



State of Delaware  
Water Infrastructure Advisory Council  
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**Minutes of the 133rd Meeting**

**September 21, 2016**

The Water Infrastructure Advisory Council held a public meeting on Wednesday, September 21, 2016 at 9:00 a.m., at Kent County Administrative Complex, 555 S. Bay Road, Conference Room 220, Dover, Delaware.

**MEMBERS PRESENT:**

Jeffrey Bross, Chairman  
Hans Medlarz, Vice-Chair  
Ralph Cetrulo  
Charles Anderson  
David Baker  
Jen Adkins Arrived at 9:15am  
Bruce W. Jones  
Eugene Dvornick  
Michael Harmer  
Lt. Col Douglas D. Riley

**MEMBERS ABSENT:**

Jeffrey Flynn  
Richard Duncan  
Andy Burger

**OTHERS PRESENT WERE:**

Terry Deputy, Environmental Finance  
Greg Pope, Environmental Finance  
Laura Rafferty, Environmental Finance  
Davison Mwale, Environmental Finance  
Robert C. Burns, Environmental Finance  
Jan Jenkins, Environmental Finance  
Keith Kooker, Environmental Finance  
Reza Moqtaderi, Environmental Finance  
Jim Sullivan, DNREC  
Sharon Webb, DNREC  
Sara Esposito, DNREC  
Michael Bott, DNREC  
Jen Walls, DNREC  
Bob Palmer, DNREC

Mike Powell, DNREC  
Ed Hallock, DPH ODW  
Keith Mensch, DPH ODW  
Thom May, DHSS/DPH  
Heather Warren, DHSS  
Brian Urbanek, DELDOT  
Andrew Jakubowitch, Kent County  
Judy Schwartz, GMB  
Kathy Lock, Town of Slaughter Beach  
Dan String, KCI  
Donna Mitchell, City of Dover  
Jason Loar, DBF  
Charles O'Donnell, GMB  
Ken Branner, Artesian Water  
Tawanda Priester, Tidewater Utilities  
Lindsey Sylvester, JMT  
Maddy Lauria, Cape Gazette  
Jesse Savage, Town of Bridgeville  
Jay Guyer, Municipal Services Commission  
Tom Wilkes, RVB Engineers  
David Spacht, Artesian Water

**CALL TO ORDER PUBLIC MEETING:**

Meeting came to order at 9:05am.

**APPROVAL OF THE AGENDA:**

Motion made by Mr. Dvornick, seconded by Mr. Anderson to approve the agenda. Motion carried unanimously.

**APPROVAL OF MINUTES –Public Meeting June 15, 2016:**

Motion made by Vice-Chair Medlarz, seconded by Mr. Jones to approve the June 15, 2016 public meeting minutes. Motion carried unanimously.

**WIAC-INFORMATIONAL:**

The new WIAC member, Ralph Cetrulo introduced himself. He is a CPA with Stephano Slack LLC which has offices in Wilmington, Delaware and Wayne, PA. Chairman Bross has worked with Mr. Cetrulo on the Workforce Investment Board where Mr. Cetrulo chaired the finance committee.

Keith Kooker is the new Engineer with Environmental Finance.

**Community Water Quality Grant Improvement Grant Project Implementations**

Judy Schwarz, P.E. from George, Miles & Buhr, LLC presented the following:

**Bethel Gardens on Broad Creek- Green Technology Retrofits**

Bethel was first settled in as Lewis' Wharf in 1795, and later became Lewisville. It was incorporated as Bethel in the 1880s. It has a history in shipbuilding and maritime trade. Bethel was placed on the National Register of Historic Places in 1975, and is a part of Western Sussex Scenic and Historic

Highway. Bethels' population was 171 as of 2010. The House count was 156 as of 2014. It has a local voluntary government. The soils are HSG type A, well-draining and somewhat excessively draining loamy sands. Bethel is 2 to 30 + feet above sea level. There is no central sewer and no central water.

Broad Creek is a major tributary of the Nanticoke River and in the Chesapeake Bay Watershed. It is part of the Captain John Smith Chesapeake National Historical Trail. It drains the rural area of Western Sussex County, Delaware including Bethel, Laurel, and Trap Pond State Park, and merges with the Nanticoke River downstream approximately 4.0 nautical miles from Bethel.

The project area was 22 acres of medium density residential. There is a limited DelDOT storm drain system, lack of defined drainage features, narrow streets, and narrow rights-of-way. The existing issues for Water Quality Improvement were: lack of stormwater controls, direct discharge of street runoff, nonbuffered lawn runoff, sediment transport, shoreline erosion, bulkhead washouts, and ponding in the streets.

The Green Technology Retrofits were: bioretention basins, linear bioretention, traffic island bioretention, tree box filters, Step Pool Conveyance System, and living shoreline.

The project was phased due to funding constraints. Some of the proposed practices were dropped due to private property objections. Easements from private property owners also had to be obtained due to narrow right-of-ways.

There are six bioretention areas were completed with the following design features: 2' stone diaphragm for pretreatment, 6" ponding depth, 24" bioretention media, 12" #57 stone, and some with underdrains.

The landscape design features are: native and adaptive species that can tolerate alternating wet dry conditions, wildlife habitat enhancement, sustainability and aesthetics. Bethel Asters were propagated some Bethel Asters for the project; they had been brought to Bethel by a master gardener and over the years spread to other properties in the Town. Delaware Nature Society helped certify wildlife habitats.

The project was bid in January 2015 and came in over budget, and as a result other funding was sourced. Some substitutes were negotiated with the lowest bidder. Clean Venture Inc. was awarded the contract. Construction was started September 1, 2015. The construction cost was \$313,415.00. On January 7, 2016, there was substantial completion. There is still a pending landscaping punch list. Some plants did not come back up, and had to be replanted: some lawn services of private residences cut some of the plants. The plants will be replanted during cooler weather. Final requisition has not been processed.

