

**Lewes Board of Public Works
Wastewater Treatment Plant Long-term Planning Workshop
March 31, 2022**

The Thursday, March 31, 2022, WWTP long-term planning workshop of the Lewes Board of Public Works was held at 6:00 pm at the Margaret Rollins Community Center.

1. WELCOME, CALL MEETING TO ORDER

President Lee called the meeting to order at 6:00 pm.

2. ROLL CALL

Board Members

D. Preston Lee, P.E.- President

A. Thomas Owen- Vice President

Thomas Panetta- Secretary

Earl Webb- Treasurer

Richard Nichols- Assistant Treasurer

Ex-Officio Members

Austin Calaman, General Manager

Robin Davis, Assistant General Manager

Theodore Becker, Mayor

Michael Hoffman, Legal Counsel- Zoom

Others Present

Charlie O'Donnell, GMB

Sharon Sexton, BPW

Joshua Gritton, BPW

Paul Townsend

David Jones

Barbara Curtis

John Ditoro

Yvonne Ditoro

Kim Ayvaziam

Tim Ritzert

William Ullman

Stephanie Tsantes

Jim Bartle

Ed Tessin

Doug Spelman

Sumner Crosby

Michael Hogan

Richard Scalenghe

Larry Ritzmann

Sam Martin

Nick Carter

Mark Prouty

Judith English

Mark Schaffer

Via Zoom

Sharon Dardine

Bill Wolff

Bonnie Osler

JoEllen Jordan

Robert Kennedy

Lawrence Firment

James

Andy Shea

Madeline

Joe Kelly

Todd Lawson

Nick Roth

Madeleine Nichols

Kim Bellere

Linda Morgan

Janice Pinto

Andrew Williams

Nadine

Elizabeth Owen

David Baker

Jay Lagree

3. DISCUSSION AND PRESENTATION OF THE LONG-RANGE PLAN FOR THE LEWES BPW WWTP.

President Lee welcomed those who attended the meeting in person and stated that there were quite a few that have joined virtually. A notice was sent out to all customers, and a letter to the editor was put into in the Cape Gazette, and the meeting was advertised on the website. This is an important decision that will be discussed tonight. The Board wanted to get the citizens input before anything was done.

President Lee showed a PowerPoint presentation:

President Lee stated that the first slide shows the existing wastewater treatment plant on American Legion Road. What will be discussed tonight is a different concept that has come up. The purpose of this workshop is to solicit public input on a very important decision the Board of Directors must make regarding the future of the BPW's wastewater facilities. It not only involves major financial and environmental considerations, but it also contains sensitive civic considerations. At this point this is an unexplored concept. No detailed planning or design has been authorized and no agreements have been reached. Therefore, there are no detailed cost estimates, only order of magnitude estimates, and will not be able to provide answers to all your questions because we do not have them ourselves. The Board has not talked to our engineers on this, and this has just been an internal discussion so far. What is trying to be achieved by this meeting is to get a feel for the public's feeling on this concept of working with the county. By the end of the evening the Board hopes to get the public's mood and what the ratepayer's think about this idea.

Purpose of This Workshop

The Board of Directors of the Lewes BPW have authorized the staff to prepare a grant application for submission to DNREC for long-range planning needs. This would be a holistic study looking at options including but not limited to:

- "Hardening" the existing Howard Seymour Water Reclamation Facility. Hardening means making the plant less susceptible to the impacts of sea level rise and major storms.
- Construction of a plant at a new location. The current plant is in the floodplain and is more susceptible to flooding although it is presently built above flood elevation. It is nine-foot elevation in that area.
- Sending BPW's wastewater to Sussex County for Treatment

"Hardening" of Existing Plant

- The hardening of the existing plant could be done by using dikes, levees, watertight containments, elevating critical equipment, etc...., against sea level rise/climate change.
- Improvements of facilities and equipment for access to the site during major storm events. In the past, with flooding, the BPW has had access of army trucks to access the plant.
- This would keep the plant where it is and utilize the existing outfall pipe.

- Very rough estimate would be \$20 million. The estimates could be off by 20-30%. It is just too unknown at this point. It is obvious that these options are very much different in cost. The Board feels that the hardening is in the \$20 million range.

Build Plant at New Location

- Building a plant at a different location that would be less susceptible to sea level rise/climate change. (\$30mil.)
- Land acquisition would be very difficult and very costly. (Possibly 10 acres at \$0.55 million/acre or \$5.5 million)
- Total rough estimate for new plant - \$35.5 million plus, treated wastewater disposal options. This is not including discharge.

Treated Wastewater Disposal Options from New Plant

- If the present outfall pipe is used, additional pumping facilities and piping is needed. (\$12.0 million assuming 10 miles at \$1.2 million/mile) Total including treatment plant \$47.5 million. No guess at where the site will be, so 10 miles is a placeholder.
- An ocean outfall like Rehoboth would be difficult and very expensive. (\$52.5 million) Total including treatment plant \$88.0 million.
- Land application of the effluent would require approximately 300 +acres of land and which would be difficult to find and very expensive. (\$30 million for land plus; \$12.0 million assuming 10 miles of piping; \$42 million total) Total including treatment plant \$77.5 million. This is one of President Lee's favorite methods to handle wastewater, but in this situation approximately 300 acres would be needed and would be difficult to find.

*These are very rough figures.

Sending BPW's Wastewater to Sussex County for Treatment

- This is the option that the Board wanted to get a feel for the public's thoughts.
- All BPW's wastewater would be pumped to the county's Wolfe Neck Plant.
- County would upgrade their plant and provide necessary treatment.
- The treated water would be returned to Lewes for disposal at the BPW's existing outfall.
- The BPW's existing plant would be demolished and made available for other purposes.

