

## MASSTC Eco-Toilet Project Updates - March 11, 2025

**Background:** MASSTC is working to study and facilitate the development of eco-toilets as nutrient management tools that can help towns across the Cape and Islands improve water quality in our impaired estuaries, bays, lakes and ponds. Both composting and urine diverting eco-toilet systems offer the ability to remove vast amounts of nutrients from our wastewater, yet these systems have not been widely adopted due to a variety of factors. Given their potential high performance, low cost, and eco-friendly features we are excited to help test and pilot their usage both at the Test Center and (pending regulatory approvals) throughout the Cape and Islands to help protect and restore our beloved aquatic ecosystems.

**Our work with the Town of Falmouth to develop a urine diversion project** continues through an extension to our Intermunicipal Agreement and allocation of additional funds so we can keep working to plan and prepare for a Town pilot urine diversion project. Our targeted date to complete necessary regulatory approvals and project planning is September 2025 with the intention to align ourselves for a funding request at November 2025 Town Meeting. The current focus of this project is working through necessary regulatory approvals with the Massachusetts Department of Environmental Protection (DEP) and the Massachusetts Board of Examiners of Plumbers and Gas Fitters (Plumbing Board). We have identified approval pathways, established good relationships, and are developing applications for necessary approvals with both agencies.

**As of today we have subcontracted with a Massachusetts licensed plumbing engineer!** The engineer is working to help us update our template urine diversion system plumbing drawings. These drawings depict the entire UD plumbing system from the toilet fixture to the storage tank and pump out port and are essential to assure we are meeting all applicable state and local plumbing codes when installing UD toilet systems. Once we have these updated drawings in hand we'll be submitting to the Plumbing Board for their review and acceptance into the state plumbing code.

**UD in the news!** Our friends in Vermont were in the BBC news last week for their pioneering work in community scale urine diversion. [Check out the article here.](#) As part of our efforts we are in regular communication with the [Rich Earth Institute](#) and they are actively supporting our work to develop urine diversion here on Cape Cod. Rich Earth has developed a [Cape Cod UD Education Coalition](#) which holds virtual meetings to discuss related topics. Sign up at the link above if you'd like to join and contribute to the conversations.

**Urine-Derived Fertilizer Approved in Massachusetts!** Our friends at Wasted have been successful in gaining approval of the first urine-derived fertilizer product in the State! [This product, called WeeBloom,](#) is a slow release fertilizer that's made by stripping the phosphorus from urine using magnesium and creating a magnesium-phosphate mineral called struvite. Wasted is helping us work through regulatory pathways to allow urine diversion systems in Massachusetts and they can't wait to have access to more pee to make more fertilizer!

Thanks for your interest and feel free to reach out with questions or ideas. I'll be back in touch as these efforts continue to progress and stay tuned for our upcoming open house for our new Clean Water Center in June (date YTD), which of course is fully outfitted with waterless urine diverting urinals, composting toilets, and greywater collection systems. Stay in the loop with everything MASSTC by signing up for our [newsletter here.](#)