



## Barnstable County Coastal Resources Subcommittee (BCCRS)

**Approved Minutes | January 19, 2022 at 9:00 a.m. - Approved April 20, 2022**

Virtual Zoom Meeting

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**The meeting was held virtually, with members of the Barnstable County Coastal Resources Subcommittee participating remotely, pursuant to Chapter 20 of the Acts of 2021, An Act Relative to Extending Certain Covid-19 Measures Adopted During the State of Emergency, signed into law on June 16, 2021.**

The Chair announced that because the meeting was being held virtually all votes and other actions would be done by roll call. He stated that the members participating remotely would be announced as roll call is taken.

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### Roll Call

Town	Member	Attendance
Barnstable	Nina Coleman	Present
Bourne	Sharon Hamilton	Present
Brewster	Chris Miller	Present
Chatham	Dr. Robert Duncanson, Chair	Present
Dennis	Karen Johnson	Present
Eastham	Shana Brogan	Present
Falmouth	Jennifer Lincoln	Absent
Harwich	Heinz Proft	Present
Mashpee	Ashley Fisher	Absent
Orleans	Vacant	-----
Provincetown	Tim Famulare	Present – arrived at 9:10 am
Sandwich	David Deconto	Absent
Truro	Emily Beebe	Present – <i>unable to vote; reappointment incomplete</i>
Wellfleet	Hillary Lemos	Absent
Yarmouth	Karl Von Hone	Present
Ad Hoc (non-voting)		
MassBays Regional Coord	Dr. Jo Ann Muramoto	Present
At large	Steve McKenna (co-Chair)	Absent
At large	Donald Liptack	Absent

Others present:

Town of Mashpee	Jeff Smith
Cape Cod Cooperative Ext	Shannon Hulst
Cape Cod Cooperative Ext	Harriet Booth
CC Conservation District	Rick DeVergilio
Cape Cod Commission	Heather McElroy
Cape Cod Commission	David Still
Cape Cod Commission	Siobhan Cavacco

## Call to order

The chair called the meeting to order at 9:00 am with roll call.

## Public Comments

There were no public comments.

## Approval of Minutes

Upon a motion by Karl Von Hone, seconded by Karen Johnson, the minutes of the October 20, 2021 BCCRS meeting were approved.

## Roll Call Vote

Nina Coleman	Yes
Sharon Hamilton	Yes
Chris Miller	Yes
Dr. Robert Duncanson	Yes
Karen Johnson	Yes
Shana Brogan	Yes
Heinz Proft	Yes
Karl Von Hone	Yes

## County Updates

***Ken Cirillo, Director of the Barnstable County Dredge Program, provided an update of dredge activity between November 1, 2021 and January 15, 2022.***

Mr. Cirillo reviewed a list of completed dredge projects, starting with Pamet Harbor in Truro. He said the volumes came in lower than expected and that weather prevented consistent dredging. Mr. Cirillo said Pleasant Bay in Chatham had volume higher than originally anticipated. He said it was a challenging project due to very strong currents.

Mr. Cirillo said current projects include the Pocasset River in Bourne and Sesuit Harbor in Dennis. He reviewed the Pocasset River project in detail and said it was last dredged fifty years ago. Mr. Cirillo said the dredged material could not be used for beach nourishment so they had to consider alternative methods for dredging. He said they opted to use a small 6-inch auger dredge with geotextile bags. Mr. Cirillo said the project started on December 18<sup>th</sup> and they currently have a one-week extension as dredging is supposed to stop by January 14<sup>th</sup> for time of year restrictions for winter flounder. He said they are about a third of the way through and will apply for additional extensions to complete the project by the end of the month. Mr. Cirillo said Mashpee and Falmouth are looking to use the same process for Waquoit Bay. He said Provincetown could use the process for the project that was canceled at Mill and Wharf. Mr. Cirillo said the material in the geotextile bags is not hazardous and the towns will bring it to the landfill.

Mr. Cirillo reviewed projects that have been postponed or canceled. He said the Barnstable Inner Channel project was canceled because the disposal area near Sandy Neck is no longer available as it turned into a marsh. He said Yarmouth has three projects with pending permits and the Megansett project in Falmouth still needs a permit. Mr. Cirillo said the Provincetown project he mentioned earlier was canceled because the dredge material cannot be used for beach nourishment. He said the revenue hit for the canceled/postponed projects is \$330,000.