Coordination With the Sussex County Engineering Department

- Sussex County would be responsible for the costs of:
 - The upgrades to their treatment facility.
 - The necessary piping between the County's plant and the BPW's facilities.
- The BPW would be responsible for:
 - The decommissioning and demolition of the existing plant (\$3.0 million)

- Necessary upgrades to the two major pumping stations (PS. #4 and PS. #8; \$3.0 million)
- Total project cost \$6.0 million

Environmental Considerations

- Design Flow for the County’s upgraded plant would be 3.0 MGD
- 2.75 MGD pumped to the BPW’s present outfall, with continued land application at the County’s site.
- The amount of nutrient and biological load discharged would be greater than the present amount, but it would still be within the present TMDL permit limits. The BPW would still be in compliance with the permit with the additional flow.
- Future discharge into the canal would only occur on outgoing tides.
- Because the Wolf Neck plant has large lagoons associated, water could be stored for days or weeks if needed.
- It has been calculated that 5% of the BPW flow goes back to the inland bays and the rest goes out the canal and Roosevelt inlet into the bay. A small amount of nutrients does go bad because the BPW discharge is very low in nutrients to start with but theoretically some of it does go back to the inland basin. The BPW compensates for that by taking other nutrients out of the watershed. This idea virtually no nutrients would be able to get back to the inland bays.

Rough Cost Comparison

- Hardening existing Howard Seymour Wastewater Reclamation Facility \$20 million
- Construction of a plant at a new location
 - Discharge from existing outfall \$47.5 million
 - Ocean outfall \$88.0 million
 - Land disposal \$77.5 million
- Sending BPW’s Wastewater to Sussex County for Treatment \$6.0 million

Potential Schedule

- When the BPW Board authorized seeking funding for a long-range plan, no specific schedule was discussed. This was seen as a long-term initiative that the BPW would work to implement as needed going forward.
- The “hardening option” could be implemented gradually over many years.
- The “new plant” option could also be implemented over several years, but the search for a site would be initiated as soon as possible.
- The option of coordination with the county could be initiated immediately. The county plans to use some of the ARPA funds they have received to finance treatment plant upgrades.

Conclusion

- We recognize the sensitivity of this issue and realize the decision on how we plan for future wastewater facilities could have a major impact on future rates and the environment.
- We realize we do not have all the information we would like to have, but felt we needed to make the public aware of the joint venture option and get your input before moving forward in our planning efforts.
- The Board will make every effort to keep everyone informed as this process proceeds.

President Lee stated that at this point the Board is looking for the public's feedback. The Board has made no decisions on this matter. The Board had mentioned that they were looking into long-range planning and the county was also interested in long-range planning and this came up as an option. Again, no commitments have been made and the Board is looking for the pulse of the community. It is a big difference in cost and is certainly attractive financially but there are other issues to consider.

Mr. Webb stated that there is a lot of things that need to take place, such as taking a tour of the county plant, what is their safety record, what is the water quality, incident reports, elevation certificates, spray irrigation capacity, etc. The Board does not have an answer and is looking for the public's concerns. Mr. Panetta stated that there has been a lot of discussion in the sea level rise committee and the susceptibility of the plant. Currently the minimum elevation of the plant for flooding is nine and half feet. The current 100-year flood plain is seven feet for that site. With sea level rise up to the year 2060, it would bring it to ten feet. The plant is not immediately at risk from flooding during storms, but this is a long-term issue that the BPW needs to address. Mr. Panetta reiterated that the facility as it exists now is at low risk.

Dave Jones questioned what area or communities are sending their wastewater to the Seymour wastewater facility. President Lee stated that it is the city. Mr. Calaman stated that the BPW would eventually serve Lewes Waterfront Preserve, Tower Hill, Henlopen Bluff on Gills Neck Road, and the BPW takes flow from the county through a flow agreement. President Lee stated that the county's ability to irrigate in the winter is reduced and the BPW has relatively low flows in the off-season. The county pays the BPW the same way everybody else pays. Mr. Jones stated that the BPW should not use a band-aid, as this is a really important topic of what happens to the wastewater treatment plant. Mr. Jones stated that Lewes is a water community and should not utilize the canal as a discharge after the wastewater treatment, either from Wolf Neck facility or the Seymour facility. Mr. Jones pointed out that he noticed the \$77 million is about what 60 homes in Lewes are worth. Mr. Jones is a proponent of getting Sussex County involved, but instead of utilizing the canal, to do another treatment facility. 300 acres is needed for a new facility, and now is a good time to buy. Before would have been better because land prices would have been half but as time goes on it is just going to get more and more expensive. The number \$77 million for a community of this size is not shocking to Mr. Jones.

Nick Carter stated that he has been involved since 1999 when the plant had a capacity of 750,000 gallons per day and it was discovered that the plant was operating above and beyond the maximum capacity. Mr. Carter stated that the history tells us that the plant was enlarged, it was doubled and when the Environmental Protection Agency found out there was a moratorium against any new sewage

