

Beaufort County Stormwater Management Utility Board (SWMU Board) Meeting Minutes

January 10, 2018 at 2:00 p.m. in Executive Conference Room, Administration Building, Beaufort County Government Robert Smalls Complex, 100 Ribaut Road, Beaufort, South Carolina

Board Members

Present

Don Smith
Marc Feinberg
Allyn Schneider
Larry Meisner
William Bruggeman
James Fargher
Patrick Mitchell

Absent

Beaufort County Staff

Eric Larson
Melissa Allen
David Wilhelm
Patty Wilson
Rebecca Baker
Tom Keaveny

Ex-Officio Members

Present

Andy Kinghorn
Scott Liggett
Kim Jones

Absent

Van Willis

Visitors

Alan Warren, USCB Lab
York Glover, County Council
Alice Howard, County Council
Ellen Comeau, Clemson Extension
Michelle Weitzel, Observant

1. Meeting called to order – Don Smith

A. Agenda – Approved with Additions.

- Additions to New Business:

- Okatie River Watershed Data
- Super Fund Site
- Public Law regarding Federal Government Paying Stormwater Fees
- 2017 DHEC Shellfish Report

B. November 15, 2017 Minutes – Approved.

2. Introductions – Completed.

3. Public Comment(s) – None.

4. Reports – Mr. Eric Larson and Mr. David Wilhelm provided a written report which is included in the posted agenda and can be accessed at:

<http://www.bcgov.net/departments/Administrative/beaufort-county-council/boards-and-commissions/council-appointed/board-list/stormwater-management-utility-board/agendas/2018/011018.pdf>

A. Utility Update – Eric Larson

In reference to item #1, the idea of regionalization is gaining momentum. The technical subcommittee has been asked to continue to meet to work to find the “best standard.” Item #2 – The subcommittee has also been asked to find a mission statement of what regionalization means and continue to define an exploratory committee for that.

Mr. Laron explained that in the past Stormwater has had an in-house GIS employee, as a result of their resignation, this funding will shift to the GIS department to fund an additional position within GIS and Stormwater will have a whole team available to assist with GIS needs for the stormwater billing system.

B. Monitoring Update – Eric Larson

Please reference the report which is included in the posted agenda. No additional updates.

C. Stormwater Implementation Committee (SWIC) Report – Eric Larson

The SWIC has not met since the last board meeting.

D. Stormwater Related Projects – Eric Larson

The Okatie West project (item #1) will be discussed during unfinished business.

E. Professional Contracts Report – Eric Larson

Mr. Larson shared that the SWIC met over the phone to approve a time extension, the end of March, for the Management Plan.

F. Regional Coordination – Eric Larson

In reference to #5, the Mossy Oaks task force was unable to meet due to the snow. This meeting is being rescheduled.

Mr. Don Smith asked what the status is. Mr. Larson explained that the purpose of the meeting that was canceled was going to be to discuss engineering proposals for the scope of work and costs to do the design work needed for that watershed.

G. Municipal Reports – Eric Larson

Please reference the report which is included in the posted agenda. No additional updates.

H. Municipal Separate Storm Sewer System (MS4 Update) – Eric Larson

Mr. Larson noted that staff is working to get the annual report completed before the end of January.

I. Maintenance Projects Report – David Wilhelm

Please reference the report which is included in the posted agenda. No additional updates.

5. Unfinished Business

A. Dirt Road Paving - Mr. Larson recapped that action was delayed during the November 15th meeting after some discussion. The latest proposed revisions to the Stormwater Ordinance and the Stormwater BMP manual are in red text and highlighted in yellow. The highlighted text indicates revisions that were made following the November meeting. The discussion was about

exempting existing private dirt roads that want to be improved by their owners as well, if they were not associated with a pending development.

Mr. Larson noted that the Planning Commission approved compatible language to this in the Community Development Code in December. These recommendations will be going to Natural Resources committee.

Mr. Larson explained that these improvements would still be subject to permitting and a stormwater plan, but won't be subject to design post construction BMP's that would need to be built off site. He mentioned that erosion control would also be needed.

A motion was made to adopt the changes to the BMP Manual and Ordinance as presented. The changes were approved (6/1).

