

Fact Sheet in Support of Amendment to LD 1964 to Upgrade the Lower Presumpscot

Who we are

For over 30 years, Friends of Casco Bay has monitored the health of Casco Bay and advocated for solutions to improve and protect its health. We cannot fulfill this mission without protecting the tributaries that feed the Bay and support species that need fresh and salt water to thrive.

The Ask: Amend LD 1964 to upgrade the lower Presumpscot River, from Saccarappa Falls to tidewater, from Class C¹ to Class B²

The rest of the Presumpscot is Class AA, A or B waters. The lower Presumpscot now meets Class B criteria. With this upgrade, Maine will have meaningfully restored and protected the Presumpscot for generations to come.

The Inspiration

2022 marks the 50th Anniversary of the Clean Water Act. It will be a year filled with celebration, inspiration, and dogged determination to improve and protect our waters from current and future harm. **This goal lies at the heart of the Clean Water Act: it inspires and requires us to restore and protect water quality. It urges us to set the highest attainable water quality classifications,³ and expressly prohibits us from degrading water quality.⁴**

¹ 38 MRS §467(9)(A)(4).

² Class B waters must be of such quality that they are suitable for the designated uses of drinking water supply after treatment; fishing; agriculture; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; navigation; and as habitat for fish and other aquatic life. The habitat must be characterized as unimpaired.

The dissolved oxygen content of Class B waters may not be less than 7 parts per million or 75% of saturation, whichever is higher, except that for the period from October 1st to May 14th, in order to ensure spawning and egg incubation of indigenous fish species, the 7-day mean dissolved oxygen concentration may not be less than 9.5 parts per million and the one-day minimum dissolved oxygen concentration may not be less than 8.0 parts per million in identified fish spawning areas. Between April 15th and October 31st, the number of *Escherichia coli* bacteria in these waters may not exceed a geometric mean of 64 CFU per 100 milliliters over a 90-day interval or 236 CFU per 100 milliliters in more than 10% of the samples in any 90-day interval.

Discharges to Class B waters may not cause adverse impact to aquatic life in that the receiving waters must be of sufficient quality to support all aquatic species indigenous to the receiving water without detrimental changes in the resident biological community. 38 MRS §465(3)(emphasis added).

³ See 33 U.S.C.A. § 1251(a)(1972); see also Andrew Fisk, *The Clean Water Act in Maine: Goals and Financing*, 17 Me. Pol’y Rev. 26, 28-29 (2008) (discussing the Clean Water Act’s goal of improving waters).

⁴ See e.g., 33 U.S.C.A. § 1342(o)(1)(1972) (prohibiting the relaxation of permit limits that are based on state standards, such as water quality standards); 38 M.R.S. §464(4)(F) (2018) (stating that when the quality of classified water exceeds the minimum standards of the next highest classification, the higher water quality must be maintained and protected, and the board shall recommend that water be reclassified.”); 40 C.F.R. § 122.44(1)(d)(ii)(1983).

The Lower Presumpscot: From dirtiest little river section to swimmable, fishable waters

The Presumpscot River drains 648 square miles and is the largest freshwater input to Casco Bay. Half of the watershed lies above Sebago Lake, and provides greater Portland's drinking water, significant habitat and myriad recreational opportunities. The lower half flows from Sebago Lake to Casco Bay, north of Portland Harbor. **We are focused on upgrading the segment from Saccarappa Falls in Westbrook to head of tide, where the waters turn salty before flowing into Casco Bay.**

This river segment flows through some forested and agricultural lands, but also drains the highly-developed and fast-growing greater Portland metropolitan area and large portions of burgeoning suburban Cumberland and York Counties.

The segment has been abused and fouled as people dammed it to produce power and dumped waste into it. Prior to passage of the Clean Water Act, the river segment from Saccarappa Falls to head of tide was known as "the dirtiest little section of river in the state."⁵ Point source pollution contributed high loads of toxins, such as dioxins, and decreased dissolved oxygen levels.⁶ Dams degraded natural river functions, including blocking fish passage.

Residents, led by Friends of the Presumpscot River, banded together to restore the river. Their efforts led the State to upgrade the segment from Dundee Dam to the confluence of the Pleasant River to Class A and to ban further point source discharges from the confluence of the Pleasant River to Little Island.⁷ At the same time, stronger permit requirements reduced pollution from the Sappi mill. Stronger permit requirements also mandated that Westbrook and the Portland Water District reduce and eliminate combined sewer overflows into the river. Finally, the FERC⁸ dam relicensing process has led to efforts to remove some dams, construct fish passage at others, and increase flow during spawning and spring runs. These efforts should continue to improve the river's health.

Now, Mainers once again use this accessible river for tubing, swimming, fishing, hiking along, and more. Westbrook hosts its river walk and famed ice disks that draw thousands. Falmouth and Portland have beautiful urban parks that allow people to access the water and walk along it free of charge.

The Lower Presumpscot meets Class B criteria

When approached about the upgrade, the Maine Department of Environmental Protection (DEP) indicated that it needed more data regarding dissolved oxygen (DO) levels in the lower Presumpscot. That was DEP's sole concern. Therefore, our analysis will focus on DO data.

Over the summer of 2021, DEP deployed a sonde in the lower Presumpscot and set it to collect data every 15 minutes. To meet Class B, the segment must maintain DO levels at or above 7

⁵ Robert M. Sanford et al., *River Voices, Perspectives on the Presumpscot* 239 (2020).