coming to the plant until it was completed. President Lee stated that they have been through this before. Mr. Carter acknowledge that fact, but the BPW is at that stage again, twenty-three years later. Mr. Carter stated that he is unsure why a meeting is being held to talk about what to do with sewage but understands that spray irrigation plant is full. The Lewes plant is reaching a certain capacity beyond what they can manage at the existing state. President Lee stated this is not true. Mr. Carter stated that as the expansion and the addition to the sewage plant continues to grow exponentially in his opinion, something must happen and has to happen sooner rather than later. Mr. Panetta stated that Mr. O'Donnell can speak to the capacity at the plant is more than capable to handle the BPW current needs and the future needs. Lewes will not outgrow the plant in the near term. Mr. O'Donnell stated that the wastewater service area was all planned out 20 years ago was built up in coordination with the county. Mr. O'Donnell referred to wastewater service maps and that the service area is up against the county service area, it was all planned out. The exact number of EDUs was known, and the plant was designed such that it has 1.5 MGD average capacity and now 2.25 potential in the future with the addition of the membranes. The 2.25 MGD is plenty to handle the whole wastewater service area as planned. Mr. Carter stated that the plant in its current location is a violation of the Clean Water Act except there is a permit from DNREC. President Lee stated that it is actually a national permit. Mr. Carter questioned if it was a federal or state permit. President Lee stated that it is not managed by the state, and it is a national permit. Mr. Panetta stated that it is a NPDES permit. Mr. Carter argued that it is in a tidal wetland and to that point the Clean Water Act says that having sewage treatment plant in the tidal wetland is a violation unless it is permitted. Mr. Carter stated that sewage treatment plant needs to be moved to another location. Mr. Carter stated that Mr. Panetta mentioned that the elevation is nine and half feet but is unsure about the sludge bins being above flood plain level. Mr. Panetta stated that they are not and are at an average of six feet. Mr. Panetta stated that the emergency plans say that they must be emptied in advance of a storm. Mr. Carter stated that the with the land-based program, Rehoboth was planning to do ocean outfall, spray irrigation, or the rapid infiltration basin. There was a plan with Artesia and had a site located but the sewage went offshore in Rehoboth. The rapid infiltration basin would be an injection. There is state property by Wescoats corner but it is not 300 acres. Mr. Carter assumes when 300 acres is said it is for spray irrigation not for rapid infiltration. President Lee stated that they have talked about this before, and this is not capable of something like that. Mr. Carter questioned why. President Lee stated that it is not big enough. Mr. Carter stated that it does not need 300 acres to do a rapid infiltration basin. President Lee stated that that site would be marsh in weeks. Mr. Carter stated that it is an option for rapid infiltration basin as it basically goes in the ground; it is not sprayed out on the surface. President Lee state that it still has to percolate into the ground. Mr. Carter stated he does not know where the numbers are coming from and understands that it is an estimate. Mr. Carter's position is that the plant cannot stay where it is, and it needs to move to another location. Mr. Carter questioned if there is an option to send the BPW sewage to the long neck facility or not. President Lee stated that this is not an option. Mr. Carter questioned if it is the Wolf Neck spray irrigation plant, Lewes BPW wastewater treatment plant, or come up with another plan. President Lee confirmed. Mr. Carter stated that the population continues to grow and the demand on this treatment plant continues to grow. Mr. O'Donnell clarified that the BPW's flow goes to the Wolf Neck plant, the Wolf Neck Plant get upgraded such that only 250,000 gallons per day would be spray irrigated and the rest would be utilizing the BPW's existing discharge.

Sumner Crosby thanked the Board for allowing the public to hear what is being considered before it has gotten so far down the track with no chance to have a say. Mr. Crosby questioned if there will be additional opportunities to share additional feedback as things move along. President Lee stated that the hope is to decide as soon as possible and get the feeling of the community. If there is overwhelming pushback, then the Board just may cancel the county discussions. Mr. Owen stated that one of the reasons that this meeting is taking place is that the county is going to really upgrade their plant and there is an opportunity to talk about a joint venture. Mr. Owen stated that because of permits and everything else, it is three to five years in the future. The county is going to upgrade their plant and offered this opportunity but if the BPW does not want it, then they will still upgrade their plant. Mr. Panetta stated that if the BPW does not go with the county, then the BPW will continue to explore the other opportunities and there is less of a time constraint on those. The county is using monies that have deadlines associated with them. Mr. Crosby questioned what the timeframe is for that. President Lee stated that they have asked for a decision as soon as possible, but no date. President Lee stated that when the opportunity first came up, the BPW discussed among themselves and decided to have a public meeting for the public's thoughts. Mr. Crosby stated that he is not prepared to offer specific kinds of comments that he would typically like to offer because this is new to him. Based on Mr. Crosby's experience when he worked at the Environmental Protection Agency, unless this is some crazy permit, he is not aware of, the fact that it is through DNREC, it went through a process of approval with EPA. So, it is approved with EPA as a national pollution discharge elimination system permit under the federal clean water act. Mr. Crosby is unsure about the wetland issue Mr. Carter mentioned, but as Mr. Carter stated there is a permit and if there is a permit it should be alright. Mr. Crosby stated on the issue of RIBS (Rapid Infiltration Basin Systems), he looked into Ribs some time ago for other RIBS schemes. RIBS would create a wetland pretty quickly. Mr. Crosby stated that the sea level committee heard from experts at the Delaware Geological Survey, because we live in an area with shallow groundwater and because of the geology of this area, which is very coarse grain and a lot of movement underground, what is put into the ground with move very rapidly. Ultimately depends on how much room there is in the ground to take the water. It is a nice idea to have a RIBS, but it is almost impossible to put the kind of volumes at the rate that is needed in order to process the water that the BPW is expecting to process. Mr. Crosby would not be in favor of a RIBS approach, particularly at Wescoats corner as it is too close to the wellhead protection area. Mr. Crosby stated that this is the best choice for water supply and there are not other choices to move, and it needs to be protected. Mr. Crosby questioned a previous statement about storing and only discharging when the tide is going out. This raised a flag of storage and how is it everything that needs to be moved handled. President Lee questioned if Mr. Crosby is familiar with the Wolf Neck Plant. It consists of four large ponds and that is the treatment and storage process. Mr. Crosby questioned the ability to store water through any tide cycle and discharge situation. President Lee stated that it may have to hold through the wet/cold season of winter with all the flow that was coming in. Mr. Crosby questioned how the 600,000 gallons will the county sends to the BPW be handled. President Lee stated that it will be built into the discharge processing capability of this new plant. Mr. Owens stated that the BPW plant is discharging all the time. President Lee stated that Hans Medlarz is the county engineer and has done this at the Long Neck facility. It was a lagoon system and Mr. Medlarz modified it with a system called Bio Lac system that converts it into a different type of treatment plant. The remaining ponds have quite a bit of storage available. Mr. Crosby stated that with sea level rise, we have learned from the Delaware Geological Survey that groundwater will rise as well and whatever is done on the surface such as lagoon storage, is susceptible to changes in the