B. Okatie West Project - Mr. Larson provided an update on the Okatie West Grant Project, noting that the County is waiting on one permit from U.S. Corps of Engineers and the project is out for bid for construction. Mr. Larson pointed out the final design that was permitted using a graphic from the Okatie West Annual Report (Figure 4).

He informed the Board that the grant is up at the end of July, as DHEC has accelerated the project by pushing up the deadline. The project has to be out for bid for a full 30 days and if he has to wait for Board approval/recommendation that the County will lose approximately 45 days of construction time. Mr. Larson explained that he asked for permission to take a recommendation directly to County Council on January 22nd for approval and administration was agreeable to that [due to the time constraint].

[The Okatie West Annual Report and bid email are attached.](#)

6. New Business –

A. Okatie River Watershed Data - Mr. Larson explained that staff was asked about the data and trends of the Okatie River. Dr. Alan Warren put together a statistical analysis of the data from station 18-02 to station 18-08 [shown in Figure 1] using approximately 18 years of data. BMPs are being built and development is being closely monitored in the area that was analyzed. The data shows that the slope and concentration of bacteria gets higher/more steep as you move upstream, with the exception of station one that has a slight decrease.

In response to a question, Dr. Warren shared that time is shown on the x axis and most probable number (MPN, which equates to colonies per 100 ml) is on the y axis. It was clarified that all data was used for the analysis was from DHEC.

Mr. Larson pointed out that the data covers the time period of 1999 to 2016 and that the Stormwater Utility was formed in 2001 and that the Okatie River TMDL report is based on data through 2010. He commented that the 53% reduction (TMDL) may or may not be a good number to be aiming for.

Mr. Larson mentioned that going forward the County will continue to monitor this area and as development occurs make sure that stormwater is being managed with BMPs as much as it can.

Ms. Kim Jones asked if the County has shared this analysis with DHEC. Mr. Larson said no. Ms. Jones commented that they look at the shellfish closures, but not the trends and feels it is important as they will be reviewing the development plans for the area.

In response to Mr. Larry Meisner's question about the R² value being so small, Mr. Larson commented that what sticks out to him is how steep that line could have gotten if we hadn't done anything over the last 20 years.

Mr. Marc Feinberg asked if there are solutions to look at by plots and come up with a plan to reduce numbers. Mr. Larson indicated that the Master Plan that will be complete in March will do just that and noted the Okatie West and Okatie East projects [to reduce bacteria] were a result of the last master plan.

Dr. Warren expressed that this data is an objective way to prioritize and Eric commented it would be a great supplement the Master Plan as it wasn't done with this level of detail, it used a different methodology.

County Council has requested this information and it will be presented to them next week.

[Data Analysis of DHEC Monitoring Stations and Narrative Summary of the Analysis](#) are attached.

B. Superfund Site on Parris Island – Mr. Billy Bruggeman asked Mr. Don Smith why the Superfund site should be consideration of Stormwater board. Mr. Smith explained he was unaware there was a superfund site on the Island and was wanting to know if the County has any assurance that the pollutants aren't being carried by stormwater into the rivers and marshes.

Mr. Smith asked if there is any monitoring or testing data in surrounding waters. Mr. Larson said he would have to check and see what data may be available and if they had any stations in that area. He also commented that a lot of that area is within the Town on Port Royal, so he could see if their consultant may have any data.

Dr. Warren mentioned that he sits on an advisory board for Parris Island and they meet routinely, so that is happening with community involvement.

7. Public Comment(s) – None.

8. Executive Session – Receipt of legal advice relative to potential abandonment of easements and maintenance for Bessie Lane/Young Circle and Orange Grove Road and potential condemnation of easements on or near Palmetto Drive was not needed. Topics were able to be discussed in Open Session. [Easement memo attached.](#)

Open Session -

A. Palmetto Ridge Street – Mr. Larson explained that Parcel 21F is the only property that has not granted easement and the County has gone above and beyond to communicate with the property owner about the request. In response to a question asking if there is a reason why they will not grant easement, Mr. Larson explained that they cannot fence in that area of easement (15 feet work shelf) and because of the engineered septic system they have very limited space in their back yard.

