

RE: Fruit Trees in Detention Basins

At the April 28th City Council meeting staff was asked to research the possibility of planting fruit trees in detention basins around town. While the idea of planting fruit trees in detention basins is intriguing, after visiting with both our on-staff Arborist and Street Superintendent, it is not advisable or feasible to accommodate this request. First and foremost, most detention basins within the community are privately owned by either an HOA or attached to an individual lot under private ownership. While the city maintains a stormwater easement to allow access for purposes of maintaining and repair, we would not have the authority to authorize the use of the area by the general public. For those few that are owned by the city, it is generally not advisable to plant trees within the basins. Trees can cause flooding and maintenance concerns for these areas. Trees can introduce branches, leaves, and other debris that may clog outlet structures and cause localized flooding. Trees will also increase the time needed to mow these areas, with our mow crew already stretched thin, anything that increases the time it takes to mow only hampers our ability to keep up with the workload.

I have attached a letter from our on-staff arborist, Mr. Tim Hammer. He outlines the issues with using detention areas for fruit trees including flooding, root rot, and diseased fruit from pollutants getting washed down into detention basins.

If council does wish to pursue planting fruit trees a discussion with the parks department needs to be considered to look at what the feasibility is of utilizing park land. Also, please note that we do not currently have any money budgeted this year for purchase of trees. If we do wish to consider this in the future, we can look at including money in future budgets for tree purchase and maintenance.

Please let us know if you need any additional information.

MEMO SUBMITTED BY:

Travis Cossey | Director Nixa Utilities & Public Works



Nixa Utilities & Public Works

Nixa, Missouri

417-725-2353

www.nixa.com

Planting fruit trees in a water detention basin is generally not advisable due to several practical and environmental concerns. Detention basins are designed to temporarily hold excess stormwater, which means they experience frequent flooding followed by periods of drying. These fluctuating conditions can stress or damage fruit trees, as most varieties require well-drained soil and consistent moisture levels to thrive.

Additionally, standing water can lead to root rot and increase the risk of disease, reducing the health and productivity of the trees. Maintenance is another challenge, as access to the basin may be limited during wet periods, making pruning, harvesting, and pest control more difficult. There is also the potential for contamination, since stormwater runoff may carry pollutants that can affect the safety of the fruit.

For these reasons, it is typically better to plant fruit trees in stable, well-drained areas where their growth conditions can be properly managed.

Tim Hammer

Nixa Utility Arborist