

CAPE HAZE OWNERS SEWER DOCKET NO: 20200226-SU

January 5, 2020

COMMISSION CLERK, OFFICE OF COMMISSION CLERK ✓

FLORIDA PUBLIC SERVICE COMMISSION

2540 SHUMARD OAK BOULEVARD

TALLAHASSEE FL 32399-0850

REF: DOCKET NO: 20200226-SU

RECEIVED-PPSC
JAN 08 2020
COMMISSION
CLERK

Opposition to the proposed Document NO: 20200226-SU is based on the following:

Charlotte County proposal includes a note that Environmental Utilities (EU) has a contract to take the waste water (BULK SEWER TREATMENT AGREEMENT dated July 2020) however, we find no information/request of a Request for Proposal (RFP) or competitive bid process to ensure that the residents of Cape Haze receive a quality engineered, cost effect system with low maintenance costs at a fair price as allowed by the FPSC. If there is no RFP, will Charlotte County certify a Sole Source Memo and back up the project if EU defaults during design, construction, operation and maintenance of the system to ensure the Cape Haze residents are protected from a failed project. Are there performance guarantees?

The current 2017 CHARLOTTE COUNTY PLAN and summary is now over 4 years old (Oct. 2016 development data start date) with data that suggest sewer improvements replacing septic systems. **This is the basis of the project** as noted by EU. We believe the data is outdated and would expect EU and Charlotte County to update their data as proof of including Cape Haze in their project with EU.

Is there a State of Florida mandate or is Charlotte County the lead is this effort?

Charlotte County completed a study in 2019 with The Tetra Tech / Johnson Engineering 20-page document (2019) that supports the Charlotte County Spring Lake (Ackerman Project) which is a more detailed study that supports the project starting in March of 2021 by Guymann Construction. This study included over 21 canal water test points along with 73 wells to determine Nitrogen and Phosphorus levels. The study took over 2 ½ years to complete which now will move 2,300 residential homes from septic to sewer on a vacuum system. Why hasn't EU and Charlotte county completed a more detailed study to verify the high-level Master Plan which is out dated. EU is basing the entire project on the 2017 study with no detailed information except for a "Master Plan" which originated in 2016.

Another factor not included related to Cape Haze is the "Storm Water Run Off" impact on septic tank drain fields. There are only a few collection lines in Cape Haze that feed into the intercoastal or Capstan Cut.

Why was the Spring Lake (Ackerman Project) study required/completed and not a detailed study of Cape Haze and Gasparilla Islands?

The cost per residential home in the Spring Lake project is \$11,500 which includes septic tank crush and fill, sod, plumbing line to new septic system connection points. The costs noted by EU is \$19,000 with no comments on what is in their cost estimate.

The permitting noted in the document includes Department of Environmental Protection (DEP) and Charlotte County Health Department. There is no mention of an **Army Corp** permit to bore a transmission line under the intercoastal water way between Gasparilla Island and the main land. There is no mention of an **Army Corp** permit to a transmission line under Capstan Cut to a future Charlotte County main-line and if Charlotte County has installed a line is it sized properly to take on the barrier islands and Cape Haze waste water flows. These permits are basic in the design and also shows the lack of knowledge with Environmental Utilities (EU) in their knowledge of building a project of this magnitude.

The risk factor of having a waste water/sewer line under the intercoastal or in Capstan Cut would be environmental disaster along with the construction connections for startup and check out. Will there be back up lines under the intercoastal water way and Capstan Cut?

The commercial operation date of December, 2022 based on the EU / county plan is not achievable. There has been limited preliminary engineering and cost estimates developed to support this project as a financially and designed based system.

A request has been made to Charlotte County to furnish all information related to the contract with EU and any and all correspondence related to the Cape Haze sewer project as part of the Florida Public Records Act Request For Information Act which includes all records as covered by the Act reflecting or discussing the extension of sewer service to Charlotte County barrier islands and/or Cape Haze area, including but not limited to any efforts, plans, proposals by Environmental Utilities or Mr. Jack Boyer to provide such service.

The funding mechanism noted in Document NO: 20200226-SU with Centennial Bank as noted is not current (7 months old) and not a strong commitment to support a multimillion-dollar construction program with a contractor with limited experience. Other

funding is noted as "Various State and Local Grants" however, we can find no opportunities to support this project other than the residents in our community.

The State of Florida has a plan in place to inspect tanks for leaks with a county permit required including septic pump out, clean, test and document. If this plan is currently in place today then why the absorbent costs to install sewers? See Senate Bill 214. I personally spent several hundred dollars to be in compliance in our Cape Haze community with my septic system.


