



Massachusetts Energy and Environment Performance Review & Recommendations for Governor Baker's Second Term



THIS REPORT WAS PREPARED BY THE FOLLOWING ORGANIZATIONS:



Charles River Watershed Association, a research and advocacy non-profit, uses science, advocacy, and the law to restore, protect, and enhance the Charles River, its watershed, and public access. It promotes sustainable water resource management policies and practices with a focus on water quality, streamflow and habitat, green infrastructure, water conservation, and climate change resiliency.



Clean Water Action works to protect our environment, health, economic well-being and community quality of life. Our goals include clean, safe and affordable water; prevention of health threatening pollution; creation of environmentally safe jobs and businesses; and empowerment of people to make democracy work.



Conservation Law Foundation forges lasting solutions to environmental challenges for the people of New England. CLF takes on powerful opponents who would pollute our air and water and squander our resources. Our deep local knowledge, legal acumen, and policy expertise make CLF a prime mover in building our clean energy future, countering climate change, and safeguarding our communities.



Environmental League of Massachusetts is committed to combating climate change and protecting our land, water, and public health. By creating diverse alliances and building the power of the environmental community, we use our collective influence to ensure Massachusetts is a leader in environmental and economic sustainability.



Environment Massachusetts is a statewide, citizen-funded environmental advocacy organization. Our staff and members work to protect Massachusetts' air, water and open spaces through grassroots organizing, coalition-building, public education, and direct advocacy.



Massachusetts Rivers Alliance's mission is to protect and restore the Commonwealth's rivers and streams. The organization works to strengthen statewide river policies in four areas: water quality, stream flow, wildlife habitat, and investment in green infrastructure. We also strengthen, connect, and unify our 60+ member organizations in support of shared river protection goals.

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Overview

The transition from Governor Baker's first term to his second term saw a change of leadership at the Executive Office of Energy and Environmental Affairs (EEA), as Secretary Beaton stepped down in April of 2019 and Governor Baker appointed now-Secretary Kathleen Theoharides to lead the agency.

During Governor Baker's first term, our groups produced a detailed annual report card for EEA. In this performance review of EEA's work during the first term to second term transition, we give overall issue grades to establish a baseline for the second term while providing top recommendations for EEA's work going forward. As in previous years, our assessment of the Baker Administration's performance on environmental issues is mixed.

We appreciate EEA's general acknowledgment that climate change is the issue of our time and is linked to many other issues such as land use, public health, and air quality. This focus on energy and climate makes sense,

yet we can't ignore other pressing environmental issues which intersect with climate, such as exposure to toxic chemicals, the vast amount of solid waste we are generating, and the uneven impact of environmental issues on vulnerable communities. Our environmental agencies need to be making progress on all fronts. That is their charge, their responsibility, and what the citizens of the Commonwealth deserve.

KEY DEVELOPMENTS

This past year was marked by a number of significant EEA milestones. We saw notable operating budget increases for our environmental agencies in the Governor's budget that were maintained or increased by the legislature. The Administration also introduced a significant environmental bond bill with a heavy emphasis on climate adaptation and resiliency that was passed into law.

The first large scale offshore wind project in the nation was selected and permitting is

underway. A second contract for a similar amount of clean wind energy will be announced before year's end.

Nine New England and mid-Atlantic states along with the District of Columbia have joined together to develop a regional market-based program to reduce greenhouse gas emissions from the transportation sector. Since transportation is responsible for 40% of the carbon pollution in the Commonwealth, it is imperative that we address this problem. Massachusetts is one of the states leading the effort and agency staff are devoting countless hours to develop a program that will reduce emissions and generate revenue that will be used for a transition away from fossil fuel powered transportation.

In addition, the Baker Administration is taking the need for climate adaptation and resiliency seriously. The state launched the Municipal Vulnerability Preparedness (MVP) program in 2018 and more than 240 communities have now received funding to develop resiliency plans. In January 2019, the Governor introduced legislation (S. 10) that would raise

significant new revenues by increasing the deeds excise tax. It is estimated that this fee increase could raise \$1 billion over ten years and the revenue would be dedicated in large part to helping municipalities implement priorities identified in their MVP plans.

The state also completed a drought management plan that includes improved metrics to identify the severity of droughts, ways to increase public awareness when a drought is anticipated or happening, measures to improve state agency response coordination, and recommendations for curtailing nonessential water use during a drought. This plan will ensure that the state can better manage the next severe drought we experience.

KEY DISAPPOINTMENTS

While EEA is leading on some fronts, the Administration has taken actions that are moving us in the wrong direction. Proposed changes to the Renewable Portfolio Standard would, generally speaking, offer increased incentives for more polluting wood-burning

CURRENT GRADE	ISSUE
B	ENVIRONMENTAL BUDGET
C	CLEAN ENERGY AND CLIMATE JUSTICE
A-	CLIMATE RESILIENCE
F	ENVIRONMENTAL JUSTICE
A-	WATER
C	PUBLIC TRUST TIDELANDS
D-	PROTECTING OUR HEALTH FROM TOXIC CHEMICALS
D	SOLID WASTE
B	LAND CONSERVATION

power plants and municipal waste combustion, weaken standards for hydropower facilities, and create uncertainty for solar developers. It is disappointing that the Administration is shifting away from rigorous standards that incentivize clean and renewable energy technologies.

In a similar vein, the Administration's continued support for expanded fossil fuel infrastructure is problematic. The handling of the air quality permit for the Weymouth compressor station was deeply flawed and raised serious questions about the state's commitment to environmental justice and meeting our greenhouse gas emission reduction targets.

