

Vincent Murphy

From: Vincent Murphy
Sent: Monday, February 6, 2023 10:36 AM
Subject: FW: CRAC's advice to Select Board on Town involvement in privately-funded resilience initiatives
Attachments: Baxter Rd & Geotube Path Forward.pdf

Hi All CRAC Members,

Forwarding as requested from Doug Rose. Please see below and attached.

There are some problems with some of Doug's comments. In developing the CRP, there was no mention of having to change state laws to keep up with SLR. It was not mentioned in the public workshops, and had some very limited mentions at CRAC meetings during the development of the CRP. During the development of the CRP we looked at the problems that were mentioned as well as the problems identified in the risk assessment. The only direction was to look at Town bylaws, and the CRP did; and there are several recommendation about Town bylaws. The conversation about state level legal problems has only come up in more recent times.

Some of what he is talking about is good info for CRP 2.0 and not to be forgotten about for that.

Finally, I will seek public private partnerships wherever I can get them, or any other collaborative efforts with organisations, to help reduce any burden to the taxpayer. We also have a new staff member coming to coastal resilience in the next few weeks, which will increase our ability to deliver projects at both large island wide and smaller localized scales.

Vince.

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From: Doug Rose <chippersdad074@gmail.com>
Sent: Sunday, February 5, 2023 10:36 AM
To: Vincent Murphy <vmurphy@nantucket-ma.gov>
Subject: CRAC's advice to Select Board on Town involvement in privately-funded resilience initiatives

*Hi Vince,
Please distribute this note to members of CRAC, if possible prior to the next meeting. Thanks!
Doug*

Dear CRAC team,

Since your last meeting in January (1/24/23), Matt has patiently helped me better understand his argument for the Town taking the lead in organizing privately-funded neighborhood resilience initiatives. His concern for the average

island taxpayer is admirable, as is his insistence that costs should be borne by those who benefit most directly. Conceptually, I understand his reasoning for the Town centralizing and co-sponsoring privately-funded resilience efforts, in that it can provide some level of orchestration in what could otherwise be chaotic individual efforts to control erosion and flooding of waterfront properties. In a world where the Town has limitless people, money and time, I think a Town-led, centralized approach to neighborhood resilience planning could make sense.

My concern is that the Town's resources are not unlimited. And while the CRP identified 40 important resilience strategies, it wisely prioritized those with island-wide benefit — especially those relating to critical public infrastructure — above those which focus on at-risk residential properties. Thinking pragmatically, I believe Town government must focus its limited resources on those initiatives that benefit all Nantucketers... not select private homeowner groups.

Simply put, every hour the Town spends on 'public-private partnerships' — i.e., (co)developing a resiliency plan for each residential neighborhood, presenting it to groups of affected private property owners, persuading homeowners to commit to it financially, co-sponsoring of permitting efforts, and so on — is one less hour spent on resilience measures for Steamboat Wharf and the harbor... for the airport... for the sewer beds... for the landfill... and for critical traffic arteries. Each of these will be hugely complex, multi-year projects of existential importance to our island community, and it's what taxpayers are counting on the Town to deliver.

But if Town doesn't take the lead, what are at-risk residential homeowners to do? I imagine the Pocomo Neighborhood (SE48-3384) might serve as a useful example of how individual homeowners can come together to work with the ConCom in regard to their shared, privately-funded resilience efforts. There may be others.

Per the CRP, there is a role for Town — specifically for CRAC — in helping neighborhood groups get organized for their common good. Strategy 1-1 identifies CRAC as the Implementation Champion for "Community Outreach on Property Owner Resilience Best Practices". This strategy can and should include familiarizing homeowner *groups* on CRP recommendations for their specific neighborhoods.

But to be clear, CRAC's role in this strategy is to *inform* homeowners and community groups, not to lead or partner with them. As we've witnessed over the past decade, public private partnerships can consume a wildly disproportionate share of the Town's capacity — administrative, project management, legal oversight, etc — and would steal time and energy from island-wide strategies.