Why hasn't Charlotte County completed this process. I know of few if any homes in Cape Haze that have septic systems inspected as of January 3, 2021. We understand the inspections were due to be completed by June of 2021?? If the septic tank program shows they are in good condition, then why septic without a detailed study. In the Spring Lake study those septic systems are 40-50 years old. Most of the septic systems in Cape Haze are 20 years old or less.

EU and Charlotte County need a better plan for a sewer project in Cape Haze community. Signed and filed documents by EU and Charlotte County go back to June, 2020. There has been no public communication to our residents until a "Rate" letter was sent out in late December to owners of Cape Haze and Gasparilla Island.

We appreciate the FPSC and OPC's review of this project document as we look for a compressive review of the data required to support the conversion of septic to sewers in the Cape Haze community of Charlotte County.

Respectfully submitted,

UTILITY INDUSTRIES CONSULTING, LLC

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Cape Haze, Fl. 33946

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CC:

Charlotte County Utilities

Charlotte County Attorney

Environmental Utilities

Martin S Friedman, Esquire

ATTACHMENTS:

SEPTIC-TO-SEWER PROGRAM WATER QUALITY REVIEW

October 29, 2019

NOTICE OF PREPAYMENT OPTION

Notice of Prepayment Option

Ackerman Sewer Expansion Project MSBU

www.CharlotteCountyFL.gov



JOHN DOE
123 MAIN STREET
PORT CHARLOTTE, FL 33952

Parcel ID Number: 41111111111
Property Address: 123 MAIN STREET

Dear Owner,

On November 19, 2019, The Board of County Commissioners of Charlotte County, in accordance with Florida Statutes §197.3632, established and approved a special assessment for properties located within the Ackerman Sewer Expansion Project Municipal Service Benefit Unit (MSBU) to fund the Ackerman Sewer Expansion Project. Your property is located within the MSBU and will be assessed.

The assessment of **\$11,500.00** will be collected by the **Charlotte County Tax Collector** over the course of 20 years in annual assessment installments of **\$575.00**.

If you take no action, the first **\$575.00** assessment installment payment will automatically be included on your 2020 Real Estate Taxes Bill. Failure to pay assessments will cause a tax certificate to be issued against the property which may result in a loss of title. **An annual discount for early payments of Real Estate Property Taxes, which includes the annual assessment installment, is available through the Charlotte County Tax Collector.**

You may prepay your entire assessment in full. The amount required to prepay the assessment prior to August 1, 2020 is **\$11,500.00**. **There is no discount for early prepayment of the entire assessment.**

Instructions for: Ackerman Sewer Expansion Project MSBU Optional Prepayment

Write a check for **\$11,500.00**, made payable to: **Charlotte County Utilities***.

*Include: "**Ackerman Sewer Expansion Project MSBU Optional Prepayment**" and Parcel ID#: **41111111111** in the memo section of the check.

Mail prior to **August 1, 2020** (with portion below) to: **Charlotte County Utilities**
Attn: Business Services
25550 Harbor View Road, Suite 1
Port Charlotte, Florida 33980-2503

Assessment records and copies of applicable ordinances and resolutions are on file at the MSBU Division, Room 229, Charlotte County Administration Center, 18500 Murdock Circle, Port Charlotte, Florida.

If you have any questions, please contact the Ackerman Project Office at 941.764.4305 or email S2S@CharlotteCountyFL.gov.

RETURN THIS PORTION WITH CHECK

Optional Prepayment for Ackerman Sewer Expansion Project MSBU

Owner Name: JOHN DOE

Parcel ID#: 41111111111

Check for **\$11,500.00**, payable to: **Charlotte County Utilities***.

Mail to: **Charlotte County Utilities**
Attn: Business Services
25550 Harbor View Road, Suite 1
Port Charlotte, Florida 33980-2503

*Include: "**Ackerman Sewer Expansion Project MSBU Optional Prepayment**" and Parcel ID#: **41111111111** in the memo section of the check.



TETRA TECH



Septic-to-Sewer Program Water Quality Review

October 29, 2019

Tim Denison, Johnson Engineering

Marcy Frick, Tetra Tech



North Shore – pilot project

- Small scale project of 42 lots along Charlotte Harbor
- Typical $\frac{1}{4}$ acre residential area with roadside swales
- Septic systems from 1960s are inadequate and failing
- Possible health concerns
- Drains to Peace River (impaired for nutrients)
- Stormwater monitoring required as part of EPA 319 grant received for \$183,000



Legend

- NS - GW 3
- NS - GW 2
- NS - GW 1
- NS - INF 1
- NS - OUT 1
- NS - OUT 2
- NS - W 1
- Project Area

Information. It is believed to be an accurate and true depiction for the stated purpose. No guarantee, implied or otherwise to the accuracy or completeness. We therefore do not warrant a survey or is it to be used for design. No part of this map may be reproduced without the permission from Charlotte County Utilities.



