



Legislation Text

File #: 26-0451, Version: 1

PUBLIC UTILITIES ADVISORY BOARD AGENDA ITEM

ACTION REQUESTED:

Receive the Water Utility System Performance Metrics Dashboard

DEPARTMENT: Water Utilities

SUBMITTED BY: Darrell Blenniss, Director of Water Utilities

BOARD/COMMISSION REVIEW:

N/A

BACKGROUND:

Staff reviewed updated data from four primary dashboards to prepare for the April meeting:

- SAIDI (System Average Interruption Duration Index): 12-Month period ending February 2026.
- Water Consumption Report: Historical and YTD usage through February 2026.
- Distribution Leaks: 2026 YTD snapshot.
- Effluent Report: Springbrook Treatment Plant 2026 YTD performance.

(Note: The Non-Revenue Water Loss metric is evaluated on an annual basis and has been removed from this interim update).

DISCUSSION:

1. System Reliability (SAIDI) Stabilization The previous report noted a significant data anomaly that temporarily spiked the 12-month average SAIDI to over 9.5 minutes. Following quality control reviews and the progression of the rolling 12-month window, this metric has stabilized.

- Current Status: The 12-month average SAIDI currently stands at 5.77 minutes per customer, which is a moderate 8.35% increase compared to February 2025 (5.32 minutes).
- Interruption Profile: While the total number of system interruptions dropped significantly year-over-year (31 YTD vs. 48 last year, a 35.4% decrease), the severity of those incidents increased. The average duration of an interruption rose to 222.1 minutes (+15.4%), and the average number of customers affected per incident grew to 14.3 (+30.4%).

2. Water Consumption Trends * YTD Observation: Total water consumption through February 2026 was 679 Million Gallons (MG). This represents a slight increase compared to the same period in both 2024 and 2025 (which both recorded 665 MG).

- System Capacity: Despite the slight uptick in early-year usage, the daily average for 2026 currently sits at 11.51 MG. This remains well below our Lake Michigan allocation (21.68 MG) and represents less than a third of our maximum system capacity (35.8 MG).

3. Distribution Leaks (2026 YTD Status) * Current Volume: The system has experienced 37 confirmed leaks YTD, resulting in approximately 15.4 MG of tracked water loss. The predominant

causes continue to be "Holes" (40.5%) and "Radial Cracks" (35.1%).

- **Cost & Outage Adjustments:** In our January preliminary snapshot, the average cost per leak trended unsustainably low (\$750). With February data incorporated, the average cost per leak has normalized to \$2,204. While this is an increase from January, it remains notably lower than the 2025 annual average of \$3,123.
- **Customer Impact:** The average interruption time has increased from the early January snapshot to 182 minutes, affecting a total of 390 customers year-to-date.

4. Effluent & Rainfall Sensitivity * Current Operations: The Springbrook Treatment Plant continues to operate highly effectively and well within its parameters.

- **Peak Event:** The highest effluent flow recorded so far in 2026 was 35.34 MG on January 10th. This represents only 64% of the Design Max Flow (55.13 MG).
- **Capacity Excursions:** There have been 0 "High Flow Days" (days exceeding 80% of max capacity) recorded so far this year, indicating excellent system resilience during the winter and early spring precipitation events.