



**Meeting of the Mashpee Planning Board
Wednesday, June 15, 2022
Waquoit Meeting Room
Mashpee Town Hall
16 Great Neck Road North
Mashpee, MA 02649
7:00 PM**

Broadcast Live on Local Channel 18

Streamed Live on the Town of Mashpee Website: <https://www.mashpeema.gov/channel-18>

Call Meeting to Order

- Pledge of Allegiance

Public Hearing

7:10 PM (Continued from May 18, 2022)

Applicant: Marcello Mallegni, Forestdale Road, LLC
Location: 523 Main Street (Map 26, Block 6)
Request: The applicant requests consideration for approval of a 9 lot definitive subdivision plan of land consisting of approximately 18.05 acres located on Main Street (Route 130) between Nicoletta's Way and Echo Road

Old Business

- Local Comprehensive Plan Update
 - Assessment of 1998 Coastal Resources Chapter
 - Review of Existing Conditions for the following Local Comprehensive Plan Chapters: Housing, Economy, Cultural Heritage, Open Space and Recreation, Transportation and Circulation, Municipal Buildings, Facilities and Service, Sustainability, Natural Resources
 - Survey Review
 - Future community engagement dates and activities
 - Additional meeting dates proposal for review of Existing Conditions
- Discussion and possible vote regarding the clear cutting at 64, 58, and 54 Algonquin Avenue and 420 Nathan Ellis Highway and referral to the Cape Cod Commission
- Clean Water Initiative
 - Nitrogen Sensitive Area
- Affordable and Workforce Housing Initiative
 - Redevelopment and other target areas

New Business

- Review and vote to pay invoices submitted by Ed Pesce Engineering & Associates
- Review draft Floodplain Provisions bylaw amendment article

Chairman's Report

Town Planner Report

- Introducing Alex Beltran, Planning Department Intern



Town of Mashpee

*16 Great Neck Road North
Mashpee, Massachusetts 02649*

Public Comment

Correspondence

- Town of Falmouth Notices
- Town of Sandwich Notices
- Town of Barnstable Notices
- April 2022 Discharge Monitoring Report for South Cape Village- N = 6.0
- March 2022 Discharge Monitoring Report for South Cape Village – N= 4.0
- February 2022 Discharge Monitoring Report for South Cape Village – N= 3.6

Additional Topics (not reasonably anticipated by Chair)

Adjournment

To: Mashpee Planning Board

From: Evan Lehrer, Town Planner

Date: June 10, 2022

Re: 1998 Coastal Resources Element of the LCP

Coastal Resources Element – Present Status

Goals:

GOAL 1: TO MAINTAIN AND IMPROVE ESTUARINE WATER QUALITY AND THE HEALTH OF OUR COASTAL ECOSYSTEMS.

GOAL 2: TO MAINTAIN AND ENHANCE PUBLIC ACCESS TO AND ENJOYMENT OF MASHPEE'S COASTAL RESOURCES WITHOUT DEGRADING THOSE RESOURCES.

GOAL 3: TO MINIMIZE OR PREVENT LOSS OF LIFE, PROPERTY DAMAGE AND ENVIRONMENTAL DAMAGE DUE TO A COASTAL STORM.

GOAL 4: TO PROVIDE FOR SAFE NAVIGATION ON MASHPEE WATERWAYS.

GOAL 5: TO ENHANCE THE ECONOMIC BENEFITS OF THE TOWN'S COASTAL RESOURCES WITHOUT DEGRADING THOSE RESOURCES.

From the time of adoption of the 1998 Local Comprehensive Plan water quality and coastal resources have remained a high priority for the residents of the Town. This is clearly demonstrated at the level of investment that has gone into research and analysis of priorities such as surface and groundwater quality and sewerage as well as investments in the Department of Natural Resources both in terms of staffing and capital needs.

The 1998 Coastal Resources element focuses on nine (9) primary issue areas: water quality monitoring, stormwater runoff, Nutrient Loading, Aquaculture, Shellfisheries and Docks, Public Access to water, Waterways, Dredging, and emergency planning. Similar to other elements such as Transportation, the Town has addressed the vast majority of action items contained in the plan's focus, some exactly as described in the plan, but generally via some variation of the described action likely due to shifting variables such as staff capacity, external stakeholders, funding, etc.

This memo will take each of these nine areas of focus and elaborate on accomplishments and provide context as to what changes occurred since adoption in 1998 and present day. This memo was prepared in coordination with Department of Natural Resources Staff, primarily Shellfish Warden Donovan McElligat. Proposed actions are shown in bullets with the sub-bullets making reference to current status.

Water Quality Monitoring

- **Identify guidelines, participants, and resources for community water quality assessment program**
 - The DNR works in coordination with other agencies such as DMF and groups such as SMAST to leverage volunteers for a water quality sampling program presently.
- **Purchase equipment to test Total Nitrogen In-house**
 - The Town has never invested in equipment to test total nitrogen (TN) in-house.
 - DNR staff have noted that if such an investment were to be made, additional staff resources would be required but feel that, generally, continuing to leverage volunteers via the existing water quality sampling program is adequate.
 - Staff have noted that there is a new interest in investing in the appropriate equipment to test for cyanobacteria in-house. Currently lack the equipment for truly comprehensive and thorough species identification for harmful algal blooms. Would be interested in technology such as a Flowbot, a device that offers real time digital cell counts and identification of species to determine toxicity. This task is currently outsourced to a Rhode Island Laboratory.
- **Any other purchases to facilitate in-house water quality testing should be considered**
 - The Town has purchased several SONDES (real time water quality monitoring devices) and three (3) additional devices were recently purchased.
- **Continue to assess and reassess water quality sampling parameters**
 - Parameters are calibrated monthly every summer
- **Maintain a file on sampling and research programs within each estuary/MOUs with neighboring Towns, institutions, and state agencies.**
 - Have in place some agreements with educational institutions for water quality sampling.
- **Maintain file of Town-wide surface and groundwater monitoring data**
 - Numerous cluster subdivision special permits have conditioned approvals on groundwater monitoring programs. As homeowners associations become less active, properties change ownership it appears as though the responsibility to follow through on this reporting is not conveyed. The Planning Department receives annual monitoring reports from Windchime Condominiums, and status updates re: treatment of wastewater from Southport, South Cape Village, the High School, etc. however monitoring programs for single-family subdivisions do not appear to have been enforced. Monitoring and enforcement of these conditions is not feasible at current staffing level
 - DNR additionally has not maintained a file of Town-wide surface and groundwater monitoring sampling data. Should follow up with DNR Director to confirm.
- **Initiate a community estuary sampling program**
 - In coordination with SMAST the Town conducts water quality monitoring for Popponesset/Waquoit Bay estuaries.
- **Provide annual assessment of estuarine water quality**
 - Done in coordination with SMAST and annual report prepared by Dr. Brian Howes.
- **Continue and expand activities of Water Quality Task Force**
 - Water Quality Task Force is no longer active.

Stormwater Runoff

- **Focus stormwater improvements to Santuit River, Popponesset Bay Watershed, Waquoit Estuary**
 - Town is currently invested in stormwater improvements around Santuit River and Santuit pond via MVP Action grant.
 - Town continues to make improvements at Boat Ramps to mitigate stormwater impacts at these water access sites.
- **Stormwater runoff mitigation program**
 - No stormwater runoff mitigation program in place with the exception of the activity that occurs in conjunction with the Town's MS4 stormwater permit issued to the Department of Public Works. Measures that go above and beyond the minimum requirements to maintain compliance with the permit should continue to be prioritized as stormwater drains are very effective at removing water from roadways and quickly leeching to groundwater but are generally not effective at treating stormwater runoff to any reasonable quality.
- **Subdivision Regs and Special Permit requirements reflective of MassDEP Stormwater Management Policy**
 - Up to date
- **Establish a storm drain painting program**
 - Has not yet been completed or prioritized but may be implemented as part of the Santuit Pond MVP Action Grant.
 - DNR is considering enhancing the "adopt a storm drain" program which could include marking the drains so that community becomes educated on where the storm drain outfall is.

Nutrient Loading

- **Establish a 'working group' to study Nitrogen Management Options**
 - Beyond the activities of the Sewer Commission, there is not presently a working group tasked with studying additional nitrogen management options. The Board of Health is currently evaluating the potential of new I/A septic technologies.
- **Integrate nutrient loading data into Town GIS**
 - DNR Staff and Planner uncertain as what is meant by this action. Could potentially refer to the TMDL's for each watershed. DNR questions the utility of such an action.
- **Follow-up sampling from the 1997 Nutrient Related Water Quality within the Popponesset Bay System Study**
 - See SMAST references under Water Quality. Summer program addresses Popponesset Bay Nutrient related water quality.
- **Lobbying of state legislatures for implementation of Title V Revisions**
 - Uncertain what lobbying activities occurred since 1998, if any. Need to check in with Health Agent to discuss Title V revisions since 1998 that may deal with Nutrient Loading.

- **Regulatory Boards adopt regulations that reduce groundwater nutrient loading to surface and groundwater bodies after Comprehensive Watershed Nitrogen Management Plan (CWNMP)**
 - New cluster subdivisions require the installation of denitrifying septic systems. Some cases have allowed conventional title V only with a payment in lieu of for the purchase of shellfish seed to enhance the DNR shellfish program and shellfish portion of the CWNMP
 - Board of Health requires denitrifying systems for any use that exceeds 600 gallons per day.
 - ConComm has a bylaw review subcommittee. Need follow up to determine regulations that address nutrient loading.
 - Planning Board generally requires vegetated swales for special permit projects however this requirement has been in conflict with a Board of Health Regulation requiring subsurface infiltration in these areas for public health reasons. In heavy rain events standing water in these swales is of concern to the Board of Health, but subsurface infiltration reduces the effectiveness of the swale at filtering nutrients.
- **Amend Water Quality Zoning Bylaw as follows: 1.) be based on mass loading approach, and; 2.) increase minimum lot area in the Popponessett Bay Watershed R3 areas to two acres unless denitrifying septic used, connected to treatment plant, etc.**
 - Water Quality bylaw was amended to be based on mass loading approach in 2006.
 - R3 areas in Popponessett Watershed have not been rezoned since 1998.
- **Address the entire watershed with Nitrogen Management Plan**
 - Adoption of CWNMP addresses the entire watershed.
- **Integrate into GIS the hydrogeological mapping of groundwater recharge areas of coastal ponds and bays.**
 - Both mapped Zone II Groundwater Recharge Areas and the nearly identical Groundwater Protection Zoning District have been mapped in the Town's GIS.
- **Construct Sewer in accordance with CWNMP**
 - Phase 1 underway
- **Strengthen follow-up on privately funded Water Quality Monitoring Programs under water quality report bylaw**
 - Ability to do so limited by staff capacity and awareness of property owners that they are subject to such conditions such as the previously mentioned cluster subdivisions.
- **Strict enforcement of Town's Area of Critical Environmental Concern, Groundwater Protection District, and River Protection Districts**
 - Needs further discussion with Building Department.
- **Continue acquisition of conservation lands in recharge areas**
 - The Town has acquired numerous parcels in Zone II. Orinda, The Commonwealth, and other partners also hold significant acreage in these areas.
- **Town-wide education program re: fertilizers and pesticide use**
 - Ongoing. Priority around Santuit pond and other freshwater bodies
- **Amend Subdivision rules and regulations to limit tree clearing**
 - Follow up

Aquaculture

- **Development of an aquaculture plan: thresholds, grant size, appropriate number of grants**
 - DNR was recently awarded a significant grant from the Seaport Economic Council to develop a Harbor Management Plan primarily focused on identifying user conflicts within the waterways and making recommendations to mitigate them. Such user conflicts include mooring fields in priority areas for shellfish aquaculture. A component of the Harbor Management Plan will be to identify an Aquaculture Development Zone (ADZ). User conflicts are diminishing the ability of public and private aquaculture operations to maximize yields. Land based aquaculture is a relatively unexplored opportunity.

Shellfisheries and Docks

- **Review construction and expansion of docks in shellfish resource areas as to not adversely impact productivity**
 - Docks reviewed by ConComm and limited to 200 s.f. currently. This is a priority of the Harbor Management Plan work underway
- **Pre-application conference requirement with Shellfish Constable, Harbormaster, and Conservation agent**
 - Follow up with Conservation Agent
- **Prepare accurately scaled maps of shellfish resource areas**
 - Commonwealth maintains maps of resource areas: MassMapper, DNR maintains shellfishing maps and family area maps.
- **Develop survey, monitoring, and assessment program in support of shellfish resource areas**
 - Underway via development of Harbor Management Plan
- **Develop public informational handouts that are given to applicants of dock permits**
 - Shellfish and water quality guides produced and disseminated to applicants.
- **Develop Program to seek voluntary conservation easements where shoreline habitats are critical to species survival.**
 - Wetlands Protection Act covers this, however no local program has been maintained.

Public Access to Water

- **Include clear explanations of public ownership of submerged lands, public trusts, rights of fishing, fowling, and navigation within the intertidal zone.**
 - The Commonwealth of Massachusetts defines rights of ownership within intertidal zone. The Harbormaster clearly marks these with aids to navigation. Further, New dock permits get a placard. Further opportunities for communicating public ownership could potentially be enhanced.
- **Investigate and inventory the legal status of all known public landings and access to coastal water and great ponds to develop an access plan.**
 - Status of Access Plan unknown however reassessing and updating the legal status of all known public landings is a goal of the Harbor Management Plan getting underway.
- **Adequately Budget for maintenance of existing public access sites**

- The DPW has been working on enhancing numerous access points generally with joint funds from the Community Preservation Committee and Capital Improvement Program. Other access points, such as the boat ramp to Mashpee Wakeby are under state control.
- **Investigate new sites for public landings specifically, 10 acres at the end of Will's Work Road, Bufflehead Bay Land fronting Jehu Pond, Mitchell's Landing, and Jackbon Terrace.**
 - Public rights of access to water via Mitchell's Landing and Jackbon Terrace are contested by adjacent property owners. Mitchell's Landing has been blocked off by large boulders for numerous years. Jackbon Terrace was not taken by the Town when Jackbon was laid out for taking by Town Meeting. 'Terraces' along these portions of Shoestring Bay have been the subject of debate in recent years. DNR used to launch at Jackbon Terrace but has since ceased launching from there as a result of neighbors contesting the public or private nature of the area. Definitive research ought to be conducted. The Bufflehead Bay land fronting Jehu is held under CR and it is unclear if access to Bufflehead is a use permissible under that CR.
- **Develop Coastal Picnic Areas via Adopt a Seaview**
 - This action has not been prioritized.
- **Investigate new sites for ways to water**
 - Currently DNR is investigating the status of public access at the end of Punkhorn Point Road as well as Daniels Island Road. A new boat ramp is being contemplated for 2023. There is a kayak launch at the north end of Bayview Road on Seconsett Island. Need to follow up regarding remaining sites identified in the 1998 Action Plan. It is my understanding that these identified ways to water and historical public access sites were compromised when Mashpee land was registered without notation delineating those public rights of access. Private landowners have then had success preventing public access. Need to confirm this understanding and will reach out to former planner.

Waterways

- **Develop Multiple Use Water Management Plan**
 - Funded via Seaport Economic Council grant in 2022. Getting underway (Harbor Management Plan)
- **Enforce Boating Regulations; increase harbormaster funding.**
 - With a full time, year round harbormaster and full complement of seasonal assistant harbormasters all waterways except Santuit and Ashumet Ponds are actively patrolled by Harbormaster staff annually and boating regulations enforced.
- **Provide literature on speed zones, restricted areas to all mooring applicants, slip owners @ marinas, and those paying boat excise.**
 - Mooring applicants receive literature. Uncertain about whether or not marinas are giving literature to slip owners, and Assessor not currently offering literature to those paying boat excise.
- **Keep updating mooring records and enforce mooring regulations**
 - The entire mooring record database was recently digitized and maintained by DNR/Harbormaster staff. Harbormaster enforces those mooring regulations and removes illegal moorings.

- **Continued coordination between Harbormaster and Shellfish Warden for location of mooring/mooring fields in shellfish resource areas.**
 - These two staff level positions are in constant communication. Recent regulatory changes at the Food and Drug Administration (FDA) designed to protect the Public Health around fishing areas have removed the ability to utilize shellfish areas where there are more than 20 moorings. This has created challenges in Mashpee given existing user conflicts.
- **Policy stating limitations of new mooring fields to protect shellfish resources.**
 - Similar to above, new FDA regulations strictly govern new moorings in consideration of shellfish resource protections. One priority of the Harbor Management Plan will be to consolidate existing mooring fields to open up priority shellfish resource areas that are impacted by the new FDA regulations and other user conflicts stemming from moorings and boat traffic.
- **Provide assistance to encourage improvements to water access, parking, boat ramps stormwater capture at marinas, and improve access to launch areas.**
 - DPW, with CIP funds and CPC funds, have regularly addressed these issues. Recently improvements to Ockway Boat Ramp have been completed.
- **Program for public awareness of safe boating procedures**
 - Not done in-house. Coast Guard auxiliary is the best resource.

Dredging

- **Develop Master Dredging Plan and maintenance Program**
 - The Waterways Commission manages the annual dredging program. Places a focus on Popponessett Bay and nourishment of South Cape Beach and Popponessett Spit. Additional funding opportunities for dredging need to be understood and taken advantage of. Permits currently held in the name of the Chairman of Waterways Commission. Need to clarify permittee for future years.

