

DENNIS WATER DISTRICT

Board of Water Commissioners

Minutes of Meeting held

October 15, 2020

A meeting, having been duly posted, was held this date at the Dennis Town Hall, Stone Hearing Room, 685 Route 134, South Dennis and called to order by Paul F. Prue, Chairman at 10:04 AM. Water Commissioners Peter L. McDowell and Alan Tuttle was present. Also in attendance were David Larkowski, Superintendent and Sheryl A McMahon, Treasurer.

The Pledge of Allegiance was recited.

Public Information

Verbatim: P = Chairman Prue; M = Peter McDowell L=David Larkowski;

P: At this time do we have any public information. Gentlemen, do you have anything (inaudible)

M: Mr. Chairman I do. I would like to acknowledge an achievement that David, our Superintendent, did, finish this past week. And that is, the Town of Dennis is about to embark on a wastewater question that is going to before the voters in the coming year. It is probably going to be the most costly, most expensive project ever in the history of the Town of Dennis and for many years thereafter. However, that's not what I want to talk about here. David, during the study over the past ten or twelve years, when they were studying, the total nitrogen or the pollutants that come from wastewater. There was a, they called it total nitrogen. One of the parts, in that total nitrogen is all of the various fertilizers that come from treated sewerage, etc. The one piece I'm going to talk about is solely is nitrates. Nitrate is the kind of fertilizer that is active in estuaries. That is the part that was considered by the Town of Dennis, David Young and CDM Smith, more than a decade ago, in the study involving our needs that included that we need wastewater, whatever. That's a separate issue. However, in nitrates, there is some interesting stats that that back in 1993, the Commonwealth of Massachusetts, the Department of Environmental Protection (DEP), it had a little bit different name back then, required all public providers of drinking water to report annually, to take readings and to report annually and file them, the nitrate reading for any well that was used. Currently with that, and the nitrate is kind of interesting, because of the nitrate levels David has recorded, consistent with that regulation, the nitrate reading annually from each well that we have. Currently, the Town of Dennis has 22 wells, 18 wells were in, had been, in place and being used to providing water to the people of Dennis since 1993. It's kind of interesting because, just getting real to the bottom of the point here is that the nitrates that are collected by our study, that is totally independent of having nothing to do with wastewater, except that is consistent with the focus of the Department of Environmental Protection many years ago, that of the 22 wells that we have 18 of our wells have been in place since 1993. And in the last 10 years that every one of those 18 wells that we have, have had at least half, or more than half, have less nitrates than they did back in 1993. In this past year, 2020, this year, 14 of our 18 wells had less nitrates than we had in 1993. What is suggested here is that the nitrate levels, for some reason in Dennis, has been dropping since 1993 and the record will show that. And that's totally independent of having anything to do with wastewater, but it is a reading that is sampled by our wells. Now it is true that the wells that they are sample, all of our Dennis Water District wells are north of the Mid-Cape highway, that's Route 6. And generally, if Hokum Rock Road went from Harwich, went from Brewster to Yarmouth, that would be as far north as our wells are so that, and there is wastewater other places than that. However, it is interesting that this number here and it could suggest that possibly the Board of Health maybe with their IA systems that they have

(inaudible) which has been more than 300 in recent years (inaudible) put in place may have had an effect of an independent source measuring that our nitrates are going down and are less now than they were in 1993. For whatever that's worth. The one thing is that, and this is when where we consider this as far as wastewater is concerned. I'm going to leave that alone. However, I want to thank David. What David has done is put on the Dennis Water District a, the chart that we've talked about, and we put some colors and coding that will make it possible so anyone that wishes to go up on to the Dennis Water District website can go up and see exactly what the recording are and what we can do is, there is also chart showing exactly where which wells are where and that is not so important as the fact that the overall story is that our nitrate discharge from our sewerage, because every toilet we have, almost, say 99% of them, every toilet we have in Dennis is flushed and its wastewater is on the piece of property where it exists. There may be some exceptions and there are. However, the fact is that we have a diminishing problem for whatever reason it may be but, I wanted to acknowledge and thank David for taking the time and going to the effort of creating a chart, when you have charts with lots and lots of numbers they're very difficult to understand what the message is, but he has done some enhancements and we may, if there is a situation we can add on to that. But thank you David, I appreciate what you have done.

