

## **Tisbury Climate Committee**

### **Meeting Minutes**

**Date:** Dec. 6, 2021

**Meeting called to order:** by Melinda Loberg, Chair, at 5:32 PM.

**Place:** Zoom: <https://zoom.us/j/93179893967>  
Meeting ID: 931 7989 3967      Passcode: 482127

**Attendance:** Committee Members: Melinda Loberg, Louise Clough, Anna Edey, Keith McGuire, Rachel Orr, Kate Shands, Bill Straw, Bruce Stuart  
Guests: Chris Cassidy, Tisbury Water Works (TWW) Superintendent

**Discussion:** ML began by reading the Covid disclaimer. She announced a presentation by Tisbury Waterways, Inc., in conjunction with the MVC, on the Permeable Reactive Barrier on Lagoon Pond, on December 14 at 5 PM. She then introduced our guest, the Superintendent of TWW and asked him to tell us a little about himself.

Chris said that he's been the superintendent for 3 years and 2 months, and that TWW is at our service 24/7. Melinda said we are a new committee; we are fortunate to have Bill Straw, who has been on the Energy Committee for many years, and Bill says water is our most valuable resource, and we need to protect it. Chris said he agreed and that our resiliency is strong. This year, 2 of Tisbury's 3 wells have been completely redeveloped, with new parts and re-wound motors. Our backup emergency systems are good; they are tested regularly; and TWW has recently changed their standard operating procedure to have them run under a load. Next year, TWW will have a 3<sup>rd</sup> pump station, and by the end of 2022 will be in a very, very good position. The new building has an emergency backup generator. There were a couple of bumps during the last storm – it turned out a couple of things were not connected, but everything has now been connected.

Anna asked how many kilowatt hours are used per year, and Melinda clarified the question by asking if TWW keeps track of the energy it takes to fill the tanks. Chris said that was a good question, but he didn't have that number; however, the pumps are on when they are filling, off when they're full, so he could calculate that from the run time.

Rachel asked what percentage of the town is on town water vs. having their own wells. Chris said Tisbury's population is 6,080 people and that TWW has 2777 accounts. He said it's hard to determine the percentage because of the seasonal population. Rachel followed up by asking how many people don't have town water. Chris said that State Road, past Lambert's Cove Road, is the end of the line, and for those people beyond that point, who have wells, when the power is out, their water is out. Melinda asked if there is a contingency plan for the people who have wells, and Chris said there are water fill stations at the TWW building and the fire

station, and those people get a reverse 911 notice. Melinda asked if he knew if anyone had availed themselves of those fill stations, and Chris said he did not.

Louise said she remembered being told some years ago that the island had a wonderful aquifer, and it would never run out. She asked if that was still true and if our wells would have enough water for the future. Chris said that our aquifer was one of the strongest aquifers he had seen, and our wells are the deepest he has seen. He added that our aquifer is strong, full, and abundant with zero issues at present, but he can't predict what will happen ten years from now.

Keith thanked Chris, noted again that we are a new committee and said we have 2 main issues: to prepare for climate change and to help the town with mitigation. He said the water department has 2 main priorities: drinking water and water for firefighting. He asked if TWW had a plan looking to the future with climate change and the likelihood of more severe storms. Chris said TWW has an emergency response plan, which is updated every five years, and they are just finishing up the latest one. The plan looks at worst-case scenarios, and the emergency equipment is always ready. He said TWW is set to control whatever they can, given the vagaries of Mother Nature, and that they train for weather-related events.

Keith asked about reducing our greenhouse gas emissions going forward. Chris said they have one diesel generator which will be replaced with propane. He said he's in favor of solar and battery backups, but he is concerned about using batter backups at pump-station facilities which provide drinking water because he is concerned about contaminants getting into the ground and poisoning the aquifer. He added that the solar requirement would be huge.

[Bruce entered the meeting at this point.]

Bill said that he had been sent an MSDS [material safety data sheet] on the transformer incident on Weaver Lane. He said a pole broke off, the transformer was upside down, and the site was contaminated. He said God forbid the transformers fell at our well sites and asked why not move the transformers away from the wells. Chris said that was an excellent point and he will discuss that with Eversource. Bill said he'd be happy to help. He said we need a list of all the public and private poles and said if a line goes out, Eversource is touchy about repairs. Chris said TWW is at the top of the list of priorities if the power goes down. Bill said his power was out for 60 hours in the last storm and that it was the first time in ten years. He asked if the lines going to the wells could be underground. Chris said we would have to figure out the cost; Eversource won't do it on their own dime.

Bill went back to Chris's concern about the batteries and solar close to the wells. He said we could install a microgrid. There is a solar array on the landfill; the town should purchase it when the 20-year lease is up. Then the batteries could go near the array, far from the wells, and we could have our own system. He said the wells are number one, but only if Eversource can get to them. He asked how long the generators can run. Chris said 2 to 2 ½ weeks; in that time, he could come up with a solution.

