

For: Annual Joint North Dakota Water Convention, December 11, 2025

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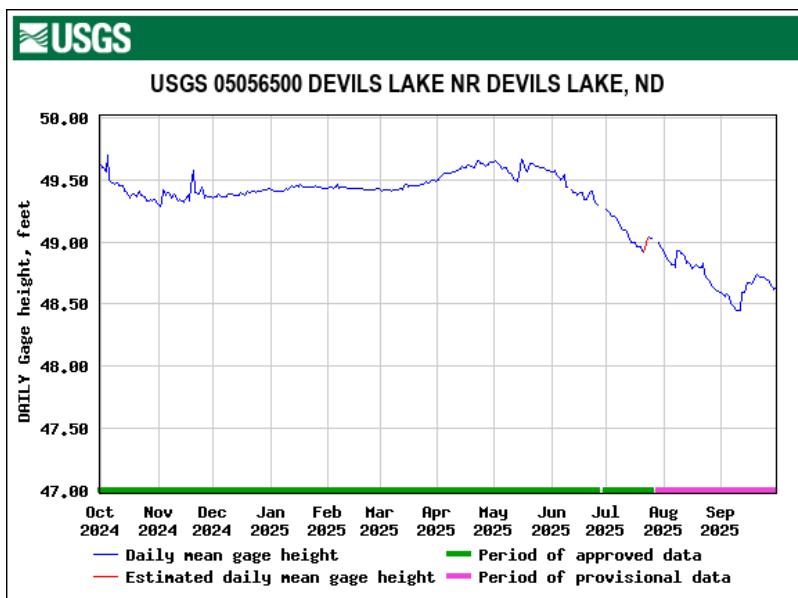
## 2025 Water Year Devils Lake Inflow—Coulees and Lakes Recap

- The 2024–2025 winter season in the Devils Lake Basin saw temperatures slightly above the normal average December to January until shifting to significantly colder temperatures for most of February, with all three months having below normal precipitation levels (National Weather Service Grand Forks, 2025).
- Daily temperatures in March were above average, but remained cool through the month, warming gradually to above freezing in early April, delaying ice-off until this time (North Dakota Agricultural Weather Network, 2025a). Due to minimal snowpack accumulation over the Winter and a slow melt-out period, ice-off did not result in a significant rise in Spring flows (U.S. Geological Survey, 2025).
- Water Year 2025 peaks on a majority of the Devils Lake inflow coulees resulted from rainfall, spurred by regular rain events in September 2024 resulting in approximately 3.08 inches total that month as recorded by the North Dakota Agricultural Weather Network (NDAWN) weather station at Cando, ND (North Dakota Agricultural Weather Network, 2025b). Most of the coulees therefore peaked in September and October 2024, except for Mauvais Coulee Trib No. 3 near Cando (05056060), which provisionally peaked in June 2025 and Mauvais Coulee near Cando (05056100), which provisionally peaked in July 2025 (U.S. Geological Survey, 2025).
- Drought conditions in the Devils Lake Basin were characterized as abnormally dry to moderate drought from late April until late August, with the greater intensity occurring more in the northern portion of the Basin (U.S. Drought Monitor, 2025).
- Despite dry conditions in the Basin resulting in lower-than-average flows compared to the past three Water Years, most coulees maintained flows above zero from April through September, with many continuing to show flow into October. However, all coulees went to zero flow or close to zero flow at least once this year, particularly in late-Summer, with intervals of steady draining followed by recharge from rain events (U.S. Geological Survey, 2025). Due to a delay in collecting close-out measurements in October, coulee gage height and discharge were displayed on the web well into November.
- USGS stations monitoring Morrison (05056222), Dry (05056241), Devils (05056500), and Stump (05056665) Lakes all recorded a rise in lake level from mid-March to a peak in late April or early May, after which they declined gradually from evaporation and pumping (North Dakota Department of Water Resources, 2025). Summer rain events slowed the decline and produced a September rise across all four lakes that persisted through September 30, which marks the end of the 2025 Water Year (North Dakota Agricultural Weather Network, 2025a and U.S. Geological Survey, 2025).
  - Morrison Lake showed an increase of approximately 1.00 feet (ft.) from levels in mid-March to the peak on April 21. After falling from the peak at the end of April, the lake level rose again by approximately 1.70 ft. from its lowest level in August to a peak in mid-November before falling again. The current lake level is approximately 0.44 ft. higher than elevations

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were at this time last year (U.S. Geological Survey, 2025). Current lake level is available at: [http://waterdata.usgs.gov/nwis/uv/?site\\_no=05056222](http://waterdata.usgs.gov/nwis/uv/?site_no=05056222).