L: Well, I just take the samples and put the spreadsheet together. I can't take any of the credit for putting it on the website. That is all Sheryl. I don't do any of that stuff. So Sheryl helped me coordinate that and put it on the website.

M: I would also like to thank Sheryl if I may.

L: You can thank Sheryl for that.

M: For both of you. The team work for getting that up there however that works. That's wonderful. The only one I knew is you and I talked (inaudible) that worked very well. Thank you Sheryl.

P: I wonder if this is weather related in the sense of pollution if we have a lot of rain or high water tables. A certain amount of dilution over a period of time. I'm just curious that's all. What do you think Peter?

M: Well, as far as our water table is concerned, our lens, and that's another issue to that we've been watching. The Town of Dennis, or Cape Cod for the most part, we're down about 13 inches from normal. But the actual measurements, and there are certain measurements that David could speak to that, but the lens from which we draw our water for our 22 wells that the actual lens it doesn't go up and down with tide like a reservoir. All of our water comes out of the ground measuring from a maybe depth of 40 feet to more than a 100 feet deep. So that basically this lens, we'll say this, this deficiency of rain of this year of 13, 14 inches, whatever the case may be, does not so much affect our source of water. I'm sure if it became real extreme, became much more disastrous, there may be a different story but, we are in very good shape. We have no reservoirs. All of our water comes out of the ground and the lens there, David can speak more of that but we are in very good shape from the source of our water under the ground is not a consider (inaudible) not even a slightest concern of what happened in Long Island decades ago when all of a sudden the ocean started getting into the drinking water that came out of the ground there and turned in to salt water. That won't happen, so far I don't think there's much chance of that happening here. Thank you very much Mr. Chairman.

P: And its always self-flushing that water is always bleeding out to the ocean (inaudible).

M: There was an extensive study, that even now at 30 or 40 years ago, when we were concerned about the volume of water and that occurred at the same time that they had the saltwater intrusion in

Long Island and basically there was a concern. But our study showed that our population could multiply many many times and still the water, the normal consumption by our population. We're in very good shape with that based on a lot of things. The one thing is, the government did at that time, we made sure that all of the places that our rainwater drains off in to the ocean that we minimize that. It goes into basins. It goes into pockets of all kinds of things. There are some places where it does go into the estuaries. But, for the most part that's been minimized and that been our, let's say the rainfall, we collect more rainfall now than we did back then, 50 years ago, I guess. Something like that.

P: I think, if I'm not mistaken David, studies show that we use about 15%, 20% of available water supply.

L: Where should I start? I think it is less than 10% that we use of what falls as rainwater is what we actually use. The rest stays in the lens or leaks out of the lens into the Cape Cod Bay and the Sound. As far as our nitrate levels, we are in good shape. We always have been. We have to be careful. We have some instances where here in Dennis we might have a well that is close to a development. I'll use 21 as an example. We put well number 21, east of Route 134, it's near, I'll say it's near a development, but near some vacant land, extensive unused vacant land. We originally put it in thinking it's going to be clean and with no problems. We started pumping it. It's a million gallon a day well, 700 gallons a minute. Within the first two years we saw nitrate levels at 4. Instantly it went skyrocketing. At that pumping rate we were changing the direction of the flow of water from normal and we felt it was coming from the neighborhood. We changed the flow by decreasing that well. It is only 600 gallon a minute well now and it's been that way since year two. The nitrate levels, we got them right away, almost instantly down to about a 1. Which is normal for all of our wells. And it was just because we were pumping it, not too hard, but just changing the direction of the flow. We can change the difference, the flow, we can influence some things and there's neighborhoods that can influence the drinking water quality. Well 16 is close to something. We've seen some higher numbers, 2 and half or 3 over the years. Not a problem. But it's one that it's that's been high, higher than the rest. Over all, we are in very good shape. We can deal with some issues like I just mentioned with well 21. Generally, the numbers have been, if you charted them, there would be insignificant changes if you charted them. But, there's been no dramatic increases. There's been very insignificant decreases also, but, you know, the data, it's a small decrease over the years that Pete's been mentioning. But, there's no problem with the drinking water as far as nitrates. We've been in good shape for many years. The District has been great at buying vacant land keeping it out of circulation. Nobody is using it for houses and septic systems and whatever land uses people use, washing cars all those types of things. So the District's done a great job and you know we continue to buy land, keep it out of circulation. That's how you protect the land so I don't see us changing the habits we've had in that respect so we'll keep doing that.