On a related note: is it fair to say there appeared to be general consensus at the last CRAC meeting that Massachusetts state law(s) requiring municipalities to provide access and utilities to at-risk areas need to be updated/adapted to reflect the reality of SLR and climate change? Unless I missed it, this issue was notably absent in the CRP. And unless and until this issue is resolved, the Town will face increasing financial and legal jeopardy. If you agree, I would encourage CRAC to lean into this issue. Specifically:

- Is there anything CRAC can/should do to help light a fire under this with our state reps Cyr and/or Fernandez?
- What can average Nantucket taxpayers do to help? (Write letters, etc)

As always, thank you for your service.

Doug Rose
22 Fair Street

Begin forwarded message:

From: Doug Rose <chippersdad074@gmail.com>

Subject: CRAC 1/24/23 Agenda -- One non-voting taxpayer's thoughts regarding Next Steps for Town re: Sconset Bluff

Date: January 20, 2023 at 8:23:25 PM EST

To: Vincent Murphy <vmurphy@nantucket-ma.gov>, Mary Longacre <ml@marylongacre.com>, "Peter B. Brace" <coskataheaven@earthlink.net>, Matt Fee <mfee@nantucket-ma.gov>, almac1@comcast.net, stbois@llnf.org, jkarberg@nantucketconservation.org, jtopham@comcast.net, jeroche@nantucket-ma.gov, environmental@nantucketlandbank.org, christyair@hotmail.org, gbellerny@gmail.com

Dear Coastal Resilience Advisory Committee,

I don't know if there will be an opportunity for public comment during the brainstorming section of Tuesday's agenda, so I'd like to respectfully submit an independent perspective on the path forward regarding the geotubes and Baxter Road. Here goes...

We should take some lessons from the decade(s)-long impasse over 'Sconset bluff. Among them:

1. **We need to take the lead on updating State law.** As Matt has so often stated, outdated state laws relating to maintenance of public ways now represent an existential financial threat to coastal municipalities like Nantucket. Clearly these laws need to be modernized to reflect the reality of sea level rise and climate change. We should urge our state representatives to fast-track this as a legislative priority for the Commonwealth.
 - If you concur, would it be appropriate for CRAC to draft a letter to Dylan Fernandez/Julian Cyr to this effect?
2. **Public-private partnerships are not a panacea.** Public-private partnerships are appealing in theory. But based on the past 10 years, we should question whether the risks of aligning with private interest groups can deliver real rewards for the Town. Eventually, private and public interests will diverge. And when they do, it seems the threat of litigation inevitably ensues.
 - Partnerships can also add complexity to any project. Every action requires negotiation, and breeds a need for consultants like Arcadis to find an elusive middle ground that satisfies everyone.
3. **Lawsuit avoidance is not a strategy.** While the Town must be mindful of the legal risks of any action, the omnipresent *threat* of litigation from aggrieved private property owners should not be allowed to shape Town policy. If lawsuit avoidance becomes our driving concern, we will inevitably favor those constituents with deep financial and legal resources over those who lack them.
 - The debate over the Baxter Road alternative access plans are a case in point. There's a good chance that the Town will get sued if it chooses Plan A... or Plan B... or Plan C. On the other hand, if the Town takes no action — and Baxter Road fails before alternative access has been provided — the Town could be sued by homeowners who've lost access to their homes. I guess we're damned if we do, and damned if we don't.
 - So the Town must accept that every action — or inaction — brings with it some legal risk, and should stay focused on making the best long term decisions for the community.
4. **Hard choices don't get easier with time.** The difficult discussions that the Town is having today regarding alternative access would have been no less difficult in 2013... but they might have been less expensive to resolve.
 - Likewise, they won't be any easier if we postpone them another decade, when they'll be even more expensive to resolve.
5. **All roads lead back to the CRP:**

- The Town has limited financial and human resources. It must focus on protecting essential community infrastructure (e.g. harbor, airport, sewer beds, landfill, aquifer)... not private property.

