Water Supply Update – July 31,2023

The current water supply situation is summarized as follows:

- Current usable storage in McGregor, Travers, and Little Bow Reservoirs is 282,000 acre feet.
- Normal total usable winter storage in McGregor, Travers and Little Bow Reservoirs is 326,000 acre feet. On July 31 McGregor was 0.95 metres below the normal winter level and Travers and Little Bow were 0.4 metres below the normal winter level.
- The Bow River flow is low due to dry conditions in the mountains, so we cannot divert as much as we want to, but we should be able to divert at least 100,000 acre feet more from the river before we shut off. Through July 31 we have diverted 306,000 acre feet from the river.
- The worst case for winter storage this year should be 200,000 acre feet, with at least 220,000 acre feet being more likely. Significant rain in the mountains or lower than expected irrigation demand would result in more winter storage.
- Our diversion from Little Bow Reservoir, which supplies over 90% of the irrigated acres, is 257,000 acre feet to date, which is 49% above average for this period. The yearly average for the past 25 years is only 265,000 acre feet. This is trending to be our fourth highest water use year ever, after 2001, 2000, and 1988.
- Irrigation demand has dropped sharply the last three days due to crops maturing and rain showers. July 30 was the first day since we began diversion that demand from Little Bow was below average, but it will probably increase again to at least average levels.
- We are being asked how many inches of water will be allowed next year. This is a hard question to answer since it depends on the weather between now and next summer. However, it appears reasonable to expect a diversion from the river of 400,000 acre feet in a severe drought, since we should divert at least that much this year, and we diverted 414,000 acre feet in 2001. Subtracting 100,000 acre feet for evaporation loss, return flow, and for 5,000 acres of irrigation on the Siksika Nation leaves 300,000 acre feet to irrigate 295,000 acres in the BRID, or about 12 inches per acre. If 100,000 acre feet were drawn from the reservoirs next year, that would allow an additional 4 inches per acre, but then reservoirs may have as little as 100,000 acre feet of storage at the end of 2024 if severe drought continues.

Your continued cooperation in ordering water on and off will help reduce return flow, which was nearly one third below the average for the last five years up to July 1. Responsible ordering and use of water will ensure that we have as much as possible stored for use next year.