Emergency Planning

- **Maintain mapped inventory of critical coastal resources and harbor facilities**
 - The Commonwealth of Massachusetts maintains this inventory and makes available to municipalities via the Geographic Response Plan.
- **Descriptive Inventory of equipment and facilities is maintained**
 - Annual requirement for the Town Manager's office.
- **Make Emergency Response Training Available**
 - DNR and Mashpee Fire are trained for an oil spill event. Additionally, all DNR staff, and first responders are certified in CPR.
- **Complete Community Ratings System Application**
 - Complete
- **Conduct study of primary emergency access roads to coastal areas subject to flooding**
 - Hazard Mitigation Plan completed in 2017 – requires an update

Coordinated Approach to reducing nutrient loading

PURPOSE:

To address nutrient loading reductions from septic systems and other sources, the following regulation/bylaw is a joint vision and strategy that will enable and empower the Town to develop and implement the necessary steps to more comprehensively address nutrient loading and contribute to lowering the overall nutrient loads impacting our fresh and saltwater resources.

The adoption of this shared approach reflects a shared understanding that along with the expansion of the municipal wastewater collection and treatment systems to include Phase 1 and the proposed Phase 2 being presented to Town Meeting for design authorization in the Spring of 2022, increased investment in shellfish aquaculture, reliance on standard Title V septic systems cannot continue. The purpose underlying this policy statement is to create a pathway and timeline for the conversion to nutrient removing systems those septic systems that are outside of Phases 1 and 2 of the wastewater collection plan within 15 years and to immediately begin the process of eliminating any remaining cesspools.

This shared approach is based on utilizing emerging technologies to minimize the amount of sewerage required to that needed to restore water quality while remaining cost conscious and taking advantage of financing tools to minimize the impact of the approach on the tax base and individual homeowners. While the Town's compliance with state and federal water quality standards continues to rely on nutrient reductions from the sewerage plan and shellfish aquaculture, reducing remaining septic nutrient loads will provide a margin of safety enabling the Town to exceed the bare minimum achievement of standards and hedges against the natural variability and risks associated with reliance on shellfish as an attenuation strategy. Source reduction of nutrients is a powerful restoration strategy that will amplify the benefits of existing and planned investments. This plan is structured to take advantage of the anticipated changes to the County septic loan program that will provide no and low-cost loans to homeowners in need of funds for both septic upgrade and sewer connection.

Nitrogen Sensitive Area

In order to meet the goals and purpose of this regulation/bylaw, the entire town should be designated as a nitrogen sensitive area. Title 5 references this in part in 310 CMR 15.215 (2) Designation of Nitrogen Sensitive Areas where embayments that are considered affected water bodies require increased treatment and reduction of nutrients to meet loading restrictions. The requirements below, if adopted, will meet the Title 5 nitrogen sensitive area restrictions.

Upgrades of septic systems to a nutrient reduction septic system shall occur at the following thresholds:

- 1. All properties serviced by cesspools shall be required to upgrade within five (5) years of adoption. (If approximately 600 properties have cesspools then in five years in**

addition to the 360 existing I/A systems in the ground now approximately 13% of the developed properties in town will have advanced treatment).

2. **New construction;**
3. **Knockdown/teardown and replacement of an existing structure;**
4. **At the time of septic failure as determine by inspection; Tank and/or distribution box replacements should be allowed, with the requirement to upgrade to an I/A system within 15 years.**
5. In the case of non-Title V compliant systems, for any alteration or modification of an existing structure that requires issuance of a building permit for the addition of a bathroom, a bedroom or space that would allow for an increase in occupancy; *A Title 5 inspection is always required when a change in footprint is proposed, and will identify any failed system.* I/A systems should be required only when there is an increase in flow, when a new office or den is proposed that is greater than 70 square feet, or when a new finished space in a basement or over a garage is proposed. Permits to enclose a deck or to add a sunroom (both without heat and privacy), to add a bathroom, or to expand an existing living or dining room should not require upgrade to an I/A system.
6. At time of transfer (other than in the case of inheritance) or, where none of these applies, within 15 years of the passage of the rule. **At time of property transfer, properties that have a passing Title 5 system should be treated as follows:**
 - **System that is over 20 years old should be upgraded to an I/A immediately.**
 - **System that is 11-15 years old should be upgraded to an I/A system within 5 years of property transfer.**
 - **System that is 6-10 years old should be upgraded to an I/A system within 10 years of property transfer.**
 - **System that is 5 years old or less should be upgraded to an I/A system within 15 years of property transfer. (The application of this option is not without its cons. This requirement would force owners to place sums of money into escrow accounts for future upgrade, record deed restrictions into Registry of Deeds to memorialize the upgrade date and the BOH would have to monitor the dates as well). The other option is to phase in the requirement for straight upgrade at time of transfer to two (2) years of adoption.**

Said rules would apply to all dwellings and commercial/industrial structures reliant on septic systems upon passage except those to be sewerred in Phase 1 approved by Town Meeting in May of 2021 and those to be sewerred in Phase 2 assuming that Phase 2 is funded and proceeds. Should Phase 2 not be funded or be modified by the elimination of any portion a-e, said portion(s) will become subject to the provisions of the rule as laid out above.

Nutrient Discharge Limits/Types of I/A Systems

The BOH will designate those systems that are suitable to achieve compliance with the rule, provided that said rule shall call for Best Available Technology as determined and as amended from time to time by the Board. I/A septic systems that have shown improvements in nitrogen reduction are listed below but this list is subject to changes as technology changes:

- NitROE
- Nitrex

- The Layer Cake Sand Filter
- Bio-Microbics MBBR

Residential I/A systems must meet a discharge concentration of 19 mg/L of total nitrogen for Title 5 systems in nitrogen sensitive areas. Commercial systems must meet a 25 mg/L nitrogen concentration discharge limit. A limit of 10 or possibly 5 mg/L may be necessary to meet the TMDL's. In order to answer that question of what concentration would be required in areas outside of Phase 1 and 2, a model run performed by Brian Howes' group would be helpful in determining the theoretical discharge concentration target.

- Using 5 mg/L of nitrogen as a discharge rate becomes problematic as there are fewer and more costly systems that would meet that discharge requirement. We can confirm those technologies with Brian Baumgaertel.

Septic Failures in Sewer Phases 1 & 2

In the event a structure in Phase 1 or Phase 2 has a septic system or cesspool that fails prior to connecting to the public sewer, the BOH will issue an enforcement order that requires:

- a. Connection to the public sewer within 30 days of the availability of the sewer
- b. Annual pump out of the failed system by May 15 of each year unless the Board, at its sole discretion, determines that more frequent pump out is necessary to ensure the minimal functioning of the system or if it is so deficient that other alternatives, inclusive of replacement are required as a matter of public health.

In case of a septic failure in Sewer Phases 1 & 2, the Sewer Connection Regulation shall be complied with. The regulation includes an extension of up to 5 years to use the existing septic system until sewers are constructed. The agreement between the BOH and the property owner does include a 30-day connection requirement upon sewer availability, along with a review of a pumping schedule and required contract for a pumping contractor. (Copies of sewer extension agreements have been obtained from the Town of Falmouth BOH to be used as a template. The BOH has already reviewed the agreements).

Nitrogen Aggregation Plans

Land utilized for aggregation credit shall be considered buildable under current zoning. Utilization of unbuildable lands to obtain aggregation credits, for example, open space or conservation land, shall be prohibited.

With a lot size of at least 13,333 square feet, the use of I/A systems should be allowed for up to 2 bedrooms on primary residences only. With a lot size of 20,000 square feet or more, the use of I/A systems should be allowed for up to 3 bedrooms on primary residences only. (This allowance would meet the "new construction" standard in #2 of Required Upgrade thresholds section). **Nitrogen credit with an I/A system or nitrogen aggregation shall not be allowed for new construction beyond three bedrooms or the existing number of bedrooms, unless an accessory dwelling unit (ADU) is being created.**

A buildable lot in the same Zone II would be an acceptable offset for anything over 3 bedrooms or for a second home. *(Young couples buy 1 or 2-bedroom homes without ever knowing they are in a Zone II, and believing they can add-on if/when they need to).*

Select Board Directive for Nutrient Reduction

The Select Board will direct all appointed Boards and Commissions under its purview and advise elected Board that it seeks the adoption and approval of regulations and enforcement policies consistent with the desire to reduce nutrient loading and that recognize this outcome as an overriding public interest to be given due weight and consideration in all regulatory decisions. Specifically, the Board will be seeking limitations in use of fertilizers in and around buffer areas to water resources to limits direct discharge through run-off and close groundwater contamination. All means of limiting lawn areas and the increase in buffer areas within close proximity to saltwater estuaries and freshwater ponds should be sought.

The only existing enforcement article on nutrients is the Nitrogen Control Bylaw. The BOH and Conservation Commission have enforcement jurisdiction, so adding lawn size limits and increase in wetland buffer areas makes sense to do in the bylaw. If those criteria are added to the bylaw, the enforcement method can be through using the Cape Cod Commission nitrogen loading calculation.

Funding Sources

Financial support for those in need will be provided through a combination of sources including:

- Local/Regional– Barnstable County Community Septic Management Loan Program offers loans to be paid back over 20 years and that program is being revised to eliminate interest charges to those making up to 120% of area median income, 2% interest for those making between 120% and 180% of area median income and 4% for those making over 180% AMI. The Town offers financing as a betterment that is paid back through property taxes. The amount of money in the loan account is \$179,521. The Town has nitrogen mitigation funds that are from the Cape Cod Commission offset fees for large projects in Town. The amount available now is approximately \$173,059.00. All of these sources will be evaluated to optimize assistance for those families in need of assistance.
- State – State tax law provides for tax credits for septic system upgrade that will lower residents state income tax liability.
- Federal – The USDA 504 Program in the Rural Development Office provides loans and grants to citizens earn less than 50% of the median income for the area. In Barnstable that amount is \$45,750 for up to four people. Grants are available to citizens over the age of 62, which do not need to be paid back. A maximum of \$7,500 can be issued in a grant. Loans and grants can be combined for a maximum of \$27,500.00. The Federal Infrastructure Investment and Jobs Act contains a decentralized wastewater grant of \$15,000 per property and details of the access to these funds will be released soon and the Town will assist residents eligible to

receive these funds with access. Additional research was performed on the Federal Infrastructure Investment funds and the monies will be dispersed the same as the USDA 504 Program. Only those property owners that meet the 50% of the median area income will be eligible. Average income families that do not meet the federal income requirements will not have access to the federal funds.

Funds should be allocated to offset any difference in the cost for residents to upgrade from a conventional system to an I/A system in the following situations:

- 1) At time of failure, where it is a primary residence and the property owner meets an income threshold.
- 2) At time of property transfer, where it is a primary residence and the property owner meets an income threshold (see Section 6 in Upgrades for property transfer thresholds).
- 3) Where age is a factor and the primary residence is being sold to facilitate the transition to an assisted living or memory care facility.
- 4) When a passing Title 5 system is involuntarily replaced with an I/A system, the Town should pay any remaining balance owed to the County before a new loan is taken by the property owner under the Community Septic Loan Program.



Department of Environmental Protection

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Bethany A. Card
Secretary

Martin Suuberg
Commissioner

Fact Sheet **MassDEP Regulatory Strategy for Estuaries Impaired by Nitrogen** **June 1, 2022**

1. Nitrogen Sensitive Area Designations: A primary source of nitrogen contamination of coastal estuaries in Southeastern Massachusetts and Cape Cod and the Islands are on-site septic systems. MassDEP, in conjunction with local Boards of Health, regulates these systems through “Title 5” regulations, 310 CMR 15.00.

To ensure the Title 5 regulations are protective of the environment, particularly in relation to the impact of nitrogen discharges on surface water quality, MassDEP is proposing the following revisions to Title 5:

Establish New Nitrogen Sensitive Areas (NSAs)

To more effectively address nitrogen impacting estuaries, MassDEP is proposing to establish new “Natural Resource Area” NSAs for:

- any watershed to an embayment or sub-embayment that is the subject of a Nitrogen Total Maximum Daily Load (TMDL) approved by the EPA pursuant to the federal Clean Water Act and an Area-Wide Water Quality Management Plan pursuant to Section 208 of the Clean Water Act addressing nitrogen pollution:
 - A “TMDL” is an EPA-approved calculation of the maximum amount of a pollutant allowed to enter a waterbody so that the waterbody will meet and continue to meet water quality standards for that particular pollutant. A TMDL determines a pollutant reduction target and allocates load reductions necessary to the sources of the pollutant.
 - All Cape Cod communities are subject to the “208 Plan” approved by EPA in 2015.
 - There are currently 30 watersheds across Cape Cod with EPA-approved nitrogen TMDLs.

- For these watersheds, the NSA designation is effective on the effective date of the final regulations.
- any watershed to an embayment or sub-embayment that is the subject to an EPA-approved TMDL or determined to be nitrogen sensitive by the Department based on scientific evaluation and adopted through a public process involving public notice, including the scientific and regulatory rationale for the designation, and a 60-day public comment period.
 - For these watersheds, the NSA designation is effective upon completion of the public process and MassDEP's issuance of the final designation.

New Requirements for Natural Resource Area NSAs

MassDEP is proposing new requirements for these new NSAs to more effectively address the specific problems related to septic systems contaminating coastal estuaries.

- Unless a community is the subject of a Watershed Permit described below, any system serving a new construction, or an existing facility must incorporate Best Available Nitrogen Reducing Technology within five years of the effective date of the NSA designation of the watershed in which they are located.
- Best Available Nitrogen Reducing Technology is an alternative system certified by MassDEP for general use pursuant to Title 5 which has the lowest effluent Total Nitrogen performance value. An alternative system granted provisional or pilot approval by MassDEP may also be utilized as long as such system has a Total Nitrogen performance value less than or equal to the lowest alternative system certified by the Department for general use.

Exemption from Enhanced Treatment Requirements in Watersheds with Watershed Permits

While the enhanced treatment requirements for septic systems will result in significant reductions in nitrogen pollution, they may not be the most effective and efficient way to restore the impacted estuaries and achieve established water quality goals. Therefore, MassDEP is also proposing a second, concurrent regulatory revision to formally establish a "watershed permit process." If communities take advantage of this approach, and obtain a watershed permit that covers an area that would be subject to new "Nitrogen Sensitive Area" regulations, the above Title 5 NSA requirements would not become effective for that area.

However, if a Watershed Permit is terminated by the permittee or revoked by MassDEP, new systems installed after the date of termination/revocation would have to install Best Available Nitrogen Reducing Technology and existing systems would have to install such technology within five years from the effective date of the new NSA regulations or two years of the date of termination/revocation, whichever is longer.

2. Watershed Permit Regulations: The Watershed Permitting regulations are a new, innovative approach to provide communities the opportunity to develop and implement the most effective

and efficient solutions to addressing water quality challenges. This approach provides the opportunity for communities to employ a greater range of solutions to address their water quality needs, including alternative or innovative approaches. The Watershed Permit is a 20-year permit instead of the traditional five-year permit which utilizes an adaptive management approach, requiring permittees to monitor, evaluate and report results, and adjust and modify the strategies and practices as needed to address conditions that are causing the water quality impairments.

Watershed Management Plan

The Watershed Permit is based on a “Watershed Management Plan” a long-term plan to address an existing water quality impairment to restore and protect water quality. The Watershed Management Plan must be approved by town meetings of each respective watershed permit applicant, and is based on a Comprehensive or Targeted Watershed Management Plan. The Plan provides a schedule and description of actions to restore the waterbody to applicable Water Quality Standards in accordance with any applicable TMDL and/or any other applicable scientific evaluation, such as the Massachusetts Estuaries Project (MEP) report.

For watersheds where a TMDL has been established, the Watershed Management Plan must achieve compliance with the Water Quality Standards required by the TMDL and demonstrate that at a minimum, 75% of the necessary pollutant reduction levels will be achieved within 20 years, unless MassDEP determines an alternative schedule is appropriate based on watershed-specific issues.