As we go to press, the position of Environmental Justice Director remains unfilled—a position that has been empty for three years. We have assurances from the Administration that they are close to hiring someone, however the fact that it has taken so long indicates that environmental justice has not been a priority.

The Administration also has obstructed progress on protecting Massachusetts residents from toxic chemicals. Implementation of the Toxics Use Reduction Act has nearly ground to a halt, and the Governor took the egregious

step of vetoing the Children and Firefighters Protection Act in January.

At the end of September, rebates to encourage the purchase of electric vehicles (EVs) were discontinued because funding ran out. Given our ambitious goal of having 300,000 EVs on the road by 2025, the inability to offer rebates at this critical juncture is of concern. To date, the Administration has not identified or proposed a sustainable funding source to replenish EV rebate funding.

Finally, solid waste generation in the Commonwealth is increasing. There are clear links between energy consumption, water contamination, public health, municipal budgets, and solid waste, yet we are seeing no sense of urgency or bold policy recommendations to deal with this issue.

We provide this performance review and recommendations to highlight progress and inaction on issues that are priorities for our organizations. While it is not meant to be comprehensive, it does cover many of the most pressing environmental issues we face. We offer it in the spirit of encouragement and with a sense of urgency to achieve meaningful progress in the term ahead.



Environmental Budget

Consistent advocacy and a strong revenue picture led to increases in support for our environmental agencies this year. We appreciate that the Governor's budget included increases for the Green Budget coalition's priorities including the Dept. of Environmental Protection (MassDEP) administration, Dept. of Conservation and Recreation (DCR) parks, the DCR watershed program, and the Division of Ecological Restoration. The Governor's increases amounted to nearly \$5.5M on these four line-items alone. This budget, which was further increased by the legislature, continues progress in ameliorating historical budget cuts that have left the agencies short-staffed and unable to carry out their myriad, and ever expanding, responsibilities. Increases from last year have led to critical new hires at MassDEP and DCR. MassDEP has been able to hire nearly 30 people, including seven positions in compliance and enforcement,

and several in the wetlands and waterways program.

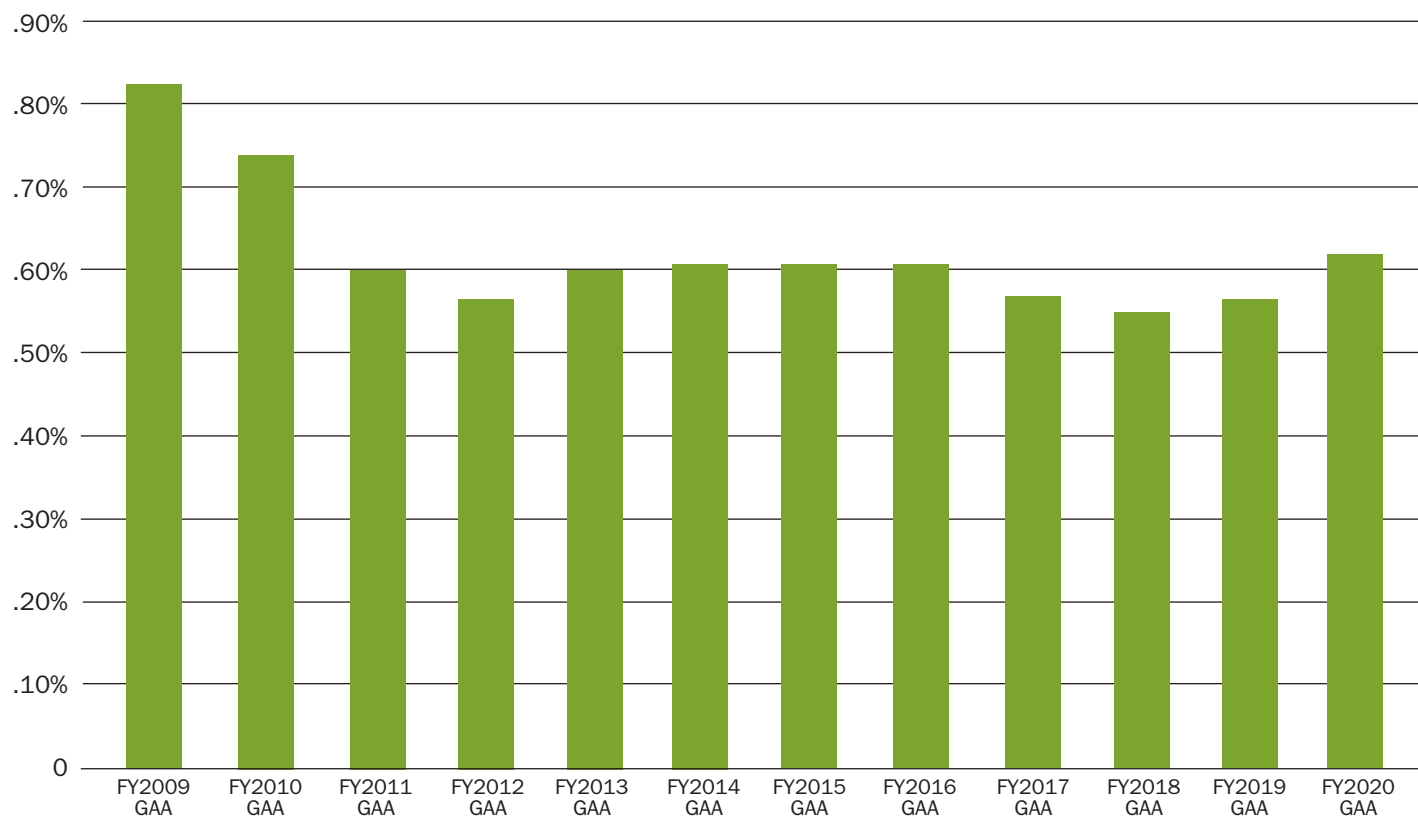
We also applauded the Governor for recently including an additional \$28.4M in a supplemental budget for MassDEP to test water supplies for Per- and Polyfluoroalkyl Substances (PFAS) contamination and for grants to support treatment and design of affected drinking water systems. This is an emerging issue of high concern. PFAS are synthetic chemicals found in many products, including food packaging, household cleaners, and nonstick cookware. These chemicals are highly toxic and persist in the environment because they don't degrade.