With these lessons in mind, the path forward is straight ahead. We should not conflate Baxter Road with 'Sconset Bluff, but instead treat them as two distinct projects, each with clear accountabilities and timelines:

1. The Select Board and Town Admin should focus on providing alternative access and utilities to Baxter Road residents.
 - Town deserves credit for finally initiating what is sure to be a very difficult, expensive process.
 - There should be a high level of **urgency** to this project, with no assumption that a Baxter Road failure can be forestalled indefinitely.
2. SB/Town Admin should trust ConCom to manage the removal process responsibly.
 - As we heard in their meeting on 1/12, they are committed to keeping **safety** foremost in mind when assessing all removal options.

Some people read words, some prefer pictures. The graphic below attempts to summarize the suggested path forward visually:

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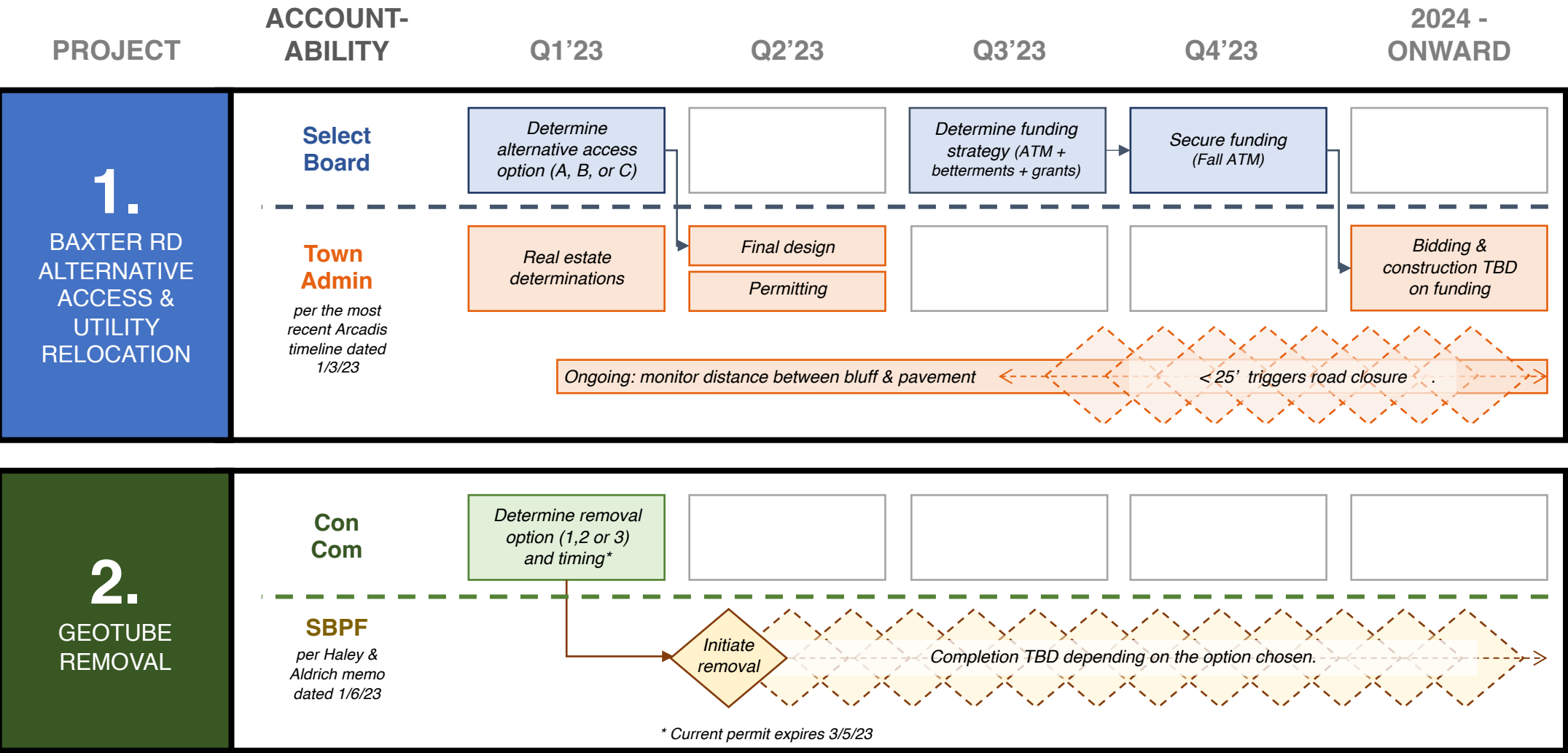
Thanks for the opportunity to share another perspective.