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Updated: 7/26/2013 3:12

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Monitoring

- **Stormwater (after rain events)**
 - Stormwater outfall site
 - Pre-construction (2013)
 - Post-construction (2015 – 2017)

- **Ground water (quarterly)**
 - 3 monitor wells



Pre-construction

Construction

- Septic tanks removal, sewer connection, and swale restoration fall 2014 – spring 2015



Stormwater Sampling



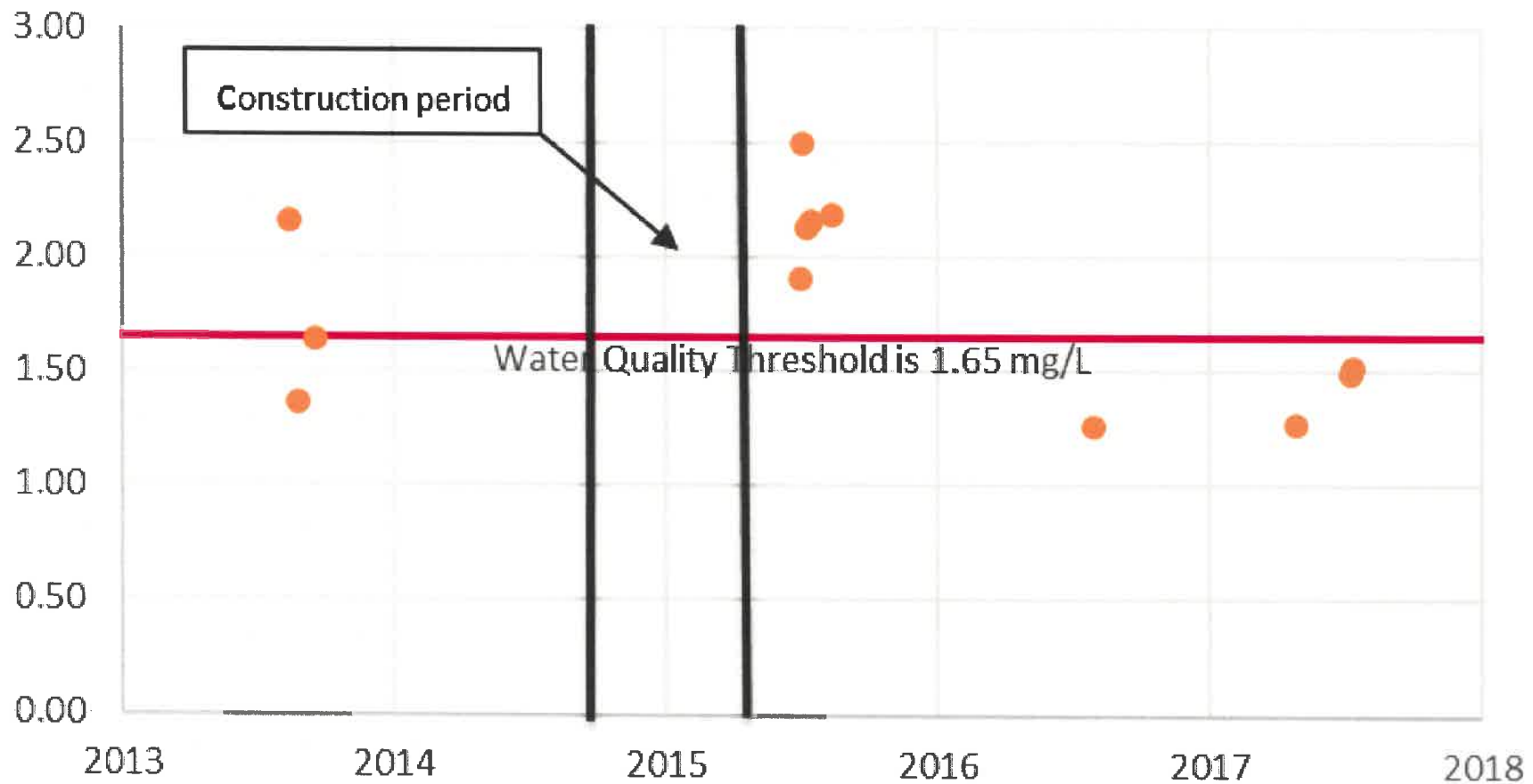
Pre-construction



Post-construction

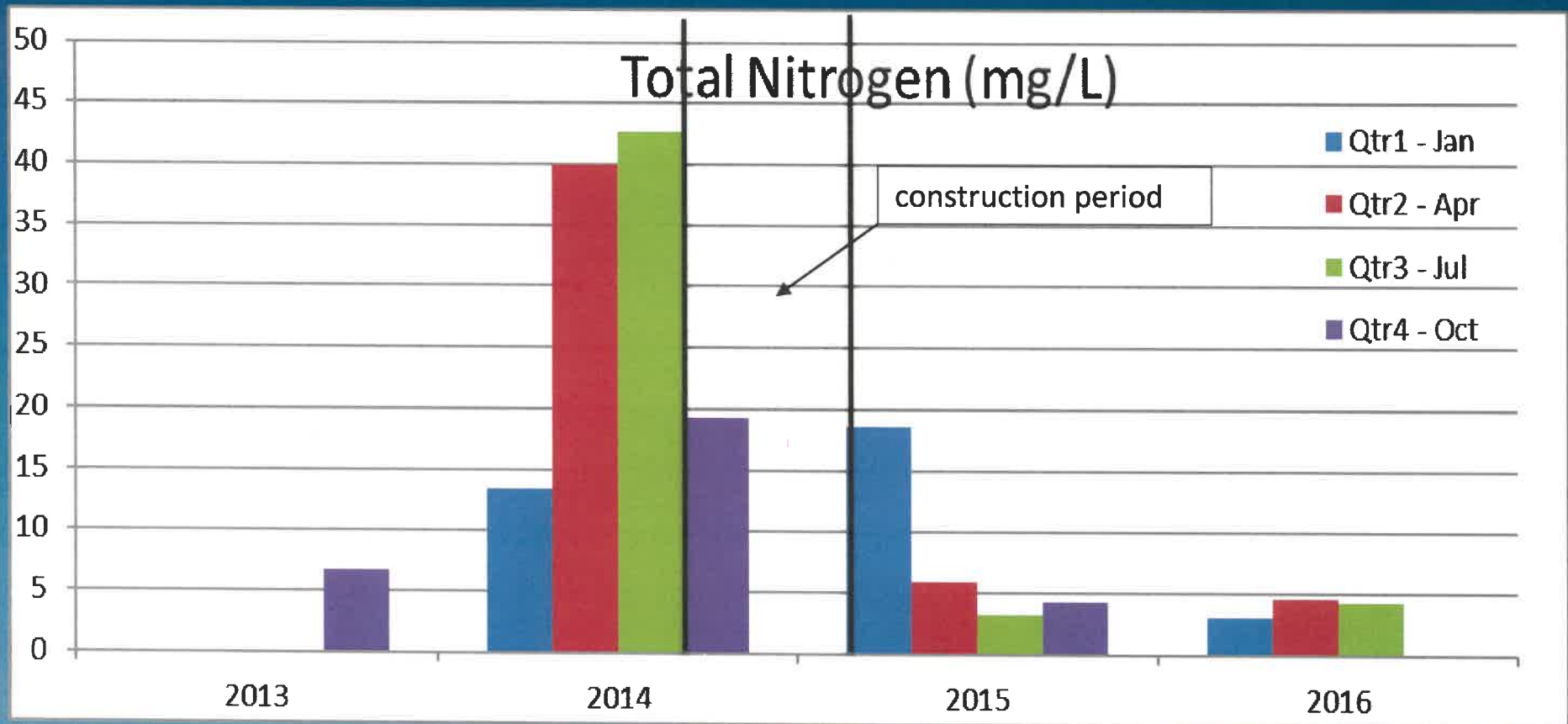
Stormwater Sampling

Total Nitrogen (mg/L)



Ground Water Sampling

GW-1



North Shore Project Findings

- **Stormwater monitoring**
 - Limited Total Nitrogen concentration reductions in first 6 months after construction
 - Significant Total Nitrogen concentration reductions within 2 years after construction

- **Groundwater monitoring**
 - Significant reduction in Total Nitrogen at Groundwater monitor wells within 6 months after construction

East and West Spring Lakes






- Large scale project of over 2,000 properties
- Septic systems were constructed between the 1950s and early 1980s
- Many were in failure and did not meet current regulations
- Discharges to Peace River basin (impaired for nutrients)
- Stormwater monitoring required as part of TMDL grants received for a total of \$2.7 M