Watershed Permit Application

- Any Local Government Unit or Regional Local Government Unit can file for a watershed permit. Multiple local government units that share a watershed or sub-watershed may apply jointly for a Watershed Permit, provided they have entered into an enforceable agreement (e.g., Intermunicipal Agreement) that confirms each permittee’s percentage share of the aggregate pollutant removal responsibility and provides a framework to coordinate resource management decision-making and arrangements relating to the receipt and expenditure of funds for implementation.
- The Watershed Permit authorizes work needed to implement the Permittee’s mitigation strategy for the watershed or sub-watershed, therefore the Application must include the Watershed Management Plan for the watershed or sub-watershed including:
 - maps depicting the regulated area (watershed boundary) and a narrative describing the area proposed to be covered under a Watershed Permit;
 - a description of the current and historic water quality conditions, including short- (daily/seasonal) and long- (annual) term variability, proposed sentinel sampling locations within the watershed/stations, sampling frequency, parameters and sampling technique (e.g., grab/observation);

- the earlier planning approaches taken prior to filing the application, including any related findings and recommendations;
- the types, locations, and timing of any on-going and proposed TMDL or alternative TMDL implementation activities within the watershed or sub-watershed proposed for coverage;
- a table identifying the nitrogen load that the area proposed for coverage under the watershed permit contributes to the surface waters of the watershed for the past 10 years and projected loads for the following 10 and depicting the necessary load reductions (removal requirements) within the watershed to meet the TMDL or TMDLs and a concise description of the means of achieving those specified reductions during the term of the permit;
- the Conventional Control Technologies and Alternative Control Approaches or Technologies selected for pollutant load reductions, the area covered by these approaches, and identification of the permittee who will be responsible for implementing each activity;
- the estimated load reductions needed to meet the threshold concentration(s) at the sentinel station(s) for each of the selected Conventional Control Technologies and Alternative Control Approaches or Technologies;
- the implementation schedule for each Alternative Control Approach or Technology proposed, including a timeframe for demonstration, testing, and acceptance or abandonment of such approaches or technologies;
- the Core Sewer Area and the service areas prioritized for wastewater collection and treatment after accounting for implementation of the selected Alternative Control Approaches and Technologies;
- if Alternative Control Approaches and Technologies are proposed, a contingency plan for a back-up Conventional Control Technology in the event that the Alternative Control Approaches and Technologies selected do not function as predicted;
- the proposed approach to control 100% of all future pollutant loads to ensure that loads will always stay below the applicable threshold levels cost estimates for the infrastructure and programs associated with the proposed actions, if available;
- an implementation schedule, not to exceed 20 years, currently envisioned by the applicant(s), including a designated set of activities that will occur in the first 5-year block of time, and the results of which will enable the permittee to revise the implementation plans for the next 5-year period as necessary to meet load reduction requirements as specified.

Standard Watershed Permit Provisions

- The Department shall not issue a Watershed Permit if the Watershed Management Plan does not provide for achievement of the Surface Water Quality standards applicable to the

water bodies covered by the permit or if the permit does not provide for reasonable progress in achievement of the TMDL load reductions necessary to meet water quality standards.

- Consistent with the Watershed Management Plan, the permit shall require that 75% of the necessary pollutant reduction levels will be achieved within 20 years, unless MassDEP determines an alternative schedule is appropriate based on watershed-specific issues.
- The proposed activities, implementation schedule for such activities, and facilities set forth in the applicant's Watershed Management Plan shall be enforceable requirements, incorporated in a Watershed Permit.
- Subject to Department approval, a permittee is granted pollutant reduction credit for Alternative Control Approaches and Technologies only if the permittee implements and maintains such approaches and/or technologies in accordance with the terms and conditions of the Watershed Permit.
- The permittee shall provide a Contingency Plan in its Watershed Management Plan that relies on Conventional Control Technologies to achieve the target threshold concentrations identified in the Watershed Management Plan.
- The permittee shall monitor water quality in accordance with the permittee's monitoring plan and report the results in the Annual Reports required by the Watershed Permit.
- The Permit requires annual reporting, with 5-Year Reports evaluating results of program and proposed adjustments through adaptive management.
- Any prospective changes to the Watershed Management Plan or the approved implementation schedule shall be identified in the Annual Reports required by the Watershed Permit. Any such proposed changes to the Watershed Management Plan shall be subject to the Department's review and approval.
- For a permittee(s) to terminate permit coverage, they must provide public notice and hold a public meeting.
- Any permits issued by the Department that comprise a component of the implementation activities or are applicable to the pollutant discharges in the watershed shall be incorporated by reference into the Watershed Permit.

Watershed Permit Process

- The applicant shall publish public notice of the Watershed Permit proceeding in the MEPA Environmental Monitor and in a newspaper circulated within the area that will be affected by the Watershed Permit. The Department will post the notice on the Department's webpage.
- Public notice will afford a comment period of at least 60 days.
- A public hearing will be held if requested by the applicant, or if the Department determines a public hearing to be in the public interest.

- After the conclusion of the 60-day public comment period, the Department may issue or deny a final Watershed Permit.
 - If no comments objecting to the issuance or terms of the Watershed Permit were received by the Department during the public comment period, then the Watershed Permit shall take effect upon issuance.
 - If comments objecting to the issuance or the terms and conditions of the Watershed Permit were received by the Department during the public comment period, then the final Watershed Permit shall become effective 21 days after issuance, unless a request for an adjudicatory hearing is timely filed.
 - During the 21-day period following issuance of the Watershed Permit or determination to deny, any person aggrieved by the decision may file a request for an adjudicatory hearing with the Department.

Watershed Permit Modification/Suspension/Revocation

- The Department may propose and determine to modify, suspend or revoke any Watershed Permit, in whole or in part, for cause including, but not limited to, violation of any permit, obtaining a permit by misrepresentation, or failure to disclose fully all relevant facts or any change in or discovery of conditions that calls for reduction or discontinuance of the authorized discharge or activity.
- The Department shall process a Watershed Permit modification, suspension or revocation in the same manner as an application for a Watershed Permit; provided, however, that the Department may revise a schedule in a Watershed Permit at the request of a permittee if the Department determines that good and valid cause, for which the permittee is not at fault, exists for such revision, and in such cases the provision for public notice and hearing shall not apply.
- Any one or more of the permittees may terminate coverage under this Permit by providing written notice to the Department at least 60 days in advance of the date such termination is to take effect. Such notice will include public notice of a public hearing to be held at least 30 days prior to the termination date. Such notice will be published in the MEPA Environmental Monitor and in a newspaper circulated within the area affected by the Watershed Permit at least 30 days prior to the hearing.



Department of Environmental Protection

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Bethany A. Card
Secretary

Martin Suuberg
Commissioner

June 1, 2022

Dear Municipal Official:

I am writing to inform you of regulatory revisions the Massachusetts Department of Environmental Protection (MassDEP) is developing to ensure that timely actions are taken to restore and protect coastal estuaries that have been impacted by excessive nitrogen pollution. The two regulatory approaches we developed and plan to publish for public comment this fall provide communities with choices on how to address the growing pollution problem affecting our waters. MassDEP will be requesting a meeting with you as we seek input on these proposals prior to publication.

As you are well aware, nutrient contamination is one of the most pressing environmental challenges facing Cape Cod. Increased population and development in those areas surrounding Cape Cod's estuaries have resulted in excessive amounts of nutrients being discharged into these sensitive resources, causing eutrophication and prompting the accelerated growth of nuisance plants, weeds and algae, using up much of the oxygen in the water. This forces out finfish, shellfish, and indigenous plant species. The result-water bodies that violate state water quality standards, are visually displeasing, smell bad, and cannot support the natural uses that the estuaries have historically offered. This is not only an environmental problem- if not addressed in a timely way, it is likely to harm the Cape's economy through a decline in fishing, shellfishing, tourism, and property values.

The primary water quality problem on Cape Cod stems from nitrogen contamination. Nitrogen from septic systems, wastewater treatment plants, lawns and stormwater leaches into groundwater and flows underground and is discharged to surface water bodies. While nitrogen comes from a variety of sources, on Cape Cod the predominant sources are on-site septic systems. Approximately 85 percent of the wastewater flow into Cape Cod's embayments comes from on-site septic systems.

MassDEP has been working closely with Cape Cod communities to assess and address this problem. First, MassDEP collaborated with Cape Cod communities and the University of Massachusetts, through the Massachusetts Estuaries Project, to provide communities with the scientific studies they need to effectively address the specific water quality issues impacting each estuary. These studies, which clearly demonstrate the need to take action, were also used to form the underlying basis for Total Maximum Daily Loads (TMDLs). TMDLs are U.S.

Environmental Protection Agency or EPA-approved calculations of the maximum amount of a pollutant allowed to enter a waterbody so that the waterbody will meet and continue to meet water quality standards for that particular pollutant. A TMDL determines a pollutant reduction target and allocates load reductions necessary to the source(s) of the pollutant. There are currently 30 TMDLs for nitrogen across Cape Cod, generally requiring significant reductions in nitrogen loads.

To further facilitate development of solutions to this problem, in 2013 MassDEP directed the Cape Cod Commission to prepare an update to the 1978 Water Quality Management (WQM) Plan for Cape Cod in accordance with §208 of the Federal Clean Water Act ("CWA" or the "Act"). The Plan was certified by Governor Baker and approved by EPA in 2015, after an extensive public participation process that included numerous public meetings across the Cape and input from hundreds of residents, community officials and stakeholders. The Plan examines the causes of water quality issues on Cape Cod and provides options for communities to consider, including new planning tools to use in making local decisions about potential solutions. The Plan Update also offers greater flexibility and discusses financing and funding options to help implement those solutions.

Since adoption of the Updated Plan there have been important steps taken to further assist such efforts, including a new source of ongoing funding, proposed by Cape legislators and signed into law by the Governor, to help towns pay for necessary wastewater infrastructure and water quality remediation projects. This fund, known as the Cape Cod and Islands Water Protection Fund, is already providing substantial financial assistance to wastewater efforts on Cape Cod. MassDEP has also continued to work with communities to develop and implement wastewater plans, and we have been pleased to see a range of progress across with the Cape, including planning, funding, evaluating pilot approaches, and, in some cases, the actual implementation of solutions. At the same time, such progress has been inconsistent and unpredictable across the Cape communities. We have clearly heard this concern from citizens and advocates who have urged additional action. MassDEP ultimately has the responsibility to ensure that concrete actions are taken in a timely way to address the ongoing nitrogen contamination and ensure these critical water resources meet water quality standards.

MassDEP, therefore, is planning to propose two regulatory changes to meet this responsibility. First, the primary source of the nitrogen contamination is septic systems, and our regulatory authority for such systems is the Title 5 regulation- and MassDEP must ensure these requirements are protective of water quality. Therefore, we are proposing to revise Title 5 regulations to establish "Nitrogen Sensitive Areas" (NSAs) for watersheds draining into an estuaries where there is an EPA-approved "Total Maximum Daily Load," which finds that the estuary is impaired by nitrogen. The revised regulations would require - unless Towns take advantage of an alternative watershed approach - that within 5 years of the effective of the NSA designation, new on-site systems include, and existing on-site systems upgrade to, enhanced nitrogen treatment systems demonstrating the lowest nitrogen levels in their effluent. For Cape Cod communities subject to the Section 208 Water Quality Management Plan, the designation and new requirements would become effective upon the final promulgation of the regulations.

MassDEP has prioritized our efforts for years to work with communities to develop more tailored and effective wastewater solutions and remains committed to such efforts. Therefore, we are also proposing a second regulatory revision to formally establish the “watershed permit.” These permits are 20-year permits that are based on long-term wastewater plans that will achieve water quality goals and provide communities the opportunity to utilize a range of approaches, including centralized sewer treatment and innovative approaches. Importantly, if communities take advantage of this approach, and obtain a watershed permit that covers an area that would be subject to new NSA regulations, the system-by-system approach can be avoided.

To help provide some of the immediate funding needs that Towns moving forward will face, Governor Baker has proposed \$200 million in additional funding for communities moving forward to addressing this environmental challenge. These funds will help support the needed actions over the next several years to improve water quality, and demonstrate our ongoing commitment to working with communities. The Baker-Polito Administration will be working to secure passage of this important funding in the coming weeks.

MassDEP recognizes that Cape communities have been working to develop and implement plans to address these water quality challenges. As we seek input and comment on these regulatory approaches over the next few months, we would like to meet with appropriate officials in your community to discuss the status of these efforts and how they may comport with the proposed changes. I have attached a fact sheet that provides more details on the proposed regulatory framework. Please contact Millie Garcia-Serrano, Director of MassDEP’s Southeast Regional Office at millie.garcia-serrano@mass.gov to schedule a time where we can meet to discuss these regulatory approaches in person.

Sincerely,

A handwritten signature in black ink, appearing to read "Martin J. Suuberg". The signature is fluid and cursive, with the first name "Martin" and last name "Suuberg" clearly distinguishable.

Martin J. Suuberg
Commissioner

Re: Waquoit Room availability through end of July

Jessica Kelley <jkelley@mashpeeema.gov>

Fri 6/10/2022 9:56 AM

To: Evan Lehrer <ELehrer@mashpeeema.gov>

Hi Evan,

As requested, below are the available dates that Waquoit is open from 8:30am - 11:00am:

June 15 -W

June 16-TH

June 22- W

June 23-TH

June 24- F

June 27- M

June 28 -T

June 29 -W

June 30-TH

July 1-F

July 7-TH

July 8 - F

July 11-M

July 13-W

July 14- TH

July 15- F

July 18 - M

July 20- W

July 21 -TH

July 22-F

July 25-M

July 26- T

July 27-W

July 28-TH

July 29-F

If you haven't noticed by this point; the letters after the date are the day of the week 😊

Jess Kelley | Administrative Secretary

Mashpee Town Clerk's Office

16 Great Neck Rd North

Mashpee, MA 02649

P: 508-539-1400 ext 8562 F: 508-539-1142

From: Evan Lehrer <ELehrer@mashpeeema.gov>

Sent: Friday, June 10, 2022 9:21 AM

To: Jessica Kelley <jkelley@mashpeeema.gov>

Subject: Waquoit Room availability through end of July

Warrant Article ____ :

To see if the Town will vote to repeal Article XI: Floodplain Zone Provisions in its entirety and Replace with new Article XI: Floodplain Zone Overlay as follows:

§174-58 Purpose and Intent

The purpose of the Floodplain Zone Overlay is to:

- 1) Ensure public safety through reducing the threats to life and personal injury
- 2) Eliminate new hazards to emergency response officials
- 3) Prevent the occurrence of public emergencies resulting from water quality, contamination, and pollution due to flooding
- 4) Avoid the loss of utility services which if damaged by flooding would disrupt or shut down the utility network and impact regions of the community beyond the site of flooding
- 5) Eliminate costs associated with the response and cleanup of flooding conditions
- 6) Reduce damage to public and private property resulting from flooding waters

§174-59 Use of FEMA Maps and Supporting Studies

The Floodplain District is herein established as an overlay district. The District includes all special flood hazard areas within Mashpee's designated as Zone A, AE, AH, AO, A99, V, or VE on the Barnstable County Flood Insurance Rate Map (FIRM) dated July 16, 2014 issued by the Federal Emergency Management Agency (FEMA) for the administration of the National Flood Insurance Program. The exact boundaries of the District shall be defined by the 1%-chance base flood elevations shown on the FIRM and further defined by the Barnstable County Flood Insurance Study (FIS) report dated [FIS date]. The FIRM and FIS report are incorporated herein by reference and are on file with the Town Clerk, Planning Board, Building Official, Conservation Commission and GIS/E911 Coordinator.

§174-60 General provisions

Permits for new construction, alteration of structures or other development (any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations), at or below the base flood elevation as specified within the A and V Zones (in unnumbered A Zones), in the absence of Flood Insurance Administration data, the base flood elevations shall be determined by obtaining, reviewing and reasonably utilizing any existing base flood elevation data from federal, state, local or other sources) as designated on special Flood Insurance Administration Flood Insurance Rate Maps dated July 16, 2014, and the Flood Insurance Study dated July 16, 2014, which are on file with the Town Clerk, Planning Board and Building Inspector, shall be approved subject to other laws and bylaws applicable thereto and to the following.

§174-60.1 Disclaimer of Liability

The degree of flood protection required by this bylaw is considered reasonable but does not imply total flood protection.

§174-60.2 Severability

If any section, provision, or portion of this bylaw is deemed to be unconstitutional or invalid by a court, the remainder of the bylaw shall be effective.

§174-60.3 Designation of community Floodplain Administrator

The Town of Mashpee hereby designates the position of Building Commissioner to be the official floodplain administrator for the Town.

§174-60.4 Requirement to submit new technical data

If the Town acquires data that changes the base flood elevation in the FEMA mapped Special Flood Hazard Areas, the Town will, within 6 months, notify FEMA of these changes by submitting the technical or scientific data that supports the change(s.) Notification shall be submitted to:

FEMA Region I Risk Analysis Branch Chief
99 High St., 6th floor, Boston, MA 02110

And copy of notification to:
Massachusetts NFIP State Coordinator
MA Dept. of Conservation & Recreation

251 Causeway Street, Boston, MA 02114

§174-61 Compliance with State Building Code

Any new construction or substantial improvement to be undertaken within said zones shall be in accordance with the Massachusetts Uniform Building Code, Section 744.0, as amended. The Building Inspector shall review all proposed development within the flood zones to assure that all necessary permits which are obtainable at such time have been received from those governmental agencies from which approval is required by federal or state law, including Section 404 of the Federal Water Pollution Control Amendments of 1972, 33 U.S.C. § 1334, and obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state, local or other source as criteria for requiring that new construction, substantial improvements or other development in Zone AE meet floodplain zone provisions.

§174-61.1 Variances to Building Code Floodplain Standards

The Town will request from the State Building Code Appeals Board a written and/or audible copy of the portion of the hearing related to the variance, and will maintain this record in the community's files.

The Town shall also issue a letter to the property owner regarding potential impacts to the annual premiums for the flood insurance policy covering that property, in writing

over the signature of a community official that (i) the issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage and (ii) such construction below the base flood level increases risks to life and property.

Such notification shall be maintained with the record of all variance actions for the referenced development in the floodplain overlay district.

§174-61.2 Variances to local Zoning Bylaws related to compliance with the National Flood Insurance Program (NFIP)

A variance from these floodplain bylaws by the Zoning Board of Appeals must meet the requirements set out by State law, and may only be granted if:

1. Good and sufficient cause and exceptional non-financial hardship exist;
2. the variance will not result in additional threats to public safety, extraordinary public expense, or fraud or victimization of the public; and
3. the variance is the minimum action necessary to afford relief.