The project benefits are: Broad Creek Water Quality Improvement; minimized land loss; enhanced wildlife habitat; street ponding eliminated; groundwater recharge promoted; green technologies showcased; Green Streets; Green Town; Green Jobs; public education; local capacity development, and local resident participation.

The funding partners for this project were Chesapeake Bay Trust/EPA G3 (\$100,000); NFWF (\$31,250); DNREC Surface Water Planning Grant (\$31,250); DelDOT CTF (\$68,000); DNREC-CWQIG (\$66,732); and DNREC-EPA-CBIG (\$144,732).

Ms. Adkins asked how private landowners were worked with to take care of the properties. Ms. Schwartz explained that the Town of Bethel gets an easement and is obligated to maintain the property. The Town of Bethel has a contract with a landscaper as the Town does not have the staff to maintain the property.

Dr. Marianne Walch presented the following Community Water Quality Improvement Grant:

**Center for the Inland Bays-Loop Canal Living Shoreline**

One of the first demonstration projects in the Inland Bays Watershed and it is in the Salt Pond area of Bethany Beach. Waves from prevailing winds were eroding the marsh edge. 20 foot pine logs were used to construct an offshore breakwater to decrease wave energy before coming ashore. Cells were built from logs and coconut fiber bio-logs to trap sediment so that the marsh can rebuild. Logs became dislodged due to a hurricane and are being put back by volunteers at this point in time.

This project started in Fall 2014 with design and permitting. Project implementation was in the Spring (April and May). There was site monitoring in the summer.

Other benefits from the project have been; perching area for birds; habitat for crabs, fish, and shrimp; half an acre of restored tidal wetland; nitrogen and phosphorous reductions; and restoration of 350 feet of eroding shoreline.

Sara Esposito from DNREC's drainage program presented the following:

**Bridgeville Branch Tax Ditch Restoration**

- *Benefits & Goals:* Protect Sewer and Water Mains; Add Floodplain; Natural Bank Stabilization and Habitat
- *Reason:* Exposed Sewer and Water Mains due to scouring; Sediment bars accumulating narrowing channel; Side slopes failing
- *Watershed:* Nanticoke River
- *Statistics:*
  - 1,600 feet of channel improvement
  - Over 5,000 acres of drainage area
- *Construction Cost:* Approx. \$460,000 (\$30,000 Chesapeake Nutrient Headwaters Grant; \$150,000 Community Water Quality Implementation Grant); Approx \$290/LF
- *Partners:* Sussex Conservation District, Meadville Land Service, Bridgeville Branch Tax Ditch Officers, Williams Chapel Church, McCormick Taylor Engineering
- *Timeframe:*
  - Surveyed in 2008 (DNREC); Designed 2012 to 2015 (McCormick Taylor); Constructed Sept-Dec 2015 (Meadville)

**Traditional vs “Natural” Channel Design**

- *Problem:* Confining a waterway into a “ditch” isn't natural. During low flows, the waterway wants to be much narrower and meander, and during high flows it wants to spread out.
  - The low flow problem creates sediments bars, especially on the inside of bends, as the “river” tries to narrow itself and meander
  - The high flow problem causes bank erosion, especially on outer bends, as the high energy tries to expand.
  - The high flows also create down-cuts: Streams naturally have riffles and pools, so even though sediment is accumulating in some areas, other areas get scoured and down-cut.
- *Solution:* Try to recreate a “natural” channel by:
  - Creating a low-flow channel with purposely placed riffles and pools. Riffles funnel the higher energy and pools slow it down.
  - Excavating a floodplain to disperse the high flow energy.
  - Adding other natural channel techniques to help redirect and reduce the water energy, plus add habitat and water quality benefits (shade, aeration, etc).

Chairman Jeff Bross presented the following:

**Clean Water and Flood Abatement Task Force Update**

The Task Force was not successful in motivating General Assembly to take up a Clean Water Fee last session, but another attempt will be made next session. Senator Townsend, a key member for the Task Force lost his primary bid for Congress, and will be back in the General Assembly. The Clean Water Fee will mitigate some of the structural deficit problems, and would alleviate some pressure on the general fund; however, the main intent is to generate additional revenue that has been missing.

Mr. Harmer asked if there is any regulatory component to add to justify the fee; Chairman Bross responded they have used that because of compliance issues with stormwater management programs overseen by EPA and the Chesapeake Bay; MS4 permits applied to other municipalities will have an impact as well.

A trust will be set up and WIAC will have an advisory function and also be charged with some planning responsibilities.

Terry Deputy presented the following:

**FY 2016 DWSRF and CWSRF Fed Cap Grants – 20% Required State Match Status**

- DWSRF Fed Cap Grant – expect to receive \$8,312,000  
20% Required State Match \$1,662, 400 (100% DWSRF NFAA-due to reduced State Funding)
  
- CWSRF Fed Cap Grant- \$6,525,000  
20% Required State Match \$1,305,000 (\$700,000 State; \$605,000 CWSRF NFAA)

It was discussed that funding had to be taken from the Non Federal Administrative Accounts because of reduced Federal and State funding. The Non Federal Administrative Accounts received their funding from interest received on municipal loans.