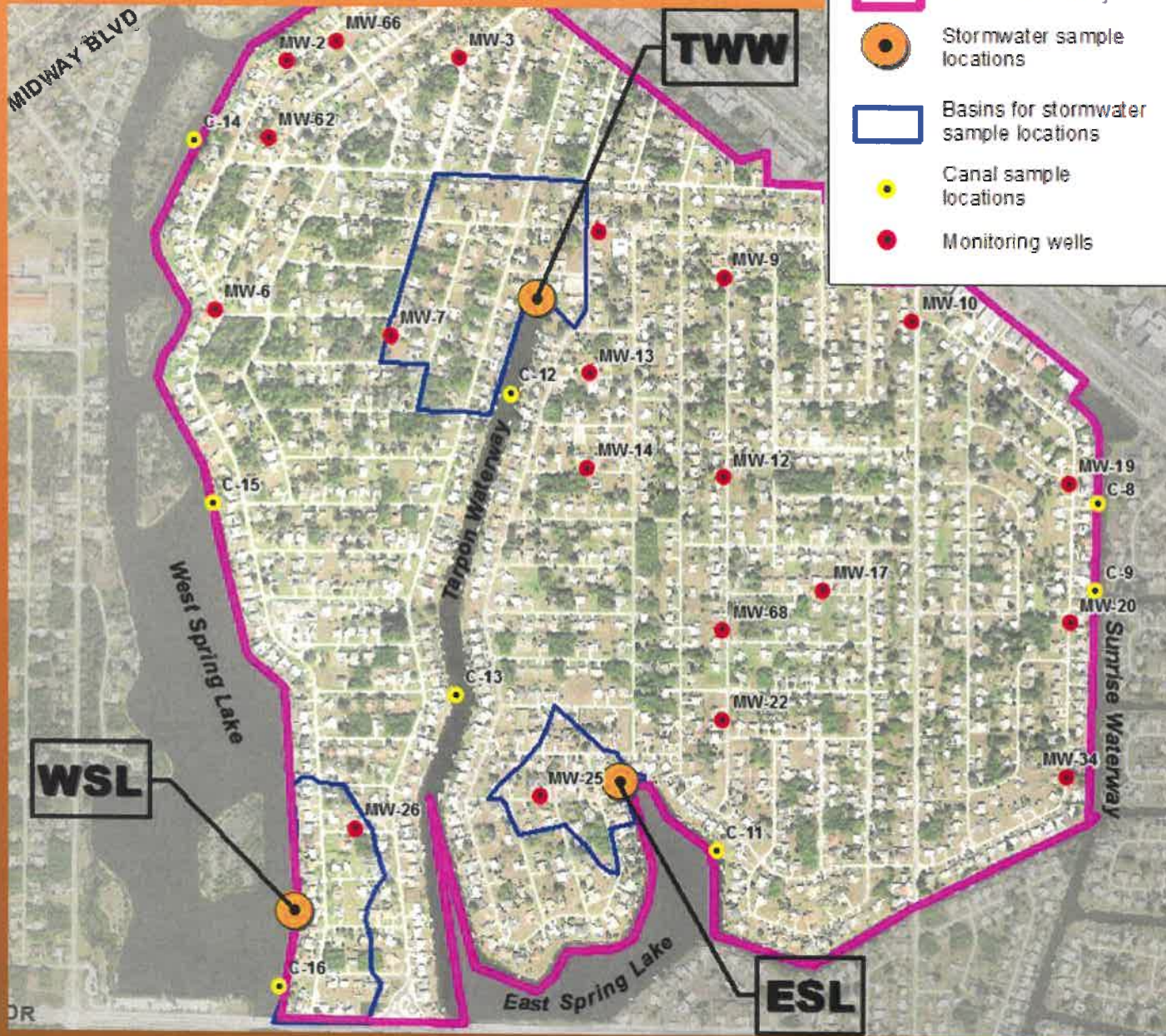
Monitoring

- **Stormwater outfall monitoring sites**
 - Phase II area – 3 sites (WSL, TWW, ESL)
 - Phase I area – 2 sites (SRC, EWW)
- **Groundwater monitor wells**
 - evenly spaced across grid + critical areas
 - initially 70 wells
- **Canal monitoring sites – 21 locations**

Phase II Monitoring

LEGEND

-  Phase 2 boundary
-  Stormwater sample locations
-  Basins for stormwater sample locations
-  Canal sample locations
-  Monitoring wells