§174-61.3 Historic District Procedures

Qualifying Historic Structures listed on the National Register of Historic Places or the State Inventory of Historic Places are exempt from those modifications which would alter the historic character of the building

§174-62 Certification of Floodproofing Methods/Assurance Necessary Permits Obtained

Where floodproofing is required in accordance with the Massachusetts Building Code, Mashpee's permit review process includes the use of a checklist of all local, state and federal permits that will be necessary in order to carry out the proposed development in the floodplain overlay district. The proponent must acquire all necessary permits, and must submit the completed checklist demonstrating that all necessary permits have been acquired.

§174-63 Record and Report of Special Permits

Upon the granting of such Special Permits, the Zoning Board of Appeals shall require that the Town of Mashpee shall maintain a record of all Special Permit actions, including justification for their issuance, and report such Special Permits issued in its annual report to the Flood Insurance Administrator in accordance with the Department of Housing and Urban Development guidelines.

§174-64 Manufactured Home Parks and Subdivisions

Notwithstanding the applicable provisions of the Massachusetts Uniform Building Code within Zones AE, for new manufactured home parks and manufactured home subdivisions and for existing manufactured home parks and manufactured home subdivisions where the repair, reconstruction or improvement of the streets, utilities and pads equals or exceeds fifty percent (50%) of the value of the streets, utilities and pads before the repair, reconstruction or improvement has commenced, lots are to be

elevated on compacted fill or on pilings so that the lowest floor of the manufactured home will be at or above the base flood level; adequate surface drainage and access for a hauler must be provided; and, in the instance of elevation on pilings, lots must be large enough to permit steps, piling foundations must be placed in stable soil no more than ten (10) feet apart and reinforcement must be provided for pilings more than six (6) feet above the ground level.

§174-65 Manufactured Homes not in Parks or Subdivisions

Notwithstanding the applicable provisions of the Massachusetts Uniform Building Code, in all manufactured homes to be placed within Zones AE but not into a manufactured home park or manufactured home subdivision:

1. Manufactured Homes must be elevated on compacted fill, pilings, or on a solid wall foundation with flood openings so that the lowest floor of the manufactured home will be at or above the base flood level.
2. Adequate surface drainage and access for a hauler must be provided.
3. In the instance of elevation on pilings, lots must be large enough to permit steps, piling foundations must be placed in stable soil no more than ten (10) feet apart and reinforcement must be provided for piers more than six (6) feet above ground level.

§174-66 Subdivisions

All Subdivision proposals shall be designed to ensure that:

1. All public utilities and facilities are located and constructed to minimize or eliminate flood damage; and
2. Adequate drainage is provided to reduce exposure to flood hazards.
3. Such proposals minimize flood damage.

When proposing subdivisions or other developments greater than 50 lots or 5 acres (whichever is less), the proponent must provide technical data to determine base flood elevations for each developable parcel shown on the design plans.

§174-67 Unnumbered A Zones

In Zones A, A1-30, and AE, along watercourses that have not had a regulatory floodway designated, the best available Federal, State, local, or other floodway data shall be used to prohibit encroachments in floodways which would result in any increase in flood levels within the community during the occurrence of the base flood discharge.

In Zones A1-30 and AE, along watercourses that have a regulatory floodway designated on the Town's/City's FIRM or Flood Boundary & Floodway Map (choose map which delineates floodways for your community) encroachments are prohibited in the regulatory floodway which would result in any increase in flood levels within the community during the occurrence of the base flood discharge.

§174-67.1 Floodway Encroachment

In Zones A, A1-30, and AE, along watercourses that have not had a regulatory floodway designated, the best available Federal, State, local, or other floodway data shall be used to prohibit encroachments in floodways which would result in any increase in flood levels within the community during the occurrence of the base flood discharge.

In Zones A1-30 and AE, along watercourses that have a regulatory floodway designated on the Town's FIRM encroachments are prohibited in the regulatory floodway which would result in any increase in flood levels within the community during the occurrence of the base flood discharge

§174-67.2 Watercourse Alterations or Alterations in Riverine Areas

In a riverine situation, the Conservation Agent shall notify the following of any alteration or relocation of a watercourse:

- Adjacent Communities, especially upstream and downstream
- Bordering States, if affected
- NFIP State Coordinator
Massachusetts Department of Conservation and Recreation
251 Causeway Street, 8th floor
Boston, MA 02114
- NFIP Program Specialist
Federal Emergency Management Agency, Region I
99 High Street, 6th Floor
Boston, MA 02110

§174-67.3 AO and AH Zones Drainage Requirements

Within Zones AO and AH on the FIRM, adequate drainage paths must be provided around structures on slopes, to guide floodwaters around and away from proposed structures.

§174-67.4 Recreational Vehicles

In A1-30, AH, AE Zones, V1-30, VE, and V Zones, all recreational vehicles to be placed on a site must be elevated and anchored in accordance with the zone's regulations for foundation and elevation requirements or be on the site for less than 180 consecutive days or be fully licensed and highway ready.

§174-68 More Restrictive Regulations to Apply

The floodplain management regulations found in this Floodplain Overlay District section shall take precedence over any less restrictive conflicting local laws, ordinances or codes.

§174-68.1 Enforcement

Warrant Article ____ :

To see if the Town will vote to add the following definitions as a new subsection 174-3.1 Floodplain Management Definitions as follows:

DEVELOPMENT - any man-made change to improved or unimproved real estate, including but not limited to building or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials. [US Code of Federal Regulations, Title 44, Part 59]

FLOODWAY - The channel of the river, creek or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. [Base Code, Chapter 2, Section 202]

FUNCTIONALLY DEPENDENT USE - a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities. [US Code of Federal Regulations, Title 44, Part 59] Also [Referenced Standard ASCE 24-14]

HIGHEST ADJACENT GRADE - the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure. [US Code of Federal Regulations, Title 44, Part 59]

HISTORIC STRUCTURE - any structure that is:

- (a) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- (b) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- (c) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- (d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - (1) By an approved state program as determined by the Secretary of the Interior or
 - (2) Directly by the Secretary of the Interior in states without approved programs. [US Code of Federal Regulations, Title 44, Part 59]

NEW CONSTRUCTION - Structures for which the start of construction commenced on or after the effective date of the first floodplain management code, regulation, ordinance, or standard adopted by the authority having jurisdiction, including any subsequent improvements to such structures. *New construction includes work determined to be substantial improvement.* [Referenced Standard ASCE 24-14]

RECREATIONAL VEHICLE - a vehicle which is:

- (a) Built on a single chassis;
- (b) 400 square feet or less when measured at the largest horizontal projection;
- (c) Designed to be self-propelled or permanently towable by a light duty truck; and
- (d) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

[US Code of Federal Regulations, Title 44, Part 59]

REGULATORY FLOODWAY - see FLOODWAY.

SPECIAL FLOOD HAZARD AREA - The land area subject to flood hazards and shown on a Flood Insurance Rate Map or other flood hazard map as Zone A, AE, A1-30, A99, AR, AO, AH, V, VO, VE or V1-30. [Base Code, Chapter 2, Section 202]

START OF CONSTRUCTION - The date of issuance for new construction and substantial improvements to existing structures, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement is within 180 days after the date of issuance. The actual start of construction means the first placement of permanent construction of a building (including a manufactured home) on a site, such as the pouring of a slab or footings, installation of pilings or construction of columns.

Permanent construction does not include land preparation (such as clearing, excavation, grading or filling), the installation of streets or walkways, excavation for a basement, footings, piers or foundations, the erection of temporary forms or the installation of accessory buildings such as garages or sheds not occupied as dwelling units or not part of the main building. For a substantial improvement, the actual "start of construction" means the first alteration of any wall, ceiling, floor or other structural part of a building, whether or not that alteration affects the external dimensions of the building. [Base Code, Chapter 2, Section 202]

STRUCTURE(for floodplain management purposes) - a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home. [US Code of Federal Regulations, Title 44, Part 59]

SUBSTANTIAL REPAIR OF A FOUNDATION - When work to repair or replace a foundation results in the repair or replacement of a portion of the foundation with a perimeter along the base of the foundation that equals or exceeds 50% of the perimeter of the base of the foundation measured in linear feet, or repair or replacement of 50% of the piles, columns or piers of a pile, column or pier supported foundation, the building official shall determine it to be substantial repair of a foundation. Applications determined by the building official to constitute substantial repair of a foundation shall require all existing portions of the entire building or structure to meet the requirements of 780 CMR. [As amended by MA in 9th Edition BC]

VARIANCE - a grant of relief by a community from the terms of a flood plain management regulation. [US Code of Federal Regulations, Title 44, Part 59]

VIOLATION - the failure of a structure or other development to be fully compliant with the community's flood plain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in §60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4), or (e)(5) is presumed to be in violation until such time as that documentation is provided. [US Code of Federal Regulations, Title 44, Part 59]

ZONE A - an area of special flood hazard without water surface elevations determined

ZONE AE - area of special flood hazard with water surface elevations determined

ZONE AH - means areas of special flood hazards having shallow water depths and/or unpredictable flow paths between (1) and (3) feet, and with water surface elevations determined

ZONE AO - means area of special flood hazards having shallow water depths and/or unpredictable flow paths between (1) and (3) ft. (*Velocity flow may be evident; such flooding is characterized by ponding or sheet flow.*)

ZONE X - means areas of minimal or moderate flood hazards or areas of future-conditions flood hazard. (*Zone X replaces Zones B and C on new and revised maps.*)

ZONE V - means area of special flood hazards without water surface elevations determined, and with velocity, that is inundated by tidal floods (coastal high hazard area)

ZONE VE - (*for new and revised maps*) means area of special flood hazards, with water surface elevations determined and with velocity, that is inundated by tidal floods (coastal high hazard area)

Massachusetts 2020 Model Floodplain Bylaws

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Section 1. Introduction

After years of devastation from flooding across the nation, Congress created the National Flood Insurance Act of 1968 in an attempt to offer flood disaster relief in the form of insurance. This insurance would be available to residents of communities that voluntarily adopt and enforce floodplain management ordinances that meet at least minimum National Flood Insurance Program (NFIP or the Program) requirements.

According to FEMA's Community Status Book, the first Massachusetts community to officially participate in the NFIP was the Town of Wareham, who joined the NFIP on May 28, 1971. Most other MA communities quickly followed suit in the 1970s and early 1980s. The State NFIP Coordinating Office was created by Executive Order of the Governor in 1978 and is housed under the Water Resources Commission in the Department of Conservation & Recreation's Flood Hazard Management Program.

This document has been prepared in order to assist NFIP communities in Massachusetts to understand the minimum requirements of the NFIP, and to assure that their local bylaws or ordinances contain the necessary and proper language for compliance with the Program.

The local floodplain overlay district is established as an overlay to all other districts. In Massachusetts, the floodplain overlay district bylaw or ordinance is part of a federal requirement for communities that choose to participate in the NFIP. However, the state already administers regulations that take care of many floodplain management requirements and concerns. Referencing existing regulations is important to ensure that projects have been reviewed under the appropriate state regulations and that variances to the conditions of the bylaw do not erroneously allow variances to state requirements.

All development in the floodplain overlay district, including structural and non-structural activities, whether permitted by right or by special permit must be in compliance with the following:

- 780 CMR- Massachusetts Statewide Building Code
- 310 CMR- Department of Environmental Protection Regulations

For those NFIP requirements that are not found in the above state regulations, the community must adopt these requirements in their bylaws (towns) or ordinances (cities.) The following section contains all NFIP requirements that must be adopted as local regulations, since they are not found in the above listed regulations.

Section 3 contains floodplain management definitions that FEMA Region I feels are critical for inclusion in local codes.

Section 4 of this document offers explanations to support local understanding of these requirements.

Section 2. Required Local Bylaws

For those National Flood Insurance Program minimum requirements that are not found in existing state law, the following articles must be adopted by the community as a part of their local bylaws or ordinances, if these are not already adopted. The suggested language in this section is compliant with the federal requirements.

1. Stated local purpose for flood resistant standards

The purpose of the Floodplain Overlay District is to:

- 1) Ensure public safety through reducing the threats to life and personal injury
- 2) Eliminate new hazards to emergency response officials
- 3) Prevent the occurrence of public emergencies resulting from water quality, contamination, and pollution due to flooding
- 4) Avoid the loss of utility services which if damaged by flooding would disrupt or shut down the utility network and impact regions of the community beyond the site of flooding
- 5) Eliminate costs associated with the response and cleanup of flooding conditions
- 6) Reduce damage to public and private property resulting from flooding waters

2. Use of FEMA maps and supporting studies

A community must select the appropriate option as follows:

A. Bylaw text for communities with “Community-Based” FIRMs, FBFM and FIS

The Floodplain District is herein established as an overlay district. The District includes all special flood hazard areas designated on the [Town or City]’s Flood Insurance Rate Map (FIRM) issued by the Federal Emergency Management Agency for the administration of the National Flood Insurance Program, dated [effective map dates on FIRM] and on the Flood Boundary & Floodway Map (if applicable) dated [FBFM effective date.] These maps indicate the 1%-chance regulatory floodplain. The exact boundaries of the District shall be defined by the 1%-chance base flood elevations shown on the FIRM and further defined by the Flood Insurance Study (FIS) report dated [FIS date.] The effective FIRM, FBFM, and FIS report are incorporated herein by reference and are on file with the Town Clerk, Planning Board, Building Official, Conservation Commission and [other.]

OR

B. Bylaw text for communities with “Countywide” FIRMs and FIS

The Floodplain District is herein established as an overlay district. The District includes all special flood hazard areas within [Community Name] designated as Zone A, AE, AH, AO, A99, V, or VE on the [County Name] Flood Insurance Rate Map (FIRM) dated [FIRM date] issued by the Federal Emergency Management Agency (FEMA) for the administration of the National Flood Insurance Program. The exact boundaries of the District shall be defined by the 1%-chance base flood elevations shown on the FIRM and further defined by the [County Name] Flood Insurance Study (FIS) report dated [FIS date]. The FIRM and FIS report are incorporated herein by reference and are on file with the Town Clerk, Planning Board, Building Official, Conservation Commission and [other].

3. Abrogation and greater restriction section

The floodplain management regulations found in this Floodplain Overlay District section shall take precedence over any less restrictive conflicting local laws, ordinances or codes.

4. Disclaimer of liability

The degree of flood protection required by this bylaw [ordinance] is considered reasonable but does not imply total flood protection.

5. Severability section

If any section, provision or portion of this bylaw [ordinance] is deemed to be unconstitutional or invalid by a court, the remainder of the ordinance shall be effective.

6. Designation of community Floodplain Administrator

The Town/City of _____ hereby designates the position of _____ to be the official floodplain administrator for the Town/City.

7. Requirement to submit new technical data

If the Town/City acquires data that changes the base flood elevation in the FEMA mapped Special Flood Hazard Areas, the Town/City will, within 6 months, notify FEMA of these changes by submitting the technical or scientific data that supports the change(s.) Notification shall be submitted to:

FEMA Region I Risk Analysis Branch Chief
99 High St., 6th floor, Boston, MA 02110

And copy of notification to:

Massachusetts NFIP State Coordinator
MA Dept. of Conservation & Recreation, 251 Causeway Street, Boston, MA 02114

8. Variances to building code floodplain standards

CHOOSE THE APPROPRIATE OPTION:

A. If the State issues variances to the flood-resistant standards as found in the state building code, the community will use this text for local adoption:

The Town/City will request from the State Building Code Appeals Board a written and/or audible copy of the portion of the hearing related to the variance, and will maintain this record in the community's files.

The Town/City shall also issue a letter to the property owner regarding potential impacts to the annual premiums for the flood insurance policy covering that property, in writing over the signature of a community official that (i) the issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage and (ii) such construction below the base flood level increases risks to life and property.

Such notification shall be maintained with the record of all variance actions for the referenced development in the floodplain overlay district.

B. Certain communities have the authority to issue variances to the state building code. If your community has this authority from the BBRs, you will use this text for local adoption:

Variances to floodplain development regulations shall only be issued upon (i) a showing of good and sufficient cause, (ii) a determination that failure to grant the variance would result in exceptional hardship to the applicant, and (iii) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

A written justification for the variance will be maintained in the Town's/City's building permit files, delineating the technical reason for the variance, and stating that the variance is the minimum necessary (considering the flood hazard) to afford relief.

The Town/City shall also issue a letter to the property owner regarding potential impacts to the annual premiums for the flood insurance policy covering that property, in writing over the signature of a community official that (i) the issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage and (ii) such construction below the base flood level increases risks to life and property.

Such notification shall be maintained with the record of all variance actions for the referenced development in the floodplain overlay district.

9. Variances to local Zoning Bylaws related to community compliance with the National Flood Insurance Program (NFIP)

A variance from these floodplain bylaws must meet the requirements set out by State law, and may only be granted if: 1) Good and sufficient cause and exceptional non-financial hardship exist; 2) the variance will not result in additional threats to public safety, extraordinary public expense, or fraud or victimization of the public; and 3) the variance is the minimum action necessary to afford relief.