Terry Deputy presented the following:

**CWSRF and DWSRF Project Notices-of-Intent Received  
FY 2016 Revised Draft PPLs and IUPs – WIAC October 19<sup>th</sup> Meeting**

**CWSRF**

City of Dover:

- Meeting House Branch Constructed Wetland Project \$ 7,600,000

Kent County:

- Plant-wide Power Backup Project \$ 1,237,400

New Castle County:

- White Clay Interceptor Project \$ 2,000,000
- Hunter’s Ridge Stormwater Project \$ 350,000
- Morningside Stormwater Project \$ 250,000
- Perch Creek Stormwater Project \$ 265,000
- Delaware City Treatment Plant Upgrade Project \$ 4,675,000
- Muddy Run 6 Sanitary Sewer Capacity Improvement Project \$ 2,000,000

Town of Smyrna:

- Kent Way Pump Station Rehabilitation Project \$ 890,000
- South Main Street Utility Replacement Project \$ 1,269,380

City of Wilmington:

- South Wilmington Wetlands Project \$16,739,000

### **DWSRF**

Delaware City:

- New Smart Water Meters Project \$ 669,822

Town of Smyrna:

- South Main Street Utility Replacement Project \$ 1,209,000

Chairman Bross thanked Mr. Deputy for his work on the New Castle County loans.

Terry Deputy presented the following:

### **DWSRF LOAN RESTRUCTURING REQUEST-TOWN OF FRANKFORD**

#### **DWSRF Loan Restructuring Request**

- DNREC received a letter from the Town of Frankford requesting restructuring of two DWSRF loans
  - Proactive request to help prevent possible loan default on DWSRF General Obligation Bonded Debt
  - Mountaire Farms, a large consumer of the Town's drinking water recently drilled a non-potable well due to change in the state law and regulations. The company represented ~1/3 of the revenues for the Town's water system
  - Without a substantial increase in drinking water user rates (~ 48%), Town finances may deteriorate increasing the likelihood of a possible loan default

#### **DNREC Response**

- DNREC was requested to develop possible financial options to help assist the Town with its DWSRF debt
  - All prior loan debt service payments have been made on time, and the two loans accounts are current
  - Two loan payments are due - November 1<sup>st</sup>, and December 23<sup>rd</sup> for \$9,626 and \$32,452 respectively.
  - A recommendation was made to the Secretary of DHSS to allow the interest rates for both loans to be reduced from 3.0% and 2.80% respectively to 0.0%, and the term of both loans extended by 10 years, from 20 years to 30 years
  - The recommendation has been shared with EPA's Region 3 DWSRF Coordinator and has received concurrence
  - It was also recommended that the Town be required to provide DNREC quarterly reports regarding the implementation of recommendations contained in a State of Delaware, Office of Auditor of Accounts, Inspection Report issued on August 1, 2016. The inspection audit was requested by the Town, some recommendations have already been implemented.

#### **Path Forward**

- Pending DHSS approval of the proposed recommendation, Town will received a Revised DWSRF Binding Loan Commitment Letter stating the terms and conditions of the proposed loan restructuring
- After the letter has been signed and returned by the Town, the DWSRF revised loans will be closed by legal counsel for the DWSRF program.

Chairman Bross expressed his concern that this could set a precedent amongst borrowers and asked if there was a fallback revision if finances improve for the borrower. Mr. Deputy said that the Town of Frankford is in the process of trying to appeal the permit that was issued by DNREC to Mountaire. There are also ongoing high-level discussions between DNREC, Mountaire and the Town to remedy the situation. The agreement will include provisions that allow Environmental Finance to follow-up the Town's situation at a later date. The goal is to make sure the Town of Frankford does not default, and that sufficient revenues are there to meet debt service.

Vice-Chair Medlarz asked about the current percentage of the MHI for the water loan and the water and sewer combined. Mr. Deputy responded that he did not have the figures for the Town at the moment. This is a loan that required subsidies. At the time of the loan it was 2% MHI for water and wastewater services and 1.5% MHI. This will not have a substantial impact on the Revolving Fund.

Ms. Adkins asked what the change was that precipitated the situation. Mr. Deputy responded that there was a change in State law that allows business and homeowners to drill wells within municipal boundaries. There was not a formal agreement between the Town and Mountaire to protect the Town. Mountaire Towns could adopt an ordinance to protect themselves. The law was mostly for irrigation wells.

Chairman Bross suggested that the Secretary should have discussions with General Assembly about the unintended consequence of the well drilling law. Lt. Col Riley asked if there were previous meetings between Mountaire and the Town to discuss the primary, secondary, and tertiary effects before the problem occurred; Mr. Deputy was not certain if meetings did take place.

Chairman Bross would like to see Public Health take a proactive role and send an advisor out to the Towns. He would also like to require a provision that requires the borrowers to report on a regular basis of their condition at the sole discretion of Environmental Finance to have the ability to restore the original loan repayment terms; Mr. Deputy agreed with that and will discuss it with the Town to try and incorporate that into the revised binding commitment.

Mr. Cetrulo suggested extending the loan term and keeping the interest rate the same so that interest is not lost. He felt that a 0% interest rate will set a precedent that will open up a lot of eyes and ask a lot of questions. Mr. Deputy felt the 0% interest rate was the best option for the Town to give it some cost savings. Mr. Deputy will pass on the WIAC's comments to Secretary Small.