RECOMMENDATION

- **Continue to increase operating budgets for EEA departments and agencies** to strengthen programs that protect our natural resources, protect public health, and urgently address climate change.



Massachusetts Environmental Operating Budget as a Share of the Overall State Operating Budget



GAA — General Appropriations Act



Clean Energy and Climate Justice

The most recent science tells us we need to accelerate action to avoid the worst impacts from climate change but Washington is moving us backwards. The states must step up. EEA has been active on these issues, leading other states in developing new programs to tackle greenhouse gas emissions from the transportation sector and supporting the buildout of large-scale offshore wind. However, slow progress in other clean energy sectors and policies and orders that negatively impact climate justice communities result in a mixed grade overall. We challenge the Administration to prioritize climate justice in updating its approach to gas policy and clean energy development in the Governor's second term.

The Administration has accelerated Massachusetts' progress on clean energy, greenhouse gas reductions, and climate justice by:

- **Pursuing the development of Massachusetts' offshore wind resources.** EEA agencies worked with MA's electric utilities to finalize and approve a contract for 800 megawatts of offshore wind with Vineyard Wind, and EEA and Governor Baker have expressed strong continued support for the project in the face of late-arising hurdles in federal permitting. The Department of Energy Resources (DOER) is now moving forward with a second offshore wind procurement and will assess the potential efficacy and cost savings of coordinated transmission for offshore wind.
- **Leading a regional collaboration of Northeast and mid-Atlantic states working to reduce greenhouse gas emissions from the transportation sector.** Secretary Theoharides chairs the Leadership Team and MassDEP Commissioner Suuberg co-chairs the Executive Policy Committee of this effort,



known as the Transportation and Climate Initiative (TCI). Addressing climate-damaging emissions and air pollution from this sector is critical if we are to meet our GHG reduction targets and improve quality of life for vulnerable populations underserved by our transportation systems.

- **Attempting to clean the electricity peaks. DOER has begun a rulemaking process aimed at reducing emissions from power plants called on at times of peak energy demand.** These rules have the potential to reduce the need to run dirty and expensive peak power units, but need to be carefully crafted to avoid the opposite effect.
- **Studying how to meet the Global Warming Solutions Act emissions reduction targets.** EEA is conducting a comprehensive scenario analysis to identify pathways to achieve the Global Warming Solutions Act's 2050 emissions target, inform an appropriate interim target for 2030, and prioritize the policies necessary to achieve those emissions reductions.

The Administration has lagged in tapping into Massachusetts' clean energy and energy efficiency potential and advancing climate justice by:

- **Issuing an inadequate solar incentive program.** Arbitrary caps on net metering, along with the limited capacity of the SMART (Solar Massachusetts Renewable Target) incentive program, continue to slow the growth of solar energy in many communities. Additionally, the level of incentives is inadequate for many categories of projects, including solar installations on commercial and industrial rooftops, parking lot canopies, and projects serving low-income communities. DOER has proposed changes to SMART that would help address some of these shortcomings, but the state should do more to incentivize low-income solar projects and set more ambitious targets for solar growth. Furthermore, the caps on net metering remain an unnecessary barrier.

- **Approving an energy efficiency plan that continues to underserve renters and undercount climate benefits.** The American Council for an Energy-Efficient Economy recently rated Massachusetts the #1 most efficient state on its annual scorecard for the ninth consecutive year. However, this top ranking is not a sufficient measure of success with regard to the Commonwealth's efforts to fully exhaust its cheapest energy resource or to ensure that all residents who pay into the program are able to access and/or benefit from efficiency equally. The Department of Public Utilities notably stripped from the final 2019-2021 Three Year Energy Efficiency Investment Plan a performance metric that would have incentivized the utilities to better serve renters and a method of accounting fully for the full greenhouse gas avoidance benefits of energy efficiency. Both of these provisions were unanimously recommended by the Energy Efficiency Advisory Council.
- **Ending the MOR-EV rebate.** At the June 2019 Zero Emission Vehicle (ZEV) Commission meeting, DOER announced the elimination of the MOR-EV program that offers incentives of up to \$1,500 to buy or lease an electric vehicle. Officially unfunded as of October 1, this rebate has been critical to the adoption of electric vehicles in the Commonwealth. Cancelling the program will set us back in meeting our ZEV commitments and climate goals. While a temporary funding source has been proposed and appears likely to be approved shortly, the Administration has not identified a sustainable source of funding for EV rebates.

The Administration has taken Massachusetts in the wrong direction by:

- **Proposing to weaken the Renewable Portfolio Standard (RPS).** DOER has proposed lowering the standards for wood-burning power plants to count as the most highly-incentivized type of "renewable" electric generation which would let inefficient and

dirty biomass electric plants qualify. It is also proposing to increase incentives for electricity generated from existing trash incinerators, which will have direct consequences for Environmental Justice communities. DOER is also proposing to weaken standards for hydropower facilities, alter existing solar incentives in a way that could create significant market uncertainty, and change the rules for energy imports.