Mr. Smith asked if there are any reasonable alternatives. Mr. Larson indicated that they could put the work shelf on the other side of the ditch, but they went with the path of least resistance for the project based on existing structures and have all but one easement.

Ms. Alice Howard expressed that Stormwater is this neighborhoods biggest issue. She mentioned there are several engineered septic systems in this area and a younger generation is moving into the area that does not have the history of the problems.

A motion was made for the County to proceed with condemnation of easement for property 21F on Palmetto Ridge Street. The motion was approved (7:0).

B. Bessie Lane/Young Circle – Mr. Larson explained that signed easements have been received for two tracts of land that are not recorded and that a property owner, with a recorded easement, has indicated they would like to have the easement abandoned. The options are to condemn easement on two properties or abandon easement. Mr. Larson mentioned the system is overgrown. Staff is recommending abandonment of easement as the County has gone above and beyond [two years of work] to obtain them, and is now feeling resistance from previous supports and has not obtained all easements needed.

In reference to a question, Mr. Larson indicated that Young Circle flooding was the original complaint. He explained that if easements aren't obtained that the property owners would be responsible for cleaning them to avoid impacting adjacent properties, as it would be a private ditch. DOT cut the ditches on Young Circle, but the water doesn't get to the marsh. He noted this is a state road outfall that the County is trying to obtain easement on to provide relief. Bessie Lane is a County maintained (legacy) road without right of way so the County cannot improve it, but continues to grade it to keep it passable.

In response to comments and questions about why the County would not want to keep has been granted, Mr. Larson expressed that the County would like to abandon easements because with signed easements comes an expectation to maintain ditches and provide services. The County does not have all the easements needed to improve or maintain the system, so they would rather not have any [to avoid assumed responsibility].

After discussion, board members indicated they wanted to know what Mr. Dawson's thoughts were as this is the district he represents.

A motion was made to table discussion and action until the next stormwater board meeting. The motion was approved (7:0).

C. Orange Grove Road – Mr. Larson

Mr. Larson explained Orange Grove is in Mr. Glover's district and that the ditch fills up from tidal influence, but doesn't drain due to elevation. A majority of the easements are not signed and one property owner has filled in their ditch. There is very little support from the residents that need relief and these are state outfall ditches. Staff is recommending to abandoned easements.

Mr. Glover indicated would like to continue to pursue getting easements. He plans to make personal contacts with residents [who have not granted easement] in the area to see if they may be willing to reverse their decision.

A motion was made to table discussion and action until the next stormwater board meeting. The motion was approved (7:0).

9. Matters Arising Out of Executive Session – None.

10. Next Meeting Agenda – Approved.

Additions to February 14, 2018 Agenda

- Unfinished Business -
 - Tabled Discussion/Update on Bessie Lane/Young Circle Easements
 - Tabled Discussion/Update on Orange Grove Easements
- New Business -
 - Special Presentation – TBD (one of topics below)
 - Animal Control Facility – Stormwater Controls

- Convenience Center Update
- Road Paving Program Criteria
- Super Fund Site on Parris Island
- Public Law regarding Stormwater Fees
- 2017 DHEC Shellfish Report

11. Meeting Adjourned

November 14, 2017

To:
Shakhlan Garane
SC Department of Health and Environmental Control
2600 Bull Street
Columbia, SC 29201

From:
Paul Moore, P.E. – Ward Edwards Engineering

Re: 319 Progress Update for Annual Report
Okatie West Water Quality Retrofit
Project No. 090099B

Shakhlan,

To aid in your Annual Report to the EPA about the active 319 Grants, we are providing the following update on the Okatie West Water Quality Retrofit. The overall project goal was to design, permit and construct a regional water quality treatment pond in a 1,170 acre sub-watershed of the Okatie River headwaters. The BMP proposed for the project is a conventional stormwater detention pond to be located in a roughly 2 acre upland area that is in close proximity to the main Okatie West drainage channel. Access to the proposed pond site will be needed, so a road was designed into the property, avoiding the wetlands and cultural resource sites. The project site was previously approved for a mixed use development by the Town of Bluffton, but Beaufort County targeted it for purchase through its Rural and Critical Land Program. The County was able to purchase the property, closing on the property in early 2016 thus allowing it to be used for the regional stormwater quality project. After the property was purchased by the County, the design work on the project began, including tree-topographic-wetland surveying, geotechnical testing, and cultural resources evaluation. The background information on the wetlands and cultural resources were critical to the design of the proposed BMP, as impacts to wetlands and archaeological sites need to be minimized. The engineering is complete and a full set of design/construction plans are ready for bidding. The project permitting is nearing completion with a few final permits needed