Mr. Cirillo reviewed dredge program statistics for the 2021-2022 season. He said so far they have dredged 30,493 cubic yards and completed projects in five towns. He reviewed the rate increases for FY22 and FY23 and said they are looking to hire two deckhands.

Mr. Cirillo provided a status of dredge equipment. He said the *Cod Fish I* is now surplus due to the expense of making it safe and operational. He said they are going to try and sell it. Mr. Cirillo said the *Cod Fish II* received a new cutterhead with teeth that will help with hard compact sand. He said there are some issues with the barge and they need to either make repairs and improvements or buy/build a smaller more functional barge. He said they are looking at grant funds to help with these expenses.

Mr. Cirillo reviewed recent supply orders and said the lead time to receive parts is long. He stressed the importance of having spare parts on hand to avoid dredging delays.

Mr. Cirillo said Foth Engineering had a technician on board both dredges to check for potential accuracy of positioning systems. He said they have a meeting with federal and state regulatory agencies on January 28<sup>th</sup> to discuss the permitting process.

Heinz Proft asked how long they have had the *Cod Fish I*. Mr. Cirillo said it was put in service in 1997. He said it will take over \$200,000 to make it functional. Mr. Cirillo said they used it last year as a second booster pump and that it worked well but now the clutch needs to be replaced and water leaks need to be repaired.

This concluded Mr. Cirillo's update.

***Heather McElroy, Natural Resources Manager at the Cape Cod Commission, provided a natural resources update.***

Ms. McElroy provided an overview of the Low-Lying Roads project that started last fall and will run through June 2023. She said it is funded by grant sources from the Municipal Vulnerability Preparedness Program (MVP) and the Economic Development Administration (EDA). Ms. McElroy said Commission staff is working with Barnstable, Bourne, Brewster, Dennis, Eastham, Orleans, Sandwich, Truro, Wellfleet, and Yarmouth to identify road segments that are vulnerable to flooding. She said they are helping these communities identify at least three design solutions and cost estimates.

Ms. McElroy said the Commission is working with the Woods Hole Group (WHG) on the feasibility analyses using the Massachusetts Coast Flood Risk Model (MC-FRM). She said they looked at flooding probability in 2030, 2050, and 2070. Ms. McElroy provided an example with Wellfleet. She said they used the information to identify roads that are vulnerable to flooding and developed a list of high-priority road segments. Ms. McElroy said they also asked towns for their input on roads that are critical to the community. She said the information has been presented to the towns with a data viewer to see different outputs and potential impacts of flooding. Ms. McElroy said each town will have a page on the Commission's website that details the information. She said workshops have been held in six of the ten communities, and the remaining four are scheduled for February and March 2022. Ms. McElroy said the WHG will then identify possible solutions and develop conceptual designs.

Ms. McElroy continued her update with information regarding the 2021 Pond and Lake Atlas. She said Commission staff has been working on updating the atlas this past year through DLTA funding. Ms. McElroy said water and natural resource analysts have been working together to update the atlas. She said they have also created a companion Pond Atlas Viewer that should be available on Commission website by the end of the week and will be updated regularly. Ms. McElroy said the viewer will not provide water quality data as that information will be found on the Water Quality Portal that previously focused on marine water but will now include fresh water data.

Chris Miller asked if each town should review the data before the viewer is available online. Ms. McElroy said the atlas looks at the ponds regionally, rather than each specific pond. She said the pond viewer data is from GIS and can be reviewed and updated any time. Ms. McElroy said a beta version was reviewed and they did hear from the Brewster Pond Coalition with some changes. Mr. Miller said they want to make sure public access is correct on the viewer. Ms. McElroy said Brewster Ponds Coalition was concerned with that issue and she thinks it was addressed.

Dr. Muramoto asked if the Low-Lying Roads project is limited to the ten towns due to cost or individual towns declining to participate. Ms. McElroy said some towns chose to not participate and they are looking into funding so all towns are involved.

Dr. Duncanson said Chatham was originally interested in participating in the project but declined. He commented that the project looks into the future and asked if they are looking at roads that currently flood. Ms. McElroy said they ask the communities during the workshops about current vulnerable roads and if the modeling is consistent with their experience.

