

## Rescheduled Study Session with Mason County and Fire Marshal Office

January 24, 2022

Those Present: Mason County- Kell Rowen, Fire Marshal Representative-Mike Sixx, RH2-Dave Matz, NWS-Sean Burns, Kevin Odegard, and Lidia Bower, Lake Limerick Water Committee- Don Bird, Kelly Evans, and Anne Moen, Lake Limerick BOD- Brian Smith, Dean Dyson, Sheila Nokes and Tamara Ingwaldson, and Lake Limerick CAM-Roger Milliman

This study session was originally requested by the Mason County Planning Department to try to understand more about the fire suppression problems that the Lake Limerick Water System is having. Lake Limerick was also glad for this session because of the need to understand what the County would require from LLCC as to fire suppression. The current County Fire Code for water flow for fire suppression was adopted in 2003. Before that, water flow codes came from State and Federal regulations that seem to go back to the early 1900s. Kell Rowen was going to check to see if Lake Limerick was required to have fire suppression abilities when the development was approved in the 1960s. The County and Fire Marshal were not sure if they would be requiring LLCC to upgrade the water flow of the Water System. Since LLCC is studying how it might be possible to improve the System to include water flow and volumes for fire suppression, providing tanker fill stations, and having the Fire District station a tanker truck at LLCC, there would likely be no requirement to immediately upgrade. At this point, the main concern is that the hydrants remain marked as unusable and that the only accepted way to do that is to bag them. Painting them a different color is not an option.

Fire trucks supported by tankers is the common way of fighting fires in rural Mason County. However, although Lake Limerick's underlying zoning is RR 5 (meaning 1 house for every five acres), it was approved for development with ¼ acre lots yielding a much higher housing density (a little over 3 houses per acre). In these more urban densities, suppression of a house fire can be considered successful if only the house originally on fire, and ½ of each of the adjacent homes is burned.

There was a discussion on the possibilities of using the current water infrastructure and what it would take to bring it into compliance with the ability to have enough water flow and volume to fight fires and to provide potable drinking water. Mike Six from the Fire Marshal's Office was wondering if there was a way to bring at least some of the hydrants up to proper water flow. Dave Matz from RH2 pointed out that the size of the water pipes, especially the 4" pipes, limit what can be done with the current infrastructure but that there may be ways to make some improvements until the mains could and would be replaced in the future. One improvement would be to construct an elevated water storage facility which would provide a more consistent water flow, although not enough to meet requirements, but it would provide enough water for

the 2-hour requirements. Also, an elevated water storage facility would provide water pressure even if there was a power failure like the most recent outage.

Don Bird pointed out that RH2 and NWS are looking into ways to improve the response of the Variable Frequency Drives (VFD). These are the pumps that pump the water into the water pipes and maintain the water pressure. They could respond faster and coordinate better with pumps at other well locations. A more up to date computer system would be needed to help with this. Sean Burns from NWS suggested that putting a booster pump that is not connected to the other pumps and would take water directly from a water tank and pumps it into the system. This pump or pumps could be turned on if there was a fire and it would provide faster and more consistent water flow to the hydrants so that the water pressure might not drop below 20 psi and therefore not affect the quality of the drinking water

Mike Sixx felt that water could be pumped directly from the lake if needed.

Brian Smith asked if it would be possible for LLCC to purchase its own water tender to be stationed at LLCC to add another layer of protection to the community. Mike Sixx felt that this would not work and is not needed. One the cost would be about \$300,000 to \$400,000 for a tanker. There would also be the need to have someone operate the truck and coordinate with the Fire Department.

Mike Sixx said that the Fire Department at this time is satisfied that LLCC is moving to improve the fire suppression abilities of the community. He suggests that even though the County has no deadline, it is important to keep working on a plan to fix the water system. He restated that it would be nice to be able to continue to add more and more usable hydrants over the many years that it will take to make pipe improvements.

Mike Sixx suggested that grants from FEMA may be available to help with funds to help with such projects. Also, that it would probably be best to hire a grant writer for this kind of an application. Roger Milliman also suggested that it might be possible to get help from our State Representatives.

It was pointed out that NWS and RH2 need to get together to iron out differences in their reports and outline what additional analyses need to be performed to address system improvements, including fire suppression. Subsequent analyses can be added to the Water System Plan as they become available. Currently the water system plan claims the system is basically OK, if so, why the current problems like the recent power outage power drop incident?

As the session was ending, questions were asked as to how LLCC would move forward.

What are the steps the Water Committee and the BOD need to develop a plan?

What more do we need to analyze to help make decisions?

What will it take to start bringing some hydrants on-line?

Do we need to move forward with the well evaluations at this time? Don thought not but there was some discussion as to how we could form a long-term plan if we do not know the current status of the Water System.

Do we need to move ahead with better communication solutions for the pump system?

Should we add a 3<sup>rd</sup> generator at well #4?

The topic of improving LLCC's communication system for water problem notification of customers was discussed. Noted, that this needs more work! What we have needs improvement.

Final note: Water Committee and the BOD need to develop a timeline for these projects.

Submitted by Dean Dyson, Secretary