Best,
Doug Rose
22 Fair Street

Baxter Road Alternative Access & Geotube Removal:

TWO DISTINCT PROJECTS

WITH CLEAR ACCOUNTABILITIES & TIMELINES



P	No.	Project Name	Status	Notes	Budget	Timing	S Date
1	1-1	Community Outreach on Property Owner Resilience Best Practices	Not started	Mentioned in one CRAC meeting as a possible committee project	S & V	2023	
1	1-2	Updates to Zoning By-Law	Not started	To be led by PLUS and may need specialized consultants	S & V	2025	
1	1-3	Updates to Wetland Ordinance and Regulations	Underway	NRD and Conservation Commission actively undertaking this	S & V	2025	
1	1-4	Strategic Retreat and Relocation Program	In development	Putting a scope of services together	S & V	2024,	
1	1-5	Coastal Resilience & Sustainability Interdepartmental Working Group	Complete	Began meeting in April and meets quarterly. Vince is the Chair.	S & V	2022	
3	1-6	Joint Staff Review of Development Proposals	In development	A working group objective	S & V	2022	
1	1-7	Coastal Resilience and Sustainability Program	Not started	A priority for the Sustainability Programs Manager	S & V	2023	
2	1-8	Shoreline Change Monitoring Program	Complete	Morgan and Vince began in December 2021. Page is now on the Town website with results from sites	S & V	2024	2021
1	1-9	Sediment Sourcing and Transport Study	In development	Scope, written, posted and bids received. Soon to be underway	\$1m	2024	2023
2	1-10	Stormwater Management Plan	In development	DPW and Sewer Dept actively developing this. Linked to 1-13	\$650k	2025	
1	1-11	Sediment Budget	Not started	Needs 1-9 Sediment Transport Study complete first to inform this plan	\$250k	2024	
2	1-12	Stormwater By-Laws Assessment	In development	Linked with 1-13	\$50k	2025	
2	1-13	Stormwater By-Law and Regulations Update	In development	DPW and Sewer Dept actively developing this.	S & V	2025	
1	1-14	Update locally-adopted sea level rise scenarios & Best Available Flood Hazard Data	Underway	MC-FRM is now on the Town website and this can proceed.	S & V	2022	2022
1	2-1	Steamboat Wharf Resilience	Not started	January 2022, Steamship Authority said 6-8 years before they will begin facility updates on Nantucket. Plan to work with Steamship then.	\$120m	2030	
1	2-2	Downtown Neighborhood Flood Barrier	In development	CRAC priority, linked with 2-6. Grant applied for (not won) to undertake a feasibility study. Reapplying in 2023	\$170m	2050	
3	2-3	Easton Street and Hubert Avenue Road Raising	Not started	A priority 3 project slated for commencement before 2030.	\$140m	2050	
3	2-4	Washington Street Extension and Consue Springs Walkway Raising	Not started	A priority 3 project slated for commencement before 2030. Land Bank undertaking works that may extend current usefulness	\$65m	2050	
2	2-5	Building Scale Resilience at 37 Washington Street	Not started	Has not been talked about. Meant to be an example to the community	\$150k	2024	
1	2-6	Downtown Neighborhood Flood Barrier - Phase 1 Project	In development	CRAC priority, linked with 2-2. Grant applied for (not won) to undertake a feasibility study and will continue to seek other opportunities	\$13m	2025	