P: Well that sounds good. That sounds good news to me (inaudible).

T: Coming out of the super market the other day a woman approached me. I got her life history by the way. She's a resident in Dennis. She plans on retiring on January first and becoming a full time resident. She's a controller for some large company, in Boston I assume. Anyway, it sounded like she watches every meeting that happens in Dennis. She watches our meetings, Old Kings Highway, the Selectmen, on and on. So she approached me she said, "Mr. Tuttle I don't", she must have seen me at some point, she said, "I've got some ideas and I don't think you're going to like them because it is going to cost you your job". I said, "oh". She said, "Yah, I think the water district should become part of the town". So I explained to her that the water district and what have you and she said, "Well, the way I understand it, the whole town is now part of the water district". I said, "That's true". She said, "Well there's a lot of savings if you, you know, if it went to the town" and she listed all the different ways we could save money. Less people, blah, blah, blah. But, the reason I bring it

up is that she said, "I'm retiring January first and this is something, along with others, that I plan on pursuing. I said, well, you know. She said, "Where should I go"? "Well", I said, "I think it would take an act of the legislature to dissolve the District first of all". I said, "I think it's a long and complicated process." "Well", she said, "I'm taking an early retirement and I've got plenty of time so I'm going to be talking to some of the selectmen." And I just wanted you to know that it's coming up so if we hear something we'll know where it came from.

P: Forewarned is forearmed. Peter.

M: You know Mr. Chairman, just real quick, that's true but, basically what it would do, there would be 4 positions that would disappear. First of all, being the youngest member of this Board of Water Commissioners, as a youngster here, our three positions would disappear along with the Clerk/Treasurer. The Superintendent would be the department head and whatever. But, you know, there would be, but the thing is, I think there's a lot of things to think about, whether the, whether those three, four positions are such that would translate it in to a better operation. I think, and just maybe its selfish, I've been involved in Dennis affairs for more than half, actually 55 years, more than 55 years, so I have a little bit of taste of that, but I think that, as far as the operation of the Dennis Water District, efficiently wise, I think it is about as fine, and if the Town of Dennis could measure up to the high standards of the water district, of course all we have to do is pump water and so forth and provide it, and the Town does a lot of other things, I think that the efficiency we have as such, that if you left it alone it would probably be a real measurements afterwards, after we turned it over to the Town affairs it might turn out to be a little bit less. So, anyway, for that being said.

P: Well a couple of our neighboring...excuse me...

T: You know I did mention to her the efficiency we have in the water district and I said if we became a part of the Town we'd still have to be our own water district as such. I said because we don't want other departments involved in what we're doing because they don't know what they're doing and we do it very well.

P: You only got to look at a couple of towns on either side of us to see what shape they're in their water departments (inaudible). They eliminated their Board of Water Commissioners. They're in tough shape (inaudible).

T: It might come up in the future.

M: More than 10 years ago, it was the water district that was being entertained for wastewater, and I think under David's leadership, that he didn't like the taste, he thought the taste of mixing wastewater with drinking water might have an adverse effect here in Dennis so actually backed away and the Town took over wastewater as opposed to the water district it by itself. The efficiency, I think from the experience I've had in this Town all these years, this water district is delivering it very well and I'd very much enjoy meeting that lady and have a chat with her.

T: Well if it ever does come up, I think it will take long enough it's not going to effect the three people up here.

P: Not only that, but the efficiency between the water district and fire department one of the few towns in Massachusetts that has some of the highest ratings relative to your insurance. We could argue this all day but for the moment let's consider item 3 of the agenda.

Consider Voting Extension of Interest Wavier and Delay of Shut-Off Demands

Ms. McMahon advised the Board that on July 31, 2020, the Board had extended their waiver of interest charges and demand shut off notices being issued due to the economic impacts of the pandemic for 90 days. A majority of the Board considered the amounts being waived not to be of significant financial impact to the District. On a motion made by Alan Tuttle, and duly seconded, the Board ***VOTED 2-1-0 (PLM) to waive the interest charges on past due balances and to suspend the issuance of Shut-Off Demand Notices until the next water billing cycle.*** Ms. McMahon confirmed that this would be on their agenda for the Board's January 2021 meeting.

Consider Posting Signs for Recent Acquisition of Watershed Acreage on Old Bass River Road and other locations.

