We have been hit hard. Flood damage to homes, structures, and roads can be noticed almost immediately. Other damage will take time to show up; trees and landscapes are no exception. Waiting will be the best course of action and it truly will be a measure of patience.

Flooding affects not only the landscape itself, but it also affects the soil. Good soil composition has room for soil particles, water, and air. During a flood, the supply of oxygen in the soil is displaced by water. If the water stands for long periods of time, the plants start to suffer injury due to a lack of oxygen. Each plant is different in how it will handle standing water. Some are adapted for prolonged wet periods, while others struggle.

The water not only brings along soil and sediment, but it can also carry it away. Deposits soil and sediment of more than 3 inches can cause damage to trees and as little as 1 inch can damage turf. If possible try to remove excess sediment from turf and around trees. Strong currents can also wash away soil from around roots. Replace soil around exposed roots to prevent them from drying out or being mechanically injured from equipment.

There are several factors that play a role in how well trees will handle flood conditions. The first factor is the type of tree itself. Some species of tree are better able to handle flood conditions than others. If the tree originated in floodplain conditions, it is better able to handle to cope with flooding. Red maple, green ash, and baldcypress are very tolerant to flooded or waterlogged soils. Honeylocust, hackberry, silver maple, and elms show intermediate tolerance to flooding. Individual trees may respond differently to flooding depending on their growing environment.

Another factor that can play a role in the severity of the flood damage to a tree depends on the age and vigor of the tree. Healthy trees can withstand flooding damage better than marginally healthy or struggling trees. The age of the tree also will play a role in how well a tree withstands flooded or wet conditions. Older mature trees are able to handling flooding conditions better than seedlings or over-mature trees.

The time of year of the flooding can also make a big impact. Trees are most harmed by flooding if it occurs during the growing season, especially right after first flush. When a majority of the flooding happened in our area, most of the trees were still in dormancy. There is the possibility that the trees might not be as impacted by the floods compared to if it would have happened 2 weeks from now.

Be on the lookout in your landscape for indicators of stressed plant material. Flood-stressed trees exhibit a wide range of symptoms from leaf chlorosis, defoliation, reduced leaf size, epicormics sprouts (growth on the trees trunk), and crown dieback. We can also see early leaf drop. Larger than normal seed crops can appear on stressed trees in the growing season after the flood. Do no fertilized trees following a flood.

Lawns can also be affected by floods. The good news is that most cool season turfgrasses can survive 4-6 days of submergence. If the lawn was underwater, consider aerating the area this spring prior to fertilizing lightly, 1/2 lb nitrogen per 1,000 square foot. If there was silt deposits on the turf, wash off any excess that is covering turf. If the amount of silt on the lawn is greater than 1" or the turfgrass was under water for an extended period of time, there is the possibility that reseeding might be needed. This growing season, be on the lookout for a wide range of turf diseases.

The irrigation system shouldn't be overlooked. If the system was submerged in flood waters, extra precautions will need to be taken including flushing the system and its rotors. The backflow prevention system should be checked prior to reintroducing potable water to the system to prevent contaminated water from being syphoned back into the system.

Recovery will take time. It may take years before we start to see all of the effects of the flood. Patience is going to be needed… for a little while anyway.

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