Dear Customer:

Since the July 17, 2017 notification advising customers of the temporary Stage 3 watering restrictions, Cowichan Valley Regional District (CVRD) staff have spent considerable time working to determine the cause of the drastic increase in water demand over the weekend of July 14-16. During these three days 510 cubic meters of water per day was recorded by our Operations staff. This is double the amount normal used by the system. To put this into perspective this is equivalent to the steel reservoir, located on Chestnut Road, filling and emptying 2.7 times each day.

Due to the large water demand, the wells were failing to supply the necessary water and the reservoir level dropped to 29% putting the capacity to fight a fire at risk; a leak was therefore suspected in the system. The system was put on temporary Stage 3 watering restrictions to reduce the stress on the wells and allow them to recover. Water was trucked in from another CVRD water system to help fill the reservoir and CVRD staff worked steadily to locate the suspected leak.

After the Stage 3 watering restrictions were put in place, demand from the system was reduced to approximately 200 cubic meters per day and the wells succeeded in keeping the reservoir full. CVRD staff continued to investigate for the suspected leak and did find one small service leak but the size of the leak was too small to account for the increase in water demand. Another leak was found on one of the well supply lines near the water treatment building, located on Hurtin Road, but due to the location of the leak and the adjustments made to the volume of water drawn from the well, it did not impact the high water demand from the system. The leak was, however, wasting water so this well has been taken offline until the necessary repair is made.

After much exploratory work, and the resulting water flow data collected after the implementation of temporary, Stage 3 watering restrictions, we believe the increase in water use was likely due to water demand from the system. Lambourn Water System is not currently a metered water system, meaning there is not a water meter at each property to record individual water consumption. The absence of water meters has resulted in historically high water demand during the dry, summer months. Water meters help to identify leaks in plumbing and irrigation systems and provide a financial incentive to conserve water. Water demand in Lambourn Water System is approximately 40% higher per household than the BC average.

Work has been ongoing for the past five months to locate water services and we are now ready to start installing water meters to each property. The contract has recently been awarded to Superior Excavating Ltd. and work will begin shortly to install water meters to each property and will be completed by December 31, 2017. Once the meters are installed, we will read the meters and show the water consumption on the water invoices, but not charged initially. This will give customers the opportunity to develop an awareness for water use before we move to metered water user charges. Water meters also provide a very key benefit in leak detection. Unknown leaks in service lines or irrigation systems are identified through water meters and repairs may be made to avoid water being unnecessarily wasted. Metered water users charges will likely come into effect one year after the water meters are installed. The CVRD will work with customers to help identify leaks as the meters are installed.

We would like to thank customers for their patience during the interruption of water service resulting from the exploratory work; further, we wish to thank customers on their conservation efforts to reduce water demand. At this time, we will return to Stage 2 water restrictions for Lambourn Water System Please be very aware of your water use and consider the sensitivity of the wells when doing any outdoor watering. If the water demand increases to the flow numbers experienced on the weekend of July 14-16 the wells will not be able to supply the demand and Stage 3 watering restrictions will needed to be imposed again. We ask for your cooperation as we move through more dry weather.

For reference, please see the table below for Stage 2 requirements.

Please contact us at 250.746.2530 should you have any questions.

**WATER USE RESTRICTION DETAILS**

|  |  |  |  |
| --- | --- | --- | --- |
|  | STAGE 1 | **STAGE 2** | **STAGE 3** |
| **Effective Date** | May 1 to October 31 | **JULY 31, 2017** | **As Required** |
| **Sprinkling Times** | 7:00 am - 9:00 am**OR**7:00 pm - 9:00 pm | **7:00 am - 9:00 am****OR****7:00 pm - 9:00 pm** | **NOT PERMITTED****SPRINKLING BAN** |
| **Even Numbered Houses** | Even days | **Wednesday & Saturday** |
| **Odd Numbered Houses** | Odd days | **Thursday & Sunday** |
| **Watering New Lawn** | Same as above unless Sprinkling Permit is obtained | **NO PERMITS ISSUED** | **NO PERMITS ISSUED** |
| **Hand Watering of trees, shrubs and gardens** **(hose with spring-loaded nozzle, a bucket or micro/drip irrigation)** | **\*Hand water between 7 am - 9 am OR 7 pm - 9 pm****Maximum 2 hours per day** |
| **Micro Drip Irrigation**  | **Anytime maximum 4 hours per day** |
| **Filling pools and** **hot tubs** | Anytime | Anytime | **NOT PERMITTED\*\*** |
| **Washing vehicles,** **houses or boats** | Anytime | Anytime | **NOT PERMITTED** |
| **Washing Driveways & Sidewalks** | Anytime | NOT PERMITTED | **NOT PERMITTED** |

\*\*Pools filled prior to Stage 3 water use restrictions being implemented may be topped up to account for evaporation losses in order to avoid damage to pumps, etc.

\* Micro or drip irrigation delivers water to the root zone of the plants and uses less than 20 gallons per hour at less than 25psi. Weeper hoses are permitted. **Soaker hoses are not permitted.**