groundwater below. Mr. Crosby stated a comment was made that there will be more discharge and if there is any more information. President Lee stated that the nutrient coming out of the BPW plant, nitrogen, is less than 2.4 mg/L on average. The BPW permit is 8 mg/L, so it is well below the limit. The system being proposed by the county produces around 5 mg/L. The permit is 8 mg/L, and the combined flow would come out at 5 mg/L still 3 mg/L under the permit. Mr. Crosby asked how much more would it be than the BPW current discharge. President Lee stated that the maximum now is one million and a half gallons at eight and we would be going to 2.75 million gallons at five. Mr. Crosby stated that when he was at the EPA, he used to look at water quality issues in terms of the percentage of the receiving water body. Is there a way to express these terms with both plants? Receiving water has a certain discharge rate. President Lee stated tides are gauged and depends on the direction of flows. Mr. O'Donnell stated that in 2004, GMB did a dye study and determined that 2.5% of the flow makes it to the Rehoboth Bay. When GMB went to DNREC to develop the nutrient offset trading program, they doubled it for conservancy. Mr. Crosby questioned how much flow is coming out of the pipe versus coming from upstream. Mr. O'Donnell stated that 97.5% of the BPW flow goes out the inlet. Mr. Crosby stated that it was his understanding the BPW plant is state of the art in regard to removal efficiency and how will the new system, working with the county, be? Mr. Panetta stated that it is still up in the air. If it is decided to pursue this option farther, this is something that will have to be reviewed. Mr. Panetta stated that Mr. Crosby is correct and that the micro filtration system the BPW has is state of the art. Mr. Crosby stated that he would hate to see things go terribly in the wrong way. Mr. Crosby stated that he has the utmost trust in the board to do what is right and hopes that there are more opportunities to discuss as the plans move forward. Mr. Crosby questioned rates and how they will be affected when the BPW hitches its wagon to the county. President Lee stated that this is something that has not been discussed yet but believes that the BPW would keep its own billing and it would be business just like today. Mr. Webb stated that it would be a joint venture kind of arrangement. Mr. Panetta stated that President Lee presented the upfront capital costs. The BPW has routine maintenance and operation of the wastewater treatment plant. The county will bill the BPW the routine operation of the Wolf Neck plant for the BPW prorated portion but is unknown what those numbers are right now. Mr. Crosby questioned if the BPW at this point is only responsible for collecting the bills and making sure everybody is paying. Mr. Panetta stated the BPW will still have the entire collection system.

Paul Townsend questioned if Lewes would be able to eliminate its NPDES permit if the BPW went with the county or would the BPW still have to hold one. President Lee stated that it has not been worked out but thinks that the BPW would keep the permit. Mr. Townsend questioned if it follows that the more expensive proposal would cause a higher rate or does the Board foresee a way to keep the rates the same or rise them incrementally as time goes on. President Lee stated this is likely but again still in preliminary stages. Mr. Townsend questioned if the BPW goes with the county and tears down the plant, the BPW would keep its outfall. President Lee stated that is the idea. Mr. Townsend questioned if the BPW will have a JV agreement with the county, basically outsourcing treatment and retain everything else: collection, billing, BPW employees. President Lee stated that this is the thought, but it has not been really discussed. Mr. Townsend questioned if the BPW keeps the permit, does the BPW keep the responsibility of a "bad day". President Lee stated that this is a good point and is one that the BPW certainly has to be careful about but does not have an answer today. The BPW needs to protect themselves. Mr. Townsend stated that it would be nice if the county does not get out of the responsibility. Mr. Panetta stated that it does give the BPW a certain amount of control what is going

into the canal. Mr. Townsend stated that Mr. O'Donnell is a great engineer and if the JV is structured correctly, the BPW will still have input. President Lee stated that he is unsure how the joint venture is structured, but the Board will make it as tight as possible. Mr. Townsend stated that if the BPW is just outsourcing the treatment, this makes a lot of sense. Mr. Townsend stated that having run a wastewater treatment plant before, the best day of that was not running it anymore. Mr. Townsend added that having metering lagoons is a luxury that most small towns in Sussex County do not have. If a plant has a hiccup and it needs to be fixed and flow cannot run through it, what does a small town do without a lagoon? People still flush and wastewater still comes in. Rehoboth, Milton, Lewes, a lot of the small towns have the same problem. If the BPW goes with Hans and the county, there are some serious lagoons. Mr. Townsend stated that it seems to him based on the cost factors and that the BPW facility would be removed that it is a win-win. Mr. Owen stated that the current plant as is, is at the end of the useful life and new membranes were just put in and things are starting to fall apart. Mr. Panetta and President Lee take exception to that statement. Mr. Owen stated that he does not mean falling apart. Major items are being replaced and this is an ongoing cost. Mr. Panetta stated that one million dollars was spent replacing all the membranes. There are pumps and other equipment that needs to be replaced. The facility itself is not at the end of its life. Mr. Owen stated he is not saying that. Mr. Townsend stated it is a mechanical plant and machines take wear. If there is not a lagoon, then it is a three o'clock in the morning event. Mr. Townsend stated that wastewater treatment plants are strange animals and if the BPW could possibly get out from underneath one and he suggests that they wholeheartedly do it.