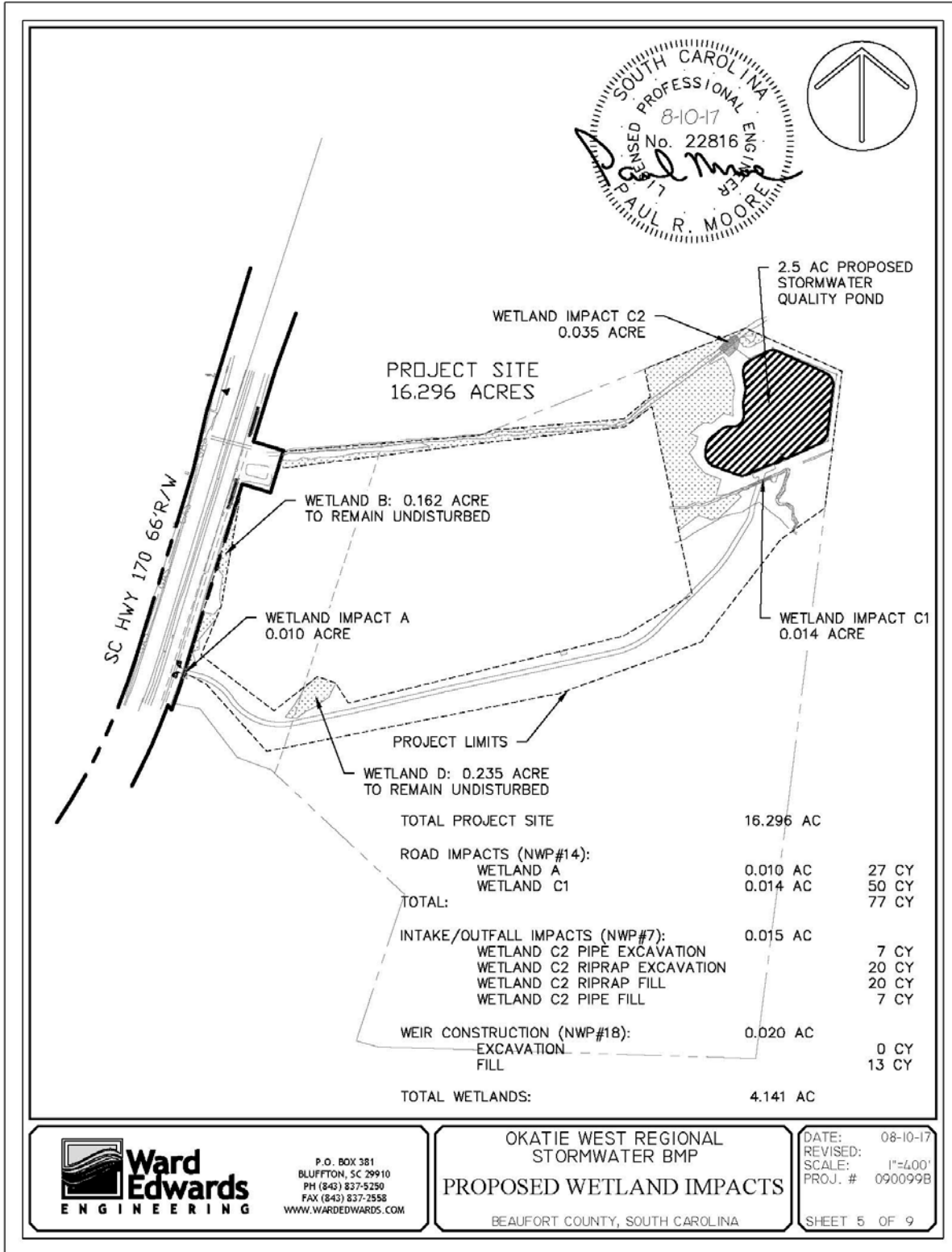


Figure 1 – Wetland Impact Plans

