

2021 CZ Resiliency Grant Public Outreach Meeting - Question and Answer Summary
January 20, 2021

- The easements clarify the understanding that beach nourishment can take place by the Towns so that permitting and funding agencies will authorize the permits and the grants to do the work. The easement only allows for beach nourishment and public foot passage on nourished areas - it does not authorize any other beach uses or create any new access - the public is not being granted any rights to walk across private property that is not seaward of the wall.
- Without these easements, work on the walls, and the nourishment, is unable to proceed, since the wall permits require nourishment permits, and the nourishment permits cannot be granted without the easements.
- Sea wall repair easements do not grant any permissions for nourishment.

The discussion and questions are grouped here by subject.

Will this meeting be available to watch later?

Yes, on the two towns' Planning Department websites, there are landing pages with all of the information for this project (beach maintenance in front of the walls), PowerPoints and links to view all prior meetings, as well as this one. The link for YouTube for this meeting has been posted on the website since January: <https://youtu.be/ZSmvMaogYB8>.

What if I don't think I should be receiving this notice – I don't think I have beachfront ownership?

If we asked for an easement from you and you don't think you own property on the beach, can you please contact us to clarify your situation? We are only collecting easements in areas where we intend to do nourishment – some areas are not compatible with beach nourishment as a solution.

What rights are being sought?

- The easement only allows for beach nourishment, and public foot passage on nourished areas - it do not authorize any other beach uses - they only clarify that the public will have the right to walk on the dunes if they are placed, and to place the nourishment, so that permits and funding can be granted. They do not create access over upland portions of private property to access the beach, including same on the dune lots. The public is not being granted any rights to walk across private property that is not seaward of the wall.
- The Towns and the Commonwealth own the land seaward of the low water mark. Below the mean high water mark and above the mean low water mark, the public has the right to fish, fowl and navigate under the Colonial Ordinances from the 1600s.
- Private beaches extend ownership to this Commonwealth boundary, depending on how the individual deeds are worded, which can vary somewhat with respect to the low or high water mark. In Marshfield, there is a presumption that the beaches are publicly owned but the legal work has never been done. The beach and roads are private in Duxbury in this area.
- If the beach is privately owned today and you are not the owner but use the beach, you are likely being permitted to use the beach. A homeowner who owns private beach may have the right to prohibit third persons from using the private beach above the mean high water mark. Very few actually do that.

- No access is created or removed to get to the beach; there are existing access points through dunes. The easement has no impact on entry to the beach, stairs or creation of any new way to get to the beach. Neither town has any plan to enhance public access to the beach related to this project. There are no plans to create new access areas.
- In Marshfield, stairs are approved by the DPW under certain terms and conditions. The stairs may need to be modified but there is no plan to change the right to request permission from the DPW for stairs over a seawall in either town.
- Activities related to placement of the material will be insured through the entities performing the work, but this is not insuring private property.

What if some people do not sign the easement?

- Without these easements, work on the walls, and the nourishment, is unable to proceed, since the wall permits require nourishment permits before more work can take place, and nourishment permits require easements. The easements are necessary to prolong the life of the seawall to protect the homes.
- There is no plan to expend money to acquire the easements, or to “take” the easements if they are not willingly granted or without express written permission of the property owner to take the easements with no liability at this time. The towns will have to determine if they will proceed with taking the easements without the express written consent of the owners.
- Each town can do its projects independently, but the effectiveness is far better along the Gurnet Road/Bay Road area if the two towns work together.

Are easements only applicable if the towns go forward with the project? Can they be given back if the project doesn't happen?

Easements can be released if the project is not funded; however, if we never nourish the beach, the easement will have no impact on the property, as no nourishment will have been placed and therefore nowhere will there be an area nourished upon which the public could walk as worded in the easement.

What about the easements at places where there is no sea wall – only dune? Can people walk across my private dune if I sign the easement?

