

South Bismarck Flood Control Overview



Bismarck River Gauge

Operations of the Tavis Causeway Gate is based off of the Bismarck River Gauge readings. [Click here for gauge readings.](#)

Mills Ave. Gate Structure

This structure is generally kept open. It allows fresh Missouri River water to flow through South Port and into the Tavis Canal and back to the Missouri River. The Flood Control Plan calls for the closing of this structure at Forecasted Bismarck river gauge reading of 13 feet but may be closed sooner in conjunction with the closing of the Tavis Causeway gate.

South Bismarck Flooding

The Tavis Gate structure has very little to do with the prevention of street flooding in South Bismarck. Roadway flooding in South Bismarck is a direct result of the intensity and duration of a rain event instead of the level of water in the Bismarck Storm Water Drainage System. Roadway flooding is due to the fact that flat terrain and aging storm water drainage structures cannot transfer the rain water from the streets to the drainage canal fast enough to prevent damage. The level of water in the Tavis Canal is only a minor factor in the potential flooding of South Bismarck streets. Since rainfall events cannot be accurately predicted, we are unable to prevent street flooding caused by runoff in South Bismarck by the closure of the Tavis Causeway Gate Structure.

City of Bismarck Storm Water Drainage System

Storm water runoff from the City of Bismarck is collected into the storm sewers and conveyed to the Missouri River through the City's canal system and the Tavis Canal.

City of Bismarck Waste Water Treatment Facility

Critical infrastructure that must be protected from Missouri River flooding in order to allow the use of the sewage treatment system during a flood.

Tavis Canal

Conveys Missouri River water around Fox Island.

Tavis Causeway Gate and Pump Structure

Generally the Tavis Gate is kept open, and its closure is dictated by Missouri River levels--not forecast rainstorms or the height of the City of Bismarck Storm Water Drainage Ditch. The Flood Control Plan calls for the closing of the structure if the Bismarck river gauge reading reaches 11 feet and the Forecasted Bismarck river gauge reading is above 13 feet. When open, the water entering from Mills Avenue and the water entering from the Bismarck Storm Water drainage system is allowed to free flow back to the Missouri River. When both of the previous criteria are met, the gate is closed to prevent the Missouri River from back flooding into the Tavis Canal and the Bismarck Storm Water drainage system, thus protecting the Bismarck Waste Water Treatment Facility and area residents behind the protective berms from Missouri River flooding.

Missouri River Flood Protection

A series of roadways, berms, and embankments built at an elevation high enough to prevent the river from flowing through most of South Bismarck during a Missouri River flood.

Missouri River