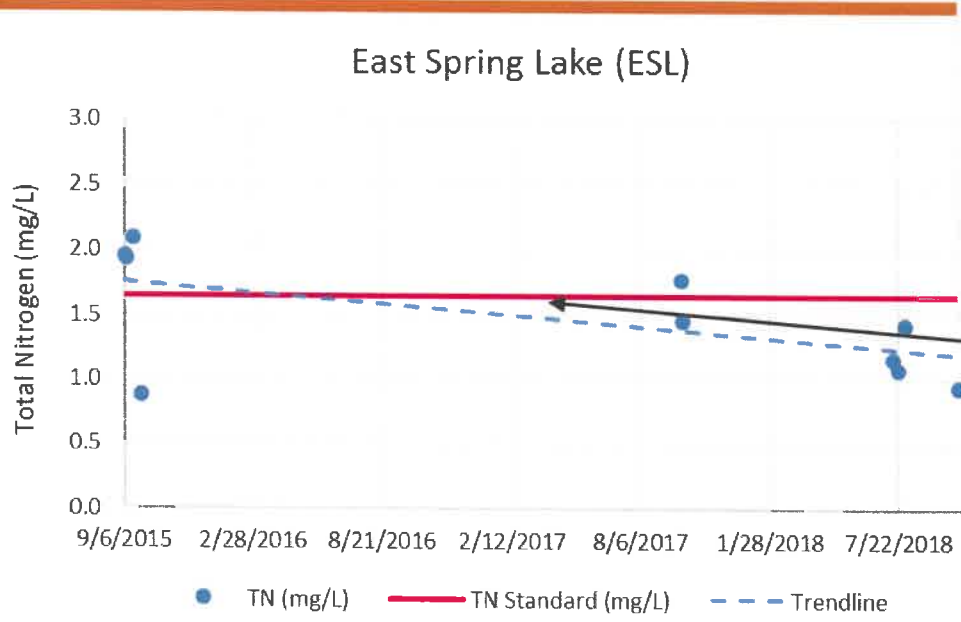
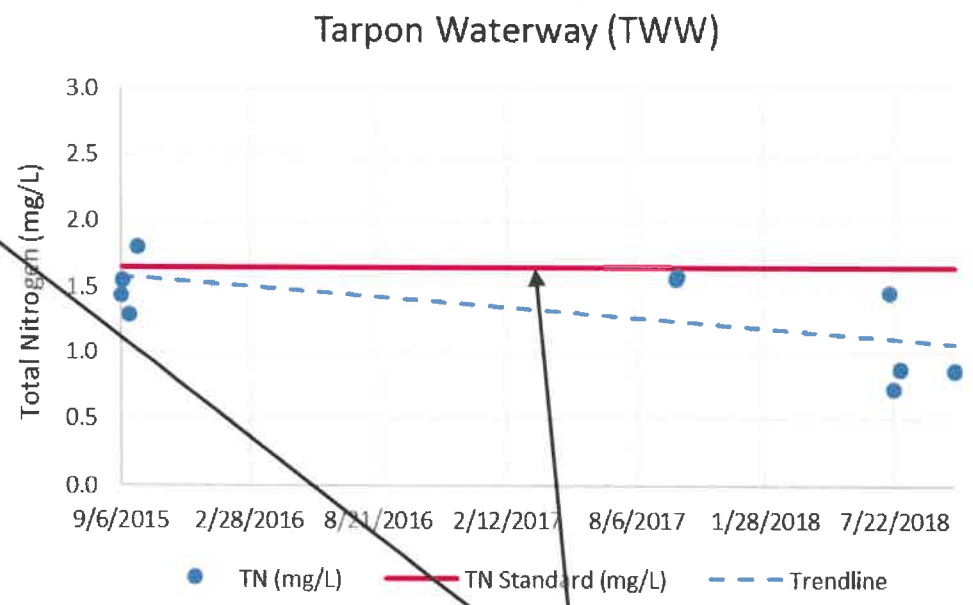
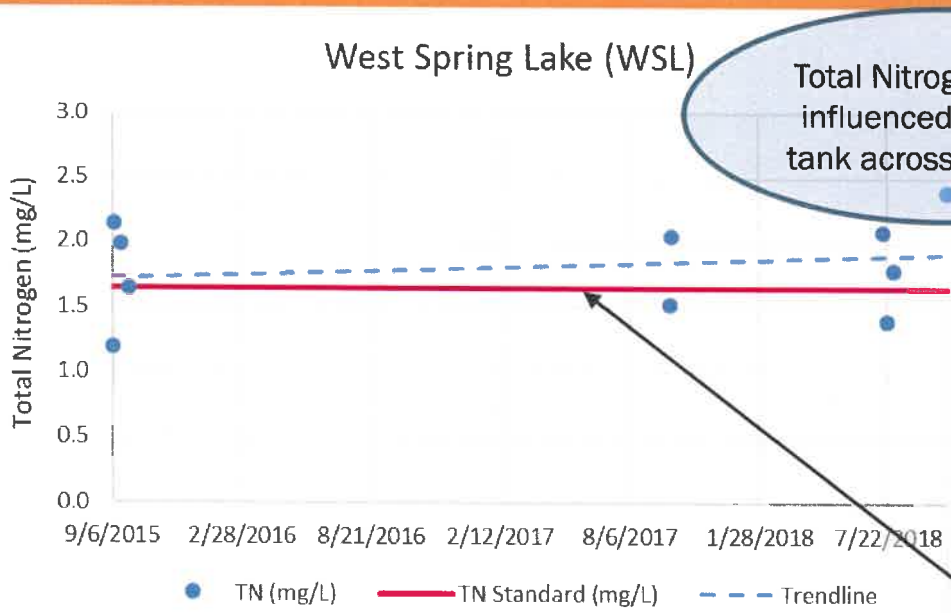


