

Executive Summary

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The State of Maine's Environment 2010

The *State of Maine's Environment* is a regular series of reports written by senior environmental policy majors at Colby College in Waterville, Maine. *The State of Maine's Environment 2010* is the sixth State of Maine's Environment report created by students enrolled in ES 493: Environmental Policy Practicum taught by Philip J. Nyhus, Environmental Studies Program. Topics in this report include [State Parks](#), [Lakes](#), [Biomass Energy](#), [Renewable Ocean Energy](#), and [Downeast Maine](#). In each chapter, we explore the history and context of the topic, evaluate its current state, and conclude with major findings and policy recommendations.

This year marks the 75th anniversary of [state parks](#) in Maine. Currently, there are 49 state parks, which include 36 parks, 12 historic sites, and Baxter. Visitation to these parks over the last 20 years has remained relatively flat at around 2 million visitors annually. This year visitation has seen a boost from advertising about the anniversary. State parks are fairly well distributed across Maine, with 80% of Maine residents living within 15 miles of a state park. Furthermore, State parks are chronically underfunded especially in capital requirements, forcing the Bureau of Parks and Lands to adopt alternative funding and outreach strategies. Conservation is not the primary focus of state parks, and they comprise a small percentage of conservation lands in Maine. Maine state parks continue to provide Mainers with a diverse range of accessible and low-cost recreational opportunities close to their homes.

[Lakes](#) are a vital ecological, economic, and social resource. They provide the state with 64% of its public drinking water and over 60% of Maine's residents use lakes for recreation. On average, Maine's lakes are mesotrophic and their water quality is comparatively better than the US. Also, Maine has the least infestations of invasive aquatic plants in New England, and has the unique opportunity to prevent further spreading. Lakes also have a large impact on the state's economy. Total direct expenditures on lakes are equal to 5% of the state's GDP. However, 30 lakes are listed as impaired. This is largely a result of the state's industries, specifically agriculture and hydropower. Residential development is also a major threat to lakes; improper shoreline development makes lakes 3 times as likely to be in poor health.

Maine is in a unique position to pursue large-scale wood [biomass](#) energy initiatives. Maine possesses a long forestry tradition, and 86% of state land is timberland. Providing 35% of Maine's energy consumption, the scale of biomass dwarfs other renewable energy sources, giving it immediate potential for long-term carbon emissions reduction. Maine's forests are also multi-use resources that hold important values in terms of wildlife habitat, biodiversity, recreation, and watershed protection in addition to wood production. Ecologically responsible forest management and nutrient supplementation can help mitigate the threats that increased harvesting pose to forest ecology. Finally, biomass is favorable over fossil fuels in terms of price, support of Maine's economy, reduction of carbon emissions, and preservation of public health. It emits considerably less air pollution than fossil fuel energy sources do, with 7-32 times less life-cycle carbon emissions.

Maine's [oceans](#) play a vital role in the state's economic and social well-being. The use of this resource has expanded to include potential energy extraction for tidal turbines, wave generators, and wind turbines. The opportunity for Maine to move toward state energy independence required the transition from R & D to commercial projects that prioritize offshore wind development, construct tidal projects in compatible locations, all the while delaying wave projects until technology is improved. Additionally, continued exploration of these technology's environmental, economic and social impacts, along with improved state and federal permitting structures must be completed before proposed projects move forward. Such exploration requires collaboration throughout the process to ensure transparency and effective communication between all stakeholders especially with regard to the use of a Marine Spatial Planning mechanism.

Despite its abundance of natural resources, the [Downeast region](#) as a whole is one of the poorest areas of Maine. Washington County has higher unemployment and poverty rates than Hancock County, where the service sector has replaced natural resource industries in employment. Cost cutting measures in the forest industry have converted forest land to non-industrial ownership, but conservation has also grown, with 60% of conservation now in the private sector. 29% of Washington County and 15% of Hancock County are currently conserved. Depletion of the area's fisheries has led to a decline of the fishing industry, which currently relies on lobster. Lobster landings are unevenly distributed and more greatly benefit the economy of Hancock County. The top 6 overnight and top 5 day tourism destinations are concentrated in Hancock County, and telecommunications technology is lacking in Washington County. The distribution of these resources perpetuates the income and employment disparities in the region.