

## MIFL Ferry Cancellation and Safety Decision Guide

### Weather, Wind, Ice, and Passenger Safety

The purpose of this report is to summarize the environmental conditions that have affected MIFL ferry service, including full-day cancellations, partial cancellations, and public warnings of possible delays or cancellations.

MIFL reviewed more than nine years of ferry service notices, from February 2017 through March 2026. The information was compiled from mass text alerts and public Facebook posts. Winter shutdown periods listed in the table below are not counted as weather-related cancellations.

During this period, full-day cancellations were uncommon compared with partial cancellations and warnings. Of the 148 affected days reviewed, 21 days resulted in all trips being canceled, 77 days involved partial cancellations, and 50 days involved warnings. This means that full-day cancellations represented 14.19% of affected days, while the majority of events were partial cancellations or warnings.

| <b>Years</b> | <b>Last Ferry Trip</b> | <b>First Ferry Trip</b> |
|--------------|------------------------|-------------------------|
| 2017         | Did not shut down      | Did not shut down       |
| 2018         | 5 Jan                  | 7 Apr                   |
| 2019         | 25 Jan                 | 30 Mar                  |
| 2020         | Did not shut down      | Did not shut down       |
| 2021         | 5 Feb                  | 12 Mar                  |
| 2022         | 18 Jan                 | 10 Apr                  |
| 2023         | Did not shut down      | Did not shut down       |
| 2024         | Did not shut down      | Did not shut down       |
| 2025         | 12 Feb                 | 6 Mar                   |
| 2026         | 29 Jan                 | 11 Mar                  |

MIFL makes every effort to provide safe ferry service during challenging weather, wind, and ice conditions. The data shows that full-day cancellations are uncommon compared with partial cancellations and warnings.

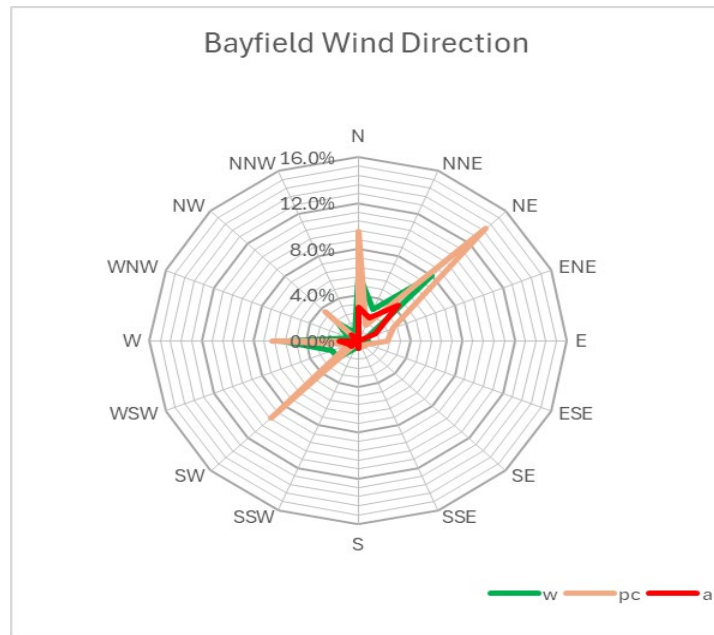
| <b>Ferry Service</b>  | <b>Number of days</b> | <b>Percentage of days</b> |
|-----------------------|-----------------------|---------------------------|
| All trips canceled    | 21                    | 14.19 %                   |
| Partial cancellations | 77                    | 52.03 %                   |
| Warnings              | 50                    | 33.78 %                   |
| <b>Grand Total</b>    | <b>148</b>            | <b>100 %</b>              |

The main factors considered when canceling one trip, multiple trips, or all trips are wind speed, wind direction, wave development, dock exposure, temperature, and ice conditions. On average,

higher wind speeds, especially when combined with exposed wind directions, are more likely to result in full-day cancellations. Wind direction is important because it affects fetch, wave development, docking conditions, and exposure at each terminal. When high winds are combined with other weather conditions, such as low temperatures, the probability of cancellations is higher. High winds, cold air temperatures, open water, and wave action can create freezing spray.

Wind directions registered in Bayfield and La Pointe are similar. This graph shows the percentage of affected days by wind direction, including full-day cancellations, partial cancellations, and warnings.

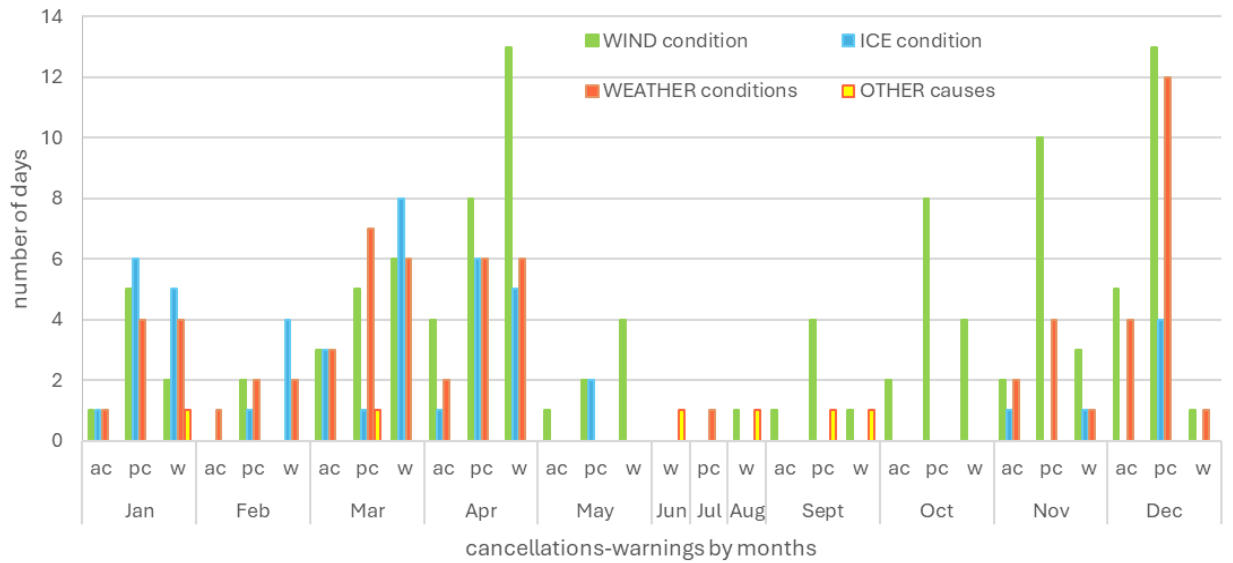
ac = all trips canceled; pc = partial cancellations; w = warnings



Ice conditions, including shifting ice, ice pressure, and ice thickness, are also considered when making service decisions.

The graphs below show the number of days when all trips were canceled (ac), some trips were canceled (pc), or a warning (w) was issued based on wind, weather, and ice conditions. The first graph also includes other causes, such as vessel issues, dock work, or paving work, which mainly resulted in partial cancellations or warnings. The data also shows that most cancellations occurred from late fall through early spring, especially during the winter months, when ferry traffic is generally lower.

### Cancellations and Warnings due to Wind, Ice, Weather Conditions and Other causes



### Combination of Temperatures and Wind on Cancellations or Warning days

