

- 1) About 3 weeks ago (about 24 Aug) Bruce noticed and reported to George a hole in the earthen dam near the no parking sign, Jasons side of the spillway. We all agreed it looked like a muskrat den that had collapsed and decided to watch it. (Muskrat Hole)
- 2) Starting shortly after that Jason and George noticed a Septic smell near the dam. Jason and Chris Baumgartner had investigated and found nothing. Jason and George planned to look at neighboring yards for a septic leak on Sept 6.
- 3) On Sept 6 George found the source of the smell about 150 feet downstream right from the spillway near sycamore trees. Several leaks estimated at 100 gallons per minute, with a black color and extreme sewage smell (Sinky Leak). Jason was shown the leak on 6 Sept and both looked at the (Muskrat hole). and the noticed an area just into the lake that looked sunken.
- 4) George met Bruce Morning 7 Sept and showed him. All 3 agreed this is serious and a new leak type we have not seen before. We thought because of the volume and smell it was a low leak below the oxygenated top water.
- 5) Jason called Marlene Thomas from Ky Dam Inspections 7 Sept and relayed info. Ky Dam Team came to look afternoon of 7 September, because of urgency. They are sending a letter to ELPOA. Their recommendation per Bruce is open valve and get a certified Dam Engineer.
- 5) George 7 Sept asked Jim Millar (Member and Engineer) to look at it as a favor. Jim agreed with the recommendation and our assessment. Jim will reach out to colleagues and see if he can recommend an Engineer who specializes in this work. Terracon was contacted.
- 6) George contacted Randel Brooks from T Lucky for help, he will get back to us.
- 7) George, Jason and Bruce all agreed opening the valve is our best measure at this time, Sheri was kept in the loop, and agreed, and would get the rest of board up to date.
- 8) Since many members are not down every weekend It was agreed to post on FB to alert members, also a e mail to members of the situation was sent by Sheri, We posted a Notice at the gate. And since have an email going out to all who get the newsletter.
- 9) 11 Sept George, Jason, Bruce, Past President Ted Blaney met with Randel Brooks from T Lucky who is keeping Terracon Consulting Engineers and Scientist in the loop. The Muskrat hole appeared to have some suction, (when water was stirred the cloud would suck down into the bank. At this time we thought the Muskrat hole was the start of the stinky discharge lower leak. And was maybe getting the smell from decaying matter. 1950-60 dams were built and trees and brush was piled in the backside of the dam and buried, rotting over 50 years and giving our smell as water flowed through. T Lucky to send a quote on grouting the leak.
- 10) It was agreed that a trench to consolidate the stinky leaks into one, so we can monitor flow was a good Idea. And on evening of 11 Sept Bruce dug the trench. And the leak was more than we had thought earlier.
- 11) on Sept 12 Bruce Introduced leak dye into the Muskrat hole, thinking it would come out the stinky trench. WELL it came out the lower right of the spillway just past the bottom, no dye in the stinky trench. So we have a leak at the muskrat hole with a confirmed exit spillway left that needs grouted and a leak feeding the stinky trench as of now unknown origin.
- 12) We are lowering the lake on recommendation of ALL involved, we are monitoring flow, and looking for sources. When the lake is lower T Lucky will come in and do exploration

to locate leaks and grout the leaks found, or what ever fix we deem best and economical

My opinion only, the Lake/Dam budget is \$4000 a year, with another \$6000 added to a dam repair fund. NOT MUCH. We have no Preventative Maintenance program, and are reactive instead of proactive. The dam is over 50 years old and is another system of your house that adds value and needs repair. I think when we raise dues, the amount needed should be raised by \$100-200 a member per year additional to maintain this important asset of our property value. This will allow preventative maintenance, repair of old leaks that we are monitoring, and other maintenance items on the back burner because of low funds and build some surplus for a rainy day.

Pictures below Muskrat hole, Sunken area near muskrat hole, Stinky trench at bottom of hill stream right, and blue dye from muskrat hole spillway left