Mr. Calaman referred to Mr. Crosby's comment regarding the quality of the effluent out. Mr. Calaman stated that one of the things that was brought up early on was that the BPW just put in new filters. Mr. Calaman is unsure if it is viable but using the filters as a polishing mechanism because the same filters that are used for this wastewater treatment is the same technology that is used on drinking water.

Barbara Curtis stated that the previous speakers had a lot of the same questions she had. Ms. Curtis came prepared to discuss moving or hardening the plant, but this is a complete shock. Ms. Curtis is concerned that Sussex County is responsible for a lot of the overdevelopment that is plaguing the town now. Ms. Curtis stated that it seems that the county is looking to bribe the BPW so they can continue to over develop. Ms. Curtis stated that the county asked Rehoboth to use their outfall, and Rehoboth said no and now they have come to Lewes. The county wants to expand, they want to get rid of all the farmland, and they want to congest the highways even worse than they are now. Ms. Curtis stated that if no one gives them an outfall then maybe things will get manageable and thinks that this is worth considering. Mr. Webb stated that he believes that this is a fair perspective and that he guesses that the county has other options. Mr. Webb stated that transfer tax is what transfer tax will be for a long time. Mr. Webb stated that because he lives on the canal, like Mr. Crosby, he is passionate about the water that goes up and down the canal and that is something that needs to be looked at as well. There are currently four wastewater treatment plants on that canal, Rehoboth, Milton, the county, and Lewes. Mr. Webb stated that the fact that one can be removed is a 20% reduction in risk. This is a material reduction from a bad day perspective. There is studying and understanding to be done and really figuring out the details of this deal and coming back having more conversations. Mr. Webb stated that there is enough value to continue the process and enough concerns to make sure the right questions are asked. Mr. Panetta stated he is sympathetic to Ms. Curtis' concerns. The city of Lewes controls the

growth inside the city of Lewes and the growth outside is controlled by Sussex County. Whether the BPW goes with the county or not, the only means the available is to speak up at the county level to control the growth. Mr. Panetta stated that people think that the BPW can constipate them by not taking the sewage, but it is not going to change the decisions at the county level as the county has alternative means they can go to. Mr. Panetta encourages anyone who is concerned about growth outside the city to make those heard at the county council and the county planning and zoning level. The wastewater treatment plant needs to be looked at from what is the best for the environment, rate payers, and risk factors.

Sam Martin thanked the Board for the meeting and that it was insightful. Mr. Martin stated that he basically knows nothing about wastewater treatment but understands that there are a lot of government agencies and regulations. He has the utmost confidence that whatever is done will be done right. Mr. Martin is approaching this topic from a Lewes resident perspective. Mr. Martin referred to a previous comment from a community member, that the BPW would be outsourcing wastewater treatment. Mr. Martin stated that outsourcing is relinquishing your future, your control. In a lot of cases, in the long run, outsourcing turns out to not be so beneficial. Mr. Martin's initial opinion is that it is not a good idea to outsource. Mr. Martin stated that he heard a comment that the facility was state-of-the-art and then he heard a follow up comment that the facility is at the end of its life. Mr. Owen apologized and clarified that he meant that the infrastructure, the building and so forth is fine, but the equipment in it that is doing the processing is starting to fail one thing at a time. Mr. Owen stated that the BPW is having to look to replace those items. If the Board does nothing, it will still have to be done. Mr. Martin agreed that capital equipment is just a fact of that type of facility and the county would have the same capital equipment needs. Mr. Martin stated that at least in Lewes now, the BPW has control, knows the risks, and knows where the skeletons are. If that BPW relinquishes control to the county, the BPW is now taking on the county's risk. Granted, the county is bigger, and the risk can be spread, and it is assumed that the financial impact on the Lewes residents would be not so great. Mr. Martin has seen that a lot of times that he has seen this, it is not true. Mr. Martin expects to see, before decisions are made, a detailed cost benefit of analysis and a risk assessment both financially and technically. Mr. Martin stated that he hopes that these documents would be forthcoming to the public to be reviewed. Mr. Martin stated that this is a long-range plan but heard that Sussex County is expecting an eminent decision within one or two months. Mr. Martin stated that to him, this is not long-range. When does the decision to the county have to be given? President Lee stated that he does not have an exact date but believes that they are looking for months rather than years. BPW was on a path of years to start the process and was not in any great rush. Sussex County is looking for the BPW decision so that they know how to proceed and use the money that is available to them. Mr. Martin stated that it seems to him that the county is forcing a sense of urgency in the city of Lewes. Mr. Panetta stated that the county is up against some deadlines because of funding issues. With ARPA funds money must be committed by 2024 and expended by 2026. These are deadlines set by other agencies. Mr. Panetta stated that the Board was looking long-range and what would be done with the next generation of the plant and the reason that the short term has come up because of the county funding. Mr. Panetta stated that the plant was built twenty years ago, and the equipment is starting to get old and is in need of replacing. This is just like a house and the need to replace appliances. This does not mean the house is at the end of its life. Mr. Martin agreed and stated that he is sure that the BPW has a capital plan and has those expenditures identified. The Board agreed. Mr. Martin stated that this is a non-issue, it is an expense that is already

known. Mr. Panetta stated that just as with a house, everything comes due at the same time. Mr. Martin referred back to long-range and that 2060 is long-range and 2024 is not. Mr. Martin stated that there was a slide that referred to financial, technical civic considerations. President Lee stated that this is not a legal or financial thing, but the BPW has this relationship with the county that is not always wonderful. The Board expected that kind of conversation to come up and wanted to find out how deep it was. Mr. Owen reiterated the quasi urgency of all this is because the county is going to redo their Wolf Neck plant. Mr. Owen stated that the county is in the designing stages, and they came to the BPW before moving forward so that if BPW decided to go with the county, those updates to the plant can be made. Mr. Owen stated that the county is going to upgrade their plant whether the BPW joins them or not.

