



Mayor's Letter
September 15, 2015

Hello Everyone,

WATER ISSUES. We have spent the last couple of weeks dealing with our water issues and we believe the worst of the problem is behind us. Accordingly, we are relaxing (**not removing**) the watering restrictions effective on Monday, September 21st. Odd numbered addresses will be allowed to irrigate on Monday, Wednesday, and Friday. Even addresses will be permitted to irrigate on Tuesday, Thursday, and Saturday. No irrigation is allowed on Sunday. Hand-watering, drip irrigation, and soaker hoses are exempt and can be done on any day. **No outdoor water use is permitted on any day between 3am - 9am**, so check your timers on your irrigation system. More details are available at www.lakewoodvillagetx.us.

Our water supply problem was caused by a sudden decline in the water availability for our Paluxy well located nearest the top of the aquifer. We have lowered the pump to the bottom of Well #2 and it is now operating normally. Our other well in the Paluxy aquifer is located 300 feet below Well #2 and has never been an issue. As is typical for small towns, we obtain our water supplies from groundwater (wells), not surface water (lakes). Groundwater has the advantage of requiring minimal treatment - 1000 feet of earth is a good filter - and it has very low operating costs. In contrast, as towns grow in population it becomes impractical to meet the greater water needs by drilling more and more wells, so they purchase surface water. Besides the greater expense, the disadvantage of water via pipeline is that you give up control to the water supplier - you have to follow their rules regarding use restrictions. I do not foresee us ever moving to surface water. So, on Lewisville Lake, you can boat, swim, canoe, kayak and fish in it, but we won't be drinking it anytime soon.

THAT'S A LOT OF WATER. Why did our available supply decrease? First, the obvious, a lack of aquifer recharge due to the recent drought. The recent flooding dramatically showed the immediate increase in the availability of surface water, but unfortunately, the disadvantage of groundwater is that it is 900 feet below ground and it's going to take some time for the water to get there. The more immediate cause, and one totally under our control, is the water usage in the Town spiked. During the spring rains, we used approximately 1.1 million gallons each month. In July the usage had doubled to 2,274,000 gallons. In the August billing cycle the usage skyrocketed to 4,846,000 gallons or more than double the previous month. The unforeseen consequences of the record rain and our super-green lawns, was once the rain stopped, and we waited and waited for rain, our lawns turned brown, and we all gave up and started watering at the same time (me included).

The issue that we face is that we cannot supply the entire town all at the same time. Our ability to supply water far exceeds the requirements for our essential use, the difficulty is the irrigation. To put this in perspective, assume our ability to supply is a 10. Our daily essential use is a 2, whereas when we irrigate it is a 12 - hey, no problem - that averages out to a 7. **That is our problem**, you can't run the system to handle the average - you design to handle the peak. As the town grows, you either get more supply - **we** are not spending \$500,000 for a new well - or you have to re-arrange the water use. We can reliably supply all of the town's water needs, we just can't do it all at once. With the surrounding towns watering on one day per week (when the trash is picked up), here in the Village you will be "limited" to three days. You don't need to water that often, so try and spread it around. If you have new plantings or sensitive areas, then you can always hand-water on any day

Take this opportunity to talk with your next-door neighbor. Try and not irrigate at the same time, or if possible pick different days. We can't have even-odd days to shower, so there is no way to avoid the early-morning peak usage. So, no irrigation between 3am - 9am to allow the tanks to fill for the morning rush.

RED, YELLOW, WHAT DO THEY MEAN ? First, let me say that your response to our water emergency was outstanding - we had 100 percent compliance during this critical period. Let me explain to you the procedures and the thought process behind our warning system.

RED - In LWV it is rare that we have a water emergency. **Level RED prohibits all “non-essential” (in other words, all outdoor) water use.** We don’t go to RED to bring awareness to conservation or to show sympathy to Californians, we do it because we have a critical problem with our ability to provide water. **The highest priority in all of our decision-making is providing water for essential household needs and fire-flow for public safety.** In general, there are two possible scenarios, and both have happened during my time on Council. The most common (it has happened twice in my eight years) is we have a large main break and we drain our water supply. The repair or isolation of the leak is relatively quick. In this case, we go to red to allow us to completely refill the storage tanks - about ten hours. The RED condition is quickly rescinded once the tanks are full. The second and most recent problem is when we have a disruption to our supply (pumps or mechanical malfunctions). We go to RED to give us time to diagnose the root cause of the problem - while still meeting our essential needs. Unlike a plumbing leak, mechanical problems often require heavy equipment and could take up to a week if the well must be pulled. Although we can’t predict them, we plan for mechanical problems and have built multiple redundancies into our system. First, we have three wells all at different depths, in multiple aquifers. In an emergency, we can run the town with only one well operational. We have three pressure pumps that push the water out into the system (as well as two backup pumps) - we can maintain our current 60 psi using only one pump. We are also exploring the feasibility of constructing an emergency interconnect with Little Elm.

YELLOW - This is our signal to you that we can support some outdoor use; however, initially it will be limited to allow us to gauge the impact. **We try to move from red to yellow as soon as possible,** we understand everyone wants to maintain their foundations and landscaping. Soaker hoses and drip irrigation are the first uses that will be permitted when we allow for outdoor use - if you use these, you will likely face little or no disruption to your routine. If you choose to use lawn irrigation, which uses the most amount of water, we will be more cautious in loosening the restrictions. We understand your concerns, and we will permit you some use as soon as possible.

POWER OUTAGES. We all know about the frequent short power outages that occur in LWV. We have received several reports that some irrigation systems may return to the default settings after losing power. You may not realize until you get your bill that your irrigation system is running at noon and midnight twice a day. So, when the power fails, during the 20 minutes it takes DIRECTV to reboot and reacquire the satellite (it apparently is orbiting near Jupiter) you might want to double-check the irrigation system.

PET DAY & NEIGHBORHOOD WATCH Bring your pets to town hall on Saturday, September 26th for low-cost vaccinations and grooming from 1pm – 3pm. While your pet is having a checkup, you can meet with LWV Neighborhood Watch and Denton County Sheriff representatives. Check the town website for all the details.

THE NEXT REGULAR TOWN COUNCIL MEETING scheduled for October 8th has been cancelled. It may be rescheduled for later in the month.

Drought, Flood, Drought, Snow ?



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