10. Permits are required for all proposed development in the Floodplain Overlay District

The Town/City of _____ requires a permit for all proposed construction or other development in the floodplain overlay district, including new construction or changes to existing buildings, placement of manufactured homes, placement of agricultural facilities, fences, sheds, storage facilities or drilling, mining, paving and

any other development that might increase flooding or adversely impact flood risks to other properties.

11. Assure that all necessary permits are obtained

(Town/City)_____’s permit review process includes the use of a checklist of all local, state and federal permits that will be necessary in order to carry out the proposed development in the floodplain overlay district. The proponent must acquire all necessary permits, and must submit the completed checklist demonstrating that all necessary permits have been acquired.

12. Subdivision proposals

All subdivision proposals and development proposals in the floodplain overlay district shall be reviewed to assure that:

- (a) Such proposals minimize flood damage.
- (b) Public utilities and facilities are located & constructed so as to minimize flood damage.
- (c) Adequate drainage is provided.

13. Base flood elevation data for subdivision proposals

When proposing subdivisions or other developments greater than 50 lots or 5 acres (whichever is less), the proponent must provide technical data to determine base flood elevations for each developable parcel shown on the design plans.

14. Unnumbered A Zones

In A Zones, in the absence of FEMA BFE data and floodway data, the building department will obtain, review and reasonably utilize base flood elevation and floodway data available from a Federal, State, or other source as criteria for requiring new construction, substantial improvements, or other development in Zone A as the basis for elevating residential structures to or above base flood level, for floodproofing or elevating nonresidential structures to or above base flood level, and for prohibiting encroachments in floodways.

15. Floodway encroachment

In Zones A, A1-30, and AE, along watercourses that have not had a regulatory floodway designated, the best available Federal, State, local, or other floodway data shall be used to prohibit encroachments in floodways which would result in any increase in flood levels within the community during the occurrence of the base flood discharge.

In Zones A1-30 and AE, along watercourses that have a regulatory floodway designated on the Town's/City's FIRM or Flood Boundary & Floodway Map (choose map which delineates floodways for your community) encroachments are prohibited in the regulatory floodway which would result in any increase in flood levels within the community during the occurrence of the base flood discharge.

16. Watercourse alterations or relocations in riverine areas

In a riverine situation, the _____ (appropriate official in community) shall notify the following of any alteration or relocation of a watercourse:

- Adjacent Communities, especially upstream and downstream
- Bordering States, if affected
- NFIP State Coordinator
Massachusetts Department of Conservation and Recreation
251 Causeway Street, 8th floor
Boston, MA 02114
- NFIP Program Specialist
Federal Emergency Management Agency, Region I
99 High Street, 6th Floor
Boston, MA 02110

17. AO and AH zones drainage requirements

Within Zones AO and AH on the FIRM, adequate drainage paths must be provided around structures on slopes, to guide floodwaters around and away from proposed structures.

18. Recreational vehicles

In A1-30, AH, AE Zones, V1-30, VE, and V Zones, all recreational vehicles to be placed on a site must be elevated and anchored in accordance with the zone's regulations for

foundation and elevation requirements or be on the site for less than 180 consecutive days or be fully licensed and highway ready.

19. Protection of dunes

Alteration of sand dunes is prohibited when the alteration would increase potential flood damage.

20. Local Enforcement

This is not sample bylaw text, but rather an instruction:

Please read the explanation in Section 4 about the importance of being able to point to specific local enforcement procedures for non-compliant floodplain development.

Section 3. Definitions not found in the State Building Code

National Flood Insurance Program (NFIP) definitions are found in Title 44 of the Code of Federal Regulations, section 59.1. The definitions below refer to their source; if the definition is from the MA building code, it is from the 9th Edition, which meets the minimum standards of the NFIP.

In order for the bylaw or ordinance to be clearly understood, it is necessary to define technical terms or key words. An understanding of these terms is a prerequisite to effective administration of the floodplain management bylaw or ordinance.

Per FEMA Region I, these additional definitions must be included in local bylaws or ordinances.

DEVELOPMENT means any man-made change to improved or unimproved real estate, including but not limited to building or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials. [US Code of Federal Regulations, Title 44, Part 59]

FLOOD BOUNDARY AND FLOODWAY MAP means an official map of a community issued by FEMA that depicts, based on detailed analyses, the boundaries of the 100-year and 500-year floods and the 100-year floodway. (For maps done in 1987 and later, the floodway designation is included on the FIRM.)

FLOOD HAZARD BOUNDARY MAP (FHBM.) An official map of a community issued by the Federal Insurance Administrator, where the boundaries of the flood and related erosion areas having special hazards have been designated as Zone A or E. [US Code of Federal Regulations, Title 44, Part 59]

FLOODWAY. The channel of the river, creek or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. [Base Code, Chapter 2, Section 202]

FUNCTIONALLY DEPENDENT USE means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities. [US Code of Federal Regulations, Title 44, Part 59] Also [Referenced Standard ASCE 24-14]

HIGHEST ADJACENT GRADE means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure. [US Code of Federal Regulations, Title 44, Part 59]

HISTORIC STRUCTURE means any structure that is:

- (a) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- (b) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- (c) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- (d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:

- (1) By an approved state program as determined by the Secretary of the Interior or

- (2) Directly by the Secretary of the Interior in states without approved programs.

[US Code of Federal Regulations, Title 44, Part 59]

NEW CONSTRUCTION. Structures for which the start of construction commenced on or after the effective date of the first floodplain management code, regulation, ordinance, or standard adopted by the authority having jurisdiction, including any subsequent improvements to such structures. *New construction includes work determined to be substantial improvement.* [Referenced Standard ASCE 24-14]

RECREATIONAL VEHICLE means a vehicle which is:

- (a) Built on a single chassis;
- (b) 400 square feet or less when measured at the largest horizontal projection;
- (c) Designed to be self-propelled or permanently towable by a light duty truck; and
- (d) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

[US Code of Federal Regulations, Title 44, Part 59]

REGULATORY FLOODWAY - see FLOODWAY.

SPECIAL FLOOD HAZARD AREA. The land area subject to flood hazards and shown on a Flood Insurance Rate Map or other flood hazard map as Zone A, AE, A1-30, A99, AR, AO, AH, V, VO, VE or V1-30. [Base Code, Chapter 2, Section 202]

START OF CONSTRUCTION. The date of issuance for new construction and substantial improvements to existing structures, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement is within 180 days after the date of issuance. The actual start of construction means the first placement of permanent construction of a building (including a manufactured home) on a site, such as the pouring of a slab or footings, installation of pilings or construction of columns.

Permanent construction does not include land preparation (such as clearing, excavation, grading or filling), the installation of streets or walkways, excavation for a basement, footings, piers or foundations, the erection of temporary forms or the installation of accessory buildings such as garages or sheds not occupied as dwelling

units or not part of the main building. For a substantial improvement, the actual “start of construction” means the first alteration of any wall, ceiling, floor or other structural part of a building, whether or not that alteration affects the external dimensions of the building. [Base Code, Chapter 2, Section 202]

STRUCTURE means, for floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home. [US Code of Federal Regulations, Title 44, Part 59]

SUBSTANTIAL REPAIR OF A FOUNDATION. When work to repair or replace a foundation results in the repair or replacement of a portion of the foundation with a perimeter along the base of the foundation that equals or exceeds 50% of the perimeter of the base of the foundation measured in linear feet, or repair or replacement of 50% of the piles, columns or piers of a pile, column or pier supported foundation, the building official shall determine it to be substantial repair of a foundation. Applications determined by the building official to constitute substantial repair of a foundation shall require all existing portions of the entire building or structure to meet the requirements of 780 CMR. [As amended by MA in 9th Edition BC]

VARIANCE means a grant of relief by a community from the terms of a flood plain management regulation. [US Code of Federal Regulations, Title 44, Part 59]

VIOLATION means the failure of a structure or other development to be fully compliant with the community's flood plain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in §60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4), or (e)(5) is presumed to be in violation until such time as that documentation is provided. [US Code of Federal Regulations, Title 44, Part 59]

ZONES, FLOOD – *These definitions do not need to be included in local bylaws.*

Definitions of Flood Zones

The community shall use the pertinent definitions for flood zones delineated within the community. All of these terms are defined in the US Code of Federal Regulations, Title 44, Part 64.3.

ZONE A means an area of special flood hazard without water surface elevations determined

ZONE A1-30 and ZONE AE means area of special flood hazard with water surface elevations determined

ZONE AH means areas of special flood hazards having shallow water depths and/or unpredictable flow paths between (1) and (3) feet, and with water surface elevations determined

ZONE AO means area of special flood hazards having shallow water depths and/or unpredictable flow paths between (1) and (3) ft. *(Velocity flow may be evident; such flooding is characterized by ponding or sheet flow.)*

ZONE A99 means area of special flood hazard where enough progress has been made on a protective system, such as dikes, dams, and levees, to consider it complete for insurance rating purposes. (Flood elevations may not be determined.)

ZONES B, C, AND X means areas of minimal or moderate flood hazards or areas of future-conditions flood hazard. *(Zone X replaces Zones B and C on new and revised maps.)*

ZONE V means area of special flood hazards without water surface elevations determined, and with velocity, that is inundated by tidal floods (coastal high hazard area)

ZONE V1-30 and ZONE VE *(for new and revised maps)* means area of special flood hazards, with water surface elevations determined and with velocity, that is inundated by tidal floods (coastal high hazard area)

Section 4. Explanations

The requirements of the NFIP can be found in the US Code of Federal Regulations, Title 44 Emergency Management, generally in sections 59 through 75, although the requirements that most specifically address development in the floodplain are found in section 60.3. The highlighted bold italic type below states the requirement as found in the federal code and is followed by the code citation.

1. Stated local purpose for flood resistant standards

To justify the community's reasoning behind local floodplain overlay district zoning bylaws, the NFIP requires:

A purpose section citing health, safety, and welfare reasons for adoption [44 CFR 59.22(a)(1)]

The statement of purpose should set forth the goals and objectives to be achieved through the bylaw or ordinance. In other words, the statement of purpose enumerates what the community intends to accomplish by enacting regulations. The underlying purpose of the floodplain management regulations is to protect the public health, safety, and general welfare and to minimize the harmful impacts of flooding upon the community

These stated purposes will be ever more critical as community liabilities increase due to climate changes and increased flooding/ flood damages. The community is responsible to assure that all development is implemented in a safe, healthy, and socially/economically acceptable manner.

2. Use of FEMA maps and supporting studies

For local adoption of current effective FEMA flood maps and Flood Insurance Studies (FIS), the NFIP requirements state:

Adopt or reference correct Flood Insurance Rate Map (and where applicable, Flood Boundary Floodway Map) and date. [44CFR 60.2(h)]

and

Adopt or reference correct Flood Insurance Study and date. [44CFR 60.2(h)]

FEMA guidance (publication #495) states:

“The basis of your community’s floodplain management regulations is the flood hazard data FEMA provides. In support of the NFIP, FEMA identifies flood hazards nationwide and publishes and periodically updates flood hazard data. These data are provided to communities in the form of a Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS) report...”

and “Each time FEMA provides your community with new or revised flood hazard data, you must either adopt new floodplain management regulations to incorporate the data into your ordinance or amend the existing ones to reference the new FIRM and FIS report.”

Communities that fail to enact the necessary floodplain management regulations will be suspended from participation in the NFIP and subject to the prohibitions contained in Section 202(a) of the 1973 Act as amended. (Text from actual FEMA Letter of Final Determination.)

3. Abrogation and greater restriction section

The community must provide that floodplain management regulations take precedence over any less restrictive conflicting local laws, ordinances or codes. [44CFR 60.1(b)]

This is a legal provision that specifies that the floodplain management bylaw, ordinance, regulations, and building codes take precedence over less restrictive requirements.

4. Disclaimer of liability

The community must state that the degree of flood protection required by the ordinance is considered reasonable but does not imply total flood protection.

5. Severability section

If any section, provision or portion of the ordinance is deemed unconstitutional or invalid by a court, the remainder of the ordinance shall still be effective.

6. Designation of community Floodplain Administrator

Designate the official responsible to submit a report to the Federal Insurance Administrator concerning the community participation in the Program, including, but not limited to the development and implementation of floodplain management regulations. [44CFR 59.22 (b)]

The community must designate by title one person to act as the community's floodplain administrator (sometimes referred to as the FPA.). This is so that FEMA can use this information in their local contacts database, and so that this person can act on behalf of the community when implementing certain tasks under the National Flood Insurance Program. For example, the local FPA would sign the Community Acknowledgement Form when a property owner wishes to file for a Letter of Map Revision (LOMR).

The designation refers to a local staff position and can be anyone with the local authority to assure that the community is meeting its obligations as a participant in the National Flood Insurance Program. The FPA does not need to be someone who is directly involved in local development, but it should be someone who has at least a general concept of NFIP requirements and of the community's obligations under the Program. Typically, across the nation the FPA can be a building commissioner, town manager, town engineer, director of planning, environmental planner, etc.

Typical duties of an FPA include but are not limited to:

- a) Understanding the regulations for development in the floodplain overlay district
- b) Ensuring that permits are applied for when development of any kind is proposed in the floodplain overlay district
- c) Involvement with the permit process and/or permit application review for development in the floodplain overlay district
- d) Coordinating with other local departments such as public works, stormwater/engineering, planning & zoning, conservation commission, or housing
- e) Notifying adjacent communities prior to alteration of a watercourse
- f) Dealing with compliance issues and enforcement actions such as correcting violations, or working with the appropriate local staff to correct violations
- g) Maintaining records of floodplain development, and keeping FEMA current and historic maps available for public inspection

7. Requirement to submit new technical data

Within 6 months, notify FEMA of changes in the base flood elevation by submitting technical or scientific data so insurance & floodplain management can be based on current data. [44CFR 65.3]

Many development changes to the floodplain will trigger the requirement to file a Letter of Map Revision or other type of Letter of Map Change. When the development does not trigger the LOMC requirement but impacts the heights or extents of the base flood (usually to lower the risk), FEMA should be notified that a change was made so that in future map studies/updates this can be adequately addressed.

8. Variances to building code floodplain standards

44CFR 60.6(a)(3-6):

(3) Variances shall only be issued by a community upon (i) a showing of good and sufficient cause, (ii) a determination that failure to grant the variance would result in exceptional hardship to the applicant, and (iii) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances;

(4) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief;

(5) A community shall notify the applicant in writing over the signature of a community official that (i) the issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage and (ii) such construction below the base flood level increases risks to life and property. Such notification shall be maintained with a record of all variance actions as required in paragraph (a)(6) of this section.

(6) A community shall (i) maintain a record of all variance actions, including justification for their issuance

Because a variance can lead to an increased risk to life and property, variances from flood elevation requirements or other floodplain management requirements should be granted only rarely. Variances for floodplain development regulations must show that:

- Good and sufficient cause and exceptional hardship exist;
- The variance will not result in additional threats to public safety, extraordinary public expense, or fraud or victimization of the public; and
- The variance is the minimum action necessary to afford relief.

In Massachusetts, typically the State Building Code Appeals Board issues a variance to the state building code, unless your community is one of those approved by BBRS for local variance authority. When a local building official's interpretation of the flood-resistant standards under the building code are contested through the appeal process, the community must keep written documentation of both:

- a. the justification for local decision to deny the permit, and
- b. the results of the state's appeal/variance hearing (either in agreement with the local community, or having granted the variance through appeal.)

The community must also send a letter to the property owner stating that the implications of this variance may adversely impact the cost of the flood insurance policy covering the structure.

A FEMA suggestion for language to be used in such a letter is as follows:

"The granting of this variance may result in increased flood insurance premium rates, up to \$25 per \$100 of coverage, and such construction below the base flood level increases risks to life and property."

The justification for the variance (or the denial of the variance) and the community letter must be maintained as documentation that these actions were taken.

[9. Variances to local Zoning Bylaws related to community compliance with the National Flood Insurance Program \(NFIP\)](#)

Please note: This section addresses local Zoning Board variances only, and applies only when other variance procedures (such as those under the state building code) do not cover the variance request.

§60.6 Variances and exceptions. Excerpts:

(a) The Federal Insurance Administrator does not set forth absolute criteria for granting variances from the criteria set forth in §§60.3, 60.4, and 60.5. The issuance of a variance is for flood plain management purposes only.

The community, after examining the applicant's hardships, shall approve or disapprove a request.

The Federal Insurance Administrator may review a community's findings justifying the granting of variances, and if that review indicates a pattern inconsistent with the objectives of sound flood plain management, the Federal Insurance Administrator may take appropriate action under §59.24(b) of this subchapter.

Procedures for the granting of variances by a community are as follows:

(1) Variances shall not be issued by a community within any designated regulatory floodway if any increase in flood levels during the base flood discharge would result;

(3) Variances shall only be issued by a community upon (i) a showing of good and sufficient cause, (ii) a determination that failure to grant the variance would result in exceptional hardship to the applicant, and (iii) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances;

(4) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief;

(5) A community shall notify the applicant in writing over the signature of a community official that (i) the issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage and (ii) such construction below the base flood level increases risks to life and property. Such notification shall be maintained with a record of all variance actions as required in paragraph (a)(6) of this section; and

(6) A community shall (i) maintain a record of all variance actions, including justification for their issuance, and (ii) report such variances issued in its annual or biennial report submitted to the Federal Insurance Administrator.