**Town of Frankford  
DWSRF Loan Restructuring Request**

<b>Town of Frankford - DWSRF Loans:</b>	<b>Loan # 210.02</b>	<b>Loan # 210.13</b>	<b>Total</b>
- Origination Date	23-Jun-00	13-May-04	
- Loan Amount	\$820,000	\$274,367	\$1,094,367
- Interest Rate	3.00%	2.89%	
- Term	20 years	20 years	
- Loan Payments:			
o Frequency	Semi-Annual	Semi-Annual	
o <b>Payment Amount</b>	<b>\$32,453</b>	<b>\$9,626</b>	<b>\$42,079</b>
o Number of Payments	40	40	
o Remaining Payments	11	18	
o Loan Balance (as of 8/15/16)	\$326,840	\$151,605	\$478,445
- Maturity Date	23-Dec-21	1-May-25	
<b>Restructuring Option 1: 0.0% Interest Rate</b>			
- Loan Balance	\$326,840	\$151,605	\$478,445
- <b>Interest Rate</b>	<b>0.00%</b>	<b>0.00%</b>	
- Remaining Term	5.5 years	9 years	
- Loan Payments:			
o Frequency	Semi-Annual	Semi-Annual	
o <b>Payment Amount</b>	<b>\$29,713</b>	<b>\$8,423</b>	<b>\$38,135</b>
o Number of Payments	11	18	
o Est. Semi-Annual Debt Service Saving	\$2,740	\$1,203	\$3,944
o Est. Annual Debt Service Savings	\$5,481	\$2,406	\$7,887
- Maturity Date	23-Dec-21	1-May-25	
<b>Restructuring Option 2: 0.0% Interest Rate Plus 10 Years</b>			
- Loan Balance	\$326,840	\$151,605	\$478,445
- <b>Interest Rate</b>	<b>0.00%</b>	<b>0.00%</b>	
- <b>Remaining Term</b>	<b>15.5 years</b>	<b>19 years</b>	
- Loan Payments:			
o Frequency	Semi-Annual	Semi-Annual	
o <b>Payment Amount</b>	<b>\$10,543</b>	<b>\$3,990</b>	<b>\$14,533</b>
o Number of Payments	31	38	
o Est. Semi-Annual Debt Service Saving	\$21,910	\$5,636	\$27,546
o Est. Annual Debt Service Savings	\$43,820	\$11,272	\$55,092
- Maturity Date	23-Dec-31	1-May-35	

Mr. Deputy stated that Mountaire was paying about \$68,000 a year to the Town of Frankford for use of non-potable water.

Vice-Chair Medlarz was concerned about extending the loan term as that the loan will outstretch the life of the asset. He also stated that Frankford pulled out of the regionalization effort years ago.

WIAC had concerns about this happening again in the future as any large user could disappear in a bad economy. Mr. Anderson asked about suspending the loan until agreements have been reached. Mr. Deputy did not know how long the discussions are going to last.

Mr. Baker suggested that a presentation regarding the law change should be given to the Sussex County Association of Towns.

Mr. Anderson made a motion to approve the 0% interest rate and the 10-year extension as a stop gap measure and request that staff work with the Town of Frankford to see if there can have a reset position once the pressure is off, seconded by Mr. Baker. Mr. Harmer would not support the motion for the interest reduction and wants a requirement for regionalization.



Mr. Deputy stated that regionalization helps communities share costs, but this is not being looked at for the Town of Frankford. EPA was consulted and this does not impact the PPL.

Chairman Bross stated that in order to avoid default, it is recommended that the Town of Frankford have a temporarily modified loan to carry 0% interest with the understanding that the Town evaluate all reasonable opportunities to get themselves out of this circumstance. The modification will not last more than 12 months and they must report back so that another decision can be made in 12 months.

Mr. Anderson and Mr. Baker withdraw their former motion. Mr. Cetrulo stated he did not like the precedent of 0% interest; he suggested that the interest rate should remain the same and the payment should be lowered. He also felt that the going to 0% interest is a bad precedent. Vice-Chair Medlarz suggested an interest only payment. Chairman Bross also suggested interest only payments or interest payments with principal (whatever they can afford to pay). Mr. Dvornick recommended that the Town of Frankford should get some assistance with their analysis.

Mr. Harmer made a recommendation to the Secretary to consider reducing the payment to an affordable level without reducing the interest rate and with a requirement to come back in 12 months to report to the WIAC with a list of solutions that include alternatives considered, cost benefits of the alternatives, and affordability.

Heather Warren suggested getting the Town of Frankford onto the 2017 NOI, and have them submit an application and consider them a disadvantaged community; then principal forgiveness and a lower rate can be used.

Vice-Chair Medlarz recommended a suspension for 12 months. Chairman Bross thought privatization and working out a deal with Mountaire could be some options.

It was decided to go with 0% interest and a term extension of 10 years as proposed by Environmental Finance as the Town has to have an immediate solution.

#### **NEW BUSINESS:**

Robert Burns presented the following:

#### **Town of Bridgeville Refinancing of USDA Wastewater Loans**

##### **Loan History**

- In 2008 The Town of Bridgeville borrowed \$1,257,000 from the USDA for the Tatman Farm Irrigation Project.
- During the same year The Town borrowed and an additional \$1,138,100 from the USDA to finance the Wastewater Treatment Plant Upgrade Project.

##### **Funding Request**

- The Town of Bridgeville is requesting that the remaining balance of approximately \$1,156,162 and \$807,039 of the original loans be refinanced for a term of 30 years at 2% interest.
- The debt service savings are intended to help The Town finance the new Wastewater Treatment Plant Upgrade Project.

##### **Affordability Analysis**

- The following analysis shows a Net Annual Debt Service savings of \$42,095 after the refinancing of the two USDA Loans.
- The lower debt services results in an estimated savings of \$26 per

EDU per year.

- In addition to the yearly debt service savings, the refinance will reduce the term by approximately 2 years, saving The Town an additional \$259,000.

<b>Town of Bridgeville Affordability Analysis</b>	<b>WWTP Upgrade USDA</b>	<b>Tatman Farm Spray Irrigation USDA</b>	<b>Cost After Refinancing</b>
<b>Loan amount</b>	<b>\$1,138,100</b>	<b>\$1,257,000</b>	<b>\$1,963,201</b>
Interest Rate	4.5%	4.5%	2.0%
Loan Terms Years	40	40	30
Debt Service on USDA Loans	\$61,504	\$67,932	
Existing Debt Service USDA		\$129,436	
Debt Service USDA Refi 30y at 2%			\$87,341
Yearly Debt Service Savings			<b>\$42,095</b>
Total Debt Service		\$358,192	
New Debt Service With Refinance			\$316,097
O,M & R Cost, Existing Facility		\$724,100	\$724,100
<b>Total Facility Cost</b>		<b>\$1,211,728</b>	<b>\$1,169,633</b>
<b>Residential Share at 69%</b>		<b>\$836,092</b>	<b>\$807,047</b>
<b>Total Estimated Annual Charge Per EDU</b>		<b>\$766</b>	<b>\$740</b>
EDU's Wastewater		1091	1091
Median Household Income		\$53,505	\$53,505
<b>% of MHI Wastewater</b>		<b>1.43%</b>	<b>1.38%</b>

**Terms**

The interest rate will be 2%. Level principal and interest payments will be paid semi-annually based on a 30 year amortization.

