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VIDEO TRANSCRIPT

Detention Basin Problems and Solutions Summary

The issues we have seen with these (detention ponds) are – I'll explain the issues. I'm sure many of you have seen what we call pond #3, it's that long and thin pond and it has had quite of bit of algae that builds up in it and American lotus that has overgrown the upstream edge of it. Some of this is because the water is so shallow it actually allows it to warm up more than if you have a deeper pond and allows the algae to propagate. One of the things we are going to do besides dredging out the ponds and deepening them, is look at steepening the banks a bit. That creates a deeper water surface, it lowers the water temperature, and it reduces the propagation of algae.

On several of these basins that received a larger area of water we are going to do what is called a sediment forebay. Really that is not going to change the nature of the pond significantly. What you end up doing – #3 is one that we are going to do this to- you have a little rip rap, it's a larger rock, most of it is an underwater check dam, and it captures sediment in the upstream end. What that allows you to do is, the City can come in and do maintenance projects here rather than draining out the whole pond to remove sediment. So, it will reduce the frequency of maintenance that is required in these larger ponds. Overall, it reduces the maintenance effort and does a better job of capturing sediment in the upstream end.

Vegetation plays a key role in improving water quality. It scrubs out some of the pollutants in the water and uptakes some of the pollutants as it grows. So, one of the other things we are going to do in addition to steeping the bank, we're going to replant the bank with more native vegetation with longer 3-foot-tall grasses, not 8-foot-tall grasses, but 3-foot-tall grasses, which we call a buffer zone. The buffer zone will extend out from the shoreline roughly 25 feet, maybe more, maybe less in some areas. The purpose of that is to protect the basin as water flows into it - it filters the water as it flows in and it uptakes some of the phosphorus. Phosphorus is big concern in Easter Lake, so it has multiple purposes. It also can provide a nice prairie appearance which is a potential benefit. The longer grass prevents geese traffic from going up and down – so that's a major benefit I'm sure many of you have experience with the waste they leave behind. The buffer has a lot of benefits. It's going to change the appearance slightly, but the trail system and views of the pond should not be impacted very significantly. These are the types of improvements we are looking at.