a recommendation to the CLTA Board later in the year as to whether or not to continue with the LFA system.