

A Rare Moment for the Oyster River

A Restoration Vision from the Durham Conservation Commission

Durham is approaching an important community decision that will shape the future of the Oyster River. On March 8, 2022, our Town will vote on whether to uphold a Town Council decision to move forward with technical designs for removal of the Mill Pond Dam and restoration of the lower Oyster River, or to overturn the Council's decision and determine another course of action.

On January 4, 2021, the Conservation Commission [recommended](#) to the Town Council that the Mill Pond Dam be removed in order to alleviate a critical impact on the lower Oyster River, consistent with Council's decision. Decades of accumulated sediment have made the impoundment progressively shallower, starving downstream marshes of needed sediments. One day, the pond will fill without repeated maintenance dredging, although dredging is likely to be prohibited. In the meantime, the shallow water has become warmer and holds less oxygen, with further deoxygenation caused by climate change and excessive nutrients that have also accumulated behind the dam. The dam also impedes migration of native sea-run fish species, including imperiled river herring (blueback herring and alewives), rainbow smelt, American eels, and sea lampreys, and prohibits expansion of ecologically crucial saltmarsh habitat into what should be tidal reaches above the dam. Removing the dam and restoring the lower Oyster River will alleviate all of these impacts and help return the degraded artificial impoundment toward a more natural free-flowing tidal river ecosystem. Additionally, this action will have fiscal and public safety benefits, which makes dam removal and river restoration an action that can achieve multiple public policy goals.

Notably, dam removal and river restoration provide an important opportunity to honor Indigenous heritage alongside our post-colonial history. Our [Abenaki neighbors](#) have identified dam removal and river restoration as the highest priority action that we as a community can take to recover some of what they value, and have lost, in their ancestral homeland. For millennia, the lives of Abenaki people were [strongly tied](#) to rivers. Sea-run fishes represented one of their most important food sources, and riverways served as transportation routes and gathering places. Indigenous heritage and environmental stewardship are often [inextricably intertwined](#), as is the case in our decision about the fate of the dam and river.

Removing the dam and restoring the river might be the single most significant environmental action that a small town like ours can take. Open space preservation, for example, brings local benefits in the way of recreational opportunities and community aesthetics. It can also have landscape-scale benefits through wildlife habitat and even global benefits through carbon capture. However, those benefits will only accrue if other communities, states, and nations take similar action. On the other hand, very few communities are home to a head-of-tide dam and responsible for the significant and singular ecological bottleneck that it represents. Very few communities have the opportunity to eliminate a barrier to the critical upstream-downstream connectivity that is fundamental to the functioning of rivers and estuaries. With one action we can not only enjoy the local benefits of a free-flowing river mouth, but also deliver benefits upstream and downstream as well. It is notable that several respected environmental organizations – The Nature Conservancy, Trout Unlimited, Conservation Law Foundation,

Native Fish Coalition, Piscataqua Region Estuaries Partnership – prioritize removing head-of-tide dams and have urged our Town to seize the rare opportunity for environmental restoration before us.

This is not to say that removing the dam and carrying out ecological restoration in the area of the impoundment will alleviate all of the environmental impacts on the Oyster River watershed – far from it. But watershed stewardship is a matter of ‘and’, not ‘or’. We should remove the Mill Pond Dam *and* work to implement fish passage and improved water flow management at the UNH reservoir dam. We should remove the dam *and* manage invasive species and plant saltmarshes in tidal reaches, mirroring the Town’s widely recognized Wagon Hill Farm shoreline restoration. We should remove the dam *and* improve water quality inputs from College Brook and other tributaries. We should remove the dam *and* address agricultural and residential fertilizer use in the watershed. We should remove the dam *and* properly manage the contaminated sediments it has allowed to accumulate in the impoundment. And so on.

Indeed, we have a very rare opportunity to approach this important Town decision with a view to creating an ecological whole that is greater than the sum of its parts. Passage of the bipartisan infrastructure bill has [allocated hundreds of millions of dollars](#) for environmental restoration and climate resilience. Elected officials and federal agencies have demonstrated willingness to invest in ambitious watershed-scale initiatives when local partners join together to offer a holistic vision. Look no further than the [Penobscot River](#) and [St. Croix River](#) in Maine to see these investments being put into practice, or to the mammoth [Snake River](#) out west for an eye-popping next-generation vision.

This decision comes before us during unprecedented worldwide losses of biodiversity and natural habitats. Climate change and its outcomes – ocean acidification, sea level rise, altered rainfall regimes, and more – and unsustainable rates of resource consumption are accelerating those losses. Removing the dam and restoring the tidal river presents a rare opportunity to build resilience against those growing threats and reclaim a piece of what has been lost. We simply need the vision and the will to move toward a new future for the Oyster River watershed.