This concluded Ms. McElroy's update.

***Harriet Booth, Marine Program Specialist at the Cape Cod Cooperative Extension, provided an update for the Marine Programs.***

Ms. Booth said they have a Sea Grant funded project that looks at aquaculture in the Three Bays system. She said they are looking at water quality and survival and growth of shellfish. Ms. Booth said they selected five sites, including Princess Cove down to Oregon Beach in Nantucket Sound. She said they planted oyster and quahog seed and will monitor growth throughout the year.

Ms. Booth said they are also working on a COVID related seafood grant funded project. She said they are partnering with the Division of Marine Fisheries (DMF) and their seafood marketing program. Ms. Booth said anyone across the state can apply for funding for projects that promote the seafood industry. She said it includes pilot projects as well as education and outreach.

Ms. Booth said they have been working with Dr. Lisan Yu, an environmental economist at WHOI, looking at the economic valuation of recreational fisheries in Barnstable County. She said this work hasn't been done in the county in over fifteen years. Ms. Booth said Dr. Lichen-Yu is sending a survey to 2019-2020 recreational permit holders. She said they would appreciate help spreading the word the survey is and said they are reaching out to towns and posting fliers. Ms. Booth said it is a short survey and only takes about 15 minutes to complete and will be open until the end of May. Ms. Hulst provided a link to survey. <https://seagrant.whoi.edu/recreational-shellfishing-survey/>

Lastly, Ms. Booth said they are starting up their Fundamentals of Shellfish Farming course next Wednesday and they are still managing their water quality monitoring program. She said they have collected all data for the 2021 season and it is being analyzed right now.

This concluded Ms. Booth's update.

***Shannon Hulst, Deputy Director of the Cape Cod Cooperative Extension, provided an update for the Coastal Processes and the Floodplain Program.***

**Coastal Processes:**

Ms. Hulst said Greg Berman has been working on a student art competition for "Don't Walk on the Dunes" signs. She said Mr. Berman has been working with the WHOI Sea Grant K-12 educator to get students involved and winners will have their artwork on the sign. Ms. Hulst said the deadline is March 7th and provided a link for committee members to share: <https://seagrant.whoi.edu/dune-art/>

Ms. Hulst said Mr. Berman is using the Business Continuity Planning template from the Cape Cod Commission for storm preparedness, targeting flood and erosion risk. She said once they have the template completed they will share it with the committee.

Ms. Hulst said Mr. Berman is continuing to work on the CoastSNAP project. She said the next location will be on Nantucket or in Falmouth.

Lastly, Ms. Hulst said Mr. Berman is writing beach nourishment guidelines for parcel level projects that discusses the basics of littoral cells and equations for compensatory requirements. She said he is open to feedback from the committee.

**Floodplain Program**

Ms. Hulst said they are continuing to work with each town on bylaws to ensure they are compliant with the National Flood Insurance program. She said everyone should be completed by the fall.

Ms. Hulst said they are working on higher standards that will be combined with the Commission's work for wetlands regulations. She said she has been working on zoning standards for the floodplain and Ms. McElroy has been working on lands subject to coastal storm flowage. Ms. Hulst said they have started talks with Brewster to see what they are interested in adopting and they will continue with other towns who have expressed interest.

Ms. Hulst said they are continuing with the Community Rating System with nine of the Cape towns. She said Chatham and Wellfleet just went through their five-year updates and advanced to 15% discount for residents. Ms. Hulst said Brewster, Mashpee, Eastham, and Orleans are ready for their five-year updates this year.

Lastly, Ms. Hulst said on March 16<sup>th</sup> she will be hosting a floodplain management class. She said it will be a virtual, all-day class, and those with a Certified Floodplain Manager designation can earn 6.5 credits. Ms. Hulst said it will be taught by her and two state floodplain educators.

This concluded Ms. Hulst's update.

### **Barnstable County staff provided an update on activities of the Barnstable County Coastal Management Committee (BCCMC):**

Heather McElroy said the BCCMC has not met recently. She said they are currently polling members to consolidate some of the committees and hopefully she will have an update at the next meeting.

There were no questions or comments.