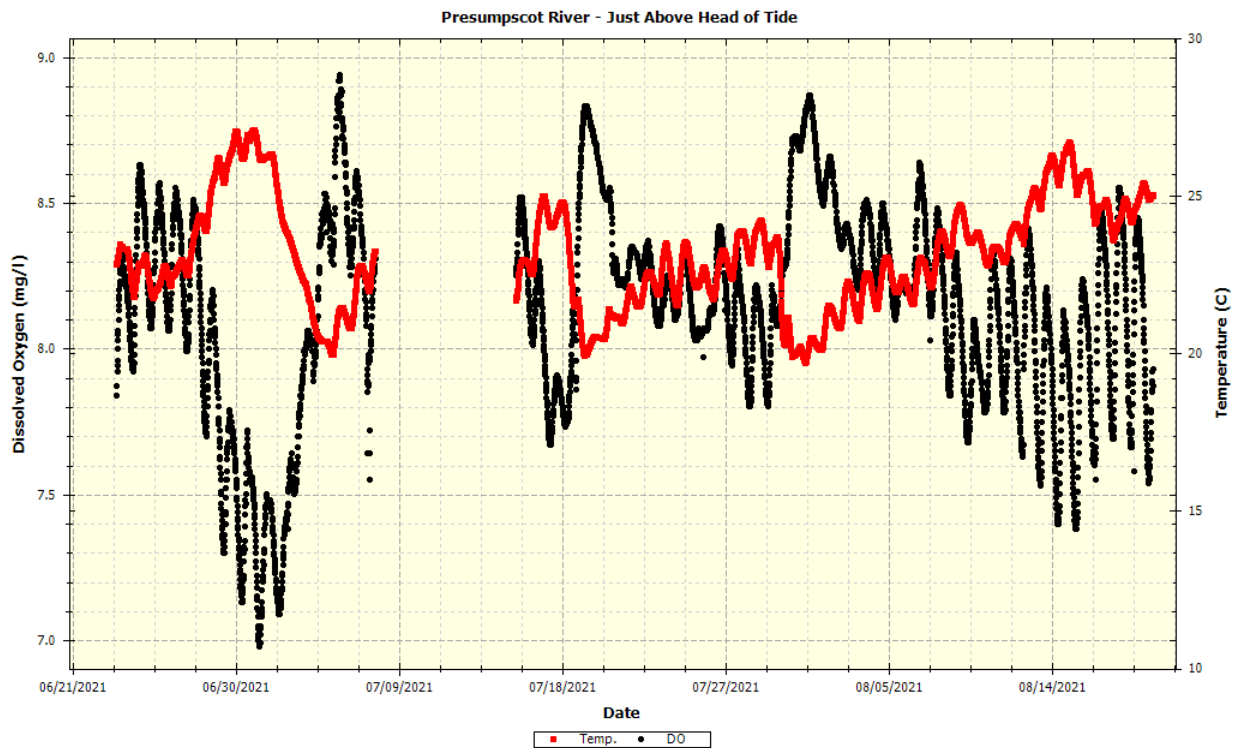
⁶ This segment also had low dissolved oxygen and high concentrations of dioxins in fish. *Id.* at 246.

⁷ *Id.* at 241-245.

⁸ Federal Energy Regulatory Commission.

parts per million (ppm) or 75% of saturation, whichever is higher.⁹ At all times, the DO saturation remained well above 75%. The graph below shows that, with one minor excursion, DO also remained above 7 ppm. This occurred during the early morning, on or about July 2, when DO dipped for less than 15 minutes to 6.98 ppm.

This slight dip is not cause for alarm. It is scientifically accepted that this .02 dip falls within the statistical margin of error (MOE). Moreover, this statistically insignificant dip occurred after an exceptionally hot and dry June (note the temperature in relation to DO) at a time when Sappi was releasing only 270cfs at the Eel Wier Dam outlet from Sebago Lake, below the 408cfs required in its license from June – September. The dip therefore reflects worse case conditions, and it is still within the MOE for Class B limits. Finally, the 6.98 ppm reading reflects the natural diurnal cycle (where DO rises during the day with photosynthesis and decreases over night with respiration) of the river (not the discharges into it) and will not harm fish. DO went up quickly as photosynthesis began.



⁹ 38 M.R.S. § 465(3)(B)(2018).

DEP's remaining concern

DEP worries that, with these DO levels, upgrading this segment of the river fails to preserve adequate assimilative capacity¹⁰ for theoretical new dischargers. This has been the biggest area of discussion.

This should not be a problem. Maine's Class B standard contemplates the water will be used for industrial processes, cooling water supply, and hydroelectric power generation.¹¹

Historically, DEP has been very generous with how it calculates assimilative capacity. The two current dischargers have significant excess capacity allocated to them in their permits.¹² This excess capacity might be reduced without affecting their operations. Moreover, technologies have evolved. New dischargers would come in needing to meet the Class B standard and could be built using modern technology. This is exactly how the Clean Water Act works.

Conclusion

In celebration of the 50th Anniversary of the Clean Water Act and because it deserves it, please vote in favor of amending LD 1964 **to upgrade the lower Presumpscot River "from Saccarappa Falls to tidewater" from Class C to Class B.** You will be part of history and will protect this river and Casco Bay for generations to come.

¹⁰ 38 MRS §464 (sets forth calculations of assimilative capacity). For example, for the purpose of computing whether a discharge will violate the classification of any river or stream, the assimilative capacity of the river or stream must be computed (with some exceptions not applicable here) using the minimum 7-day low flow that can be expected to occur with a frequency of once in 10 years. 38 MRS §464(D)(4).

¹¹ 38 MRS §465(3)(A). *See also* footnote 2.

¹² This chart reflects current permit terms regarding Biological Oxygen Demand

	Current	Actual 5 Year
SAPPI	1,700 lb/day	260 lb/day
PWD	1,137 lb/day	605 lb/day