Phase II Construction

- **Pre-construction samples collected 2015–2016**
- **Swales regrading/rehabilitation 2016–2017**
- **Connections in WSL basin 2016 - 2017**
 - 1 septic tank remained across the street from WSL location
- **Connections in TWW basin 2016 – 2018**
- **Connections in ESL basin in 2017**
- **Post-construction samples collected in 2018**
 - 2 more samples scheduled in fall 2019

Phase II Storm Event Results

Total Nitrogen



Class III fresh stream standard of 1.65 mg/L Total Nitrogen (annual geometric mean not to be exceeded more than once in any 3 consecutive years)

Phase I Monitoring

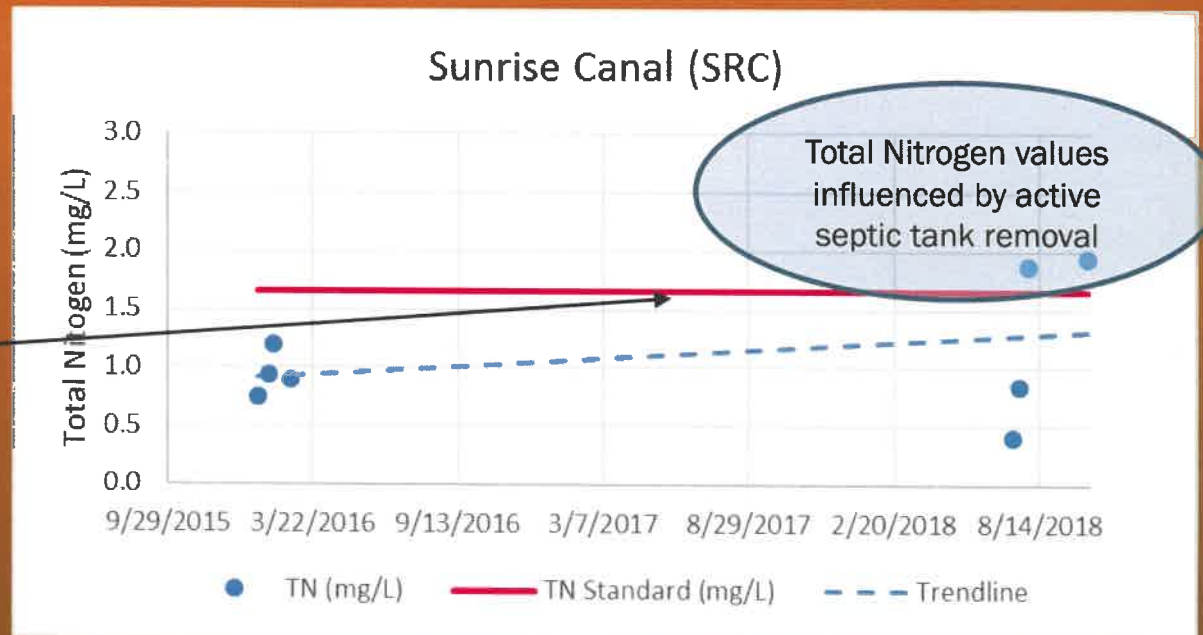
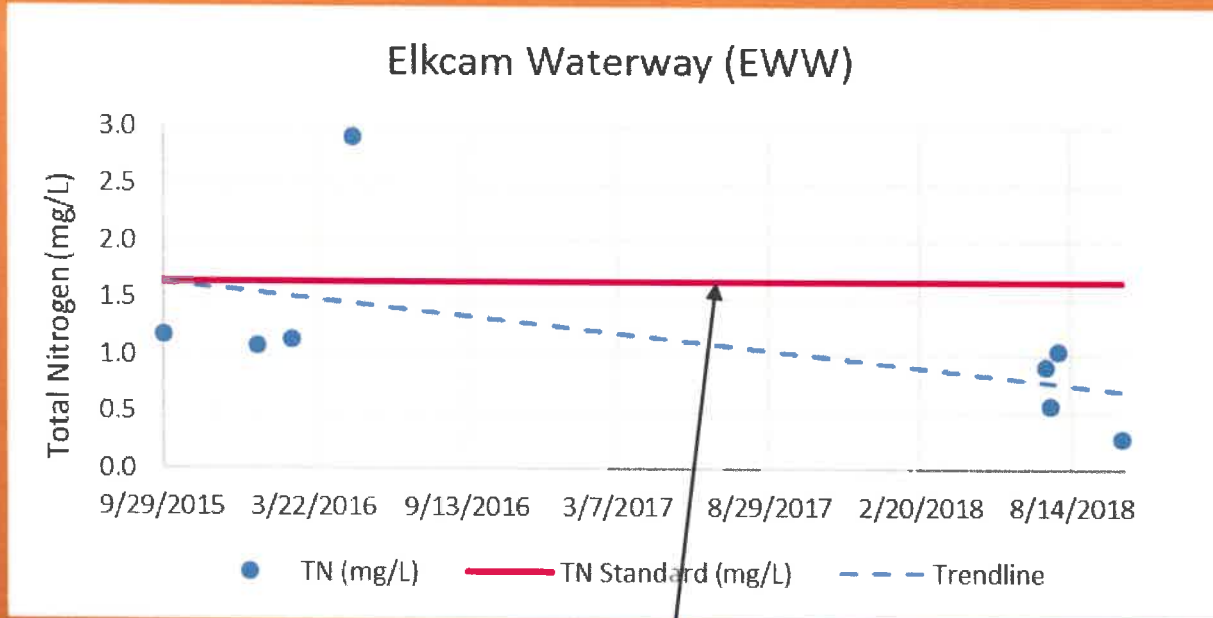