P	No	Project Name	Status	Notes	Budget	Timing	S Date
1	3-1	Madaket Road Raising and Bridge Conversion	Not started	Briefly discussed with sewerage Madaket.	\$40m	2030	
1	3-2	Ames Avenue Bridge Resilience	In development	NRD and Admin developing a project (just started 2 weeks ago, so researching). Linked with 3-4	See 3-4	2025	
3	3-3	F Street Boat Ramp	Not started	To commence after 2030	\$5.1m	2050	
1	3-4	Madaket Erosion Mitigation Pilot	In development	NRD and Admin developing a project (just started 2 weeks ago, so researching). Linked with 3-2. May also be the subject of an MVP grant in 2023	\$96m	2025	
1	3-5	Department of Public Works Facility and Land Fill Resilience	Not started	Bigger question first. Will DPW relocate? Then, plan appropriately.	\$300k	2024	
2	4-1	Polpis Road Raising and Bridge Conversion at Folgers Marsh	In development	Tried to revive this project with NCF with a feasibility assessment and plan development in the spring with a grant application. Failed, but outline developed.	\$21m	2035	
2	4-2	Polpis Road Raising, Culvert Expansion, and Wave Attenuation at Sesachacha Pond	In development	NRD was awarded a grant from SNEP for wave attenuation. Partly underway for the Wave Attenuation portion of the project	\$45m	2025	2023
3	4-3	Coatue Erosion Mitigation and Dune Resilience	In development	NCF and TTOR project. Initial study completed in spring 2022 . More study and implantation required. How can CRAC/ Town help?	\$41m	2026	?
1	4-4	Numerical Modeling Study of Coatue Breaching	Not started	Scope developed in the spring but didn't progress. Could be picked up with the right grant application.	\$250k	2026	
3	5-1	Sconset Bluff Dune Restoration	Not started	Uncertain future as NOI has been withdrawn.	\$16m	2030	
2	5-2	Codfish Park Dune Restoration	Not started	Uncertain future	\$21m	2030	
2	5-3	Baxter Road Relocation Planning	Underway	NRD and Admin began a contract with Arcadis in February 2022 to run for 12-18 months. A Select Board priority project.	\$30m (\$34-52m)	2030	2022
2	5-4	Sconset Bluff Nearshore Breakwaters Feasibility Study	Not started	May be a cost prohibitive project.	\$800k	2025	
2	6-1	Nantucket Memorial Airport Dune Restoration	Not started	Anticipated to commence in 2026	\$28m	2035	2026?
1	6-2	Surfside Wastewater Treatment Plant Dune Restoration	In development	Sewer Dept is considering options and working with engineers. Tracking developments	\$38m	2025	
1	6-3	Tom Nevers Field Erosion Mitigation Pilot Project	Underway	Being led by Parks and Recreation in DPW. Project just commenced.	\$18m	2025	2022
2	6-4	Surfside Emergency Access Planning	Not started	Could be a brief project but need to find a way to advance it.	S & V	2025	
2	6-5	Sheep Pond Road Relocation Study	Underway	Not currently a study, but relocation efforts underway	S & V	2023	2022
3	7-1	North Shore Dune Restoration and Nourishment	Not started	No planned start date	\$38m	2035	
3	7-2	Sand Pumping Feasibility Study	Not started	Possibly linked to 7-1. may be cost prohibitive	\$250k	2027	

Complete	2
Underway	4
In development	15
Not started	19
2023	2022, 2023 & 2024 projects for CRAC to consider

P = Priory

S Date = Start Date

S & V = Staff & Volunteer. No assessed dollar value.

