Most Lakes and Streams Meet Water Quality Standards

Urban Waters More Likely to Have Poor Water Quality

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WHY IT MATTERS

The Casco Bay watershed includes all lands and waters that drain to Casco Bay. The watershed is linked hydrologically and ecologically, from headwaters to the Bay. Flowing waters transport wood, sediment, and other materials downstream, carving the valleys and shaping the stream channels that provide habitat for aquatic organisms. If rivers and streams are healthy (and unblocked by dams or other barriers) they allow fish, aquatic insects, and other animals to move from bay to river to lake and back again.

If water quality is poor, however, not only can pollutants be transported downstream to the Bay, but those long-distance ecological linkages can be disrupted, lessening the ecological integrity of our waters, including the Bay. Both direct and indirect effects of poor water quality in the watershed make our lakes, rivers, and the Bay more vulnerable to other stressors, including climate change.

The fresh waters of the Casco Bay watershed are a major economic asset. Our lakes, rivers and streams support boating and recreational fisheries. Our region's healthy waters underpin a robust tourism economy. Sebago Lake provides drinking water to more than 200,000 people in Portland and the surrounding region.

STATUS & TRENDS

Lakes, Rivers, and Streams

Under Maine law, every body of water must meet water quality criteria, specific to the "designated uses" associated with the waterbody's assigned water quality class. For example, lakes, rivers, and streams must have sufficient dissolved oxygen to support healthy insect and fish communities. Waters that do not meet related standards are labelled as "impaired".

Biomonitoring

The Maine Department of Environmental Protection (DEP) has developed statistical tools to evaluate the health of rivers and streams based on the composition of stream biota, especially invertebrates like insects, snails and worms. DEP uses invertebrate data to determine whether a stream meets Class A (best), B, or C requirements, or is in "non-attainment" (not meeting even Class C standards). We looked at the most recent biomonitoring results available from sites monitored over a ten-year period (2009 through 2018).

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