PRESUMPSCOT REGIONAL LAND TRUST 2023 Water Quality Results

The Presumpscot River watershed covers much of Greater Portland and is the largest freshwater input into Casco Bay. Clean water is critical to safe recreation and healthy wildlife habitats in the watershed. The Land Trust runs an ongoing Water Quality Monitoring program and uses the findings to help identify important places to conserve land and work in collaboration with partners on restoration projects. As the region has quickly grown, so has recreational use of the river; there are now over 20 water access points for paddling the river, several swimming holes, and numerous great fishing spots.

HIGHLIGHTS FROM THE 2023 WATER QUALITY ANALYSIS:

The water quality data from 2023 showed some decline in water quality compared to 2022. The long-term water quality trends on the Presumpscot River have remained stable, with the sites closest to Sebago Lake having the highest water quality. This analysis includes data from the Presumpscot River as well as the River's eleven tributaries, with a focus on the Pleasant River, Little River, and Mill Brook. The analysis also incorporates historical data, from the last fourteen years.

THE PRESUMPSCOT RIVER:

- The "main stem" of the Presumpscot River almost always met dissolved oxygen and bacteria standards. Four sites met both standards 100% of the time, which was down from seven in 2022.
- Historically, the main stem almost always meets both bacteria and dissolved oxygen standards, and raw scores (bacteria levels and dissolved oxygen amounts) are consistently the most favorable of any sites in the region.
- Overall we have seen increased bacteria readings, with four sites showing higher bacteria levels over the past 15 years.

THE PRESUMPSOT RIVER TRIBUTARIES:

- In the eleven Presumpscot River tributaries, dissolved oxygen results met standards more frequently than in 2022. Just five tributary sites met dissolved oxygen standards less than 50% of the time (declining results compared to 2022).
- Most Presumpscot River tributary sites met bacteria standards more consistently than in 2022. No tributary sites met these standards 100% of the time, eight sites met the standard less than half of

the time (compared to six in 2022).

- The Pleasant River upstream and downstream sites mostly met bacteria standards while those in between did not. For dissolved oxygen, downstream sites mostly met standards while upstream sites did not.
- Most tributaries of the Presumpscot have historically met dissolved oxygen standards most of the time. Two exceptions are Black Brook and Pleasant River in Windham, and efforts are being made to address this.
- The majority of tributary sites have rarely met bacteria state standards. Historical trends suggest that this is getting worse rather than better.

THE STROUDWATER RIVER:

- Sites on the Stroudwater River almost always met dissolved oxygen standards (an improvement from 2022) but mostly did not meet bacteria standards (with variable scores compared to 2022).
- No meaningful historical trends are evident for the Stroudwater River yet as it has only been sampled for four years.