### **Cape Cod Conservation District (CCCD) staff provided an update on projects funded by the Cape Cod Water Resources Restoration Project (CCWRRP)**

Rick DeVergilio provided an update for CCWRRP. Mr. DeVergilio said the project originated in 2008 and they received \$10 mil dollars in 2010 to restore tidal marsh, fish passages, and remediate storm water runoff into shellfish growing areas. Mr. DeVergilio said the project was defunded for a few years but in 2017 the project received an additional \$10 million.

He briefly reviewed the projects that were funded, including stormwater remediation in Chatham and Sandwich Harbor, two culvert replacements at Sampson Mill Pond in Mashpee and John Parker Road in Falmouth, a fish passage at Baxter Grist Mill, and stormwater remediation at Barley Neck Landing.

Mr. DeVergilio said in 2018 the project received additional funds for stormwater remediation projects and feasibility studies and designs. He said in the summer of 2019 they asked for additional funds and individuals from the watershed operations program at the National Resource Conservation Service (NRCS) in Washington, D.C. informed staff that the project needs a deadline and requested an update. Mr. DeVergilio said at that point they were halfway through the project goals.

Mr. Devergilio said Dr. Muramoto has been helpful by meeting with all the towns to identify their projects. He said they were looking at 400 projects and were able to prioritize to 100 projects. He said all updated information has been provided to NCRS and they have requested \$43 million. He said it they should know about the funding by February 2022.

Mr. Devergilio said the CCCD met with all towns, except for Harwich, to apprise of projects on list for each town. He said in the meeting they explained for the watershed projects, the federal government pays 75% and local sponsors pay 25% and are responsible for permitting. Mr.

DeVergilio said the towns have to commit to having their non-federal resources and said they will help the towns secure their non-federal share. He said they will be speaking with local and state level representatives and that the state has already agreed to fund the Herring River restoration project.

Dr. Duncanson suggested ARPA funding to help with the local share and asked about the operations and maintenance commitment for the towns for these projects. Mr. DeVergilio said it is a topic that is open for discussion but currently it is a fifty-year commitment. He added the CCCD looks to the BCCRS for its leadership and their help with the maintenance discussion would be appreciated.

Dr. Muramoto said when APCC met with each town a couple of years ago they asked what they thought would be suitable operations and maintenance timeframe. She said most responses fell along lines of the expected lifetime of the infrastructure being installed. She said they relayed this to the CCCD. Dr Duncanson asked her to share that information with the committee.

Mr. Proft said Harwich emailed to schedule a meeting with the CCCD and asked if any of the funds have already been committed. Mr. DeVergilio said NRCS has only requested the funds. He mentioned high priority projects, including Herring River, West Falmouth Harbor, Rt 124 bike path, Long Pond outlet, and a culvert under the bike path at Depot Road. He said they definitely want to meet with Harwich regarding their priority projects and added they have been working with MADOT on the bike path at Rt 124 as well as two projects on Rt 28 in Chatham

This concluded Mr. DeVergilio's update.

## Member Reports

**Nina Coleman provided an update for Barnstable.** Ms. Coleman said they are updating their hazardous mitigation plan. She said the county dredge was unable to complete their project at Barnstable Harbor but they were able to hire a private dredge to complete the work. Ms. Coleman said the material is ready to be spread at Sandy Neck in the spring. She said they are working with the Woods Hole Group for an alternative analysis regarding erosion in the parking area at Sandy Neck. She said they continue to struggle with water quality in Three Bays with sewerage. Ms. Coleman said they are working on their pond prioritizing matrix that looks at water quality & solutions for issues.

**Sharon Hamilton provided an update for Bourne.** Ms. Hamilton said the town is excited about the Pocasset River dredge project Mr. Cirillo mentioned earlier in his dredge update. She said some things haven't worked but for the most part it is going smoothly.

**Chris Miller provided an update for Brewster.** Mr. Miller said they have the Low-Lying Roads project coming up in February. He said they are working with CCCD and the NRCS on revisions to a culvert at (Frost) Fish Creek that leads to Salt Pond and Freemans Pond. He said two new projects include the purchase of the Sea Camp property and they are starting the public process to decide how the town is going to use the property. He said they have started the permitting process for a



new boardwalk from town park across the salt marsh to wing island outside museum of natural history.

