

# Climate Change at Scarborough Marsh

By Laura Bither



Laura Bither is a local intersectional climate justice activist. As the Scarborough Marsh Audubon Center Environmental Education Intern and the Maine Environmental Changemakers Summer Community Organizer, she created and authored this project on climate change and sea level rise. By focusing on the stories of youth and fisherfolk—those typically left unheard in the environmental movement—she centered on the challenges Maine coastal communities face and their visions for a climate-resilient future.

# Scarborough Marsh is Sinking



Image I: Existing marsh types

Salt marshes can defend themselves from destruction due to sea level rise—if they have the opportunity. Roots and above-ground plant matter add their biomass to the soil every year, helping the marsh build upward. Tides also bring in sediment deposits that help upward growth. But Scarborough Marsh is surrounded by human-made infrastructure that prevents it from expanding. Protecting the marsh is critical to protect the bird and animal species, as well as the humans, that depend on it.



Image II:  
Marsh type changes for +1 ft  
sea level rise  
(Intermediate scenario)



Image III:  
Marsh type changes for +2 ft  
sea level rise  
(High scenario)



Image IV:  
Marsh type changes for +3.3 ft  
sea level rise  
(Extreme scenario)





**Ania Wright** is a youth climate activist and the Grassroots Climate Action Organizer for Sierra Club Maine working with communities throughout the state to push for climate action within their own communities. Her mission is centered on climate justice and environmental justice that addresses the real roots of the crisis: systems change.



In Maine, climate change is already visible. Summer 2021 saw days thick with wildfire smoke from the West Coast, record-breaking heat waves, and the most humid day in the city of Portland since the 1950s. Climate migration and tourism are creating a housing crisis that is causing hardships for Maine residents who already struggle to afford to live here.



Despite the current and imminent challenges we face, Ania is energized by the youth climate justice movement. “Youth see climate change for what it is. We see the solutions and what they are and push for them very unapologetically. Working with youth feels like the most straightforward way to [do] what needs to be done. There is a different urgency working with young people.”

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“[Scarborough] Marsh is a snapshot in time, and it has changed from what it was because of climate change and will continue to change because of climate change. Recognize that and the moment that we are in as a society and the potential we have to act and to keep the marsh as it is. Without local, state, [and] global action, the marsh may not be there anymore. [We are] part of this movement at a very critical time.”

“[Climate change] is a very integrated environmental hazard. It relates to many different public and private sectors, it relates to communities in really varied ways. For me, work on climate change is work on sustainability overall, and work on development overall.”

As the Maine Sea Grant’s Community Climate Resilience Coordinator, **Parker Gassett** connects the research community studying climate change to those on the ground making changes at the municipal level. He helps shift communities’ mindsets to understand that time, attention, and investment in resilience to climate change can integrate with other town plans, and that these investments in long-term resilience will generate both incremental and profound benefits to the community over time.

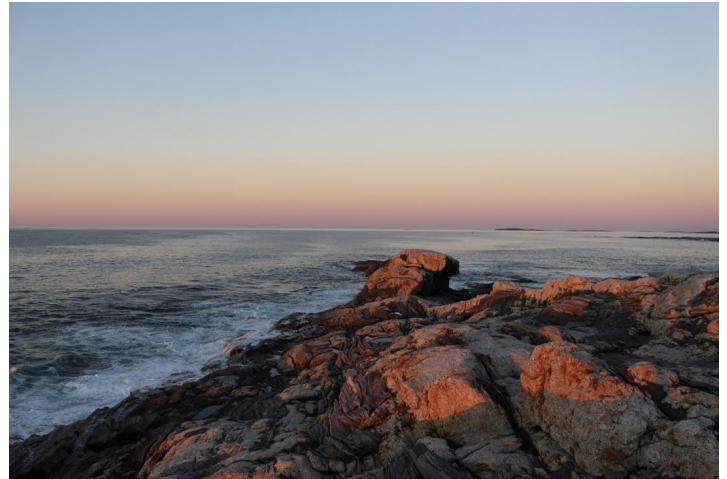
Parker is motivated by ingenuity at the local scale and the engagement of local citizens working toward solutions. Climate resilience in the future will demonstrate our understanding of the value of natural systems, and we will focus on nature-based solutions that put nature to work for our own community needs—services like pollution control, buffers to storms, and water absorption. “A climate-resilient future will overlap with a number of different priorities. It will include protection of biodiversity, community well-being, social benefits... Conservation [will be] integrated with community needs.”



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“Marshes have a really important role in society, not just to the environment: in terms of biodiversity, fish habitat for commercial fisheries, buffering from storms for inland communities... Understand how the marsh helps us. Understand [ways to] help marshes acclimate to climate change: the Make Way for Marshes program at The Nature Conservancy, other planning approaches for marsh migration, or marsh protections that are in place and are being renewed by the Maine Climate Council. [There are] ways that our society is being proactive about protecting marshes not just because they’re beautiful and have birds, but because they help society overall. A person working a job that has nothing to do with environmentalism at all is still receiving benefits from a marshland near their home.”

*“The ocean is... what makes this place so unique, but it’s also what makes this place so dangerously fragile.”*



**Riley Stevenson**, a youth activist from Waldoboro, has been grappling with how Maine can make decisions that boost both the economy and the environment holistically and equitably without a singular focus on capital. While lobsterfolk and others who work on the waterfront contribute a smaller share of global carbon emissions, they bear the brunt of the burden in the challenges they already face to their livelihoods.



In Maine, “economically, there’s a lot to lose” from climate change. The tourism industry relies on Maine’s environment to cooperate as it has in the past to ensure the weather, food, and seaside attractions continue to drive visitors. With sea level rise, homes and businesses on the water that are desirable are also threatened.

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“We can appreciate the places many of us love while understanding it’s not enough to just donate to your local conservancy; more action than that is needed. It’s more tangible: throwing your support behind legislation [and] supporting people in power doing the right thing [for people and the environment]... every person counts in [the] fight.... Those big changes affect [places like Scarborough Marsh].”



**Sarah Vanacore** is an oyster farmer at Glidden Point Oyster Farm on the Damariscotta River. Despite current and imminent challenges to the industry, she has seen many farmers entering aquaculture work, a climate resilient field. Equipped with a deep understanding of the hurdles facing farmers and the environments they cultivate, Sarah plans to start her own oyster farm in the midcoast area.



In the future, she anticipates more logistical hurdles to oyster farming, especially water quality issues due to biotoxins. Affected areas will be subject to closures and tighter regulations that impact farming operations. Maine will need to transform its economy to adapt to a changing climate, including a shift from lobstering to aquaculture.

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“Our environments are changing. In the future, most likely, Scarborough Marsh won’t be there, and other key ecosystems will look very different. [Climate change] is a very real issue and we need to do something about it.”