

Land of Extremes

By Mike Lucas, Wastewater Technician

Remember back in 2012 when many systems were running potable drinking water into their wastewater collection systems to attempt to maintain a minimum of 2 feet of water in their lagoons? Now here we are in 2015, only 3 years later, with water, water everywhere.

I've received many calls literally from border to border in the state regarding issues with flooding and high ground water levels. Inflow and infiltration (I&I) has been a hot topic this year.

When looking for sources of I&I it's really a two-fold effort, video inspection of sewer mains and also sewer smoking in combination. Each effort will reveal issues that the other will miss. I currently have 12 systems on my "to do" list for smoking either all or parts of their collection systems. It's best to wait for the flows to decrease and the soil to dry out for the most effective inspections. It also helps if the operator can isolate sections of the collection system where they think there is excessive flow to help prioritize areas for inspection.

It is important to regularly read and record flow readings at lift stations and at the treatment facilities, either mechanical plants or lagoons. It's also important that your lift station pumps are calibrated annually so that if you are using hour meter readings to calculate flows you have the most accurate data. I can talk you through that process or help you with it. This has an additional benefit in that you can compare the actual gallons per minute (gpm) pumped to the theoretical nameplate gpm which would indicate pump wear.

Remember that if you normally have seasonal discharging lagoons and you have to do discharge during the recreational season, additional lab tests are usually required.

If bad comes to worse and you have to do emergency discharges or bypasses based on mother-nature overwhelming you, there are still NDEQ notification requirements. I have only heard good comments regarding the Department's willingness to work with the operators and systems this year. That positive relationship is extremely important.

Don't worry! The weather will change and we will all be facing new challenges. They tell me that it all builds character. If so, then you should all be of exemplary character for sure. 😊