**Recommendation**

Environmental Finance, Office of the Secretary, recommends Council approval and recommendation of a binding commitment to The Town of Bridgeville for a \$1,963,201, 30 year, 2.0% interest loan from the Water Pollution Control Revolving Fund. The proceeds of the loan are to be used by The Town to pay-off the existing USDA loans in full.

Mr. Deputy explained that a borrower can refinance the construction portion of the project if they take on a new project.

Motion made by Mr. Harmer, seconded by Mr. Dvornick to approve the binding commitment for the Town of Bridgeville (\$1,963,201). Motion carried unanimously.

Greg Pope presented the following:

**Wastewater Matching Planning Grant Applications**

<b>Wastewater Planning Grant Application #1:</b>	<b>Kent County</b>
Name:	Sanitary Sewer Collection and Transmission System Condition Assessment and Improvement Plan
Total Project Cost:	\$100,000
Assistance Requested:	<b>\$50,000</b>
Start Date:	Contingent on timing of funding approval and RFP
Completion Date:	12-18 months from initiation of study
Consultant:	TBD
<p>The Kent County Department of Public Works (KCDPW) has identified portions of the County's sanitary sewer pipelines that warrant a condition assessment. The assessments will include gravity sewer systems and wastewater force mains. The results of the assessment work will be used to identify deficiencies in the system, prioritize corrective measures, and establish budgetary cost estimates for inclusion in the County's budget for capital projects. The project is expected to occur over multiple years with additional condition assessment studies beyond those identified. The work may include the County entering into a contract for engineering services with a consultant for design of associated replacement and/or repair work. The project will initially include an assessment of sanitary sewer transmission pipelines that are 12 inches in diameter and larger.</p>	
<p>Recommendation: Environmental Finance recommends Council approval and recommendation of a Wastewater Matching Planning Grant in the amount of \$50,000 to Kent County for the proposed study.</p>	

Motion made by Mr. Dvornick, seconded by Mr. Baker to approve Kent County’s Wastewater Matching Planning Grant request for \$50,000. Motion carried unanimously.

<b>Wastewater Planning Grant Application #2:</b>	<b>New Castle County</b>
Name:	Delaware City Industrial Sewer Expansion
Total Project Cost:	\$100,000
Assistance Requested:	<b>\$50,000</b>
Start Date:	October 2016
Completion Date:	October 2017
Consultant:	Vandemark & Lynch Inc. Consulting Engineers
<p>The purpose of this project is to plan new sanitary sewer infrastructure required to provide sewer service to the Heavy Industrial Zoned properties within and surrounding the Delaware City Refinery. The project also includes the planning of required improvements to existing sanitary sewer infrastructure to maintain current sanitary sewer capacity in the sewer basin. All wastewater within this project scope is planned to be conveyed to the Delaware City Wastewater Treatment Facility, which is owned and maintained by New Castle County. The general location of this project ranges along the Route #9 River Road corridor,</p>	

from Red Lion Creek as the northern boundary to Dragon Run Creek as the southern boundary. The project area is bound by Rt. #13, South DuPont Highway, to the west and the Delaware River to the east.

Recommendation: Environmental Finance recommends Council approval and recommendation of a Wastewater Matching Planning Grant in the amount of \$50,000 to New Castle County for the proposed study.

Chairman Bross clarified that this project is to service the undeveloped lands adjacent to the refinery; it is an economic objective. It is in the coastal zone, and there is some legislative support for this.

Motion made by Vice-Chair Medlarz, seconded by Mr. Harmer to approve New Castle County’s Wastewater Matching Planning Grant request for \$50,000. Motion carried unanimously.

**Summary of Requested Wastewater Planning Grants**

<u>Applicant</u>	<u>Amount Requested</u>
<i>Previously awarded</i>	<i>0</i>
Kent County	\$50,000
New Castle County	\$50,000
<b>Totals:</b>	<b>\$100,000</b>

Greg Pope presented the following:

<b>Wastewater Planning Advance Application #1:</b>	<b>City of Seaford</b>
Name:	Seaford WWTP - Upgrade & Expansion Preliminary Engineering Report (PER)
Total Project Cost:	\$60,000
Assistance Requested:	<b>\$60,000</b>
Start Date:	9/15/16
Completion Date:	1/31/17
Consultant:	George, Miles & Buhr

Professional engineering services for developing a planning level study for the expansion and upgrade for the Seaford WWTF. Reformat information contained in previous work efforts to the interagency PER requirements. Include additional information related to the project which is required by the interagency format. Update existing liquid stream alternatives to include advances made in technology since time of previous work. Update cost estimates and develop preliminary plan for construction of recommended alternative while existing facility is in operation. Update cost estimates associated with biosolids expansion report. Verify with vendor that recommended alternative includes same features as proposed previously. Develop cost estimates associated with spray irrigation of treated effluent at lands of the Hooper's Landing Golf Course. Continue to investigate option of exfiltration ponds at Golf Course. Consider potential locations, sizing and costs for alternative rapid infiltration basin (RIB) based disposal options. Consider potential locations, sizing and costs for alternative spray irrigation based disposal option.