Mr. Larkowski noted that for the watershed property recently acquired on Old Bass River Road, and perhaps other District properties that have or may be acquired from unknown owner's that posting a sign would provide public notice that the property has been purchased and is owned by the District. It would help substantiate that the District purchased the property. On a motion made by Peter McDowell, and duly seconded, the Board ***UNANIMOUSLY VOTED: to authorize the posting of signs on District owned property (watershed) recently acquired and on any other locations the Superintendent deemed appropriate.***

Water Quality Sampling Results and Updates

Mr. Larkowski advised that the Lead and Copper samples are taken every three years to verify that they are at sufficient levels to treat corrosion. Samples at 30 properties in Town and schools were taken in September. One home was found to be slightly above Maximum Contaminant Level (MCL) and the District had returned to re-take samples of a first draw and flushed at the kitchen. Treatment that is done by the District is working. School samples have not been returned at the time of this meeting. Mr. McDowell asked what kind of neighborhood the home was located. Mr. Larkowski explained that the type of neighborhood was not relevant. It has to do with the pH level. Usually, every sampling cycle has one or two that come up higher than expected. We are allowed to be in the 90th percentile. The limit on copper is 1.3 ppm and lead is .15 ppm. Mr. Tuttle asked if the water is tested at the street and at the location. Mr. Larkowski advised that water has to be in the pipes for at least six hours. The home owner takes the first draw. If it has been leaching out copper or lead, it is captured then. After five minutes of running, a second sample is taken and in that there should be no lead and copper.

The Superintendent reported on the PFAS sampling (Per- and polyfluoroalkyl substances) that was authorized by the Board in accordance with Mass DEP's free sampling program. The first sampling reports that came out showed no detections. District has to do complete samples over four different quarters. This round counts toward this requirement and DEP may do another free round that will also count towards the required quarter. New regulations require four rounds. If nothing is detected the District will apply for a reduced sampling schedule. The contaminants are tested in parts per trillion. There are so few labs that are able to conduct these samples within that range. PFAS samples cost a couple of hundred dollars each. Instead of sampling at every source we are allowed to do entry points which reduce twelve samples down to two. Twenty-two individual wells are reduced to nine sampling points. This will also provide a baseline for doing the four required quarters.

Update on Route 134 Tank Painting and Maintenance Project

Mr. Larkowski advised that the project was moving along good but, there was a stretch of weather where the contractor could not work. Mobilization was done early so work is on schedule. Spots on the tank were sanded and primed. The final coat of paint is being delivered, he believed, today. The final coat has to have perfect weather conditions such as moisture and temperature. Washing the inside of the tank and removing the staining is underway. Not sure of condition until the iron staining is removed. It appears that there are very few rust spots that would require treatment. Mr. McDowell wanted to go inside of the tank. Dave said it would have to wait until the contractor was ready. Mr. McDowell asked what the lowest temperature was at which they could paint. Mr. Larkowski advised that there is an inspector on-site all of the time. There is a temperature gauge on the tank itself. Shady side of tank is the most difficult to accomplish.

Mr. Larkowski advised that there is a 24" valve outside the tank that needs to be replaced because it is broken. When the booster station was originally designed and constructed there were only 10 wells and there were no standby generators. It was designed so that in an emergency it could pump water out of the six-million gallon tank into the distribution system. It has never been used for its intended purpose. He is taking the pumping station and decommissioning it for two reasons. One, it doesn't work. Two, it would cost a fortune to fix.

Superintendent's Report

Mr. Larkowski had no further reporting.

Treasurer's Report

Other Post-Employment Benefits Trust Fund – Report – Ms. McMahon had provided the Board members with a report on the income, gains and fees on the OPEB Liability Trust Fund since inception. She serves as the Trustee by virtue of her appointment as District Treasurer. She advised that she receives economic and investment outlook reports from Rockland Trust and attends meetings of the Town's OPEB Liability Trust Board of Directors.

Ms. McMahon shared a copy of a report from Cape and Island Electric Cooperative. She advised that CVEC is the organization that monitors the energy output from the Town's solar farm and prepares the calculations for the distribution of the net metering credits.

Minutes: February 12th and February 27, 2020

The minutes were deferred to the next meeting.

Adjournment: On a motion made by Alan Tuttle, and duly seconded, the Board **UNANIMOUSLY VOTED: to adjourn the meeting at approximately 11:07 AM**

Respectfully submitted,

Sheryl A McMahon, Clerk