Madaket Near-Term Strategy

LEGEND

- 01 Ecological Restoration
- 02 Increased tidal flow and ecological connection
- 03 Reduction of density and building-scale adaptation in High and Moderate Coastal Risk Areas
- 04 Strategic relocation of structures in Priority Action Areas
- 05 Building-scale resilience and operational resilience planning at Dept. of Public Works
- 06 Elevation of Madaket Road
- 07 Resilient public boating access
- 08 Bridge structure replacement culvert

-  Road Raised
-  Bridge
-  Priority Action Area Structure
-  High and Moderate Coastal Risk Area Structure

*See facing page for section diagram



Folger's Marsh

Island-Wide Coastal Risk Framework

Fulling Mill Creek

\$21M

01

02

02

Low Risk Area
Moderate Risk Area

High Risk Area
Priority Action Area

02

Nantucket Shipwreck Museum

04

Polpis Road

Polpis Road

05

06

01

LEGEND

01 Ecological restoration

02 Reduction of density and building-scale adaptation in High and Moderate Coastal Risk Areas

03 Increased tidal flow and ecological connection

04 Possible marsh walkway for public access and education

05 Elevation of Polpis Road and bike path

06 Bridge structure replaces existing culvert

— Road Raise

- - - Bridge

- - - Potential Public Walkway

High and Moderate Coastal Risk Area Structure

N



Sesachacha Pond Near-Term Strategy

Priority Action Area
High Risk Area
Moderate Risk Area
Low Risk Area

\$45 M

LEGEND



- 01 Ecological Restoration
 - 02 Installation of nature-based wave attenuation structures
 - 03 Increase tidal flow and ecological connection
 - 04 Reduction of density and building-scale adaptation in High and Moderate Coastal Risk Areas
 - 05 New and expanded culverts or bridge structure
 - 06 Possible marsh walkway for public access and education
 - 07 Elevation of Polpis Road
 - 08 Possible parking for walkway access
- Road Roaised
 - Potential Public Walkway
 - High and Moderate Coastal Risk Area Structure
 - Culvert