Joe Elder questioned what the cost would be to run the piping from Lewes currently to the county's plant. President Lee stated that the BPW would not be responsible for that cost under this proposal and the county would cover that cost.

Stephanie DeSantis stated that she does not know what questions she has because she does not think there is enough information. Ms. DeSantis stated that she has a lot of questions the water will move from point A to point B and what land that's going over. How sensitive is that land? Ms. DeSantis stated that she is kind of hearing, and is afraid of for the residents, that Lewes residents will be paying maybe double of what their current wastewater bills are especially if the county treats it and then the BPW double treats it to make sure what is put into the bay is as clean as possible. Ms. DeSantis does not have any confidence that if this is outsourced to the county, the BPW will not have any control over rates. Not everyone is living in million-dollar luxury houses. Ms. DeSantis is afraid that Lewes will be footing the bill for the continued growth in the county. Ms. DeSantis stated that as it is, city of Lewes residents pays more for services because they pay city tax and county tax. A resident of Wolf Run would only pay for county tax. Ms. DeSantis stated that she does not have the confidence that the county is going to do it right and right over the long haul. Ms. DeSantis referred to the Donovan Smith trailer Park and stated that you could look at the seeping sewage that comes up from some of those failing septic systems that the county has allowed to continue to fester. Ms. DeSantis stated that she would hate to see the BPW give up what is basically a clean discharge on a hard-earned permit. Ms. DeSantis stated she believes that the BPW has a perception problem. While the plant is state-of-the-art, the running of it has been a little bit lapse in the terms of equipment failing and not having the filters maintained. Ms. DeSantis stated that she cannot imagine the county having to deal with the high flow of the summer season and processing all the waste that is in the beach area. Ms. DeSantis has more confidence in what BPW is doing right and what lessons have been learned from letting filters get out of date. Just like a car, maintenance of pumps and pipes is necessary with the state-of-the-art facility. Ms. DeSantis does not think the BPW should not be rushing to jump on the county's proposal and certainly would not want to see it unless members of the county are present. Ms. DeSantis thinks that the Board's numbers are probably pretty low for the projections of what things would cost. Ms. DeSantis stated that she missed the first part of the PowerPoint and tried to find the PowerPoint. President Lee stated it will be available on the website. Ms. DeSantis continued that she is unsure of the effects of discharging at low tide and what the effect of that is on the environment and what does it do to the houses that are near that. Ms. DeSantis stated that she cannot give her opinion as she does not know enough, but certainly does not trust the county. Anybody who lives in Lewes can look at other decisions that the county has made and how they maintain roads and services, and most do not have a lot of trust in the county. Ms. DeSantis

stated that the decision should not be rushed even if the county is under the gun. President Lee referred to Ms. DeSantis comment about the county not being here. The county wanted to come but President Lee suggested that the Board discussed this first with residents before there was any pressure. Ms. DeSantis stated that she does not think there is enough information for a serious discussion and questioned if there has been a written proposal from the county. She is going with her gut and not trusting the county.

Barbara Curtis stated that as she hears people reacting, it seems that there is more interest in more study before making a decision. Ms. Curtis stated that looking at the three options, she favors moving the plant and going with something more state of the art, something like hydrothermal carbonization. Ms. Curtis had sent an article a month or two ago about what Phoenixville is doing with that, a four-square mile city in Pennsylvania with a population of about 14,000. This wastewater treatment plant is supposed to come online before the summer, and it is expected will ultimately pay for itself because the product that comes out is fuel instead of sludge. This fuel will used to create electricity to run the wastewater treatment plant. The water that comes out of the plant is supposed to be suitable for use as fertilizer. Ms. Curtis stated that there is a lot of new stuff out there and she would love Lewes to be more state-of-the-art. Ms. Curtis added that the wastewater gets treated quicker, so the footprint needed would be smaller. Ms. Curtis suggested speaking with the people of Phoenixville before making a decision.

Mark Prouty stated that he worked with President Lee in wastewater years ago. Mr. Prouty questioned the Cape Henlopen treatment plant and the discharge of nutrients into the canal done by geologic survey or DNREC. There was concern about the discharge from Cape Henlopen, which goes through rapid infiltration basins. The seep was monitored and the nutrients joining the flow were monitored, Mr. Prouty questioned if there has been any dollars and cents talk with the federal government. President Lee stated that this is in negotiations. Mr. Calaman stated that it is actively being discussed and is at 33% or 44% design. Mr. O'Donnell stated that schematic plans have been put together that the Board has reviewed, and it is now in the Department of Parks court, but there is funding for it through the state. Mr. Prouty questioned if this funding would be from ARPA. Mr. O'Donnell stated that it would be a regular DENREC revolving fund. Mr. Prouty questioned if there are any federal funds available for the work that is being discussed, whichever option comes to fruition. President Lee stated that the city has some and it is being discussed whether BPW could use some. Mr. Prouty questioned if the county has some of these funds as well. President Lee stated that the county got a big chunk. Mr. Prouty stated that without any capital expenditure to send to the county, he is sure the county costs of borrowing will come back in the BPW's annual costs. Mr. Prouty questioned if the county's funding included grants and would keep the BPW's costs down. President Lee stated that the county mentioned a figure of 24 million from the state. Mr. O'Donnell stated that from the infrastructure law that was passed in the fall there is 40 million dollars dedicated to wastewater projects over the next five years. Roughly 50% would be grant money, but that is for every project and community that goes after that, and it would need to be prioritized. President Lee stated that 24 million of ARPA funds was put aside for the Wolf Neck plant. Mr. Panetta stated that the county may use it for other projects to free up money for the plant.