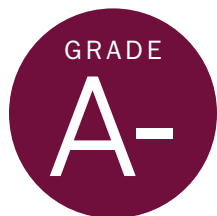
- **Failing to reckon with the environmental and societal costs of fracked gas.** In addition to a general refusal to acknowledge the full public health and climate justice impacts of fracked gas, EEA agencies have specifically failed to protect the community surrounding Enbridge's proposed Weymouth compressor station. A promised Health Impact Assessment was released late in the review process with an inadequate scope and inaccurate information, and a 759-page document dump of air quality monitoring data was produced in the midst of MassDEP's hearings on the project's air permit.

RECOMMENDATIONS

- **Continue and strengthen Massachusetts' leadership on offshore wind energy**, by moving ahead on a rapid timetable with the procurement of the next 1,600 megawatts of offshore wind.
- **Continue work towards a robust and equitable TCI program** that reduces greenhouse gases, improves air quality, and invests in clean transportation options.
- **Move ahead with a strong 2050 GWSA study** that goes beyond 80% greenhouse gas emissions reductions by 2050, set a 2030 greenhouse gas emissions target of at least 50% below 1990 levels, and issue strong regulations to achieve emissions reductions across all major sectors.
- **Include public processes and climate justice goals in all energy planning, analysis, and regulations** to ensure the benefits of the clean energy economy are available to all communities and existing inequities are addressed by new programs and initiatives.
- **Enhance the SMART program** by providing improved incentives for large rooftop installations, low-income solar projects, and other important categories of solar projects, and work to remove all caps on net metering.
- **Abandon plans to weaken RPS regulations that would allow** more biomass and trash incineration to qualify as "renewable" energy.
- **Oppose the expansion of gas pipelines, compressor stations, and other fossil fuel infrastructure** using all available regulatory levers and strategies.
- **Accelerate electric vehicle adoption by prioritizing and identifying a sustained source of funding** for incentive programs, developing an EV car-sharing program and a comprehensive EV program for low-income residents that provides more generous rebates, addresses availability of charging infrastructure, and applies to used electric vehicles.



Climate Resilience



As we experience the impacts of climate change with more extreme storms, precipitation, heat, and drought, the Commonwealth needs a two-pronged approach—reducing greenhouse gas emissions and preparing for the impacts of a warming climate. Regardless of our mitigation efforts, there is a certain amount of climate impact that we cannot avoid. These impacts will be felt statewide, especially in environmental justice communities, and much needs to be done to identify vulnerabilities, plan for climate change impacts, and provide resources to adapt. The Administration has already taken a number of significant actions to move a climate change adaptation and resiliency agenda in the Commonwealth.

The Administration has accelerated progress by:

- **Publishing an integrated Statewide Adaptation and Hazard Mitigation Plan** that serves as the state's adaptation strategy. In August 2019, the Administration launched the Resilient MA Action Team (RMAT), an inter-agency team that will work to implement the plan.
- **Successfully growing the Municipal Vulnerability Preparedness grant program** which provides technical and financial assistance to cities and towns undertaking climate adaptation work.
- **Introducing legislation that would generate a new revenue stream for climate adaptation** based on an increase in the state's deeds excise tax.

- **Committing to revising state regulations and policies through the lens of climate change** including revisions to the state's Waterways Regulations.

The Administration is still lagging on:

- **Implementing mandatory climate adaptation measures for new development and infrastructure.** Climate adaptation remains a voluntary, elusive, and moving target for private actors even when they are receiving state subsidy for projects.
- **Requiring investor-owned utility companies to proactively plan for the effects of climate change** on important infrastructure.

It is also critical that the Administration keep housing needs front of mind as we make advances in our resiliency planning. Climate change is a threat multiplier, meaning it will exacerbate equity issues, including housing insecurity, that are already facing the Commonwealth's most vulnerable communities. Unstable housing is an environmental problem because the lack of affordable housing decreases the ability of individuals and communities to be resilient to the effects of climate change. By investing in climate-resilient affordable housing, the Commonwealth can reduce energy and transportation-related pollution, slowing the effects of climate change, increasing resiliency to climate impacts, and reducing economic burdens for residents.

RECOMMENDATIONS

- **Require that all projects receiving state funding assess climate risks and include climate adaptation measures.** The Commonwealth must hold projects to a consistent and transparent climate resilience standard to promote fiscal responsibility and ensure that all new development and infrastructure is sustainable and able to withstand future risks.
- **Ensure that any new revenues raised or designated for adaptation prioritize energy resilience infrastructure in environmental justice communities.** Investment in energy resilience infrastructure, such as multi-user community microgrids in low-income and environmental justice communities, will increase the ability of these communities to withstand and bounce back from climate disruptions.
- **Prioritize affordable housing as a climate resiliency remedy.** State investment in affordable housing should include rigorous standards requiring that all housing development meet climate resilience standards and be low carbon or carbon neutral.
- **Require the Department of Public Utilities to open a rulemaking proceeding to consider and develop strategies for utilities to adapt to climate change and engage in long-term adaptation planning.** Investor-owned utilities are not currently required to engage in proactive long-term adaptation planning; rather the focus is on far more expensive reactive emergency response. Mandating consideration of and adaptation to future risks will ensure the long-term viability of critical infrastructure, prudent use of ratepayer dollars, and promote public health and safety.
- **Establish a commission to research, advise, and coordinate resilience and adaptation projects across the state.** A commission is needed to urgently investigate and provide recommendations for addressing existing legal, regulatory, financial, and governance barriers to planning for and constructing climate change resilience and adaptation infrastructure.
- **Reinsert coastal zone standards into the state building code** to ensure smart construction in our vulnerable and storm-prone coastal areas.