Bill then asked about communication between the wells and the office and if they are transmitting through the antenna. If the antenna were out, would they lose communication? Chris said back-up plans are hard-wired into the computer system. If they lose communication, they can operate the system manually. Bill suggested they might lay fiber optic cable underground.

Melinda addressed the issue of the supply chain and asked if there is enough propane and diesel in storage. Chris said that's a question for the supply companies. He said all our tanks are full all the time. Melinda said we'll put that on the agenda when we talk to the emergency management people. Anna said we also need information on the gallons of propane used, in addition to the kilowatt hours.

Rachel said our wells are really deep. She has heard about contamination on the Cape and asked if the depth of our wells help with contamination. Chris said yes; earth is the best filter, and our wells are 215 feet deep. He said we could check the water quality report. A study done by U Mass Dartmouth showed lower numbers for our wells than for anybody else's. Rachel then asked about saltwater intrusion at the Tashmoo well. Chris said that the location of our 3 pump stations is beneficial; our water is first in, first out. Rachel noted that there have been problems with the Oak Bluffs (OB) wells and the Edgartown wells, too. Chris said he did not see that as a problem in the future. Bill asked how many wells OB and Edgartown have, and Chris said approximately 5-6 and they are shallower than ours. Bill asked if those wells were contaminated, would it affect ours. Chris said no, because we get the first draw; the aquifer flows down-island from us. Bill said part of the pollution comes from West Tisbury, and it's a joint aquifer. He asked if Chris had said it was a flowing system. Chris said yes; water moves. He also noted that we have one municipal connection with OB, and it wasn't the wisest place to connect. Melinda said, thinking more broadly than just our town, do we have a mutual aid agreement? Chris said we have never needed to use the OB municipal connection.

Anna then asked if the water is tested for viruses. Chris said there is bacterial sampling, and there are 4 years of water quality reports. Anna asked again about viral testing and pointed out that Covid could spread that way. Chris said they do exactly what is required by the state, and they don't test for viruses. Melinda commented that there are communities that test their wastewater for Covid. Anna asked if viruses survive water treatment. Chris said it would be hard to prove whether someone got Covid from drinking water. Anna noted that pharmaceuticals and viruses go through wastewater to ground water and asked if testing could be done. Chris said yes, but it would have to go through the Board of Water Commissioners. They currently are not doing that testing. Melinda said that may be in the bailiwick of the Board of Health. Rachel asked if the leaching fields were at least 200 feet from the wells, and Chris said yes, they are at quite a distance. Rachel commented that gives us at least 200 feet of soil filtering.

Melinda said that Tisbury Waterways has done quite a lot of testing of contaminants in the ground. Rachel said that contamination puts people with wells and septic systems at higher

risk. Chris said they're not testing close to what we're doing. Melinda mentioned elevated nitrogen levels at Kuehn's Way. Bill asked about the frequency of testing and if filtering is done. Chris said bacterial testing is done twice a month; testing for lead and copper and a slew of other contaminants is done quarterly; and PFAS testing is done yearly. Melinda asked if the reports were on the TWW website, and Chris said yes. Bill asked who does the testing, and Chris said the Wampanoag Environmental Laboratory and Envirotech Labs in Sandwich. Bill asked if anyone tests daily, and Chris said no. Melinda asked if the test results are out of range, what corrective measures are taken. Chris said the DEP [Department of Environmental Protection] goes case by case.

Anna said she would love to know about chlorine. Chris said they use it from time to time - when it's very hot and this time of year when the seasonal use decreases. Bill asked if there are plans for a third tank, and Chris said no. Bill asked about the tank with all the antennas on it, and Chris said they may tear down that tank and replace it, hopefully within his time here. Bill asked if there was revenue from the antennas, and Chris said yes, and it went to the Water Department.

Melinda commented that she feels encouraged by Chris's thinking and confidence and said as we develop plans and priorities, she looks forward to working with him. Chris said, "Me too." He added that he has a great team to work with. Melinda thanked him and said we would stay in touch.

[Chris left the meeting.]

Melinda commented that we have great quality water, and it was good talking about it. Bill said maybe we should bottle it and sell it. Anna commented that he wasn't very open about the batteries and solar power and commented that when we have the numbers, we will know what we need.

**Review and Approval of Minutes:** Melinda returned to the beginning of the agenda and addressed the minutes. Bill commented that Bruce was present. Melinda said she had sent Kate a couple of corrections, and Kate said she had put those in the minutes. Anna had a couple of lengthy edits, and Melinda and Kate asked her to send those to Kate. Louise moved that the minutes be accepted, Keith seconded, and the motion passed 8-0.

