



NANTUCKET TOWN ASSOCIATION MEETING

August 23, 2022, at 4:00 pm

Meeting held by Zoom conferencing

DRAFT MINUTES FOR REVIEW AND APPROVAL

Attendance (Participants as noted by Zoom): Shantaw Bloise Murphy, Tim Braine, Trish Bridier, Mary Anne Easley, Jeff Fearon, Doris Hanna, Ron Lefrancois, Mary Longacre, Sarah Ann Miller, Gail Norton, Lee Saperstein, Bill Seay, Lisa Margaret Stevenson Bryan, Anne Terry, Henry Terry, Barbara von der Groeben, and Charley Walters

Guests: Mark Willett, Director, Water Department, and Janet Forest, Atheneum (left early).

Thanks to the Atheneum, Janet Forest, for hosting the meeting. which was recorded and the link to YouTube is included here: <https://youtu.be/tFfY11B3Gdg>.

I. Call the August 23, 2022, Nantucket Town Association Meeting to Order.

President Henry Terry called the meeting to order at 4:00 pm. He announced that the meeting is being recorded and those who could not attend are welcome to use the above link to watch the recording. He also announced that, to avoid conflicts with the Open Meeting Law, there would be no discussion of the Nantucket Town small area plan because members of that working group are in attendance at today's meeting and no agenda for it has been posted.

II. Approval of minutes of the Meeting of July 26, 2022.

Henry Terry asked for approval of the minutes of the meeting of July 26, 2022; Trish Bridier moved approval of the minutes, Charley Walters seconded them, and the vote to approve was unanimous.

III. Treasurer's Report.

Anne Terry, Treasurer, gave the Treasurer's report, attached. There were no additions or deductions so the balance of \$3818.50 was unchanged. A motion to approve was made by Mary Longacre, seconded by Trish Bridier, and approved unanimously.

IV. Guest Speaker.

Henry Terry said that the guest speaker would go first because he had another meeting to attend; he then introduced Mark J. Willett, Director, Water Department, who apologized that his computer camera had just failed and, thus, was speaking by telephone only. He started by saying that 2021 was the greatest year ever for the water company. In an extremely busy year, they pumped over 600 million gallons of water. They completed 141 new connections although, since some of them were for fire protection, somewhat less than that number represented new construction. Their greatest pumping rate was 4.8 million gallons per day, which was a new record. To provide a comparison of scale, the water tower on the Washing Pond Road holds around two million gallons so that one-day total was over two times the tank's capacity. It has been unduly dry this summer, although last summer was worse, and that meant that a lot of water went into lawn irrigation during both summers.

The Water Department, known also as Wannacomet Water Company, monitors the state of its water supply very carefully. There is an observational well managed by the State Department of Environmental Protection, DEP, on Russells Way; only the state has access to this well. It shows that the water table for the supply aquifer to be 3.5 inches above drought level, which is actually a lot of reserve water supply. Should that reserve diminish, they may need to impose water restrictions, which are not needed now.

He said that water company does all of its own work in terms of making connections and installing water meters. They have extra meters in reserve but have been informed by the meter manufacturer that additional ones are in short supply and may need a substantial period before they can supply new ones. Mary Longacre asked about the new connections around the airport to provide PFAS-free water to houses with contaminated wells. Mark Willett replied that they have already surveyed for the new connections and have the needed meters on hand. He noted that increased snowfall in the winter has led to an increase in use of de-icing salt and that can infiltrate into the groundwater.

Mary Longacre then asked about research into the state of the groundwater supply and was told that Nantucket is special and has had a lot of mapping and research done on it, including studies by the Wood Hole Oceanographic Institute, WHOI, and the National Science Foundation, NSF. The water company will be doing a stress test on the aquifer in the winter when the water consumed can be afforded. Much of the water pumped during the test will be put on the ground for aquifer recharge. He talked about the geology of the aquifers. There are at least three layers with the upper-most going from zero to 70 feet of depth. Most residential wells pump from that layer and they are no more than 60 to 80 feet deep. At 90 feet of depth there is a low permeability layer (aquitar) that protects the middle layer, which is from 90 to 250 feet of depth. It is into this layer that the water company has its wells and from which it pumps. The water was derived in an inter-glacial period from melting ice and may be in the order of 24,000 years of age. Below yet another impermeable layer is a vast lake of fresh water that they call, fondly, Lake Nantucket. Because of the depth and pressure, the layer has a consistency of Play-Doh. It is the subject of the research done by WHOI, who are mapping the entire island; it probably extends under the sea well off shore and may lead to similar discoveries in droughty areas such as West Africa.

Yes, he said in response to another question, he is concerned about the potential commercialization of this “fossil” water. The water company, reflecting on the difficulty that a public water company has in commercializing its product, has decided not to bottle its water for commercial sale. They have, however, in the past given away empty, labeled bottles and may do so again. They continue to research sites to place water-bottle filling stations.

Mary Longacre asked about the height of groundwater levels as measured over time. Mark Willett said that the levels have remained stable. Incidentally, he noted that sea-level rise leads to a rise in the groundwater level. They have 15 monitoring wells. Bill Seay asked about the technology of monitoring to which Mark Willett said that they monitor water pressures, electrical conductivity, and pH. From time to time, they use a physical water-level monitor to substantiate their other measurements. Much of this technology has been borrowed from the oil industry. The State owns the groundwater and sets pumping limits for individual towns and water companies. Nantucket is well off while some communities on the Cape may be facing pumping limitations to keep brine incursion at bay. The volume of the freshwater reservoir is such that they have never found brine incursions below 500 feet of depth. Also, there is no PFAS contamination in the middle layer from which they pump. Bill Seay asked if private landowners may pump from this middle layer and was told that the only prohibition is expense; there may be one or two private wells into this layer.

Sensing that there were no more questions, Henry Terry thanked Mark Willett for his presentation. In turn, Mark Willett said that their offices are always open and people are welcome to visit the water company.

Henry Terry then suggested a return to the published agenda.

Old Business. None.

New Business.

Mary Longacre said that association members might be interested in two applications before the Tree Advisory Committee for removal of Town trees; both received negative findings. The first was on West Chester Street and the second was for 14 West Creek Road at the corner of Pleasant Street. She suspects that both applications will be litigated.

VII. Adjournment.

The meeting was adjourned at 4:33 pm by motion from Trish Bridier, seconded by Anne Terry, and approved unanimously.

***Next meeting is September 27, 2022, and will be via Zoom unless a decision to hold an in-person meeting is made; more information will be forthcoming with the next agenda; if one uses Zoom, registration is available at the following address:**

<https://us02web.zoom.us/meeting/register/tZwrcOCsqj0iH9CoJJCY4FXOdz-tHfyynBrX>.

Lee W. Saperstein, Secretary, saperste@mst.edu.

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NANTUCKET TOWN ASSOCIATION

Treasurer's Report	July 26, 2022
Beginning Balance	\$3,818.50
Deposits None	
Expenditures None	
End Balance	\$3,818.50