Environmental Justice



Environmental justice (EJ) is based on the principle that all people have a right to be protected from environmental pollution and to live in and enjoy a clean and healthful environment.

Despite a growing awareness of environmental justice in the state legislature and long-standing continued support among grassroots environmental and public health advocates, inaction and abdication from basic environmental justice responsibilities as well as legal requirements have continued to be the norm for the Administration. An electrical substation in East Boston and a landfill in Saugus—as well as other issues including a natural gas compressor station in Weymouth, a waste facility in Millbury, and a water quality crisis at Mass Correctional Institution Norfolk—illustrate the continued burdens placed on certain populations and the lack of state action to address the impacts from these facilities or failing systems.

We acknowledge that equity is included in the Transportation and Climate Initiative framework (see p. 7) and in the criteria for the Municipal Vulnerability Preparedness program (see p. 10), but it is too soon to evaluate the benefits/impacts of these efforts on EJ communities.

The Administration has lagged in promoting environmental justice by:

- **Not ensuring or requiring that state resources are distributed equitably.** There is strong evidence that low income communities receive disproportionately fewer state resources than higher income communities. This is especially concerning for large scale energy programs such as Mass Save into which all ratepayers pay. There is little evidence that the Administration considers the distribution and accessibility of clean energy subsidies for Environmental Justice communities.

- **Not working with developers and communities to take advantage of the Solar Massachusetts Renewable Target (SMART) program that incentivizes low-income projects**, resulting in less than 3% of projects in the program qualifying to serve low-income customers.
- **Not including specific safeguards or mechanisms in their transportation and climate resilience legislative priorities to make sure that EJ communities are included or prioritized for resource allocation.** Without specifically addressing the unique challenges and historical discrimination that EJ communities have faced, communities that have the resources to participate in large public programs will disproportionately benefit.
- **Not convening the Governor's Environmental Justice Advisory Council for the past three and a half years**, as required by Executive Order 552. EEA has similarly failed to convene the Interagency Environmental Justice Working Group, offer training for its and other secretariat employees, convene an annual environmental justice public meeting, or complete annual EJ reports, as required.

RECOMMENDATIONS

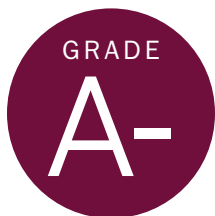
We call for the Administration to prioritize and advance social, racial, and economic equity in our state's environmental, energy, and public health programs and capital investments. It

is clear after almost five years in office that by not addressing racial, social, and economic inequities, the Administration is failing to meaningfully remedy them.

- **Initiate implementation of EO 552 immediately.**
 - Ensure that all state secretariats have an Environmental Justice Coordinator in place, as mandated by the Executive Order, beginning with EEA agencies.
 - Appoint members to the Governor's Environmental Justice Advisory Council and convene the Interagency Working Group on Environmental Justice.
 - Create a plan and a publicly available timeline for implementing all other provisions of EO 552 and the EJ Policy.
- **Empower the new Director of Environmental Justice to fulfill unmet promises from the last three years**, including completion of the reports mandated by the FY19 and FY20 budgets.
- **Publicly oppose projects and policies that would contribute to environmental and public health degradation in historically overburdened communities** by denying permits and other approvals for projects that permit new, expanded, or modified polluting facilities in and near environmental justice communities.



Water



The Administration's efforts to address the conservation and protection of freshwater resources intensified over the past 18 months. The reasons for this improved performance include the creation of a new program to assist municipalities in addressing climate change, the legislature's allocation of increased funding for critical river protection programs within MassDEP and the Division of Ecological Restoration (DER), and the completion of some long-overdue commitments. While we are pleased to see this progress, we encourage EEA to move from this somewhat piecemeal approach to one that prioritizes and articulates a clear vision and set of goals to protect the Commonwealth's freshwater resources. Secretary Theoharides has a unique opportunity to lay out a new vision for water protection, addressing the challenge of protecting our environment and public health in the face of climate change.

The Administration has accelerated progress on water resources protection by:

- **Implementing the Municipal Vulnerability Preparedness (MVP) Program.** Designed to assist communities in building resiliency and adapting to climate change impacts, the MVP Program has been a boon to rivers across the state, supporting planning and action grants that cover areas critical to water health, including support for green infrastructure, stormwater, dam removals, and culvert upgrades.
- **Expanding the Division of Ecological Restoration.** The recent addition of four new staff at DER has dramatically expanded the capacity of this small division's ability to remove dams, upgrade culverts, restore cranberry bogs, and improve water quality around Massachusetts.

- **Updating Water Conservation Standards.** The adoption of new standards developed by the DCR Office of Water Resources enables the Commonwealth to access timely and accurate information about best water conservation practices. Adoption of best practices will help ensure resources are used efficiently and not wasted.
- **Developing the Watershed Group Monitoring Grant Program.** This program, housed within MassDEP's Watershed Planning Program, will expand the capacity of third-party stakeholders to collect water quality data which can then be shared with the agency, an important step in ensuring that up-to-date water quality data is complete across the state.
- **Completing the Massachusetts Drought Management Plan.** DCR's Office of Water Resources and EEA coordinated a thoughtful, interagency process to update the state's Drought Management Plan.
- **Rebuilding existing programs.** MassDEP is using restored operating budget funds to backfill nearly 30 critical program positions. Many of these restored positions are water-related. As the agency rebuilds from the budget cuts imposed by the most recent recession and the Early Retirement Incentive Program, MassDEP's ability to conduct critical water protection work will be greatly strengthened.
- **Developing the Water Utility Resilience Program,** a coordinated expansion of efforts supporting local drinking water and wastewater utilities as they seek to ensure that infrastructure is sound and resources can withstand severe weather events.

