

RIVERS DAM SPILLWAY AND DAM REHABILITATION

Purpose and Need

The Rivers Dam is on the Little Saskatchewan River and located to the east of the Town of Rivers in the R.M. of Riverdale. The dam and the reservoir were constructed between 1958 and 1960 by the Prairie Farm Rehabilitation Administration.

The dam consists of an earthfill embankment with a gated riparian conduit and adjacent fixed crest concrete chute spillway.

In late June 2020, two large rainstorm events resulted in more than 130 mm (5 inches) of rain in western Manitoba and led to record flooding on the Little Saskatchewan River. Shortly after the rainstorm events, record flows and levels were present at the Rivers Dam.

Status

The rehabilitation of the Rivers Dam low level conduit is complete. A contract for rehabilitation and upgrade of the spillway and dam embankment was advertised for competitive tender in June 2024 and has been awarded. The contractor is scheduled to mobilize to site in late September 2024.

The proposed work is anticipated to proceed in two phases over a two year period and will include:

- Raising the existing earthen dam embankment by approximately 0.6 m to provide additional freeboard for the inflow design flood
- Increasing the capacity of the spillway by raising the existing upstream wingwalls and and spillway chute walls
- Reconstructing the stilling basin which will include raising the walls, and increasing the length and thickness of the stilling basin floor
- Installing new drainage systems underneath the spillway
- Post-tensioned anchoring of the spillway crest
- Installing a new seasonal safety boom

The spillway and stilling basin construction work will be restricted to fall and winter months to ensure that the spillway is fully operational during the spring and summer. Starting at the end of September the reservoir water level will be lowered to 0.6 m below the spillway crest to facilitate construction of a temporary cofferdam. No artificial drawdown of the reservoir will be necessary for spring and summer. The construction work is projected to be complete in June 2026.