**Robert Duncanson provided an update for Chatham.** Dr. Duncanson said they are working with the Chatham Conservation Group to look at culvert widening at Crawfish Creek. He said they applied for a grant and received CPA funding. Dr. Duncanson said they have a coastal resiliency project at the Chatham fish pier that includes raising bulkheads. He said it is a tricky spot to find the balance for fishing and addressing sea level rise. Dr. Duncanson said they just completed a dredge project and have an upcoming dredge project at the Stage Harbor entrance channel. He said due to sand movement they will probably have to dredge the area multiple times a year. Dr. Duncanson said they have been fortunate to have the county dredge and assistance from the Army Corp of Engineers to clean things up before boating season. He said due to federal funding issues they may have to repeat what they did two years ago when the town paid the Army Corp. He said it was still cheaper than using a private dredge. Dr. Duncanson said they aren't participating in Low-Lying Roads project but they did apply for MVP grant for a couple of roads. He said they are continuing with wastewater project and they have a contract out to bid for the Trap Dock at Stage Harbor, which is the last commercial offloading point. Dr. Duncanson said they rebuilt the pier two years ago and have a second component to build a storage building. He said they postponed the bid due to the lead time issue for materials, but they will rebid in the fall.

**Karen Johnson provided an update for Dennis.** Ms. Johnson said their biggest project is their ten year dredge permit for Bass River and Swan Pond River. She said Sesuit Harbor was removed from the permit after an order issued in October 2019 was contested by neighbors across the river with a private beach. Ms. Johnson said they filed with DEP and the Town is contesting. She said they are also experiencing issues with a certificate of inclusion at West Dennis Beach.

Dr. Duncanson commented that the difficulty could be due to the high turnover rate at state and federal regulatory agencies with new employees lacking experience.

**Heinz Proft provided an update for Harwich.** Mr. Proft said the Rt 124 project will focus on connecting and repairing the culvert at Long Pond, which is the largest freshwater pond on Cape Cod for herring. He said there is a smaller project at Long Pond & Blacks Pond, which borders Brewster and Harwich. He said he met with Mr. Miller to possibly make it a 2022 project. Mr. Proft said they have been outsourcing engineering work as the town engineer resigned.

**Tim Famulare provided an update for Provincetown.** Mr. Famulare said Truro, Wellfleet, Eastham, and Provincetown are working on a CZM coastal resiliency grant. He said they are coming to the end of the second year. Mr. Famulare said some of the deliverables coming to fruition include a regional sand bank so they can store beach nourishment materials. He said they are doing their own low-lying roads based on a database that was developed for a FY19 CZM grant.

**Emily Beebe provided an update for Truro.** Ms. Beebe said their two big projects are a culvert replacement and salt marsh restoration at Eagle Neck Creek. She said she received the 75% funding from the NRCS. She said Phase II of the East Harbor project (aka Pilgrim's Lake) is also underway.

Ms. Hulst asked about a house located at 133 South Pamet Road. Ms. Beebe said the property has been on the edge of the cliff for a while and the property owner is looking to shift the building 20 ft as a temporary fix. She said the owner just purchased the property next door and the long-term plan, pending zoning board of appeals and conservation commission approval, is to move the house in a more permanent way.

**Karl Von Hone provided an update for Yarmouth.** Mr. Von Hone said they are looking forward to the post- Rt 28/Parkers River Bridge study to look at restoration project for the upper reaches. He said the flow has dramatically improved. Mr. Von Hone said they did emergency dredging south of the bridge due to sediment transport. He said they are in the process of re-permitting their ten-year plan for dredging. Mr. Von Hone said Parkers River is looking at some redevelopment with walkways and a kayak launch.

## **New Business**

There was no new business

## **Next meeting and call for topics**

The next meeting is scheduled for April 20, 2022.

## **Adjourn**

Upon a motion by Karl Von Hone, seconded by Nina Coleman, the meeting adjourned at 10:48 am.

## **Roll Call Vote**

Nina Coleman	Yes
Sharon Hamilton	Yes
Chris Miller	Yes
Dr. Robert Duncanson	Yes
Karen Johnson	Yes
Shana Brogan	left meeting at 10:15 am.
Heinz Proft	Yes
Tim Famulare	Yes
Karl Von Hone	Yes

## **Meeting Materials**

- Dr. Jo Ann Muramoto's MassBays update (PDF)
- Barnstable County Dredge Report

- Low Lying Roads Presentation
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