Recommendation: Environmental Finance recommends Council approval and recommendation of a Wastewater Planning Advance in the amount of \$60,000 to the City of Seaford for the proposed PER.

Motion made by Mr. Dvornick, seconded by Mr. Baker to approve the Wastewater Planning Advance for the City of Seaford (\$60,000). Motion carried. Mr. Anderson recused himself.

**Wastewater Planning Grants and Project Planning Advances**

- Wastewater Matching Planning Grants (July 1, 2016 to present):
  - Kent County – Sanitary Sewer Condition Assessment \$50,000
  - New Castle County - DE City Industrial Sewer Expansion \$50,000
- **Total** **\$100,00**
- Percent of Allocation (\$500K) 20%
  
- Wastewater Planning Advances (July 1, 2016 to present):
- Seaford WWTP Upgrade and Expansion PER \$60,000
- Total \$60,000
- Percent of Allocation (\$500K) 12%

Jim Sullivan presented the following:

**Surface Water Matching Planning Grants  
Award Recommendations (August 2016 submittal)**

- A press release was issued on July 6, 2016.
- Grant proposals were due on August 4, 2016.
- A review and ranking of the grant proposals was held on August 10, 2016.
- After a detailed review and ranking all 3 grant applications were considered eligible and acceptable.
- The following grants recommendations are offered to the Water Infrastructure Advisory Council for approval.

Grant Applicant Project	Final Ranking	Final Score	Project Cost	Recommended Grant Award	Note
<p><b>City of Seaford</b></p> <p><b>Riverview Playground &amp; Waterfront Redevelopment</b></p> <p>Creation of a comprehensive plan for Riverview Park that includes design of green infrastructure strategies within the playground along with the design, and permitting, of a 300' living shoreline to replace riprap which is eroding in places.</p>	1	89.5	\$49,030	\$24,515	This phase will build on a feasibility study conducted in 2015-2016 for the park.
<p><b>Center for the Inland Bays</b></p> <p><b>Green Infrastructure Reforestation Plan for the Inland Bays Watershed</b></p> <p>Identify and conceptualize priority green infrastructure reforestation projects that are the most cost-effective measures for the water quality improvements for 10-12 sites within the Inland Bays watershed.</p>	2	88.5	\$18,386	\$9,016	Projects identified by the study may be eligible for funding through State Revolving Fund loans and public or private programs.

Grant Applicant Project	Final Ranking	Final Score	Project Cost	Recommended Grant Award	Note
<b>Town of Smyrna</b> <b>Town of Smyrna NPDES Statewide Storm System Inventory and Inspection Program and Green Infrastructure Program</b> The current draft National Pollutant Discharge Elimination System (NPDES) Phase II Permit requires the Town of Smyrna to develop a map of all storm sewer data, structural BMPs, and other green technologies. The Town plans to use data collected from this project as the basis for a Town-wide Master Stormwater Management Plan.	3	85.5	\$100,000	\$50,000	The combination of the existing infrastructure data and feasibility review of potential green stormwater practices will allow the Town to assess and prioritize future system improvement projects.
Totals			\$167,416	\$83,531	
Percent of Allocation (\$300K)				28%	
Percent of Allocation Remaining				72%	

Motion made by Mr. Dvornick, seconded by Ms. Adkins to approve the Surface Water Matching Planning Grants for the City of Seaford (\$24,515), Center for the Inland Bays(\$9,016), and the Town of Smyrna (\$50,000). Vice-Chair Medlarz reported that these were recommended by the Surface Water Subcommittee. Chairman Bross stepped out of the room and was not present for this vote. Mr. Anderson recused himself. Motion carried.

Heather Warren presented the following:

### Drinking Water Matching Planning Grants

#### Slaughter Beach

Project Name:	Slaughter Beach Water Company Assessment
Total Project Cost:	\$60,000
Assistance Requested:	<b>\$30,000 (match provided by already-approved USDA grant)</b>
Start Date:	Upon WIAC approval
Completion Date:	<b>April 15, 2017</b>
Project Description:	Assess condition, compliance, and overall efficacy of the existing Slaughter Beach Water Company for potential purchase by the Town of Slaughter Beach.

Vice-Chair Medlarz would support this project if the scope was expanded to include creation of a county water district and/or potential privatization in addition to the town acquisition.

Ms. Warren replied that the current owner did discuss privatization, but both companies (Tidewater &

Artesian) walked away.

Vice-Chair Medlarz did state that the County can be petitioned to create a water district which can borrow funds to buyout the water provider and create a publicly owned utility as part of the Sussex County Water District. Vice-Chair Medlarz would like Slaughter Beach to look at all the options and document them since they are coming to WIAC to borrow the funds. The analysis needs to be reworked.

Motion made by Mr. Harmer to approve the Town of Slaughter Beach’s Drinking Water Matching Planning Grant (\$30,000) with an amended scope to include a review of alternative options including privatization or regionalization to a county system, seconded by Mr. Dvornick. Chairman Bross stepped out of the room and was not present for this vote. Motion carried.

<b>Summary of Requested Drinking Water Matching Planning Grants</b>	
<b><u>Applicant</u></b>	<b><u>Amount Requested</u></b>
<i>Previously awarded</i>	0
Slaughter Beach Water Company	\$30,000
<b>Totals:</b>	<b>\$30,000</b>

**Drinking Water Matching Grants, Project Planning Advances, and Asset Management Plan Development Grants**

Drinking Water Matching Planning Grants (July 1, 2016 to present):

- Slaughter Beach Water Company \$30,000
- Total \$30,000
- Percent of Allocation (\$300K) 10%

Drinking Water Planning Advances (July 1, 2016 to present):

- None to date
- Total \$0
- Percent of Allocation (\$300K) 0%

Drinking Water Asset Management Planning Grants (July 1, 2016 to present):

- None to date
- Total \$0
- Percent of Allocation (\$500K) 0%

Heather Warren presented the following:

**Drinking Water Innovation and Technology Grant**

**Municipal Services Commission (MSC)  
City of New Castle**

- Application Date: August 2, 2016
- Represents New Castle County
- \$50,000 requested
- DW Sub-Committee approved on August 5th

- STEM outreach prepared for: William Penn High School and George Read Middle School

**Project Description**

- Name: Dobbinsville Pipeline Rehabilitation Pilot Program
- MSC will work with J Fletcher Creamer & Son, Inc. to clean and line 1,500ft of 6” cast iron pipe dating back to the 1890’s using the 3M Scotchkote Pipe Renewal Liner 2400.

