An Act to accelerate and streamline wetlands restoration

HD1988 (Rep. Dawne Shand) & SD1206 (Sen. Brendan Crighton)

Why Wetlands are Critical to Communities? Healthy coastal wetlands provide many essential functions including sequestering 10x the amount of carbon per year compared to forests, reducing wave and flood impacts caused by extreme weather, and providing habitat for 132 species of the greatest conservation need in Massachusetts. Similarly, inland wetlands filter fresh water, prevent floods, host 265 species of the greatest conservation need, and, of course, sequester carbon.

Massachusetts has already lost 41% of its salt marshes¹ and nearly a third of its freshwater wetlands.² Many remaining coastal wetlands and inland waterways are degraded or damaged, placing strain on our ability to mitigate and adapt to the impacts of climate change. Ecological restoration and management rejuvenate wetlands, and Massachusetts hosts the people and the expertise to unlock these benefits.

With hundreds of millions of dollars in new federal and state funds available through the American Rescue Plan Act, Bipartisan Infrastructure Investment and Jobs Act, and other major public spending package and programs, to leverage for ecological restoration projects, Massachusetts has a once-in-a-lifetime opportunity to prepare our landscapes and communities for the worsening impacts of climate change.

What is the problem? Regulations adopted decades ago to protect wetlands from development are not designed to support environmentally beneficial, nature-based restoration projects. Inconsistent or unclear standards, limits on the size of work allowed, and insufficient coordination across multiple agencies cause delays and high costs for restoration projects. This puts a burden on cities, towns, and nonprofit partners working against the clock to complete nature-based climate resiliency projects at scale. The need to accelerate progress is especially important in coastal communities, where we have a narrow window of just a few years to restore thousands of acres of salt marsh before they are lost forever.

We must modernize our regulatory system and state government processes to efficiently advance this critical work

What is the solution? This bill proposes the implementation of a "Wetlands Restoration Coordination Initiative" to improve interagency coordination and develop recommendations to update and reform processes and standards for wetlands restoration projects. This will improve efficiency and ensure the Commonwealth leverages significant new federal funding. The initiative will also coordinate with experts to leverage scientific knowledge and with municipalities and nonprofit partners to maximize progress. This bill supports and complements related administrative actions under existing laws.

Are these requirements often the result of unintended consequences? Yes. One recent example of unintended consequences stems from the 2021 Next-Gen Climate Roadmap law, which requires a full environmental review under the Massachusetts Environmental Policy Act (MEPA) for any proposed projects located within one mile of an Environmental Justice (EJ) Population. Ironically, EJ communities are disproportionately impacted by degraded wetlands and waterways and increased flooding, so conservation and restoration efforts are needed most urgently in these communities. Preparation of a full environmental impact report is onerous, and redundant monitoring requirements can add tens or hundreds of thousands of dollars and many months of delay to these beneficial projects. Recent progress was made through MEPA regulatory updates that exempt some types of ecological restoration, but this does not apply to many urgent projects including salt marsh restoration. Further improvements are needed to all applicable environmental regulations to support environmentally beneficial projects.

Have other states encountered this issue? Yes. In 2020, Governor Newsome of California ordered that all agencies "implement actions to increase the pace and scale of environmental restoration and land management efforts by streamlining the State's process to approve and facilitate these projects." California's *Cutting the Green Tape³* initiative has resulted in a unified, coordinated approach to permitting restoration projects, yielding rapid progress, substantial efficiencies, and cost savings for the state, local communities, and conservation partners.

- www.jstor.org/stable/3526949
- 2. Dahl, T.E., 1990, Wetlands-Losses in the United States, 1780's to 1980's: Washington, D.C., U.S. Fish and Wildlife Service Report to Congress,
- 3. https://wildlife.ca.gov/Conservation/Watersheds/Cutting-Green-Tape

^{1.} Bromberg, K. D., & Bertness, M. D. (2005). Reconstructing New England Salt Marsh Losses Using Historical Maps. Estuaries, 28(6), 823–832. http://

CASE STUDY: Great Marsh Area of Critical Environmental Concern (ACEC)

The Great Marsh ACEC includes 25,000 acres of barrier beach, dunes, saltmarsh, and water bodies in the towns of Essex, Gloucester, Ipswich, Newbury, and Rowley. With over 10,000 acres of salt marsh, Great Marsh ACEC contains the largest salt marsh system north of Long Island, New York. These marshes are impacted by thousands of old ditches and agricultural embankments that are altering natural water flows and increasing the rate of loss due to sea level rise and erosion. Healthy marshes without these degraded conditions are much more resilient to climate impacts.

Ongoing restoration is being carried out by The Trustees, MassWildlife, and others, and includes ditch remediation, removing ditch blockages, micro-runneling, and micro-topography. Phase I was completed in 2022, along with 2 years of follow up monitoring. Additional spot treatment for ditch remediation is planned in 2023. Phase II work began in 2022, with a first year of post-restoration monitoring planned for 2023.

Phase III is awaiting permitting, pending resolution on monitoring requirements for previous phases, which have exceeded all other project costs on the previous phases. Peer-reviewed technical literature on these techniques is already available from other sites. The work to date has shown positive results on these sites as well. The U.S. Fish and Wildlife Service is also conducting restoration in the Great Marsh at the Parker River National Wildlife Refuge, with three projects permitted and another 1,000 acres planned for permit submittals in 2023.

	PHASE I	PHASE II	PHASE III	TOTAL
		Crane Estate, Crane	The Trustees, Essex	
Land	Trustees Old Town Hill	Wildlife Refuge, Stavros	County Greenbelt	
	Reservation	Reservation, and William	Association, and Mass	
		Forward WMA	Wildlife	
Towns	Newbury	Ipswich, Essex, Newbury	Ipswich and Essex	
Acreage	85	273	916	1,274
TOTAL COST (without required				
<u>monitoring)</u>	<u>\$70,692</u>	\$189,299	<u>\$111,000</u>	<u>\$370,991</u>
Design	\$9,240	\$23,230	\$75,000	\$107,470
Permitting	\$11,452	\$41,069	\$36,000	\$88,521
Implementation	\$50,000	\$125,000	TBD	\$175,000
Permitting Time	26 months	22 months	Ongoing	
				\$750,000 for
Required Monitoring Cost	\$300,000	\$450,000	TBD	Phases I & II only

For more information, see: https://www.onthecoast.thetrustees.org/great-salt-marsh-restoration and Perry, D.C., Ferguson, W. and Thornber, C.S. (2022), Salt marsh climate change adaptation: Using runnels to adapt to accelerating sea level rise within a drowning New England salt marsh. Restor Ecol, 30: e13466. https://doi.org/10.1111/rec.13466





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