(7) Variances may be issued by a community for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that (i) the criteria of paragraphs (a)(1) through (a)(4) of this section are met, and (ii) the structure or other development is protected by methods that minimize

flood damages during the base flood and create no additional threats to public safety.

For further information, see FEMA publication P-993, “Variances & the National Flood Insurance Program.”

From the State NFIP Coordinating Office: For all variances to floodplain development regulations, the community must maintain documentation that includes the variance request; determinations made by the entity granting the request that the three criterium listed above have been met; a copy of the letter to the property owner regarding possible insurance premium impacts; and that all appropriate flood protection and hazard mitigation measures were taken where applicable and possible, as specifically described in the variance file.

10. Permits are required for all proposed development in the Floodplain Overlay District

Require permits for all proposed construction and other developments including the placement of manufactured homes [44CFR 60.3(b)(1)]

NFIP requirements are focused on “development” in the floodplain. The NFIP definition of development is “*any manmade change to improved or unimproved real estate, including but not limited to building or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations.*” [44CFR 59.1]

Most Massachusetts communities have long used building permits to review construction in their floodplain overlay district, and conservation commissions use several documents for review of other types of development, but the regulation of all development in a floodplain is essential so that flood risks are not increased either on the site or to adjacent or upstream/downstream properties.

Some communities use a ‘Floodplain Development Review Form’ in addition to the traditional building permit, so they can document the review of all activities in the floodplain such as filling and grading; excavation, mining and drilling, storage of materials or equipment, placement of recreational vehicles or temporary stream crossings, and the review of activities conducted by other agencies such as roads or bridges built by state or federal government.

In Massachusetts, the local conservation commission reviews many of the above-listed activities, but use of a floodplain development review form for all floodplain overlay district proposals ensures that nothing slips through the cracks. This NFIP permitting

requirement is not prescriptive, but the documentation of some kind of permit or review process is mandatory for all floodplain development.

An additional benefit of documenting all floodplain development is that when a violation is discovered, the community can demonstrate that they did not approve the development as constructed, or that the developer did not come in for a full review of the development activity.

11. Assure that all necessary permits are obtained

Assure that all other State and Federal permits are obtained [44CFR 60.3(a)(2)]

While the community does not have to participate in the acquisition or review of all necessary state and federal permits for floodplain development, the community is obligated to assure that all necessary permits have been obtained by the proponent. The use of a checklist facilitates awareness for the proponent of which other permits must be obtained, generally prior to beginning the development project.

12. Subdivision proposals

Review subdivision proposals and development proposals to assure that:

(a) Such proposals minimize flood damage.

(b) Public utilities and facilities are located & constructed so as to minimize flood damage.

(c) Adequate drainage is provided.

[44CFR 60.3(a)(4) (I thru iii)]

13. Base flood elevation data for subdivision proposals

Require base flood elevation data for subdivision proposals or other developments greater than 50 lots or 5 acres. [44CFR 60.3(b)(3)]

If a subdivision fitting this size description is proposed in the floodplain overlay district where there are not already base flood elevations (BFEs) for each parcel, then the developer must provide BFEs for each parcel so that flood-resistant standards can be appropriately applied. The developer is responsible for providing the necessary technical data to support the base flood elevations shown on his/her design drawings.

14. Unnumbered A Zones

In A Zones, in the absence of FEMA BFE data and floodway data, obtain, review and reasonably utilize base flood elevation and floodway data available from available from a Federal, State, or other source as criteria for requiring new construction, substantial improvements, or other development in Zone A as the basis for elevating residential structures to or above base flood level, for floodproofing or elevating nonresidential structures to or above base flood level, and for prohibiting encroachments in floodways. [44CFR 60.3(b)(4)]

If the community has the engineering resources required to determine the base flood elevation in an unnumbered A zone, these resources can be used to meet this requirement. For those communities that do not have these resources, and even in communities that do, the permitting office can require that the proponent pay for resources to determine the base flood elevation when a development is being proposed. Historical records can be used, as well as any other data that reasonably indicates the 1% chance flood event. Two notes about this requirement:

- a) FEMA does allow a “defacto” elevation of two (2) feet above the highest adjacent grade in cases where the BFE cannot be reasonably determined, but the 9th Edition of the Massachusetts building code requires an additional foot of freeboard. This means that the top of the lowest floor would have to be three (3) feet above the highest adjacent grade.
- b) The 9th Edition of the MA building code allows communities to use preliminary FEMA maps once the Letter of Final Determination has been issued. These maps may indicate a BFE where none existed before, by virtue of the map update process.

15. Floodway encroachment

310 CMR 10.57(4) General Performance Standards.

(a) Bordering Land Subject to Flooding.

1. Compensatory storage shall be provided for all flood storage volume that will be lost as the result of a proposed project within Bordering Land Subject to Flooding, when in the judgment of the issuing authority said loss will cause an increase or will contribute incrementally to an increase in the horizontal extent and level of flood waters during peak flows.

Compensatory storage shall mean a volume not previously used for flood storage and shall be incrementally equal to the theoretical volume of flood water at each elevation, up to and including the 100-year flood elevation, which would be displaced by the proposed project. Such compensatory volume shall have an unrestricted hydraulic connection to the same waterway or water body. Further, with respect to waterways, such compensatory volume shall be provided within the same reach of the river, stream or creek.

2. Work within Bordering Land Subject to Flooding, including that work required to provide the above-specified compensatory storage, shall not restrict flows so as to cause an increase in flood stage or velocity.

This standard is found in the Wetlands Protection Act (WPA), and essentially means that there is no rise allowed in the elevation of the base flood anywhere in the entire floodplain. While an official certification is not required in floodways that are not regulated (shown on the FEMA map), for the intent of the WPA to be fulfilled the community must be sure that there will be no rise in the base flood elevation. If the area is located in an unnumbered A zone, a BFE must be determined before the development is designed, so that the “no rise” standard can be demonstrated.

Prohibit encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge. [44CFR 60.3(b)(6)]

Under federal NFIP requirements, the community must require certification from a registered professional that shows there will be no rise in the base flood elevation when development takes place in the regulated floodway. This cannot be accomplished by showing compensatory alone; the documentation must include a hydrologic and hydraulic (H&H) analysis.

16. Watercourse alterations or relocations in riverine areas

In riverine areas, notify neighboring communities of watercourse alterations or relocations. [44CFR 60.3(b)(6)]

Neighboring communities (and possibly a neighboring state) need to know in advance if the alteration or relocation of a watercourse might change their floodplain or flood risk. Send plans for this development to the CEOs of those communities, as well as to the Massachusetts NFIP State Coordinator and to the FEMA Regional Office.

17. AO and AH zones drainage requirements

In Zones AO and AH, require drainage paths around structures on slopes to guide water away from structures. [44CFR 60.3(c)(11)]

Guiding water away from the structure must also consider adjacent properties, where drainage cannot impact those lots or structures.

18. Recreational vehicles

In A1-30, AH, and AE Zones, all recreational vehicles to be placed on a site must be elevated and anchored or be on the site for less than 180 consecutive days or be fully licensed and highway ready. [44CFR 60.3(c)(14)]

In V1-30, VE, and V Zones, all recreational vehicles to be placed on a site must be elevated and anchored or be on the site for less than 180 consecutive days or be fully licensed & highway ready. [44CFR 60.3(e)(9)]

“Fully licensed and highway ready” means that wheels must be inflated; the vehicle must be self-propelled or towable by a light-duty truck; have no attached deck, porch or shed; and have quick-disconnect sewage, water and electrical connections. In other words, the vehicle must be ready to relocate immediately upon notification of the possibility of flooding in the area.

19. Protection of dunes

Prohibit alteration of sand dunes which would increase potential flood damage. [44CFR 60.3(e)(7)]

20. Local Enforcement

The NFIP requires that the floodplain management ordinance be legally enforceable and enforced uniformly throughout the community. [44 CFR 60.1(b)]

Sample bylaw language has not been offered regarding local enforcement of flood-resistant and flood reduction standards because enforcement is typically already addressed elsewhere in codes that are locally enforced.

As a part of implementing the NFIP in a local community, however, FEMA will need to know how the community enforces these regulations and standards. Each NFIP community should be prepared to answer the following questions:

1. How do you enforce the building code in your community? What specific actions are taken, and how are these actions documented? What penalties are specified? *[Definitions and regulations related to building code enforcement are found in CMR 780 Chapter 1 Sections 114 and 115, which refer to M.G.L. c. 143, c. 148, and M.G.L. c. 148A, and specifically M.G.L. c. 143, section 94(a.)]*
2. How do you enforce the Wetlands Protection Act? What actions and documentation exist to prove that enforcement was implemented? *[Enforcement regulations related to the Wetlands Protection Act are found in 310 CMR section 10.08.]*
3. How are other NFIP floodplain development requirements enforced, such as fencing that increases flood risk, the placement of recreational vehicles in the floodplain, re-grading of large commercial properties, construction of agricultural structures, placement of tanks, pools, temporary construction offices, etc.?

FEMA will expect to hear about a rigorous enforcement program that includes specific actions taken by the community for non-compliant floodplain development.

Enforcement provisions establish the responsibilities of persons, enforcement authority, what makes a violation, notice of violation, stop work and other orders, and citation and penalties for violations. These penalties may include fines and/or jail sentences.

Explanations for Definitions found in Section 3

Development. FEMA's minimum standards for the NFIP require review of, and possibly permitting for all activities defined as development within the Special Flood Hazard Area (SFHA.) Some of these activities might not normally require permitting under existing state or local regulations, and not all of these activities might be reviewed by the building department in a community.

Flood Boundary & Floodway Map. Some communities with older mapping (typically 1987 and prior) have two sets of flood maps, the familiar Flood Insurance Rate Map (FIRM) and the Flood Boundary & Floodway Map (FBFM). The floodway is delineated only on the FBFM. Communities with a FBFM must include it in the district definition in order to enforce floodway standards.

Flood Hazard Boundary Map. Communities with very old mapping (usually prior to 1980) might have a Flood Hazard Boundary Map (FHBM). This map must be referenced in the community's floodplain district definition. In most cases the FHBM has been converted to a FIRM by letter but the map will still say "Flood Hazard Boundary Map."

Floodway, Regulatory Floodway. The floodway, or regulatory floodway, is established by regulation and through hydraulic analysis. It is not a natural, physical feature of the watercourse. It is part of the 100-year floodplain but has specific requirements that exceed those in the floodplain fringe (the rest of the floodplain). The NFIP standards for floodway encroachments (for example including no-rise analysis) are not in state regulations.

Functionally dependent use. This term is used in the evaluation of variances to floodplain management standards. Sometimes variances can be issued for functionally dependent uses.

Highest adjacent grade. In an AO zone, the base flood elevation is determined by adding the depth indicated on the FIRM to the highest adjacent grade, or two feet if no depth is indicated (and if no alternative floodplain analysis is conducted and applied.)

Historic structure. NFIP standards for substantial improvement include an exception for structures that are identified as historic structures. Only those structures meeting this definition are eligible for this exception.

New construction. NFIP minimum standards apply to all new construction, which includes improvements to structures defined as new construction. as follows: (1) new

construction, including subsequent work to such structures, and (2) work classified as substantial improvement of an existing structure that is not an historic structure. [ASCE 24-14]

Recreational vehicle. NFIP elevation standards can sometimes apply to these vehicles when they are placed in the SFHA.

Special Flood Hazard Area (SFHA). The flood-prone areas on the FEMA maps (and subsequently adopted in a community's Floodplain Overlay District) where NFIP minimum standards apply. within special flood hazard areas.

Start of construction. Knowing the start of construction, as defined, can sometimes determine which version of a FIRM or regulation is used in situations where the FIRM or the regulation has been or is being updated.

Structure. NFIP minimum standards apply to all structures meeting this definition.

Substantial Repair of a Foundation. This is a Massachusetts unique definition included in the 9th Edition Building Code. It is important to be familiar with this definition as Building Code standards will apply.

Variance. It is important to understand the term in order to properly administer, consider and potentially issue variances. Note that variances are not the same as (and shouldn't be confused with) similar terms and/or processes such as special permits, exceptions or exemptions. Variances to standards enforced under state regulations must be administered through the proper state authority.

Violation. Violations can affect the community's standing in the NFIP and will likely result in higher flood insurance premiums. Violations can also prevent a community from entering participating in the Community Rating System.

**Pesce Engineering & Associates, Inc.**

43 Porter Lane
West Dennis, MA 02670

Phone: CELL: 508-333-7630 epesce@comcast.net

Invoice

Invoice #: 2022-2009

Invoice Date: 5/28/2022

Due Date: 6/28/2022

Bill To:

Mashpee Planning Board
ATTN: Evan Lehrer, Town Planner
Mashpee Town Hall
16 Great Neck Road N
Mashpee, MA 02649

Project & Location:

Willow Circle
- Engineering Peer Review
and Construction Inspection Svcs.

Description	Hrs./Qty.	Rate (\$)	Amount (\$)
ENGINEERING PROFESSIONAL SERVICES: 19 October 2021 - 28 May 2022			

Review of e-mails, printing & initial review of plans and project docs. - 19 October and calls with Matt Eddy & Evan Lehrer - 15 Nov 2021	1.50	160.00	240.00
Travel & Site Visit to review existing conditions - 19 Nov	2.50	160.00	400.00
Review of project plans and Drainage Report, preparation of Engineering Review Report - 26 Nov	5.00	160.00	800.00
Review of e-mails and revised plans & Special Permit Decision - 13 & 14 December 2021	1.00	160.00	160.00
Review & response to e-mails (23 March) from Contractor (Scott Miller) to schedule site visit, Travel & Site Visit & Meeting with Contractor's Team - 30 March 2022	3.00	160.00	480.00
Review & response to e-mail proposed change in drainage piping materials and invert elevation adjustments - 14 April	0.33	160.00	52.80
Travel & Site Visit with Contractor, and attendance at Pl. Bd. Hearing - 4 May	3.50	160.00	560.00
Review of Gravel Base Lab results, and travel and site visits to inspect Sewer & drainage construction - 10 & 11 May	5.50	160.00	880.00
Travel and site inspections to review existing conditions, erosion controls and construction progress - 16 & 20 May	3.00	135.00	405.00
REIMBURSABLES			

Mileage expense for site visit - 44 miles roundtrip - 7 trips: 19 Nov, 30 Mar, 4, 10, 11, 16 & 20 May	308.00	0.57	175.56
Plan Copies 11" X 17" color - 12 sheets	12.00	2.50	30.00
Photocopy expense - Drainage Report & Sieve lab tests	22.00	0.40	8.80

Please make checks payable to "Pesce Engineering"

Thank You for Your Business!

Total \$4,192.16

Payments/Credits \$0.00

Balance Due \$4,192.16

Phone: CELL: 508-333-7630 epesce@comcast.net

Invoice

Invoice #: 2022-2008

Invoice Date: 5/28/2022

Due Date: 6/28/2022

Bill To:

Mashpee Planning Board
ATTN: Evan Lehrer, Town Planner
Mashpee Town Hall
16 Great Neck Road N
Mashpee, MA 02649

Project & Location:

Casper Circle Subdiv.
- Construction Inspection Services

Description	Hrs./Qty.	Rate (\$)	Amount (\$)
ENGINEERING PROFESSIONAL SERVICES: 20 November 2021 - 28 May 2022 -----			
Calls to Contractor (Bill Weber) to construction progress and spring schedule - 21 Feb 2022	0.33	160.00	52.80
Travel & Site Visit to review existing conditions & construction progress & erosion controls - 28 March	2.50	160.00	400.00
Review of gravel base material lab test results (Briggs), compare to MassDOT Spec. (15 April). Travel & Site Visits to review existing conditions & construction progress for subgrade prep. - 4, 10 & 11 May	9.00	160.00	1,440.00
Travel & Site Inspections of final road grading, checks of thickness of compacted gravel base, witness and inspect compaction testing - 16 & 20 May	5.00	135.00	675.00
Travel & Site Visit to review paving construction progress, calls to Bill Weber - 25 & 27 May	4.50	160.00	720.00
REIMBURSABLES -----			
Mileage expense - 8 trips - 48 Miles Roundtrip for visit to Casper Circle - 28 Mar, 4, 10, 11, 16, 20, 25 & 27 May	384.00	0.57	218.88

Please make checks payable to "Pesce Engineering"

Thank You for Your Business!

Total	\$3,506.68
Payments/Credits	\$0.00
Balance Due	\$3,506.68

**Pesce Engineering & Associates, Inc.**

43 Porter Lane
West Dennis, MA 02670

Phone: CELL: 508-333-7630 epesce@comcast.net

Invoice

Invoice #: 2022-2006

Invoice Date: 5/28/2022

Due Date: 6/28/2022

Bill To:

Mashpee Planning Board
ATTN: Evan Lehrer, Town Planner
Mashpee Town Hall
16 Great Neck Road N
Mashpee, MA 02649

Project & Location:

532 Main St. (Leamar Dr. Subdivision)
- Engineering Peer Review Services

Description	Hrs./Qty.	Rate (\$)	Amount (\$)
ENGINEERING PROFESSIONAL SERVICES: 1 March - 28 May 2022			
Review of e-mails, printing & initial review of plans and project docs. - 1 March	1.0	160.00	160.00
Travel & Site Visit to review existing conditions - 15 March	2.0	160.00	320.00
Review of Subdivision Plans & Drainage Calculations, Prep. of engineering review letter report, and send to Town - 24-28 March	6.5	160.00	1,040.00
Travel & attendance at Pl. Bd. Hearing - 6 April	3.5	160.00	560.00
Review of Revised Plans, new letters submitted to PB, and travel & Attendance at PB hearing - 4 May	3.5	160.00	560.00
REIMBURSABLES			
Mileage expense for site visit - 44 miles roundtrip	44.0	0.57	25.08
Mileage expense - 42 Miles Roundtrip for visits to Town Hall - 2 trips	84.0	0.57	47.88
Plan Copies 11" X 17" color - 8 sheets	8.0	2.50	20.00

Please make checks payable to "Pesce Engineering"

Thank You for Your Business!