- No one will be granted the right to walk across private upland dunes, even if they are nourished to tie into the public walking area where nourishment will be placed, as discussed with the Woods Hole Group in March. With the dune properties, walking rights on nourished areas will only be areas below the current mean high water line that will be nourished. We have shared the proposed plans with this neighborhood and resolved any questions related to this area – revised language, now that the more detailed designs are available, is being sent to these property owners.
- The public is not being granted any rights to walk across private property that is not seaward of the wall.

Design of the nourishment – general questions.

- The wall has a 50-75 year design life, nourishment will enhance its performance and lessen storm overtopping as sea level rises and storm intensity/frequency builds. After thirty years, storm damage to the homes and property behind the wall will start to be more costly to repair than the cost to maintain the walls and beach nourishment. This estimate is based on the prior storm

damage information available and using current projections provided by the Woods Hole Group as part of their analysis required for the permitting – please refer to PowerPoints.

- The permitting agencies do not support revetment at the toe of the wall because it is considered a hard structure. Dunes are going to provide nourishment to the system, protect the wall, and not cause as much wave refraction at the toe of the wall. Wave refraction increases wave action and causes further damage to the wall and more erosion.
- It will take time to get permits, and then find appropriate sediments, then seek funding for and finally and place the material.
- The source of funding will depend on available grants, state/federal funding, town meeting decisions – the source is not yet identified. We cannot get the funding or permits to do either the sea wall or the nourishment without the nourishment permits. We will be seeking funds for both activities and it will depend on timing and opportunity.
- We expect to need to enhance nourishment, once placed, approximately every five years – it will depend on the available materials and timing of grants and funding. We also can't predict how much material will last with storms - it is based on the storm damage unique to that storm. We are using historic patterns and estimating how often we will need to re-nourish, which is a standard engineering practice in the United States. In addition, if only partial amounts of suitable nourishment material are found, the size and frequency of the nourishment may not match the ideal design and frequency being proposed.
- *Given the design elevations of the dunes at Bay Ave/ Bay Street beach entry, this may require the ramp design be adjusted. Would this be reviewed?* Yes, we will have to manage public access points.
- Materials must be replaced with like materials. We can place similar, or “like” sediments to what is there: a mix of cobble and sand, are permitted. 100% sand is not an option. We first have to have permission to place nourishment and then locate suitable materials, whether they are on land or under water. We are still negotiating with the permitting agencies about the size and mix of material that would be placed, given the fluctuation in the materials evident between tides – we must try to match what is there which will be stipulated in the permits.
- We are using the most current available sea level rise projections modeling for projected sea level rise impacts in line with the state's most recent infrastructure risk modeling – the most accurate and accepted data available, which Woods Hole Group used for the state and is using for the towns. This is generally accepted best practice in engineering in the United States.
- We expect to match and enhance the design and lifespan of the sea wall – we cannot predict the exact timing of the projects to nourish the beach until we find funding and suitable material – we will continue to communicate as the project moves forward. It will be phased and it will be repeated from time to time as described – every couple of years it will be necessary.
- Hard structures are not permissible in this nourishment permit, nor is fencing or boardwalk. Plantings are not expected to last and are not part of the permit request or design – the beach height fluctuates several feet in tide cycles at the present - and the nourishment will only help prolong the life of the sea wall. There are no trees or shrubs that will be removed to place nourishment and plantings are not in the design unless at the dune-only area which will be handled separately. If anything, this vegetation, if it exists, would have the ability to expand, the intention is not to impact it.