**Technical Description**

- Previous I & T Grant used for Echologics ePulse™ testing to determine estimated remaining wall thickness and service life of the pipes
- Echologics Leak Detection was performed as part of the grant with no leaks reported on 10,500ft of pipe tested
- Use of the 3M Class III Structural liner will add an estimated 50 years of service life to the existing pipeline
- Use of this 3M rehabilitation method rather than replacing existing distribution pipes delivers the best value to end-users by decreasing labor, material, and restoration costs

**Expected Outcomes**

- 1,500ft of 6” cast iron pipe will be cleaned and lined with CCTV Inspections being performed both pre and post liner application
- Estimated service life of the pipeline will be extended by an estimated 50 years
- Water quality, service reliability, and fire flow will be improved
- Neighborhood disruption is minimized using this pipeline rehab method

**Timeline**

- **Start Date: April 1, 2017**
- **End Date: September 30, 2017**
- **Results will be reports to WIAC during the first meeting of 2018**

<b>I&amp;T Grant</b>	
<u><b>Applicant</b></u>	<u><b>Amount Requested</b></u>
<i>Previously awarded</i>	0
New Castle Municipal Services Commission	\$50,000
<b>Totals:</b>	<b>\$50,000</b>

Drinking Water Innovation and Technology Grant (July 1, 2016 to present):

- Municipal Services Commission, City of New Castle                     \$50,000
- Total   \$50,000
- Percent of Allocation (\$150K)   33%

Vice-Chair Medlarz asked if the pipeline had service connections on it. Ms. Warren responded that it does.

Motion made by Mr. Harmer to approve the Drinking Water Innovation & Technology Grant for the City of New Castle’s Municipal Services Commission (\$50,000), seconded by Mr. Anderson. Motion carried unanimously.



Terry Deputy presented the following:

**Additional Subsidization Assistance Program for Low-Income Subgroups**

- Additional financial assistance is available for low-income subgroups within new CWSRF and DWSRF project areas
- CWSRF and DWSRF loans closed after August 19, 2015 are eligible
- Grantees must agree to administer the Assistance Program, and sign a five-year grant agreement that include but not limited to the following program requirements:
  - Inform residential users regarding the availability of the Assistance Program;
  - Offer, process, and approve grant assistance applications
  - Establish and maintain necessary administrative and accounting procedures
  - Submit grant reimbursement requests to DNREC for approval
  - Agree to safeguard and ensure the confidentiality of personal information
  - Agree to periodic meetings and program audits of all records and accounts
- Assistance Program Grants cannot exceed \$200,000 per project
- Assistance Program Grants must last for at least 5 years
- Average Number of Assistance Account Per Year: 200 or 400 accounts (combined – drinking water and wastewater services) that can be supported over 5 years
- Amount of Annual Assistance Per Household: \$200 or \$400 (combined – drinking water and wastewater services) that can be supported over 5 years
- Eligibility for the Assistance Program is based on the Federal Department of Housing and Urban Development (HUD), Community Development Block Grant (CDBG) State Low-Income levels
- In addition, residential utility user households must meet the following criteria:
  - Applicant must be year-round resident of the home;
  - Liquid assets and real estate, other than owner-occupied home must be less than \$15,000;
  - No delinquent Taxes (municipal, county, or state);
  - No delinquent drinking water or wastewater service bills
- There is no guarantee of additional funding beyond initial grant awards
- Insurance Requirements apply to the program

Terry Deputy presented the following:

**Additional Subsidization Assistance Program Request  
City of Lewes - Board of Public Works**

- Qualifying CWSRF Project: **Highland Acres Sewer Project**
- Loan Amount: **\$1,423,401**
- Population Served: **58**
- Loan Closing Date: **March 18, 2016**
- Estimated Project Completion Date: **September 15, 2016**
  - Project Purposed: **Removal of septic systems and cesspools; construction of sewer collection system and connection to centralized municipal sewer system**
- Additional Subsidization Assistance Program Grant Request: **\$5,000**
- Number of Qualifying Grant Applicants **5**
- Annual Assistance Per Applicant **\$200**
- Estimated Grant Period **5 years**

Mr. Deputy stated that the City of Lewes Board of Public Works will supply backup documentation for the qualified applicants.

Motion made by Vice-Chair Medlarz to approve the City of Lewes Board of Public Works' (\$5,000)

Additional Subsidization Assistance Program request, seconded by Mr. Baker. Motion carried unanimously.

