



Citizens for the Protection of Waquoit Bay

P.O. Box 3021

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www.protectwaquoitbay.org

February 8, 2021

Dear Falmouth and Mashpee Select-boards, Con Coms and Falmouth WQMC,

We respectfully write to alert you to the potential disaster awaiting our bays and estuaries. Fully implementing comprehensive waste water treatment is absolutely essential to the long-term health of our estuaries. We stand by that goal and will always fight for it. However, fifteen years will pass before a final plan is implemented for Waquoit Bay. During this in between period, it is essential that we not miss opportunities to implement permanent infrastructure remediations that are the best for the recovery of our long-neglected water bodies.

Road runoff remediation technologies are often missing from discussions because it is a minor component of the total nitrogen budget; however, the choice of which technology to use plays an important role because of the toxins, pathogens, nitrogen and phosphorus components that it may or may not remove. Conventional road runoff catchment basins do not remove nitrogen or phosphorus. Vegetated swales that are well maintained do. Both are permanent improvements not likely to be addressed again for decades so deciding which technology to use will have long lasting implications for the particular recharge area served.

Road runoff always has the potential to be a killer with an ever-increasing chance of occurring. It carries heavy metals, hydrocarbons and pathogens toxic to fish and shellfish. **Although storm water runoff is a small contributor of the nitrogen load, it carries an inordinate capacity to stress the ecosystem. Global warming magnifies the impact of road runoff making it a more imminent danger to our bays.**

Road runoff has a more immediate and detrimental impact after a heavy rain because it deposits into bodies of water pathogens, metals (from tire rubber) and hydrocarbons (exhaust residue, oils, and other automotive fluids) that kill fish, close shellfish beds and swimming beaches. And that rain is getting heavier all the time thanks to global warming. Global warming has created more intense rainfall events that deliver more rain over very short time periods after extended dry spells. Rainfall events that once were expected to happen infrequently are now happening on a regular basis especially in **New England which has seen a 71% increase in "very heavy precipitation."**¹ These events carry significant amounts of pathogens directly into our bays with the potential to cause massive fish kills and shellfish bed closures.²

At a minimum, there should be no road runoff into any estuary's watershed and especially Waquoit Bay, which is recognized as an Area of Critical Environmental Concern (as are most of our salt water estuaries) and a significant nursery for several important fisheries. There are simple and affordable solutions including vegetated buffers, rain gardens and infiltration systems that provide effective treatment of storm water that remove nitrogen and phosphorus along with toxins. It is vitally important to the marine ecology and tourist

¹ <https://www.c2es.org/content/extreme-precipitation-and-climate-change/>

² https://www3.epa.gov/npdes/pubs/usw_b.pdf

industry to protect all of our bays and estuaries. We have taken the time to document some of the more egregious sources of road runoff directly into Waquoit Bay and its three tributaries.³

We call on you to recognize this problem and understand that it can be addressed easily in only a few years. However, if we miss this once in a life time opportunity, and take the easiest way out, the nitrogen and phosphorus components of the catchment area will continue to be sent into the recharge areas of our bays and freshwater ponds or lakes for decades upon decades.

We suggest that an ad hoc committee be formed to make recommendations within a year and also to investigate augmenting sources of funding. Thank you for your attention to this matter. We know that the health of our bays and estuaries is as important to you as it is to your constituents.

We respectfully request an agenda item to discuss this issue.

Sincerely

Matthew C. Patrick
President, CPWB

Judith McDowell, President
Falmouth Water Stewards

Ron Densmore, President
Falmouth Rod and Gun Club

Roberta Schilling, President
Cape Cod Chapter of Trout Unlimited

Hamblins Point Homeowners Assoc.

Seconsett Island Association

Mashpee Clean Waters

³ CPWB will provide hand annotated topographical maps with road runoff outfalls that are not addressed in current on-line town maps.