

District of Barriere
REPORT TO COUNCIL

Date: April 25 2022	File: 530.20/Rpts
To: Council	From: CAO
Re: Water Restrictions – Discussion (updated)	

Background: The District of Barriere is currently on level 2 Water Restrictions, with hand-watering only for lawns, gardens, flowers, trees and shrubs etc. only during their prescribed watering times of 7-9am and 7-9pm during their assigned odd/even days.

At the April 11th, 2022 Committee of the Whole Meeting, Council received updated information regarding the situation and condition of the new **DW 3 Well** and discussed the possibility of reverting back to Stage 1, or Stage 1 with additional conditions in order to allow some residential irrigation this spring and summer season.

Discussion: As previously reported, we now have more information on running DW 2, DW3 and PW1 into the water system:

- DW2 – has new pump installed and is back on line, at 600 gpm
- DW3 (new) - final conditioning is ongoing with the pump now running separately at 500 gpm
- PW1 – max output is 300 gpm, with some discoloration caused by mineral reactions, blending into the system is possible to reduce the discoloration.

These volumes are expected to increase as the staff continue to carefully condition the wells over time.

More conditioning and time is required to confirm at what rates both the DW2 and DW3 wells can run at concurrently and what the affect would have on the drawdown of the aquifer, this requires more time and review.

In addition to the source water improvements and distribution line repairs over the past year, Council passed their new fee schedule for water rates that will assist in reducing the consumption of potable water at the consumer end of the system. In May of this year the town saw the lowest water output recorded in many years thanks to the hard work of the utilities staff.

Current baseline water production available from is Spruce Wells estimated to be: 13,000,000
If needed, PW1 can produce additional 300gpm/ 6,000,000

Water consumption levels from 2021 are recorded as:

April = 8,200,447 USG

May = 10,650,658 USG

June = 13,459,102 USG

July = 10,264, 193 USG

August = 12,096.955 USG

The District's Water Bylaw No. 189 states the following:

“Notwithstanding any other provision of this bylaw it shall be lawful for the Council, when in their opinion, there is, or there is likely to be, a shortage of water, by resolution, to restrict or ration the use of water for all or any purposes by determining the applicable Water Conservation Stage further outlined in Section 8 of this bylaw. Such restriction or rationing shall continue until such time as the Council shall in their discretion, decide that sufficient water is available.

In situations requiring immediate action, Council delegates the responsibility for determining, imposing and lifting the restrictions described in 5 a), to the Chief Administrative Officer.”

Staff are suggesting that Water Conservation Stage 1 Water Restrictions could be considered as is written in the Bylaw, with clear communication to residents that the goal is to not over stress the system through enforcement and education. It would be communicated to the community that should the system show signs of stress, the District would revert back to full Stage 2 Water Restrictions.

For ease of reference, the Water Restriction Stages 1 and 2 outlined in Bylaw No. 189 are attached.

Recommendation: THAT the District commence with Stage 1 Water Restrictions effective May 31 2022, with the understanding that should the water system show signs of stress, that appropriate remedial action take place as per Bylaw No. 189, including increasing the water restrictions as necessary to maintain the required fire flows and levels in the reservoirs.

Prepared by: B. Payette, CAO

(Excerpt from Bylaw No. 189)

8.5 WATER CONSERVATION STAGES

For the purposes of this bylaw, the Water Conservation Stages are as follows:

STAGE 1 – Year Round – Every Other Day Watering

- a) During Stage 1, no person shall use a watering system to water a lawn, garden, or landscaped area on a property with:
 - i) an even numbered address, except on even days of the calendar between the hours of 7:00am to 9:00am and 7:00pm to 9:00pm.
 - ii) an odd numbered address, except on odd days of the calendar, but excluding the 31st, between the hours of 7:00am to 9:00am and 7:00pm to 9:00pm.
- b) During Stage 1 a person may:
 - i) water gardens, trees, shrubs, flowers and vegetables if watering is done by a drip-irrigation system as defined under this bylaw;
 - ii) water gardens, trees, shrubs, flowers and vegetables if watering is done by hand-held container or a hose equipped with a shut-off nozzle but only during the prescribed Stage 1 watering hours and days;
 - iii) water newly planted lawns, gardens, trees, shrubs, flowers and vegetables if watering is done by hand-held container or a hose equipped with a shut-off nozzle during installation and for the following 24 hours if prior approval of the District of Barriere is received;
 - iv) water new sod or newly seeded lawn during the first 7 days after installation on any day but only during the prescribed Stage 1 watering hours if prior approval of the District of Barriere is received;
 - v) wash a vehicle with water using a hand held container or hose equipped with a shut-off nozzle;
 - vi) wash sidewalks, driveways, parking lots or exterior building surfaces including windows using a hand held container or hose equipped with a shut-off nozzle if prior approval of the District of Barriere is received; and,
 - vii) fill a swimming pool, wading pool, hot tub, garden pond or decorative fountain.
- a) During Stage 1, no domestic use property Owner or Occupier using an underground, automatic watering system, may water except on Mondays, Wednesdays and Fridays between the hours of 4:00am – 6:00am
- d) During Stage 1 the following uses may irrigate as follows:
 - i) Public Schools properties – Tuesdays and Thursdays between the hours of 12:00am to 5am for a maximum of 30min per watering zone.
 - ii) District owned parks and playgrounds – Mondays, Wednesdays and Fridays between the hours of 12:00am to 5am for a maximum of 30min per watering zone.

STAGE 2 – Implemented in Times of Stress on the Water System – Hand Watering Only

- a) During Stage 2, no person shall
 - i) water a lawn;

- ii) use a sprinkler or irrigation system to water a garden, trees, flowers, or shrubs;
 - iii) wash driveways, sidewalks, parking lots or exterior building surfaces.
- b) During Stage 2 a person may:
- i) water trees, shrubs, flowers and vegetables if watering is done by hand-held container or a hose equipped with a shut-off nozzle, but only during the prescribed Stage 1 watering hours and days;
 - ii) water trees, shrubs, flowers and vegetables if watering is done by a drip irrigation system as defined in this bylaw;
 - iii) water newly planted trees, shrubs, flowers and vegetables if watering is done by hand-held container or a hose equipped with a shut-off nozzle during installation and for the following 24 hours if prior approval from the District of Barriere is received;
 - iv) wash a vehicle with water using a hand-held container or hose equipped with a shut-off nozzle and at commercial car washes;
 - v) top-up or add to a swimming pool, wading pool, hot tub, garden pond or decorative fountain.