- Dry Lake rose approximately 0.60 ft. from its level in early March to its peak on May 5. After the peak, Dry Lake levels fell by approximately 1.10 ft. to the lowest level in mid-September, after which levels rose again by almost 1.0 ft. to a peak at the beginning of November, dropping back down by 0.40 ft. to current levels, which are approximately 0.50 ft. lower than lake levels were this time last year (U.S. Geological Survey, 2025). Current lake level is available at: [http://waterdata.usgs.gov/nwis/uv/?site\\_no=05056241](http://waterdata.usgs.gov/nwis/uv/?site_no=05056241).
- Between November 2024 and March 2025, after which lake levels began to rise, Devils Lake level hovered right around 49.4 ft. From early March to the peak on May 16, Devils Lake levels rose by approximately 0.37 ft. Since the peak of 49.77 ft. on May 16, Devils Lake levels dropped approximately 1.30 ft. to their lowest point in mid-September, after which they rose slightly again, with the current lake level approximately 0.30 ft. higher at around 48.74 ft. (U.S. Geological Survey, 2025). This is approximately 0.70 ft. lower than levels this time last year. Current lake level is available at: [http://waterdata.usgs.gov/nwis/uv/?site\\_no=05056500](http://waterdata.usgs.gov/nwis/uv/?site_no=05056500) and the daily values hydrograph from the 2025 Water Year (WY, Oct 1, 2024–Sept 30, 2025) can be seen in the image below.



- The USGS gage on Eastern Stump Lake recorded a rise of approximately 0.41 ft., from mid-March to the peak of 49.71 ft. on April 28. With the east-end outlet operating again this year, from May 14–August 29 (North Dakota Department of Water Resources, (written commun(s), May 20 and September 3, 2025), Stump Lake levels approximately 1.30 ft. to their lowest point in mid-September, after which they rose slightly again, with the current lake level approximately 0.30 ft. higher at around 48.69 ft. (U.S. Geological Survey, 2025). This is approximately 0.60 ft. lower than levels this time last year. Current lake level is available at: [http://waterdata.usgs.gov/nwis/uv/?site\\_no=05056665](http://waterdata.usgs.gov/nwis/uv/?site_no=05056665).
- Both east and west-end outlets were operated by the State Department of Water Resources this year. Pumping began out of the west-end outlet on May 5 and out of the east-end outlet on May 14 and continued until August 31 for the west-end outlet and until August 29 for the

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east-end outlet (North Dakota Department of Water Resources, written commun(s.), May 20 and September 3, 2025). As a result of the east-end outlet operation, the USGS streamgage on Tolna Coulee (05056678) recorded a provisional maximum flow of 201 cubic feet per second (cfs) on July 18. Flows dropped to near zero on multiple occasions throughout the period but remained above 140 cfs for the most part between May 14 and August 14. From August 14 until the east-end outlet was shut off for the season on August 29, the flows hovered right around 80 cfs, after which flows dropped back down to near-zero again (North Dakota Department of Water Resources, written commun., September 15, 2025).