- The nourished areas will migrate after placement – the initial profile will be closer to the top of the wall until the tide cycles start to move the sand around. The beach will be much wider – people will have more options on where to spend time on the public beaches, which is a benefit – rather than having to be right next to the wall, if the nourishment is placed.
- Birds that are protected under the endangered species act are protected regardless of beach nourishment. People drive on, and actively recreate on, the privately owned Duxbury Beach because of a lease arrangement and with very detailed permits that describe how the birds must be protected to allow these activities. No one is driving on the beaches subject to the nourishment we are discussing in Duxbury. Where no one drives – for example Scusset Beach in Bourne, protected bird nests are taped off and people are asked to stay away from them while they nest – this is true for wherever they appear on beaches. The birds themselves are also protected by law.
- We expect that land hauling (trucking in material) may be needed due to permitting requirements and finding suitable sources of materials. If we can pump it or barge it, we may do that but there is no source yet identified on land or water. We first must get permits to place material. It is not a simple matter to coordinate when another party dredges through its permits to “land” that material by barge or pumping to a separate beach – sediment materials have to match, timing is a factor, available funding is important, it’s not feasible to get permits to pump material from the ocean floor to the beach without extensive additional studies and federal and state permits – we will continue to explore this but more suitable and available material will be used if it can be located without going through this additional, costly and time-consuming additional permitting to try to pump material from the ocean floor. The permitting agencies do not agree on allowing this activity at this time – National Marine Fisheries is generally opposed and more information is needed.
- It will depend on the project, but it is expected that the beaches will be temporarily closed if the nourishment is being placed for safety reasons – heavy equipment will be used.
- We evaluated a barrier in the initial studies – permitting, costs and effectiveness are important considerations. Please see the materials on the web pages.
- It will depend on funding and timing – it’s cheaper and more effective to do more nourishment less often than to nourish every other year or every year. We may not have the source material available in a pattern such as this available to us.

Relationship of beach nourishment to the Duxbury Beach Reservation.

- The Duxbury Beach Reservation relies on private donations, and grants for which it is a qualified applicant. The Reservation has spent millions of dollars, which used to be easier to obtain but FEMA stopped funding beach restoration years ago, preserving the barrier beach, and continues to do so – the Reservation is struggling to keep up with the impacts of sea level rise and is also engaged with the Woods Hole Group in a similar study through a similar grant to try to identify sources of funding and appropriate beach maintenance projects to maintain the barrier beach while satisfying all of its permit obligations.
- People drive on, and actively recreate on, the privately owned Duxbury Beach because of a lease arrangement where the Town pays to use the beach, manage the people on the beach, and sell stickers to fund these activities, all with very detailed permits issued to the Duxbury Beach Reservation that describe how the birds must be protected to allow these activities.

- The Duxbury Beach Reservation will be subject to its own permitting and beach management activities; however, where the Town and the Reservation can help one another secure funding and suitable material for nourishment, they will.
- Raking or fencing to try to prevent sand migration towards Duxbury Beach is not permissible at the present time by the agencies who grant permits for these activities.

Why isn't Brant Rock/Ocean Bluff part of the nourishment? This was covered in prior meetings and is available on the website landing pages – rocky intertidal areas are not good candidates for beach nourishment due to the permitting restrictions which limit any placement of nourishment on rocky intertidal shores. We are seeking alternate solutions for rocky intertidal areas.

How is the Green Harbor jetty design impacting the Green Harbor and Duxbury beaches? Would project include alteration? The jetty is subject to several studies available from the town of Marshfield; over decades beach erosion is taking place along the entire shoreline which has further worsened as armoring has happened, removing the source of natural beach nourishment that once existed. The material on the website addresses where beach nourishment is considered the best and most feasible solution. The boardwalk along Green Harbor is not part of this project.

Will there be any federal or state assistance to incentivize homeowners to 'lift' or elevate their homes? Not in this project. Marshfield has gotten a small grant to help a few home-owners and Scituate has also; there are intense federal requirements and procurement laws that must be followed. Towns will be seeking FEMA and state funding for the wall and nourishment projects, which will take precedent (the town has to rank its requests) for the time being, over seeking funding for home elevations.

What Grants are available from CZM for this beach nourishment program? How does this fit in order of priorities? CZM is funding this study, and the permitting, right now. State grant programs are funded annually or sometimes more frequently. There are loan programs through the state, and it's possible that the MVP program, other state funding, or FEMA grants can be applied to for some of the costs; however, grants are limited, competitive and must be matched with 25% funds by the applicant in almost every case federally and at the state level. They also have to be expended within a certain time frame – the money can't be "collected" from year to year and then spent all at once. No local match source has been identified for Duxbury; however, Marshfield Town Meeting has supported match for projects in that community.