Alan Roth stated he wanted to wait until everyone else in the room had spoken because he has only lived here for two months and probably knows the least of what is happening here. Mr. Roth served on

the Board of Directors at DC Water. Mr. Roth does not want to weigh in on any particular option but would like to offer an analogy. DC Water owns Blue Plains wastewater treatment plant but by virtue of what is called an inter-municipal agreement, that has been in place for about 30 years. DC Water takes a portion of the wastewater from Fairfax County, Prince George's County, and Montgomery County. Those counties pay a wholesale rate to DC water for a service that Blue Plains provides. Mr. Roth assumes that Sussex County will want the BPW to pay a rate to them and the question is what rate they will charge, wholesale or retail rate. Mr. Roth stated that it is nice to say that the county will pay for the cost run the pipe from here to there, but the assumption is that the county will build in the capital costs into the rate or at least a portion. Mr. Roth stated that this is presumably up for negotiations. President Lee stated that the Board has not got that far yet. President Lee stated that the BPW presently takes some of the county's flow and they pay retail rate. Mr. Roth stated by virtue of the inter-municipal agreement, the counties in DC get a seat on the Board of Directors of DC Water. The counties are not just customers, but a part of the governance of the organization (not a majority). The counties get a say in how the operation works, but do not get a say in how retail rates are set. Mr. Roth stated that he has heard the word joint venture used, and that there are lots of different ways to structure a joint venture. Mr. Roth stated that it sounds like the county needs the BPW as much as BPW is considering using them. Mr. Roth suggests structuring the joint venture so that the BPW is not just customers but stakeholders in the operation. Mr. Roth stated that if the BPW builds a new plant, it is worth pursuing looking into the waste to energy option. Mr. Roth does not know what the cost would be on something this scale, but Blue Plains generates one-third the electricity that the plant uses and creates class A biosolids that they now sell as a product for fertilizer and landscaping. Mr. Roth is unsure if this is feasible for this site but should be looked into if the BPW goes the route of building a new plant. Mr. Panetta stated that the BPW does not have a formal offer yet from the county, but the concept was that they would pay for all the capital costs and the BPW would pay a pro-rated portion of the cooperation and maintenance of the plant. The details have not been worked out yet. Mr. Roth stated that he understands theoretically but assumes that the county's financial people are trying to figure out how to recoup those capital costs, either by spreading it out over the entirety of the county or figure out a way to charge it back to Lewes. Mr. Panetta stated that the devil is in the details.

Staphanie DeSantis questioned if the county is trying to piggyback on the permit that Lewes already has. President Lee stated that it could be called that. Ms. DeSantis questioned what the county would do if Lewes says no. Do they have a plan B? President Lee stated that he understands that the county pumps a lot of their wastewater to Long Neck. There is a large piece of property with spray irrigation. President Lee stated that this is at least one of the county's options. Ms. DeSantis questioned if the BPW does not participate in the new Wolf Neck facility, does it negatively affect Lewes or the BPW. President Lee stated not that he is aware of. Mr. Panetta questioned what Ms. DeSantis means by negatively impact. Ms. DeSantis stated she doesn't know enough to say. Mr. Panetta stated that the BPW would have to stand on its own and choose either hardening the plant or moving the plant. President Lee stated that it is possible that they would not discharge to the BPW plant anymore, which is free money for the BPW. The BPW would lose that revenue, but the BPW did not have it before. Ms. DeSantis questioned what percentage of the budget represents this revenue. Mr. Calaman stated that he would have to go back and look, but it does not make up a large portion of that budget.

Mr. Webb stated that the conversations around price and control are critically important. One advantage other than getting out of a low-lying area, is that the synergies associated with being with somebody else. To be able to pull those resources together, it becomes more efficient from a cost perspective and a time perspective. There are advantages that need to be made sure the BPW is uncovering, but also see how the expenses are applied. Ms. DeSantis stated that if the partner were named someone other than Sussex County Council, she would trust it better.

Mr. Calaman stated that from the wastewater side of things that when the BPW does have a need, BPW can all on the county. A lot of this came from the joint workshop discussing mutual aid. The BPW realized, as a result of August 15th, that with a failure at four the BPW needs the ability to react. The BPW needs to think beyond today and the BPW has the ability to send flow back to the county, with bi-directional flow. It is just the discussion of helping someone out, your neighbor. Mr. Panetta stated that just so everyone understands, pump station four is the pump station at the bridge on Savannah Road. This is the main pump station that takes everything from the town side to the wastewater treatment plant. It is the most major pump station with pump station eight being secondary. Eight takes everything from the beach side to the plant. Mr. Owens stated that the Board has been talking to the engineers that run the system and the plant and he has been to Sussex County Council meetings. Mr. Owen stated that they are two different things.