Bill asked if the minutes are available on the Town website, and Melinda said yes, they would be. Heidi is developing the website, and she said she was working on it today. It should be ready very soon, and then we can upload whatever we want. She said she and Kate need to learn how to upload minutes and reports. Rachel added that then the agendas can be posted.

Melinda said that since our last meeting, the MVC CAP Kick-off meeting had happened and asked who had attended. Keith and Kate did, in their capacities as members of the Steering Committee and a Thematic Working Group. Keith said he was glad that Liz, Meghan, and Cheryl had been at our meeting, because they presented pretty much the same information at

the Kick-Off as they had presented to us. Kate added that there had been break-out sessions, and people had put information and suggestions in the Zoom chats. Melinda said they made all that available and it could be sent to her or to a Google Drive (GD) site. Louise said she had some experience with GD, and it would be better to send it to Melinda and have her send it out to us; or it could be posted on our webpage. Both GD and Dropbox (DB) can have problems. Keith asked if other committees, before GD & DB, had a file drawer. Rachel said that it's easy to violate the Open Meeting Law with GD, and that she been in groups that have used DB for large files; it's still problematic, but it's easier when the files are huge.

Melinda said there had been another meeting since our last committee meeting: The West Tisbury Climate Committee meeting on getting to 100% renewable energy by 2040. She asked how many had attended, and she, Louise, Anna, Rachel and Keith all said they had been there. Melinda said she learned a lot of new terms and information. Rachel said it had been helpful: the committee had polled the residents and gathered target information. They also discussed their CLEAR [Clean Energy and Resiliency] report from MassCEC [Massachusetts Clean Energy Center].

(\**Note: "MassCEC's CLEAR Program seeks to support community resiliency efforts that reduce GHG emissions, enable the integration of renewable energy sources, and provide energy resilience for critical facilities during electrical grid outages." They "work with communities to analyze the cost and system design for resilient facilities in various communities."*)

Rachel said it was a very helpful report and she is hoping Tisbury can do something like that.

Melinda asked Bill about that possibility and said Cape Light Compact (CLC) was one of the resources. Bill said yes; money was available. He reiterated that Green Communities money is available twice a year to the tune of \$250K until a total of \$700K is reached and said we are nowhere near that. The money is available to analyze what's necessary and plan for achieving those needs. He said that hot water, lights, and heating in the town buildings are low-hanging fruit. We don't have enough money in our latest grant to cover putting in a heat pump at the DPW, but we can submit it again in February. He said an administrator at CLC, in collaboration with Rise Engineering, can do a walk-through and change all the lights to LED's. He added that Kirk can tell us next Monday where things stand.

Anna asked how to access that report, and Rachel said it's on the West Tisbury website. Melinda added that it's on the Energy Committee's website page.

Melinda then announced that guests at next week's meeting will be Jay Grande, Ross Seavey, and Kirk Metell. Melinda will meet with them on Dec. 8 in preparation for that meeting. She asked that committee members have questions or concerns for them to please let her know.

Bill asked if we were skipping over agenda item 3 {Begin discussion of short-term goals for the committee) and Melinda said we're kind of doing that. Bill said his short-term goals include the heat pump at the DPW, lights in all the town buildings, and buying out the solar array at the

landfill; he said we need to plan for that last item. He said we need to initiate a discussion with CVEC about that and find out if we have the right of first refusal. Melinda said she thought we did have that, and we will have a better idea of how to consolidate our goals after we meet with the people who are coming to next week's meeting. Bill said energy efficiency and mitigation are big issues for him and that includes engineering for storm water runoff

Keith returned to contacting CVEC and asked Bill if he would do that. Bill said yes. Keith made a motion to authorize that, Louise seconded, and the motion passed 8-0. Rachel offered to provide records, but Bill said he was on the CVEC Board for 8 years and he knows people. Melinda asked if CVEC has a contract, and Rachel said it's on record.

Anna commented that algae in the ponds is a huge issue, and we need to talk about wastewater and Title 5 as well.

Bill said we need a study on the carrying capacity of the island; we need to be able to say whether to go on building or to say we have exceeded our carrying capacity.

Melinda suggested we might invite Adam [Turner, Executive Director of MVC] to a meeting.

Melinda then summed up: next Monday we will have a report on projects the Town has going.

She will put as a regular agenda item a report from the [MVC CAP] Steering Committee.

And after that, it will be holiday time, so there will be no meetings at the end of December.

Our next meeting will be Jan. 3.

**Adjournment:** Motion to adjourn by Anna, seconded by Bill; the motion passed 8-0. The meeting was adjourned at 7:00 PM.

**Next Meeting:** December 13, 2021 at 5:30 PM

**Minutes Submitted by:** Kate Shands