The Administration is lagging on:

- **Issuing strong Water Management Act permits.** While we appreciate that the Administration has begun to roll out the overdue Water Management Act permits, the permits that have been issued to date will not adequately safeguard streamflows. For example, MassDEP gives public water suppliers seeking future

increased withdrawals retroactive credit for mitigation measures performed as far back as 2005. This effectively negates the mitigation requirement and virtually guarantees that these freshwater resources will continue to lose water—the very opposite of the regulations' intent. Seasonal limits on outdoor non-essential water use, another requirement for new permits, conflict with current EEA recommendations for reducing outdoor watering during droughts. MassDEP has also implemented a nonsensical policy to loosen watering restrictions in the current year if the municipal permit-holder met the state's residential water conservation standard in the previous year. While we understand MassDEP's desire to reward good behavior, they should not do so at the expense of environmental protection.

RECOMMENDATIONS

- **As MassDEP moves forward with issuing updated Water Management Act (WMA) permits, we urge them to make the following improvements:**
 - Require true mitigation for increased future withdrawals in WMA permits. MassDEP should not give retroactive mitigation credit unless, in accordance with the regulations, the permittee can demonstrate that measures since 2005 will actually mitigate the impact of the proposed increased withdrawal being sought.
 - Revise WMA permit seasonal limits on non-essential outdoor water use so that they do not conflict with the revised Drought Management Plan and meet EEA's recommended actions to reduce outdoor water use at each drought stage. Include effective seasonal outdoor watering limits in permits to protect freshwater resources and their ecology.
 - Enforce WMA permit limits and conditions to create an equitable and level playing field for all permittees of this shared natural resource and protect the environment.

- Assign additional staff to implement the Water Management Act program. The 2014 regulatory changes have created a steep learning curve, both for program staff and permittees, and the agency has struggled to issue timely permits.
- Make private wells, of which there are over 400,000 in the state, and especially irrigation wells, subject to the same outdoor water use restrictions as those for residents on public water supplies.
- **Increase capital funding for Division of Ecological Restoration programs.**
As climate change exacerbates negative impacts on critical infrastructure, DER's role will become more prominent and demand for their services—already high—will increase. Capital funding will be required for DER's river restoration, culvert, and cranberry bog programs.
- **Update MVP application guidelines to allow watershed associations to apply for planning and action grants.** As climate change will significantly impact water resources and water knows no municipal boundaries, it is in the best interest of the state to support multi-municipal resiliency efforts using a watershed-scale approach. Many of the state's watershed associations have managed multi-town projects and have the knowledge and expertise to coordinate these regional efforts.



Public Trust Tidelands

Public trust tidelands in Massachusetts consist of all lands that are presently or were ever historically beneath the waters of the ocean, including lands that are always submerged as well as those in the intertidal area (i.e., between the high and low tide marks). In Massachusetts, public and private uses of tidelands are governed by a concept in property law known as the Public Trust Doctrine, which dates back centuries to ancient Roman law. The doctrine provides that the public has a range of rights and interests in these tidelands and that these rights and interests are held by the state “in trust” for the benefit of the public. The Commonwealth’s primary tool for protection and promotion of public use of its tidelands and other waterways is Massachusetts General Law Chapter 91, the waterways licensing program and the implementing Waterways Regulations.

Through Chapter 91, the Commonwealth seeks to preserve and protect the rights of the public in those tidelands and waterways, and to guarantee that both public and private uses of tidelands and waterways serve a proper public purpose and provide significant public benefits. The Division of Wetlands and Waterways in MassDEP administers the Chapter 91 Waterways Program.

The Administration has accelerated progress on public trust tidelands protection by:

- **Increasing enforcement and compliance activities** for existing licensees.
- **Commissioning a study** on private use of public spaces.
- **Developing an electronic tool** to access Chapter 91 licenses and management plans.
- **Committing to revise state Waterways Regulations** to better address climate change risks and facilitate climate adaptation measures.



The Administration is lagging on public trust tidelands protection in these areas:

- **The Administration must more vigilantly monitor existing licenses and be accountable to its duty as public trustee when approving substitute regulations under Municipal Harbor Plans (MHPs).** MHPs are a municipal planning tool that allows for the establishment of local objectives, standards, and policies for guiding public and private use of land and water within jurisdiction of Chapter 91. Communities can use Municipal Harbor Plans to customize the Chapter 91 regulatory program in ways that allow some development flexibility while honoring the spirit of ensuring robust public access and use. MHPs must be approved by the Secretary of EEA.
- **While MassDEP has held the line on several important tidelands policies, there continues to be compliance and enforcement challenges that have negatively impacted the public's access rights.** The program is also challenged, as it has been for many years, by staffing shortages resulting from low budget allocations. The Administration must shift its stance more proactively and energetically toward fulfilling its public trust obligations, a responsibility that has become even more paramount in the face of climate change. In recent years, EEA has approved at least two MHPs that are fundamentally and egregiously at odds with the policies of prior administrations and fail to meet the Commonwealth's public trust obligations.
- **EEA agencies should also exercise their authority to levy fines against licensees who are in noncompliance** and non-cooperative and in some cases require additional compensatory mitigation.

