

Wetland Rehabilitation Project

This project will achieve 80% of the phosphorus load reduction needed from external sources (i.e. runoff) to Moody Lake by cleaning out and restoring degraded wetlands upstream of the lake. Specific project components include: excavation of nutrient-rich built up sediment, native vegetation restoration, livestock access management/fencing, wetland alum application to bind additional suspended phosphorus, and finally installation of a culvert riser to slow upstream water flow allowing more sediment and phosphorus to settle out. Phase 1 of this project was completed in 2017, and phase 2 is currently underway and will be finished later this year.



(Left photo) Tanks of liquid aluminum sulfate along wetland shoreline. These tanks are then loaded into a boat, and the alum is pumped into the water through injectors off the back of the boat (right photo). The Moody Lake round barn park will be used as a staging area and boat launch site for the whole lake alum treatment this fall.

Whole-Lake Alum Treatment

Application of aluminum sulfate (commonly referred to as alum) in Moody Lake will bind suspended phosphorus in the water column and trap it in the lake bottom sediment. Once bound to the alum, the phosphorus will no longer be biologically available for algae, thus improving water clarity. The whole-lake alum treatment is scheduled for fall 2018. The Moody Lake round barn parking lot will be used as the project staging area and boat launch site for the alum applicators. Large tanks of liquid aluminum sulfate will be staged near the shoreline and loaded onto the injector boat as needed.

Curly-leaf Pondweed Treatment

Starting in 2019, the District will perform annual treatments of curly-leaf pondweed in Moody Lake. Curly-leaf pondweed has a unique growth cycle in that it dies back mid-summer, releasing phosphorus into the lake. By treating curly-leaf with herbicide prior to its mid-summer die back, it is possible to prevent it from reaching peak biomass, thus reducing the amount of phosphorus release. Early season curly-leaf control can also prevent the plant from producing turions and spreading to new patches. Curly-leaf pondweed treatments must occur early in the spring, prior to growth of most other aquatic plant species. This is usually in May or early June at the latest.

In past years, the District was restricted in its ability to treat curly-leaf pondweed with herbicide since Moody Lake is classified as a Natural Environment Lake. As such, it has strict regulations for chemical applications. These restrictions required that the District first address the phosphorus load entering the lake and what is already in the lake. Once the Wetland Rehabilitation and Whole-Lake Alum Treatment projects are finished, the District will apply for a permit to treat curly-leaf pondweed on Moody Lake. The first treatment may occur as soon as May or early June of 2019.