Total \$2,732.96

Payments/Credits \$0.00

Balance Due \$2,732.96

**Pesce Engineering & Associates, Inc.**

43 Porter Lane
West Dennis, MA 02670

Phone: CELL: 508-333-7630 epesce@comcast.net

Invoice

Invoice #: 2022-2005

Invoice Date: 5/28/2022

Due Date: 6/28/2022

Bill To:

Mashpee Planning Board
ATTN: Evan Lehrer, Town Planner
Mashpee Town Hall
16 Great Neck Road N
Mashpee, MA 02649

Project & Location:

Prop. Sherwin Williams - Rt. 151.
- Engineering Peer Review and
Construction Inspection Services

Description	Hrs./Qty.	Rate (\$)	Amount (\$)
ENGINEERING PROFESSIONAL SERVICES: 20 January - 28 May 2022			

Travel & Site visit to review existing conditions & attend Pre-Construction Meeting - 25 May 2022	3.50	160.00	560.00
Printout & Review of Revised Site Plans (Rev 3 - 28 Apr 2022), review comments & plans changes from BOH, print & review project schedule, preparation of e-mail responses to Chad Brubaker & Corey McGinnis - 28 May	2.33	160.00	372.80
REIMBURSABLES			

Mileage expense - 52 Miles Roundtrip for site visit - 25 May	52.00	0.57	29.64
Plan Copies 24" X 36" color (13 Sheets)	13.00	5.90	76.70

Please make checks payable to "Pesce Engineering"

Thank You for Your Business!

Total \$1,039.14

Payments/Credits \$0.00

Balance Due \$1,039.14



Massachusetts Department of Environmental Protection

eDEP Transaction Copy

Here is the file you requested for your records.

To retain a copy of this file you must save and/or print.

Username: EBELAIR

Transaction ID: 1372240

Document: Groundwater Discharge Monitoring Report Forms

Size of File: 1608.04K

Status of Transaction: Submitted

Date and Time Created: 5/31/2022:12:13:14 PM

Note: This file only includes forms that were part of your transaction as of the date and time indicated above. If you need a more current copy of your transaction, return to eDEP and select to "Download a Copy" from the Current Submittals page.

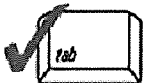


Groundwater Permit
MONITORING WELL DATA REPORT

668
1. Permit Number
2. Tax identification Number
2022 QUARTERLY 2
3. Sampling Month & Frequency

A. Facility Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility name, address:

SOUTH CAPE VILLAGE

a. Name

672 FALMOUTH ROAD/RTE. 28

b. Street Address

MASHPEE

c. City

MA

d. State

02649

e. Zip Code

2. Contact information:

MYLES OSTROFF

a. Name of Facility Contact Person

6174311097

b. Telephone Number

myles@chartweb.com

c. e-mail address

3. Sampling information:

4/14/2022

a. Date Sampled (mm/dd/yyyy)

RI ANALYTICAL

b. Laboratory Name

NICOLE SKYLES ON

c. Analysis Performed By (Name)

B. Form Selection

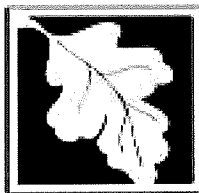
1. Please select Form Type and Sampling Month & Frequency

Monitoring Well Data Report - 2022 Quarterly 2

☐ All forms for submittal have been completed.

2. ☐ This is the last selection.

3. ☐ Delete the selected form.

**Massachusetts Department of Environmental Protection**

Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit**MONITORING WELL DATA REPORT**

668

1. Permit Number

2. Tax identification Number

2022 QUARTERLY 2

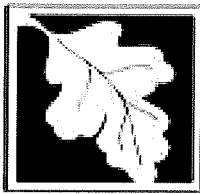
3. Sampling Month & Frequency

C. Contaminant Analysis Information

- For "0", below detection limit, less than (<) value, or not detected, enter "ND"
- TNTC = too numerous to count. (Fecal results only)
- NS = Not Sampled
- DRY = Not enough water in well to sample.

<

Parameter/Contaminant	P-1	P-2	P-4	P-6		
Units	Well #: 1	Well #: 2	Well #: 3	Well #: 4	Well #: 5	Well #: 6
NITRATE-N	2.2	0.75	DRY	2.9		
MG/L						
TOTAL NITROGEN(NO3+NO2+TK	11.9	10.4	DRY	3.84		
MG/L						
TOTAL PHOSPHORUS AS P	1.2	0.69	DRY	3.1		
MG/L						
ORTHO PHOSPHATE	ND	0.15	DRY	2.7		
MG/L						



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit
DISCHARGE MONITORING REPORT

668

1. Permit Number

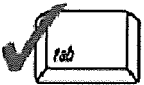
2. Tax Identification Number

2022 APR MONTHLY

3. Sampling Month & Frequency

A. Facility Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility name, address:

SOUTH CAPE VILLAGE

a. Name

672 FALMOUTH ROAD/RTE. 28

b. Street Address

MASHPEE

c. City

MA

d. State

02649

e. Zip Code

2. Contact information:

MYLES OSTROFF

a. Name of Facility Contact Person

6174311097

b. Telephone Number

myles@chartweb.com

c. e-mail address

3. Sampling information:

4/5/2022

a. Date Sampled (mm/dd/yyyy)

RI ANALYTICAL

b. Laboratory Name

NICOLE SKYLESON

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2022 Apr Monthly



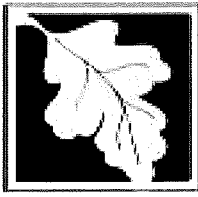
All forms for submittal have been completed.



2. This is the last selection.



3. Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

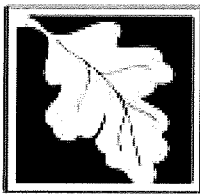
Groundwater Permit
DISCHARGE MONITORING REPORT

668
1. Permit Number
[REDACTED]
2. Tax identification Number
2022 APR MONTHLY
3. Sampling Month & Frequency

D. Contaminant Analysis Information

- For "0", below detection limit, less than (<) value, or not detected, enter "ND"
- TNTC = too numerous to count. (Fecal results only)
- NS = Not Sampled

1. Parameter/Contaminant	2. Influent	3. Effluent	4. Effluent Method
Units			Detection limit
BOD	230	6.1	3.0
MG/L			
TSS	620	8.3	2.0
MG/L			
TOTAL SOLIDS	1000		
MG/L			
AMMONIA-N	22		
MG/L			
NITRATE-N		2.9	0.050
MG/L			
TOTAL NITROGEN(NO3+NO2+TKN)		6.0	0.50
MG/L			
OIL & GREASE		ND	0.50
MG/L			

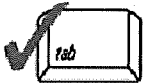


Groundwater Permit
DISCHARGE MONITORING REPORT

668
1. Permit Number
2. Tax identification Number
2022 QUARTERLY 2
3. Sampling Month & Frequency

A. Facility Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility name, address:

SOUTH CAPE VILLAGE

a. Name

672 FALMOUTH ROAD/RTE. 28

b. Street Address

MASHPEE

c. City

MA

d. State

02649

e. Zip Code

2. Contact information:

MYLES OSTROFF

a. Name of Facility Contact Person

6174311097

b. Telephone Number

myles@chartweb.com

c. e-mail address

3. Sampling information:

4/5/2022

a. Date Sampled (mm/dd/yyyy)

RI ANALYTICAL

b. Laboratory Name

NICOLE SKYLESON

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Discharge Monitoring Report - 2022 Quarterly 2

☐ All forms for submittal have been completed.

2. ☐ This is the last selection.

3. ☐ Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

DAILY LOG SHEET

668

1. Permit Number

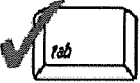
2. Tax Identification Number

2022 APR DAILY

3. Sampling Month & Frequency

A. Facility Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility name, address:

SOUTH CAPE VILLAGE

a. Name

672 FALMOUTH ROAD/RTE. 28

b. Street Address

MASHPEE

c. City

MA

d. State

02649

e. Zip Code

2. Contact information:

MYLES OSTROFF

a. Name of Facility Contact Person

6174311097

b. Telephone Number

myles@chartweb.com

c. e-mail address

3. Sampling information:

4/30/2022

a. Date Sampled (mm/dd/yyyy)

WHITEWATER

b. Laboratory Name

JAIME STEWART

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Daily Log Sheet - 2022 Apr Daily



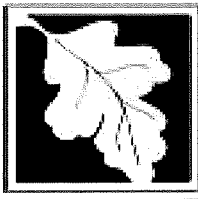
All forms for submittal have been completed.



2. This is the last selection.



3. Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit
DAILY LOG SHEET

668

1. Permit Number

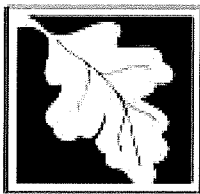
2. Tax identification Number

2022 APR DAILY

3. Sampling Month & Frequency

C. Daily Readings/Analysis Information

Date	Effluent Flow GPD	Reuse Flow GPD	Irrigation Flow GPD	Turbidity	Influent pH	Effluent pH	Chlorine Residual (mg/l)	UV Intensity (%)
1	6328					7.4		
2	6328							
3	6328							
4	15760					7.9		
5	8393					7.9		
6	6210					7.8		
7	14821					7.7		
8	7733					7.7		
9	7733							
10	7733							
11	17280					7.9		
12	8458					7.9		
13	12755					7.3		
14	2114					7.3		
15	10295					7.5		
16	10295							
17	10295							
18	10295					7.5		
19	10512					7.5		
20	10364					7.5		
21	12933					7.7		
22	8250					7.7		
23	8250							
24	8250							
25	10355					7		
26	10750					7.5		
27	10312					7.4		
28	5250					7.4		
29	9637					7		
30	9637							
31								



Groundwater Permit
MONITORING WELL DATA REPORT

668

1. Permit Number

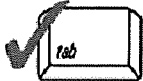
2. Tax identification Number

2022 APR MONTHLY

3. Sampling Month & Frequency

A. Facility Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility name, address:

SOUTH CAPE VILLAGE

a. Name

672 FALMOUTH ROAD/RTE. 28

b. Street Address

MASHPEE

c. City

MA

d. State

02649

e. Zip Code

2. Contact information:

MYLES OSTROFF

a. Name of Facility Contact Person

6174311097

b. Telephone Number

myles@chartweb.com

c. e-mail address

3. Sampling information:

4/14/2022

a. Date Sampled (mm/dd/yyyy)

WHITEWATER

b. Laboratory Name

JAIME STEWART

c. Analysis Performed By (Name)

B. Form Selection

1. Please select Form Type and Sampling Month & Frequency

Monitoring Well Data Report - 2022 Apr Monthly



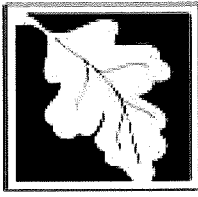
All forms for submittal have been completed.



2. This is the last selection.



3. Delete the selected form.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit
MONITORING WELL DATA REPORT

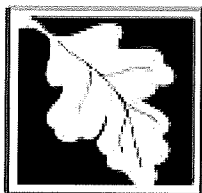
668
1. Permit Number
2. Tax identification Number
2022 APR MONTHLY
3. Sampling Month & Frequency

C. Contaminant Analysis Information

- For "0", below detection limit, less than (<) value, or not detected, enter "ND"
- TNTC = too numerous to count. (Fecal results only)
- NS = Not Sampled
- DRY = Not enough water in well to sample.

<

Parameter/Contaminant	P-1	P-2	P-4	P-6		
Units	Well #: 1	Well #: 2	Well #: 3	Well #: 4	Well #: 5	Well #: 6
PH	6.5	DRY	6.1	6.6		
S.U.						
STATIC WATER LEVEL	18.5	DRY	46.5	5.3		
FEET						
SPECIFIC CONDUCTANCE	625	DRY	282	982		
UMHOS/C						



Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Groundwater Discharge Program

Groundwater Permit

668

1. Permit Number

2. Tax identification Number

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Any person signing a document under 314 CMR 5.14(1) or (2) shall make the following certification

If you are filing electronic-ally and want to attach additional comments, select the check box.



Facility Information

SOUTH CAPE VILLAGE

a. Name

672 FALMOUTH ROAD/RTE. 28

b. Street Address

MASHPEE

c. City

MA

d. State

02649

e. Zip Code

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

ELIZABETH BELAIR

a. Signature

5/31/2022

b. Date (mm/dd/yyyy)

Reporting Package Comments

PLANT MET ALL DISCHARGE PERMIT REQUIREMENTS FOR APRIL 2022.



Town of Barnstable
Planning & Development Department
www.townofbarnstable.us/planninganddevelopment



Elizabeth Jenkins
Director

May 23, 2022

Department of Housing and Community Development
100 Cambridge Street, Suite 300 - Boston, MA 02114

Cape Cod Commission
P.O. Box 226 - 3225 Main Street (Route 6A) - Barnstable, MA 02630

Town of Sandwich, Planning Board
16 Jan Sebastien Drive - Sandwich, MA 02563

✓ Town of Mashpee, Planning Board
16 Great Neck Road - Mashpee, MA 02649

Town of Yarmouth, Planning Board
1146 Route 28 - Yarmouth, MA 02664

Town of Barnstable, Zoning Board of Appeals
367 Main Street- Hyannis, MA 02601

Reference: Town of Barnstable Planning Board
Proposed Zoning Amendment – TC Item No. 2022-159

**AMENDING CHAPTER 240 ZONING, ARTICLE III, BY CITIZENS PETITION TO
AMEND THE SEPARATION REQUIREMENTS OF THE MEDICAL MARIJUANA
OVERLAY DISTRICT**

The Barnstable Planning Board, acting under Chapter 40A, Section 5 of the General Laws of the Commonwealth of Massachusetts, will hold a public hearing on Monday, June 13, 2022, at 7:00 p.m. The purpose of this public hearing is to take comment on a proposal to amend the Town of Barnstable Zoning Ordinances, §240-30E(4) the Separation Requirements of the Medical Marijuana Overlay District.

This amendment is a petition made by ten certified registered voters of the Town and was referred to the Planning Board for a public hearing by Town Council Item No. 2022-159. A copy of the full text for the proposed zoning amendment can be found on the Town's website, <https://www.townofbarnstable.us>, on the Department of Planning and Development's homepage, under "Current Projects" via Zoning Updates.

Members of the public may participate in the Public Hearing through remote access via the Zoom link or telephone number and Meeting ID provided below.

Alternative public access to this meeting shall be provided in the following manner:

1. The meeting will be televised via Channel 18 and may be viewed via the Channel 18 website at <http://streaming85.townofbarnstable.us/CablecastPublicSite/>

2. Real-time access to the Planning Board meeting is available utilizing the Zoom link or telephone number and Meeting ID provided below:

Link: <https://townofbarnstable-us.zoom.us/j/81549904943>

Phone: 888 475 4499 US Toll-free Meeting ID: 815 4990 4943

3. Applicants, their representatives and individuals required or entitled to appear before the Barnstable Planning Board may appear remotely, and may participate through accessing the link or telephone number provided above. Documentary exhibits and/or visual presentations should be submitted in advance of the meeting to james.kupfer@town.barnstable.ma.us, so that they may be displayed for remote public access viewing.

A copy of the full text for the proposed zoning amendment can be found on the Town's website, <https://www.townofbarnstable.us>, on the Department of Planning and Development's homepage, under "Current Projects" via Zoning Updates and can also be obtained by calling 508-862-4784 or emailing james.kupfer@town.barnstable.ma.us.

Attach: Notice Amendment Summary

Copy: Planning Board File Zoning Amendment
Planning Board Chair

B. NEW BUSINESS (First Reading Refer to Planning Board)

ITEM# 2022-159
INTRO: 05/05/2022

**2022-159 ORDER PURSUANT TO M.G.L. CHAPTER 40A, SECTION 5
SUBMITTING TO THE PLANNING BOARD A PROPOSED
ZONING AMENDMENT TO AMEND THE SEPARATION
REQUIREMENTS OF THE MEDICAL MARIJUANA OVERLAY
DISTRICT**

ORDERED: That the attached one-page proposal to amend the Town's Zoning Ordinance by "deleting the present form of §240-30(E)4 in its entirety" and "replacing that provision" with the language set forth in the attached proposal submitted to the Town Council on May 2, 2022 by 10 registered voters is hereby submitted to the Planning Board for review pursuant to the provisions of M.G.L. Chapter 40A, Section 5.

SPONSOR:

DATE

ACTION TAKEN

____ Read Item
____ Motion to Open Public Hearing
____ Rationale
____ Public Hearing
____ Close public hearing
____ Council discussion
____ Move/vote

The Commonwealth of Massachusetts

DATE and TIME this paper received
by Registrars. 2 APR 22 PM 12:21
BARNSTABLE TOWN CLERK

PETITION

TOWN OF BARNSTABLE

SUBJECT OR SUBJECTS REQUESTED

(To be filled in by petitioners. If space is insufficient, attach additional page of description to each petition form before signatures are gathered.)