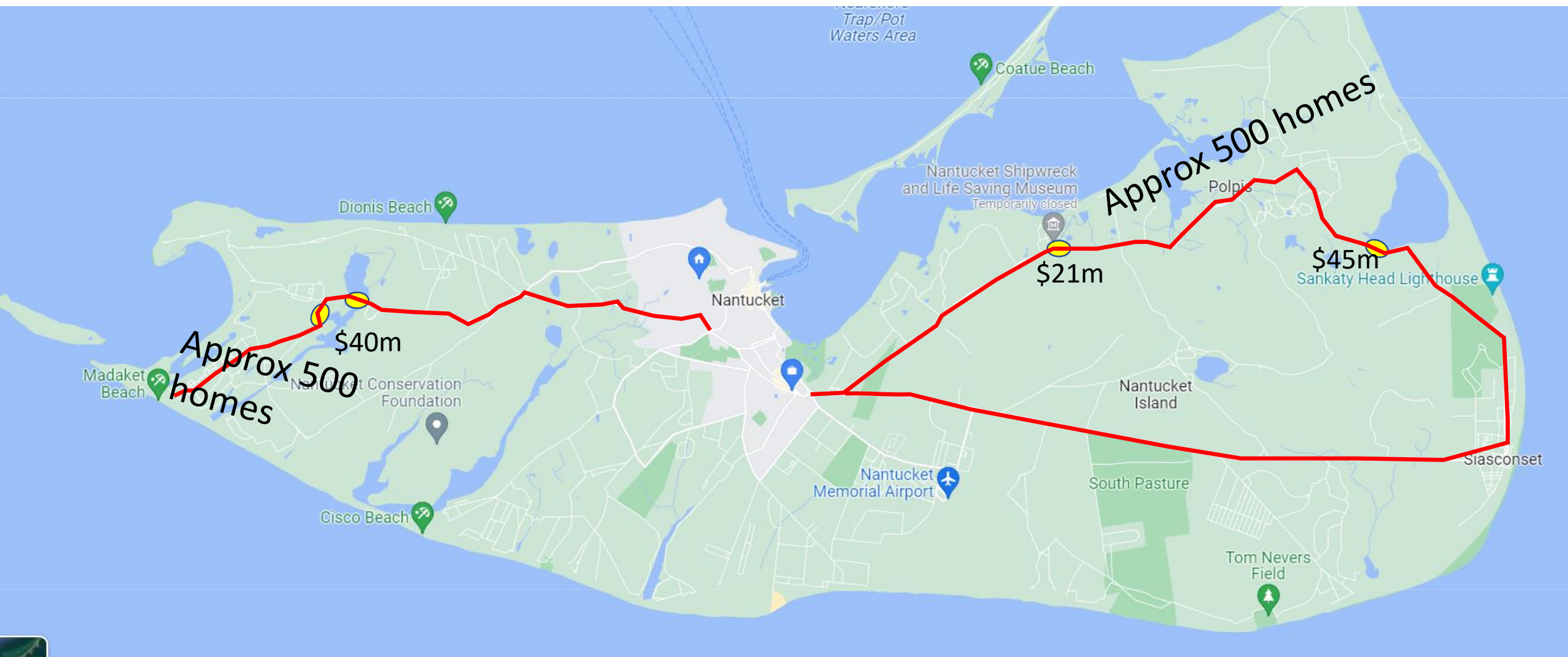
Cains Pond

Polpis Road

Sesachacha Pond

Atlantic Ocean

Possible dilemma



Capital Programs Committee – Coastal Resilience related funds for FY 2024

Good afternoon, Vince. Below are the FY24 recommendations that have been reviewed by CapCom pertaining to coastal resiliency related issues. If you wouldn't mind sharing this with the committee for review prior to our meeting tomorrow. Sorry for the delay but should be an easy read. Thank you! -Christy

General Fund:

Coastal Resiliency--\$1M

The Town has committed \$1M toward the effort through Town Administration. This will be a line item over the next 10 years and will probably remain at \$1M until increased funds are recommended. Coastal resiliency is a priority of the Select Board. While specific uses of the funds are not yet determined, we expect there will be the need for funding for professional services, permitting and engineering. And to recap, as you may know FY23 was the first year this fund was set up and there was a request for \$.5M, but CapCom recommended \$1M. Also, the plan is to fund this request over the next 10 years as noted in the 10 Year Capital Improvement Plan (CIP).

Millie's Bridge Structural Sustainability and Access--\$1M

Maintaining access to Smith's Point while protecting it from coastal flooding and erosion. A definitive plan has not yet been decided and Jeff Carlson has stated they are reviewing all options for consideration. Monitoring and maintenance to the existing bridge will continue and it may be sometime before we see any change.

Harbor Plans Implementation--\$.1M

Updating the Nantucket and Madaket Harbor plans. There is a contract signed with Urban Harbors Institute and the updating process is under way. These funds will cover the start of any recommended implementation.

Miacomet Pond Dredging--\$4M

This request is for the actual dredging of the pond in compliance with all permitting and design work underway. The Land Bank has made a commitment of \$1.5M and private commitments could be \$1M.

Polpis and Madaket Harbor Dredging--\$.56M

Request for completing and analysis of cost for dredging and maintaining the channels in each harbor.

Island Wide Underground Wiring Feasability Study--\$.5M (\$0M)

I know underground wiring has come up in our meeting discussion but this request for CapCom review pertained only to Townwide/Historic district. This was not recommended by CapCom.

Town Pier-Floating Dock Replacements--\$2.58M

This supplemental request is for the on-going town pier improvement project.

Enterprise Accts:

Capacity, Management, Operation and Maintenance (CMOM)--\$2M

New this year this request is to fund a program similar to the (CMOM) program for the sewer system and will involve inventorying, camera-ing and cleaning of the island wide stormwater infrastructure.