## 2025 Water Year Upper Sheyenne River Recap

- Station 05055300, Sheyenne River near Flora peaked with a provisional peak of 181 cfs on May 24 from sustained rain events just under 2.0 inches recorded by the Cando NDAWN weather station between May 14 & 21 (U.S. Geological Survey, 2025; North Dakota Agricultural Weather Network, 2024b). For the better parts of June and July, and August, flows remained below 50 cfs, the only exception being a peak in each month due to rain events. The month of September saw the lowest flow at this station, with flow remaining below 15 cfs for the entire month, until rain in October allowed for an increase in flows that have remained for the rest of the year. The last streamflow measurement made on November 18, measured 43.3 cfs, which is nearly three times the flow seen at the previous year's closeout measurement (U.S. Geological Survey, 2025).
- Station 05055400, Sheyenne River near Bremen, located below the west end outlet experienced similar flow patterns to those at Flora. Bremen's peak flow of 392 cfs (provisional) also occurred on May 24, as a result of the rain events in the weeks leading up to it and pumping out of the west-end outlet, which began on May 5, and was at around 200 cfs from May 9 through the peak (U.S. Geological Survey, 2025; North Dakota Department of Water Resources, written commun., May 27, 2025). Bremen flows are influenced by pumping, remaining above 200 cfs for most of the season until the pumps were shut down on August 31 to comply with downstream water quality constraints (North Dakota Department of Water Resources, written commun., September 3, 2025). Flows after pumping out of the west-end outlet ceased, remained approximately the same as those at Flora (U.S. Geological Survey, 2025).
- Station 05056000, Sheyenne River near Warwick peaked at a provisional 559 cfs at a stage of 4.69 ft. on May 23, 2025, a day before Bremen, and was also a result of the same rainfall accumulation that Flora and Bremen peaked from and like Bremen, also includes the approximate 200 cfs being pumped out of the west-end outlet during that time (U.S. Geological Survey, 2025; North Dakota Department of Water Resources, written commun., May 27, 2025).

## Looking Forward

- The USGS has plans in FY2026 to install a camera at a streamgaging site within the Devils Lake Basin. Currently, the plan is to install the camera at station 05056215 (Edmore Coulee Tributary near Webster, ND). The camera will take a picture every hour at the site (during daylight hours) and publish the image on USGS's Hydrologic Imagery Visualization and Information System (HIVIS; <https://apps.usgs.gov/hivis/>) website. This camera will assist field staff in making decisions on when conditions are most favorable to go out and collect data so that no trips are wasted. This camera upgrade will have no increase in cost share.

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- Another FY2026 upgrade is with the continuous water quality monitors in the basin. Currently, the monitors at 05055300 (Flora), 05055400 (Bremen), and 05056678 (Tolna) only have the ability to continuously collect water temperature (WT) and specific conductivity (SC) data. The new monitors that USGS plans to integrate at the sites will have the ability to collect additional water quality parameters. If there are future interests in wanting to collect additional data such as pH, dissolved oxygen, or turbidity, the new monitors can easily have those sensors installed.
- The monitoring location Mauvais Coulee near Cando, ND (05056100) will be moved in FY2026. The current gage is located just north of 71<sup>st</sup> St NE in Towner County. The gage will be relocated upstream to the bridge on Highway 17 just east of Cando.

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North Dakota Agricultural Weather Network, 2025a, North Dakota Agricultural Weather Network---Daily Average Air Temperature Map---March 1-31, 2025-April 1-30, 2025, accessed December 5, 2025 at [https://ndawn.ndsu.nodak.edu/get-map.html?mtype=daily&variable=ddavtm&c=c&u=1&begin\\_date=2025-04-01&end\\_date=2025-04-30](https://ndawn.ndsu.nodak.edu/get-map.html?mtype=daily&variable=ddavtm&c=c&u=1&begin_date=2025-04-01&end_date=2025-04-30)

North Dakota Agricultural Weather Network, 2025b, North Dakota Agricultural Weather Network--- Daily Rainfall Table, Cando, ND---August 1, 2024-November 30, 2025, accessed December 5, 2025 at [https://ndawn.ndsu.nodak.edu/get-table.html?station=14&variable=ddr&year=2025&ttype=daily&quick\\_pick=&begin\\_date=2024-08-01&end\\_date=2025-11-30](https://ndawn.ndsu.nodak.edu/get-table.html?station=14&variable=ddr&year=2025&ttype=daily&quick_pick=&begin_date=2024-08-01&end_date=2025-11-30)

North Dakota Department of Water Resources, 2025, Discharge monitoring reports, accessed December 5, 2025, at [https://www.swc.nd.gov/basins/devils\\_lake/outlets/discharge\\_monitoring/](https://www.swc.nd.gov/basins/devils_lake/outlets/discharge_monitoring/).

U.S. Drought Monitor, 2025, U.S. Drought Monitor Maps---Map Archive---April 29, 2025, accessed December 5, 2025, at <https://droughtmonitor.unl.edu/Maps/MapArchive.aspx>

U.S. Geological Survey, 2025, U.S. Geological Survey water data for the nation, accessed December 5, 2025, at National Water Dashboard—Web Interface at <https://dashboard.waterdata.usgs.gov/app/nwd/en/?aoi=default>

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