Phase I Construction

- **Pre-construction samples collected 2015–2016**
- **Swales regrading/rehabilitation 2017–2018**
- **Connections in SRC basin 2018**
 - Connections actively being made during sample collection
- **Connections in EWW basin 2018 - 2019**
- **Post-construction samples collected in 2018**
- **- 2 more samples scheduled in fall 2019**

Phase I Storm Event Results

Total Nitrogen



Class III fresh stream standard of 1.65 mg/L Total Nitrogen (annual geometric mean not to be exceeded more than once in any 3 consecutive years)

Water Quality Benefits

Calculations

- Total Nitrogen concentration measured in a lift station near the project
- Total Phosphorus concentration was taken from the model used in the grant
- Water use per household was recorded for the project area (84% estimated as septic tank use)
- Pre-construction loads = concentration x septic tank use per household x number of homes to be converted
- Post-construction loads = pre-construction loads x percent reductions measured at stormwater outfalls

Phase II Estimated Load Reductions

- Measured benefit to stormwater quality from the stormwater system improvements and septic system removal
- The monitoring results from the groundwater wells also show an improvement

Annual Values	Total Nitrogen (lbs/yr)	Total Phosphorus (lbs/yr)
Pre-construction Loads	35,350	12,408
Post-construction Loads	23,334	9,577
Load Reduction	12,016	2,831
Percent Reduction	34%	23%

Phase I Estimated Load Reductions

- The load reduction for Total Nitrogen is lower than expected and Total Phosphorus shows a negative load reduction
- Post-construction samples were collected while septic systems were being connected and soon after swale restoration

Annual Values	Total Nitrogen (lbs/yr)	Total Phosphorus (lbs/yr)
Pre-construction Loads	9,963	3,497
Post-construction Loads	7,639	3,893
Load Reduction	2,324	-396
Percent Reduction	23%	-11%

Items to Consider

- **Marked improvement is expected as the remaining septic systems are connected**
- **Septic systems in place for decades and will take time for the nutrients to be flushed out**
- **Many failed systems throughout the project area may have caused extended period of higher nutrient concentrations**
- **Additional reductions expected over time as in North Shore**
- **Measured load reductions are for stormwater runoff only – groundwater load reductions are likely similar or higher**
- **Septic system removal has an impact on groundwater levels**
 - **Measured groundwater levels were 0.4 feet lower after septic removal**

Summary

- **Monitoring results show benefit to stormwater quality from swale restoration and septic system removal**
- **Groundwater quality results from wells in Phase II also show an improvement in post-construction samples**
- **Additional water quality improvements have likely been realized since the samples collected last year**
- **The County will continue to sample in the project area to gather more data**

Questions?

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