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Opinion

Dick Haws: Mitigating the dangers of low-head dams

By Dick Haws

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Down a narrow blacktop road on the backside of the North River Valley Park along East 13th Street, hidden away behind the ball fields, is one of Ames' more dangerous and isolated public places.

But all of that is expected to change soon.

It's the site of the low-head dam on the Skunk River. About 100 yards upstream from the dam, boaters — kayakers, canoers, tubers — are warned via a sign strung above the river that there's danger ahead, that they should get out at the next portage site, which is clearly marked.

At the dam site, there's another sign, this one telling everyone, fishermen included, that the recirculating water below the dam can trap and drowned victims. The site is fenced off with chain link. As a part of a public park, it is not an inviting place.

The low-head dam was built across the Skunk by the city in 1984 as a way to help ease drinking water shortages during dry times. The dam creates a pool of water that filters down and recharges the aquifer beneath Ames. It is from this aquifer that Ames draws all of its drinking water.

No doubt the dam has been a success when it comes to drinking water. No water faucets in my 34 years of living in Ames have run dry. But it has also become obvious, as the years have gone by and more and more people have sought to use the river, that the dam has become an increasing problem.

Low-head dams are notoriously dangerous. They allow water to pour over them, which then produces a deadly undertow that traps and drowns anyone who

might have paddled or floated over the dam. Such dams are called “drowning machines.” Fortunately, no one has died at the Skunk River low head.

But that dam and site on the Skunk River are about to be transformed into what should become a popular and safe attraction for park visitors.

The city has rounded up almost \$850,000; some of the money has come from state low-head dam safety grants, some from the local option sales tax, some from the general fund and other local tax sources, some from donations and some from in-kind contributions.

With that money, the city plans to redo the dam site — gone will be the high concrete wall on the park side, replaced by terraced steps to the water.

The far side of the river will be reconfigured with interconnected small pools, none deeper than about 3 feet, with no drop between pools of much more than about 1 foot. This is all expected to be gentle enough and safe enough for kayakers or stand-up board paddlers to navigate.

The near side of the river will also be reworked to have even more pools with even lower drops, and will be intended for tubers, canoers and fish. And, even with the new design, the Skunk is still expected to be able to recharge the aquifer. What could be better? Final design work will be completed by this summer, with construction this fall and winter.

I just hope the other low-head dams in the immediate Ames area will get a similar kind of overhaul. There are three.

The most dangerous is up across from Ada Hayden Park, just on the other side of U. S. Highway 69, on the Skunk River. Two people have drowned there — floater David Barnhart in 1963, and canoeist Thomas Manatt in 2005. There are now signs posted upstream from the dam, warning of the impending danger and telling boaters to portage. That dam is expected to be “mitigated” in the not-too-distant future.

A second low-head dam is on Squaw Creek where it runs through the Veenker Golf Course, right near the 16th hole. I saw no warning signs upstream from the dam, nor anything about the need to portage.

The third low-head dam is almost immediately below the Lincolnway Bridge on the Squaw. On Memorial Day 2016, two kayakers were caught in that dam's undertow. Police were called but the two men escaped the "boil" by the time they arrived. Their kayaks were recovered four blocks down stream. At the dam, the city has recently made improvements by putting in impediments that help break up the hydraulic effect of the water.

This all means that Ames, when it comes to water, is becoming a safer city, but that it still has a ways to go.

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