To respectfully request that the Barnstable Town Council amend the below section from the Town of Barnstable Zoning Ordinance, pursuant to M.G.L. Ch. 40 §5 or by other means, for consistency and compliance with State Law, as follows:

By deleting the present form of §240-30(E)4 in its entirety:

"(4) Separation requirements. The site is located at least 1,000 feet distant from a religious institution/place of religious assembly, school, day-care center, preschool or afterschool facility or any facility in which children commonly congregate, or if not located at such a distance, it is determined by the Zoning Board of Appeals to be sufficiently buffered from such facilities such that its users will not be adversely impacted by the operation of the registered marijuana dispensary, but in no case shall the distance be less than 500 feet measured from parcel boundary to parcel boundary. In no case shall a RMD directly abut another RMD or any medical marijuana use."

And by replacing that provision with the following:

"(4) Separation requirements. The site does not abut a religious institution/place of religious assembly, and is located at least 500 feet from any school, day-care center, preschool, or afterschool facility or any facility in which children commonly congregate. In no case shall a RMD directly abut another RMD or any medical marijuana use."

Town of Sandwich
THE OLDEST TOWN ON CAPE COD



Board of Appeals

16 Jan Sebastian Drive
Sandwich, MA 02563
Phone: 508-833-8001
Fax: 508-833-8006
E-mail: planning@sandwichmass.org

**Special Permit
Certificate of Approval**

Petition #	22-12
Current Property Owner(s):	Samuel & Eliza Battles
Applicant:	Samuel & Eliza Battles
Property Address:	3 Grace Lane
Map, Parcel	06-203

TOWN CLERK
TOWN OF SANDWICH

MAY 26 2022

11 H 03 M A May
RECEIVED & RECORDED

On May 24, 2022 the Board of Appeals voted to approve a special permit from Section 3560 of the Sandwich Zoning By-law for property located at 3 Grace Lane, as shown on Assessor's Map 06, Parcel 203, for the purpose of constructing an 8-foot tall fence on the subject property.

The Board of Appeals certifies that the decision attached hereto is a true and correct copy of its decision to approve a special permit and that copies of said decision, and of all plans referred to in the decision, have been filed with the Board of Appeals and the Town Clerk.

The Board of Appeals also calls to the attention of the owner or applicant that General Laws, Chapter 40A, Section 11 provides that no special permit, or any extension, modification or renewal thereof, shall take effect until a copy of the decision bearing the certification of the town clerk that twenty days have elapsed after the decision has been filed in the office of the town clerk and no appeal has been filed or that, if such appeal has been filed, that it has been dismissed or denied, is recorded in the registry of deeds for the county and district in which the land is located and indexed in the grantor index under the name of the owner of record or is recorded and noted on the owner's certificate of title. The owner or applicant shall pay the fee for such recording or registering. A copy of that registered decision shall be returned to the Planning & Development office as proof of filing.

Any person aggrieved by this decision may appeal to the Superior Court or Land Court as in Section 17 of Chapter 40A, M.G.L. by filing a NOTICE OF ACTION AND COMPLAINT with the Town Clerk within twenty (20) days of the date of filing of this decision.



Board of Appeals Member

5/25/22

Date

- b) The Board of Appeals finds that nuisance, hazard or congestion will not be created;
 - c) The Board of Appeals finds that there will not be substantial harm to the neighborhood;
 - d) The Board of Appeals finds that there is no derogation from the intent of the bylaw such that the districts' objectives will be satisfied.
9. Applicant states that the fence height of 8' is required to resolve an issue with a neighbor.
10. Applicant states that the 8 foot fence shall be located on the northern elevation and +/- 106' in length.

Motion: I, James Killion, move to adopt these findings as the findings of the Board of Appeals.

Second: Robert Jensen

Vote:	Erik Van Buskirk	Yes
	James Killion	Yes
	Robert Jensen	Yes
	Chase Terrio	Yes
	Mary Foley	Yes

CONDITIONS:

At the public hearing, the Board of Appeals considered potential conditions of approval for the special permit. The Board of Appeals voted that the following conditions of approval shall be imposed upon any approval of a special permit and that these conditions are reasonable and that the applicant and its successor-in-interest shall be bound by these conditions:

1. Failure to comply with all the conditions set forth in this decision shall terminate the grant of this special permit.
2. Pursuant to the requirements of Sandwich Protective Zoning By-law Section 1330, the grant of special permit shall expire upon:
 - a) Transfer of ownership, prior to initiation of substantial construction on or occupancy of the site unless such transfer is authorized in this permit, or
 - b) If no substantial construction or occupancy takes place within (3) three years of special permit approval, excluding such time required to pursue or await the determination of an appeal referred to in MGL C 40A, Section 17.



BOARD of APPEALS

16 Jan Sebastian Drive
Sandwich, MA 02563
Phone: 508 833 8001
Fax: 508 833 8006
E-mail: planning@sandwichmass.org

**TOWN OF SANDWICH
PUBLIC HEARING NOTICE
BOARD OF APPEALS**

The Sandwich Board of Appeals will hold a Public Hearing on the application of MJG Nominee Trust, Mary Jo Gagnon, Trustee, Applicant and Property Owner, for a Special Permit under Sections 1330, 2420 and 4350 of the Sandwich Protective Zoning By-Law for property located at 337 Phillips Road, Sagamore Beach, MA Assessor's Map #95, Parcel #28, for the purpose of constructing an addition over 301 s.f. to a non-conforming structure in the floodplain. The Public Hearing will be held on June 14, 2022 at the Sand Hill School Community Center, 16 Dewey Ave, Sandwich, MA at 6:00 p.m. The public record information can be viewed at the Planning & Development office, 16 Jan Sebastian Drive, Sandwich, MA, Monday-Friday 8:30 a.m. to 4:30 p.m.

Erik Van Buskirk, Chair
Sandwich Board of Appeals
Publication: Sandwich Enterprise
Publication Dates: May 27 and June 3, 2022

Town of Sandwich
THE OLDEST TOWN ON CAPE COD



Planning Board

16 Jan Sebastian Drive
Sandwich, MA 02563
Phone: 508-833-8001
Fax: 508-833-8006
Email: planning@sandwichmass.org

TOWN OF SANDWICH PUBLIC HEARING NOTICE PLANNING BOARD

The Sandwich Planning Board will hold a Public Hearing on the application of Ron Gangemi, applicant and Farmersville Realty, LLC, property owner, for a Definitive Subdivision Plan of Land for property located at 0 Farmersville Road, Sandwich, MA, Assessor's Map #13 Parcel #82, for the purpose of creating a subdivision. The Public Hearing will be held on June 21, 2022 at the Sand Hill School Community Center, 16 Dewey Avenue, Sandwich, MA at 7 p.m. The public record information can be viewed at the Planning & Development office, 16 Jan Sebastian Drive, Sandwich, MA, Monday-Friday 8:30 a.m. to 4:30 p.m.

Jeffrey R. Picard, Chair, Sandwich Planning Board
Publication: Sandwich Enterprise
Publication Dates: June 3 and June 10, 2022



**TOWN OF FALMOUTH
MASSACHUSETTS**

BOARD OF APPEALS

Notice of Decision

Notice is hereby given that the Board of Appeals of the Town of Falmouth has made a decision on a petition by Lorien LLC, 108 Gansett Road, Woods Hole, Ma.

(Map 49 Lot 002B) under 240-10.1C(5) and 240-11.4A(1)i of the Zoning By-Law, as amended to grant the special permit to allow plan modifications to previously issued Special Permits #075-18 and #021-21.

Appeals, if any, shall be made pursuant to the Massachusetts General Laws, Chapter 40A, Section 17, and shall be filed within twenty (20) days after **June 6, 2022** which is the date the Decision was filed in the office of the Town Clerk.

Please contact Noreen Stockman at 508-495-7460
or Noreen.stockman@falmouthma.gov if you have any questions or comments
full text of decision available at <http://www.falmouthmass.us>



**TOWN OF FALMOUTH
MASSACHUSETTS**

BOARD OF APPEALS

Notice of Decision

Notice is hereby given that the Board of Appeals of the Town of Falmouth has made a decision on a petition by Robert M. and Nancy J. Kravets, 97 Lake Shore Drive, East Falmouth, Ma. (Map 22 Lot 001J) under 240-10.2A of the Zoning By-Law, as amended to **grant** the special permit to construct an addition, covered deck and extend the existing covered porch.

Appeals, if any, shall be made pursuant to the Massachusetts General Laws, Chapter 40A, Section 17, and shall be filed within twenty (20) days after **June 6 ,2022** which is the date the Decision was filed in the office of the Town Clerk.

Please contact Noreen Stockman at 508-495-7460
or Noreen.stockman@falmouthma.gov if you have any questions or comments
full text of decision available at <http://www.falmouthmass.us>



**TOWN OF FALMOUTH
MASSACHUSETTS**

BOARD OF APPEALS

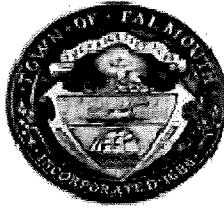
Notice of Decision

Notice is hereby given that the Board of Appeals of the Town of Falmouth has made a decision on a petition by Barnstable County Agricultural Society, Inc., 1220 Nathan S. Ellis Highway, East Falmouth, Ma.

(Map 18 Lot 180 and associated lots) **under 240-6.1, 240-14.1I, 240-5.1F and 240-5.1B** of the Zoning By-Law, as amended to grant the special permit to allow non-agricultural events with associated parking and parking for a fee.

Appeals, if any, shall be made pursuant to the Massachusetts General Laws, Chapter 40A, Section 17, and shall be filed within twenty (20) days after **May 25, 2022** which is the date the Decision was filed in the office of the Town Clerk.

Please contact Noreen Stockman at 508-495-7460
or Noreen.stockman@falmouthma.gov if you have any questions or comments
full text of decision available at <http://www.falmouthmass.us>



**TOWN OF FALMOUTH
MASSACHUSETTS**

BOARD OF APPEALS

Notice of Decision

Notice is hereby given that the Board of Appeals of the Town of Falmouth has made a decision on a petition by Buca Corp., 7 and 22 Nathan S. Ellis Highway, North Falmouth, Ma.

(Map 05 Lot(s) 001 & 002) **under 240-10.2A** of the Zoning By-Law, as amended to **grant** the modification of special permit #23-88 to construct an in-fill addition to the restaurant and to allow the installation of an outdoor bar/seating area.

Appeals, if any, shall be made pursuant to the Massachusetts General Laws, Chapter 40A, Section 17, and shall be filed within twenty (20) days after **May 25, 2022** which is the date the Decision was filed in the office of the Town Clerk.

Please contact Noreen Stockman at 508-495-7460
or Noreen.stockman@falmouthma.gov if you have any questions or comments
full text of decision available at <http://www.falmouthmass.us>



**TOWN OF FALMOUTH
MASSACHUSETTS**

BOARD OF APPEALS

Notice of Decision

Notice is hereby given that the Board of Appeals of the Town of Falmouth has made a decision on a petition by Joseph and Mary Noonan, 183 Surf Drive, Falmouth, Ma.

(Map 47 Lot 000D) under a Court Ordered Remand and section 240-3 C. and 240-69 E. of the Zoning By-Law, as amended to **grant** the special permit to raze and reconstruct the dwelling.

Appeals, if any, shall be made pursuant to the Massachusetts General Laws, Chapter 40A, Section 17, and shall be filed within twenty (20) days after **May 26, 2022** which is the date the Decision was filed in the office of the Town Clerk.

Please contact Noreen Stockman at 508-495-7460
or Noreen.stockman@falmouthma.gov if you have any questions or comments
full text of decision available at <http://www.falmouthmass.us>



TOWN OF FALMOUTH

ZONING BOARD OF APPEALS

59 TOWN HALL SQUARE, FALMOUTH, MA 02540
508-495-7460 – FAX 508-495-7463

BOARD OF APPEALS NOTICE OF PUBLIC HEARING

Being all persons deemed affected by the Board of Appeals under Section 11 of Chapter 40A of the Massachusetts General Laws you are hereby notified that:

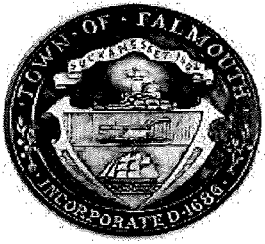
Application #044-22 Michele C. Brandt, 95 Club Valley Drive, East Falmouth, Ma.: Applied to the Zoning Board of Appeals for a special permit pursuant to section(s) 240-9.5B(1)a (formerly 240-162) of the Code of Falmouth to allow a home occupation to operate a yoga studio. The subject property is 95 Club Valley Drive, East Falmouth, Ma.

Map 09 Section 01 Parcel 004 Lot(s) 034

A public hearing will be given on this application, in the Select Board's Meeting Room, Town Hall, on **Thursday, June 23, 2022 at 6:30PM**
You are invited to be present.

By Order of the Board of Appeals,
Chairman, Terrence Hurrie

Plans are available for review prior to the hearing at the Board of Appeals office, Town Hall during the hours of 8:00 AM to 4:00 PM. *Plans are available to review at <https://www.falmouthma.gov/1113/Applications-under-review-by-the-ZBA>



TOWN OF FALMOUTH

ZONING BOARD OF APPEALS

59 TOWN HALL SQUARE, FALMOUTH, MA 02540
508-495-7460 – FAX 508-495-7463

BOARD OF APPEALS NOTICE OF PUBLIC HEARING

Being all persons deemed affected by the Board of Appeals under Section 11 of Chapter 40A of the Massachusetts General Laws you are hereby notified that:

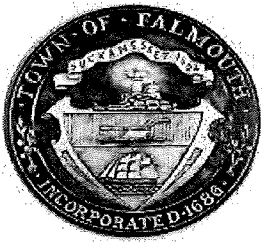
Application #043-22 Stephen J. and Ruthanne Molyneaux, 137 Old Main Road, North Falmouth, Ma.: Applied to the Zoning Board of Appeals for a special permit pursuant to section(s) 240-11.3A (4) and 240-10.2A (previously 240-3 C. and 240-69 E.) of the Code of Falmouth to allow an above ground pool; increasing lot coverage by structures on subject property known as 137 Old Main Road, North Falmouth, Ma.

Map 05A Section 06 Parcel 013 Lot(s) 000

A public hearing will be given on this application, in the Select Board's Meeting Room, Town Hall, on **Thursday, June 23, 2022 at 6:30PM**
You are invited to be present.

By Order of the Board of Appeals,
Chairman, Terrence Hurrie

Plans are available for review prior to the hearing at the Board of Appeals office, Town Hall during the hours of 8:00 AM to 4:00 PM. *Plans are available to review at <https://www.falmouthma.gov/1113/Applications-under-review-by-the-ZBA>



TOWN OF FALMOUTH

ZONING BOARD OF APPEALS

59 TOWN HALL SQUARE, FALMOUTH, MA 02540
508-495-7460 – FAX 508-495-7463

BOARD OF APPEALS NOTICE OF PUBLIC HEARING

Being all persons deemed affected by the Board of Appeals under Section 11 of Chapter 40A of the Massachusetts General Laws you are hereby notified that:

Application #040-22 Christopher J. and Joan H. Eident, 4 Fargo Drive, Ledyard, CT.: Applied to the Zoning Board of Appeals for a special permit pursuant to section(s) 240-10.1C (3) and 240-11.3A(4) (formerly 240-3 C. and 240-69 E.) of the Code of Falmouth to demolish a portion of the existing non-conforming dwelling and construct a two-story addition; exceeding 20% lot coverage by structures on subject property known as 129 Jericho Path, Falmouth, Ma.

Map 46 Section 00I Parcel 000 Lot(s) 004

A public hearing will be given on this application, in the Select Board's Meeting Room, Town Hall, on **Thursday, June 23, 2022 at 6:30PM**
You are invited to be present.

By Order of the Board of Appeals,
Chairman, Terrence Hurrie

Plans are available for review prior to the hearing at the Board of Appeals office, Town Hall during the hours of 8:00 AM to 4:00 PM. *Plans are available to review at <https://www.falmouthma.gov/1113/Applications-under-review-by-the-ZBA>



**TOWN OF FALMOUTH
MASSACHUSETTS**

BOARD OF APPEALS

Notice of Decision

Notice is hereby given that the Board of Appeals of the Town of Falmouth has made a decision on a petition by Richard F. Prior, Trustee, 83 Alcott Road, East Falmouth, MA.

(Map 40 Lot 014) under 240-11 3A(4) of the Zoning By-Law, as amended to grant the special permit to construct a second-floor addition, convert existing one car garage into a two-car garage, expand existing front porch and rebuild rear deck, exceeding 20% lot coverage by structures.

Appeals, if any, shall be made pursuant to the Massachusetts General Laws, Chapter 40A, Section 17, and shall be filed within twenty (20) days after **June 3, 2022** which is the date the Decision was filed in the office of the Town Clerk.

Please contact Noreen Stockman at 508-495-7460
or Noreen.stockman@falmouthma.gov if you have any questions or comments
full text of decision available at <http://www.falmouthmass.us>