Terry Deputy presented the following:

**Draft Proposed Guidelines  
CWSRF and DWSRF Subsidies for Investor-Owned Utilities**

Purpose:

- Outline guidelines for providing subsidies to Investor-Owned Utilities (IOUs) for new CWSRF and DWSRF projects
- Applies to IOUs regulated by the Delaware Public Service Commission (PSC)
- Guidelines include: (1) proposed eligibility criteria for new projects; (2) qualify information to be provided by the PSC; and (3) establish priority for the use of available subsidies
- Subsidies should directly result in lower annual residential user rates for new projects

Eligibility Criteria:

- Subsidies only considered for projects that solve public health and/or environmental compliance concerns
- CWSRF assistance can only be provided to projects within Delaware's Estuary Watersheds (CWA –Section 320), this limitation does not apply to DWSRF financial assistance
- Loan applications must include Assurance and Confirmation from PSC:
  - Assurance - a Separate Rate Structure has been or will be established for the proposed project area and customers impacted for the term of the proposed loan; and
  - Confirmation - proposed subsidies are necessary to help ensure estimated annual residential user rates will be within Affordability Standards for the term of the proposed loan

Process:

- CWSRF/DWSRF Project Notice of Intent (NOI) submitted to DNREC
- SRF Project Priority Lists (PPLs) and Intended Use Plans (IUPs) prepared
- Preliminary Affordability Analysis prepared by DNREC based on IOU submitted project NOI (with and without loan subsidies)
- PSC reviews Preliminary Affordability Analysis, provides DNREC Assurance and Confirmation note above
- Final loan subsidies adjusted based on solicited and accepted project construction bids
- CWSRF and DWSRF residential user rate covenant to be included in loan agreements; shall remain in effect for the term of a proposed loan. If a new project is financed for the same residential users without SRF loan assistance, residential user rates will be governed by PSC

Current Affordability Standard:

- Estimated proposed residential annual user rate equal to or less than 1.5 percent of MHI within proposed project area for wastewater projects; 2.0 percent of MHI for wastewater and drinking water projects combined

Proposed Subsidies (in proposed priority order):

- Wastewater, Surface Water, and Drinking Water Matching Planning Grants: Based on funding availability; four solicitations per year for matching planning grants, priority will be given to municipal utilities, if funds remain after each solicitation, IOUs request may be considered
- Wastewater and Drinking Project Planning Advances: Based on funding availability; priority will

be given to municipal utilities, if funding remains from open solicitations IOUs request may be considered.

Proposed Subsidies (in proposed priority order):

- Principal Loan Forgiveness: Based on funding availability, CWSRF and DWSRF Project Priority List Ranking, and Project Readiness to Proceed, annual priority will be given to municipal utilities, if funding remains IOUs requests may be considered
- WRRDA requires for the CWSRF program an eligible pass-through governmental entity for IOU to receive Principal Loan Forgiveness
- WRRDA also requires Principal Loan Forgiveness to be determined based on income, unemployment, and population data
  - Income – 1.5% of MHI for wastewater ; 2.0% of MHI for wastewater and drinking water
  - Unemployment Data – Residential utility bill delinquency rates are used as proxy for unemployment. 5% residential utility delinquency rate assumed for wastewater and drinking water when evaluating CWSRF loan applications.
  - Population Trends – Estimated number of EDUs served by a wastewater utility used as proxy measure for population trends. Loan applicants required to provide documentation to receive a systems revenue credit.
- 30 Year Loan Terms: No restrictions, based on CWSRF and DWSRF cash flow projections
- 0% Interest Rate: No restrictions based on CWSRF and DWSRF cash flow projections

Some of the items discussed: user rates cannot be charged above average; when any SRF money goes into a project, all requirements apply to the project, and this includes the prevailing wage rates.; credit and the ability to service debt will be reviewed to make sure the SRF debt is secure; and Environmental Finance will work closely with the Public Service Utility Commission as they have a closer tie with investor-owned utilities.

Mr. Deputy explained to the WIAC that this is another way to provide financial assistance to communities that are investor-owned utilities or to one that could be owned and operated by an investor-owned utility.

Vice-Chair Medlarz and Mr. Harmer support this program. Mr. Deputy let WIAC know that there will be an application from Tidewater Utilities for the Town of Milton in the future.

Terry Deputy presented the following:

**ADMINISTRATORS' REPORTS**

**Project Updates**

Kent County – WWTP Nutrient Removal & Capacity Expansion

- Construction – 97.6% complete

Smyrna – North Duck Creek Pump Station and Sewer Facilities Extension

- Final Phase – Construction 25% complete

Lewes –Highland Acres Sanitary Sewer Project

- Construction –70% complete

Division of Parks and Recreation – Lums Pond Improvements Phase II

- Construction – 80% complete

**CWSRF SUMMARY**

8/31/2016	Actual:	\$422 million
	Obligated:	\$342 million
	Dispersed	\$314 million

**DWSRF SUMMARY**

8/31/2016	Actual:	\$191 million
	Obligated:	\$172 million
	Dispersed:	\$160 million

**SUBCOMMITTEE REPORTS:**

**Wastewater:** No report. Bruce Jones expressed concern about the fact there are still a segment of communities out there that need to be identified that are not receiving assistance from the various programs and identify the ways that they can be served. The first step would be to take a look at the obstacles that there are to providing the CWSRF and DWSRF programs to these communities and whether it is a technical or administrative issue, and providing recommendations. A report will be presented to the WIAC. Mr. Jones suggested that the Drinking Water Subcommittee should be involved.

**Surface Water Management:** Vice-Chair Medlarz reported that they had a conference call. Discussed were the Planning Grant recommendations, the granting of 2 time extensions, and the next application deadlines.

**Finance:** Met on September 16, 2016. Mr. Deputy said they discussed the items that were added to the agenda since August.

**Drinking Water:** Mr. Anderson said the Asset Management applications were recently reviewed and it was a lengthy process.

**PUBLIC COMMENTS:** None

**GOOD OF THE COUNCIL:** Chairman Bross wanted to let the public know that a lot of work is completed by the subcommittees and that their work is appreciated.

**MEETING ADJOURNMENT:** Motion made by Mr. Dvornick, seconded by Mr. Anderson to adjourn the meeting. Motion passed unanimously. The meeting was adjourned at 11:55am. Next WIAC meeting is October 19, 2016 to be held at Kent County Administrative Complex, Conference Room 220, 555 Bay Road, Dover, DE at 9:00am.