RECOMMENDATIONS

- **Dedicate additional resources to the Division of Wetlands and Waterways in MassDEP to ensure ongoing compliance with Chapter 91 Waterways licenses.** Based on current staffing levels, it is nearly impossible for the Administration to adequately monitor and enforce existing licenses. Scarce resources also make it difficult for new license applications to undergo proper, rigorous review. Dedicating additional resources will increase the effectiveness of the program and ensure better outcomes and protection of public trust rights.
- **Develop a policy for private use of public spaces provided through licenses.** The Administration should develop a consistent and transparent process to govern the ability of private property owners to close off public spaces on their properties and profit from these private events at the expense of the public. At a minimum, this policy should include limiting the amount of time public spaces can be closed and requiring mitigation/fees for periodic private use.
- **Revise Municipal Harbor Planning Regulations.** The Administration should revise these regulations to increase the consistency, transparency, and accountability of the municipal harbor planning process and to provide judicial review of EEA decisions. This will establish a better process for municipal harbor plan approval and better protect public trust rights.
- **Revise the Chapter 91 Regulations to address climate change realities.** This will help ensure that public access and amenities on tidelands are prepared for and protected from climate-related increases in flooding and extreme weather.



Protecting Our Health from Toxic Chemicals

Exposure to toxics can lead to cancer, developmental disorders, respiratory illness, and endocrine disruption, among other health impacts. Massachusetts led the nation when we passed the Toxics Use Reduction Act in 1989. Sadly, the Commonwealth has lost its leadership role as other states have taken focused action to protect public health from exposure to toxic chemicals.

The Administration has accelerated progress on protecting public health from toxic chemicals by:

- **Starting a dialogue with advocates and municipal officials about nanomaterials—** tiny particles which have unique properties due to their small size, making them both uniquely useful and sometimes uniquely toxic. Companies and institutions using nanomaterials are not required to report their use, thus

leaving state and municipal governments and first responders in the dark about how to prevent harm to human health or the environment from their use or release.

- **Taking initial steps to address contamination of drinking water from perfluorinated chemicals (PFAS).** PFAS are used in firefighting foam as well as many consumer products. Chemicals in this class are linked to birth defects, cancer, and other health problems and are known as “forever chemicals” because they don’t break down in the environment. The Administration included funding in a recent supplemental budget for PFAS cleanup and signed onto a letter in support of provisions in the federal National Defense Authorization Act that would support PFAS cleanup and health protection. While this funding is a good first step, much more will be needed to tackle this issue.



- In addition, **MassDEP is in the process of establishing groundwater standards for PFAS chemicals.** MassDEP has proposed a combined limit of 20 parts per trillion (ppt) for six PFAS chemicals. However, this limit is not health protective enough based on available studies and data. In January 2019, MassDEP announced that it would begin a stakeholder process to develop a Maximum Contaminant Level (MCL) for PFAS in drinking water. The persistence of PFAS chemicals in the environment and the human body requires that they be regulated as strictly as is possible with current technology.

The Administration has lagged in protecting our health from toxic chemicals by:

- **Most egregiously, Governor Baker pocket vetoed legislation that would have protected children, families, and firefighters from toxic flame retardants in January 2019.** In doing so, the Governor caved to the pressure of chemical industry lobbyists and kept Massachusetts from being the 13th state to ban one or more toxic flame retardants. The bill would have banned 11 toxic flame retardants in children's products, household furniture, bedding, carpeting, and window treatments.
- **Doing little to implement the state's Toxics Use Reduction Act (TURA) program.** The TURA Administrative Council and Advisory Committee have not been holding regular meetings. In early 2018 the program completed the work begun in 2017 to add C1-C4 halogenated hydrocarbons to the TURA Toxic or Hazardous Substance List but has not initiated any new proposals for adding chemicals to that list or the list of Higher Hazard Substances, and the state continues to be out of compliance with the TURA law because the Administrative Council has not raised the fees on toxic chemical users since they were set in 1991.
- **Taking five years to finally promulgate regulations to implement the light bulb recycling portion of the Mercury Management Act** updated in 2019.

RECOMMENDATIONS

- **Support passage of and enact the Children and Firefighters Protection Act in its current form.** Massachusetts has an opportunity to join other states in protecting children and firefighters from toxic flame retardants and the Governor should embrace and encourage that opportunity rather than standing in the way or attempting to minimize its impact.
- **Fully implement the Toxics Use Reduction Act** by resuming regular meetings, considering at least five new chemicals for listing or designation as Higher Hazard Substances, and modernizing the fee structure in keeping with state law. Furthermore, resist industry attempts to weaken the program.
- **Re-establish the interagency task force on nanomaterials** and assess what authorities Massachusetts can use to gather data about nano-technology use and releases, including TURA listing and right to know, and then take appropriate action.
- **Protect the Commonwealth from PFAS exposure** by lowering the proposed allowed limit for PFAS in groundwater under the MCP and setting the MCL for PFAS in drinking water to the minimum detectable level. Additionally, in order to protect water systems of all sizes and lay financial responsibility on industry polluters responsible for the contamination, the Administration should follow the lead of New Jersey and work to identify companies that introduced toxic PFAS chemicals into the water supply and hold them accountable for all incurred costs of treatment required to provide Massachusetts communities with clean and safe drinking water.



Solid Waste

EEA has consistently failed to acknowledge that its lackluster approach to reducing solid waste degrades the quality of our air, land, and water and results in greenhouse gas emissions. Rather than reducing waste, the Commonwealth disposed of 230,000 more tons of waste in 2018 than in 2010, according to MassDEP.

