

# Trees and Flooding

***By: Pam Bergstrom, Lower Elkhorn Natural Resources District Forester***

This past week has been one for the record books and one that Nebraskans across the state will not forget anytime soon. March 2019 will go down in history books and the memories of so many as one of the most devastating times for Nebraska from the panhandle all the way to the southeast corner of the state. But, we are Nebraskans! We are strong, and we help one and other in times of need. Nebraska is known for its kindheartedness and for pulling through in tough times. It will take time; however, we will pull through!

So, how about our trees and shrubs that have been affected by the flooding?

I've already started getting questions about trees that were underwater, were damaged by debris, and trees that are still underwater or are still completely submerged. I hate to say it, but right now it will depend on the tree and so many factors like how long was it submerged in water, how deep was the water, what pollutants were in the water, what was the health of the tree before the flooding, was the tree damaged during the flood like debris brushing up against the tree and taking off some of the bark, and if some of the bark was removed - how much of the bark was removed. These are just a few questions I have had to ask people who have called into me about what will become of their trees once the waters start to go back into the banks of the streams and rivers.

We are in a waiting game right now. With spring right around the corner, we will have to wait to see if hardwood/deciduous trees start to bud out in the next month or two and if they do bud out, does the whole tree bud out or is it just part(s) of the tree. We will have to see how the evergreens/conifer respond to the stress they just endured if they hold onto their needles and if they put on new candles or new needles this spring. Honestly, it will be easier to see how the evergreens do due to the fact their

needles from previous years will turn yellow and fall off if the tree is a goner while deciduous trees will be harder because we must wait for them to either put on new leaves or not.

Then again, trees affected by floodwaters may take years to show the strain of what they went through and finally die. Trees can fool us into thinking that they survived the flood the first 6 months to 2 years or longer, but some trees eventually will fade and die, it may happen months to years after the water has receded. We saw it in years past when Nebraska has been affected by floodwaters before. Trees and shrubs seemed to have come out of everything, but as time went on, some of those trees and shrubs began to die-back and eventually die altogether.

Another aspect that will determine if a tree will be okay is what species is the tree in the first place. Cottonwood, our state tree, can handle flooding, but what it can't handle is a large portion of its bark being removed from debris. When the bark is removed, this opens the tree up to being prone to diseases and insect problems either immediately or down the road. When a tree loses its bark, it's similar to a human losing part of their skin. Unlike humans who can have skin grafts done, trees aren't so lucky and have to regrow the bark and that will take years to do and in some cases decades.

Most evergreen trees are susceptible to flooding like Colorado Blue Spruce, Ponderosa Pine, or Eastern Red Cedar that don't like to have wet roots and if they are underwater for an extended period of times, it will be hard for them to recover. The flood water is putting pressure on those roots and in some cases if the pressure is high enough, it can snap those roots or cause damage to the roots. Once roots are compromised, the rest of the tree becomes compromised as well.

Will our trees and shrubs survive the flooding of March 2019? The answer is 'time will tell' and leave your trees and shrubs alone. Do not put down any fertilizer around the trees thinking that will help because in the long run it will only cause more damage. The thing to do would be to put organic mulch like wood chips around the base of the tree and keep an eye on the tree or shrub this spring to see if it does bud out.



Photo Taken Near Monroe, Nebraska by Jory Knowlton. From Facebook.



Knox County Nebraska. Picture by Lorie Kreycik Knigge. Found on Facebook.



Knox County Nebraska. Picture by Lorie Kreycik Knigge. Found on Facebook. Notice the bark has been partially removed from this tree.



Knox County Nebraska. Picture by Lorie Kreycik Knigge. Found on Facebook. Notice the damage that has been done to these trees.



Osmond, Nebraska March 16, 2019. Photo by Regina M. Lorenz.



Poolside Park in Osmond, Nebraska. Photo by Regina M. Lorenz. These trees have been underwater for a while. Will they survive? Time will tell.



From Facebook.



From Facebook.



Photo by Heath Lichty from Facebook. Flooding in Nebraska March 2019.



Photo by Heath Lichty from Facebook. Flooding in Nebraska March 2019.



Photo by Evan Bergstrom. Photo taken in Antelope County on March 15, 2019. The driveway to their house is gone and all the trees you see are under water.