Mr. Crosby stated that a lot of time is spent discussing coastal resiliency within the city. What Mr. Crosby heard Mr. Calaman and Mr. Webb say was all about resiliency. Mr. Crosby stated that the BPW has the ability to adapt to a number of different situations that may arise. Right now, the BPW is on an island and has to rely on calling on the county to help us out. One day if the BPW has the lagoons, there may be more flexibility. Mr. Crosby urges the Board to provide graphics to help the public to better understand and grapple with the large numbers that were presented. Mr. Crosby asks that the Board to look at the TMDL. Mr. Crosby stated that if the flow is doubled or two and half times then then it is going from basically running at a million gallons a day to 2.7 million gallons a day through the same pipe at twice the concentration. Mr. Crosby stated that his math brings it to six times increased load and the pounds discharged to the canal. Mr. Crosby would like to see this as well. President Lee stated that The BPW produces about a million gallons per day right now for a 2.75. Mr. Crosby stated that if it is expressed in terms of the volume plus increased concentration whether pounds of nitrogen or whatever it may be, he assumes it is doubling. Mr. Crosby stated that resiliency is something that needs to be taken very seriously. Ultimately, Lewes (BPW) cannot stay where it is, and something has to be done. There is time now, but that time is needed to make the changes necessary.

Mr. Calaman read a few statements and questions from online participants:

Lawrence Firment questioned if there could be a spreadsheet current and future capacities, inflows, outflows, effluent quality, etc. for the current Lewes plant, the current Wolf Neck plant, and the hypothetical joint plant. Mr. Firment would also like to see projections with growth in BPW service area and the county. Mr. Calaman stated that there are reports that come from Inframark monthly have the current flows and a lot of that information is in there the readings for nitrogen and phosphorus. MR. Calaman encourages everyone to come to the BPW Board meetings. Mr. Calaman stated that the BPW can look into what the county has available.

Bonnie Osler questioned the approximate daily volume of wastewater from the BPW into the canal now and what will it be with the county. The BPW average is about one million and with the county it will be 2.75 million gallons a day. Ms. Osler questioned what the effects the joint venture will have on the rates and the ready to serve fees. Mr. Calaman stated that this is one of top questions/concerns, but it is fairly early to answer this. This will be something that is heavily looked into and the impact over a certain amount of time. Ms. Osler requested more information on the ecological effects on the canal and the bay from this proposal. Ms. Osler understands that the water quality will not be as good as it is now, but how will it be? President Lee stated that the water going into the canal now looks like drinking water. President Lee stated that he thinks the BPW has the best effluent in the state. Mr. O'Donnell stated that the BPW often refers to nitrogen and phosphorus but the other pollutant loadings that have always been an issue is known as total suspended solids and biological demand. Mr. O'Donnell stated that the BPW does absolutely have the lowest in the state and that is a function of the membrane cartridges. Nitrogen would be what needs to be kept track of through this whole thing. President Lee stated that overall, the flow going into the canal is better than the canal water. It is crystal clear. Mr. Panetta stated that one of the things the BPW was doing before COVID were tours of the plant. Mr. Panetta stated he is unsure if the Board is ready to start that up again but encourages anyone to take a tour of the plant. At the end, you can see the quality of water going out into the canal. A tour through the plant is an eye opener, it is not a smelly place but is clean and is amazing to see what goes in and what goes out. Mr. O'Donnell stated that everyone should realize that even if the Wolf Neck plant was upgraded, it would still meet the requirements of the current Board and the PDS permit.

Bob Hefernan stated that part of the understanding problem is that it is not known what is really on offer from the county. There have been some suggestions that if it becomes a joint venture then the BPW would have some control like that, but the county has sort have come to the BPW and said let's make a deal now. Maybe it is a good thing if the county gives the BPW a hell of an offer, but Mr. Hefernan does not know what the offer is and apparently the Board does not either. Mr. Hefernan stated that it seems that the flows that come out of Lewes that would be treated at Wolf Neck are significant, but if a few more building permits are issued it is just a year or two of the evolutions of the flows. Mr. Hefernan stated that the Board should find out what the hell of a deal is. Mr. Panetta stated that the Board does not know the details yet but instead wanted to get the public's input before proceeding. The BPW does not want to lead the county down a path that would not get support from the community. This was the first step, and the next step is to find out what is going on. Mr. Hefernan stated that if the water is cleaner than what is currently coming out, then let's explore that but if the BPW is getting the bums rush then no. Mr. Hefernan stated the BPW has a nice plant that is run well and suggested keeping it that way. Mr. Hefernan stated that he would much rather have the wastewater treatment plant there then new condos.

Mr. Panetta followed up on Mr. Crosby's comment and that part of this is about resiliency, in terms there is a mishap at the plant, the BPW has a backup. Ms. Curtis stated we currently have a backup plan with the county and the county has a backup with the BPW. IF the BPW plant is gone, then doesn't the county lose some resiliency even though they send the BPW a small amount. With a new plant they wouldn't need that, but maybe the BPW could supply spare parts that could help out. Even though there is duplicating and engineering and duplicating management there are also resiliency advantages. President Lee stated that the county is a pretty big operation and they have been helpful to the BPW

and the BPW tries to be helpful to them, but it is not the same. Mr. Webb stated that the county has seven or eight different interconnections. It is the synergy of the size they have. Mr. Webb stated that he looked up hurricane Sandy, 2012. There was a 14-foot wave surge in New York and New Jersey. IF that hit Lewes like it hit them, the BPW would have a bad day.

President Lee thanked everyone for coming out and if anyone has any thoughts afterwards to give Mr. Calaman a call at the office. Mr. Owen did question what it would cost to buy land for a new plant and where would it be. If anyone has any idea where to find land and the cost, the Board would love that information.

President Lee adjourned the meeting.

4. ADJOURNMENT

President Lee adjourned the meeting at 7:52 pm.

Respectfully Submitted
Sharon Sexton
Executive Assistant