We know that there are significant savings and job opportunities to be had if the Commonwealth adopted a Zero Waste approach, yet the state has allowed the waste stream to increase and allowed landfill and incineration facilities to expand.

We are seeing the impacts of inaction. Municipal recycling costs have increased throughout the Commonwealth, now that China has refused to accept our mixed paper or plastic because of its high levels of contamination. Materials that are easily recycled, like corrugated cardboard and textiles (about 15% and 6% of

the waste stream respectively) are still being burned and buried. Environmental Justice communities, where most of our solid waste infrastructure is located, continue to suffer the health effects from landfill and incineration facilities in their communities.

The Administration has accelerated progress in addressing solid waste issues by:

- **Supporting the development of composting and anaerobic digester infrastructure for food scrap diversion and processing.** As part of that effort, the Administration has also committed to evaluate lowering the threshold on the Commercial Food Waste Ban from a ton or more a week to half a ton or more a week per institution. If successful, this would support and increase food rescue, composting, anaerobic digestion, and decrease the Commonwealth's reliance on incinerators and landfills.



The Administration is lagging in addressing solid waste in these specific areas:

- **Defending its permit for the Wheelabrator Saugus Ash Landfill to expand its capacity,** which the Superior Court has upheld, despite the fact that the ash landfill is unlined, has no groundwater monitoring, is in an Area of Critical Environmental Concern, and is located in a densely populated Environmental Justice community. Meanwhile, the adjacent Wheelabrator Saugus Incinerator, the oldest incinerator in the country, is running so poorly that it has created significant noise pollution in the area.
- **Proposed rules threaten to disincentivize waste reduction and increase emissions.** The Division of Energy Resources has proposed regulatory changes to the Renewable Portfolio Standard regulations that would increase subsidies and incentives for incineration and biomass, despite the fact that they are not renewable and incineration is one of the most expensive and polluting methods of producing energy.
- **The Master Planning process is not generating confidence.** MassDEP has begun the Solid Waste Master Plan 2020-2030 process. While the staff at MassDEP is diligent and committed, the framing of the discussion already indicates that the waste companies are using this process to generate support for more disposal capacity, rather than acknowledging real economic and environmental progress will necessitate adopting Zero Waste programs and principles while aggressively phasing out landfills and incinerators. There has been a great deal of discussion of contamination of single-stream recycling and constricted landfill capacity, but no acknowledgement of the potential for expanding deposit return systems or the need to replace single-stream with dual and deep sort recycling.

RECOMMENDATIONS

- **Require effective reduction programs throughout the state for both residential and commercial waste.** This should include programs like Save Money and Reduce Trash (SMART) or Pay-As-You-Throw (PAYT) that incentivize reduction.
- **Support statewide bans on single-use plastic** to reduce need for landfill and incineration capacity, mitigate financial toll and increase effectiveness of municipal recycling, and eliminate health risks, particularly for overburdened Environmental Justice communities.
- **Incentivize dual and deep sort recycling** and promulgate regulations to phase out single stream recycling.
- **Prohibit expansion of any ash or municipal solid waste landfills in the Commonwealth.** Promulgate rules to require that incinerators continuously monitor emissions (including dioxin) and be held to the strictest standards at all times.
- **Withdraw proposed changes to the RPS regarding incinerators and biomass.**
- **Add textiles to Waste Banned materials,** and aggressively enforce the new Ban, along with the existing Waste Ban on corrugated cardboard, to encourage the development of markets for textile and cardboard reuse and recycling.



Land Conservation

Land conservation takes on additional urgency as we understand the need to mitigate and adapt to climate change impacts. Be it for uptake of CO₂ by our forests, absorption of flood waters by wetlands, or providing corridors for migrating species, protecting natural areas is a critical undertaking. Massachusetts has been losing forestland to development at a rate of 7,000 acres a year, faster than any other New England state.

But it is not just large tracts of land that matter. Suburban and urban parks are also important. Recent studies indicate that being outdoors and experiencing nature contribute to better mental health.

The Administration is accelerating progress on land conservation by:

- **Increasing funding for agency partners** in the operating budget and for land protection programs in the capital plan. However, overall investment in land conservation has been steadily declining the past few years.
- **Supporting successful Community Preservation Act legislation** that increases resources for the state matching fund.
- **Initiating a statewide Resilient Lands Initiative.**
- **Incorporating biosequestration into the ongoing 80x50 climate study.**
- **Expanding the Dept. of Conservation and Recreation's Working Forest Initiative** which includes a nation-leading forest land-owner estate planning program that has resulted in the donation of hundreds of acres of conservation restrictions.



The Administration is lagging in progress on land conservation by:

- **Slowing the pace of conservation.** The number of acres protected has decreased from FY17 to FY19. Potential for future progress is represented in new funding proposals that could support land protection and other nature based solutions as a climate resiliency approach.

RECOMMENDATIONS

- **Make land protection a priority by increasing spending and acres protected.** Set ambitious goals to secure the values and benefits we need (clean water, clean air, carbon sequestration, resilient wildlife, and quality of life).
- **Integrate land protection and climate action** through the statewide Resilient Lands Initiative.
- **Use equity as a frame for land conservation** by considering disparate impacts of existing programs, particularly in rural communities, and assisting underserved communities with tools like the Conservation Land Tax Credit and the Greening Gateway Cities program.



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<https://www.environmentalleague.org>

Charles River Watershed Association

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Clean Water Action

<http://www.cleanwateraction.org/states/massachusetts>

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