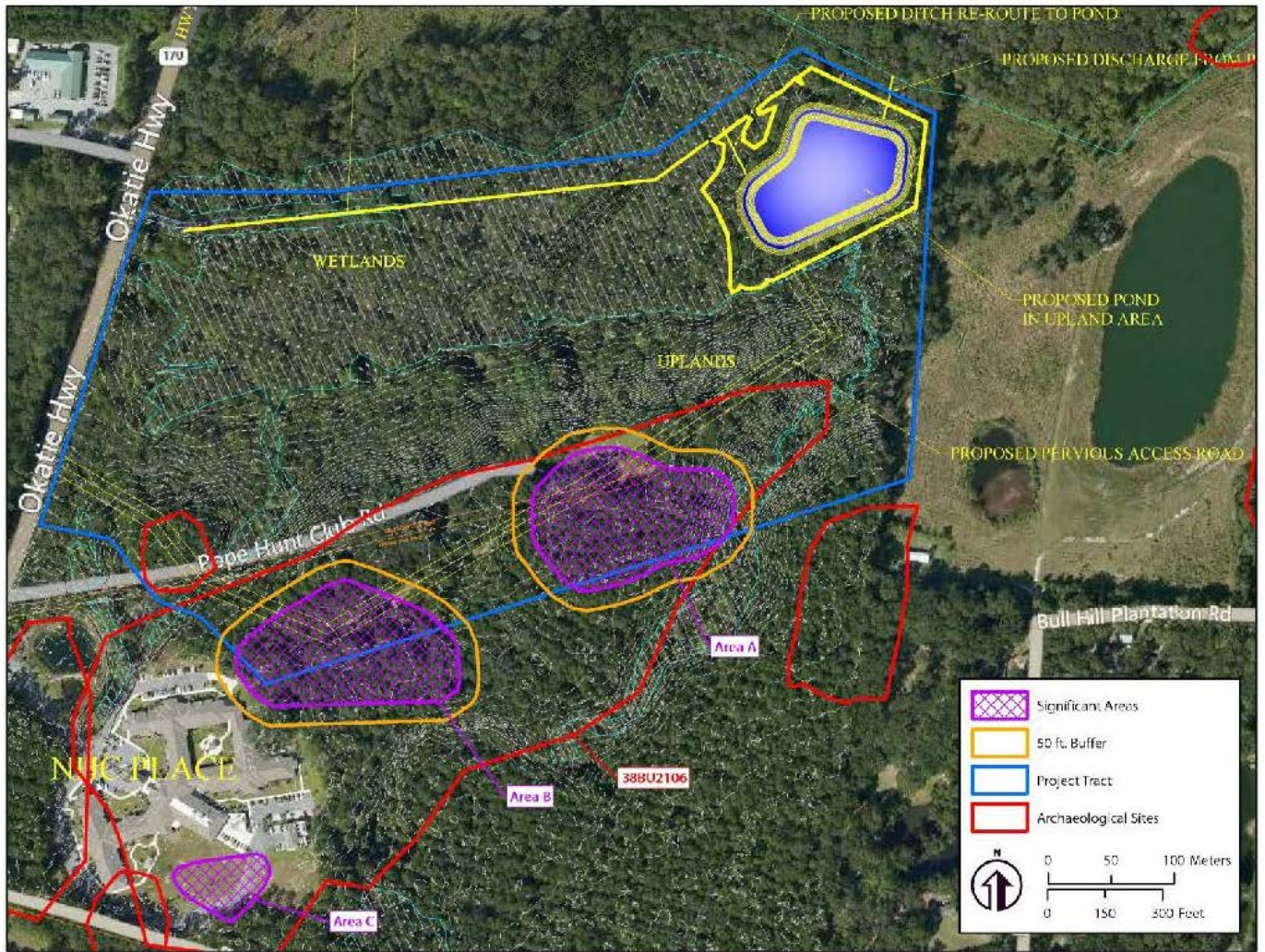


Figure 2 - Project Cultural Resources Site

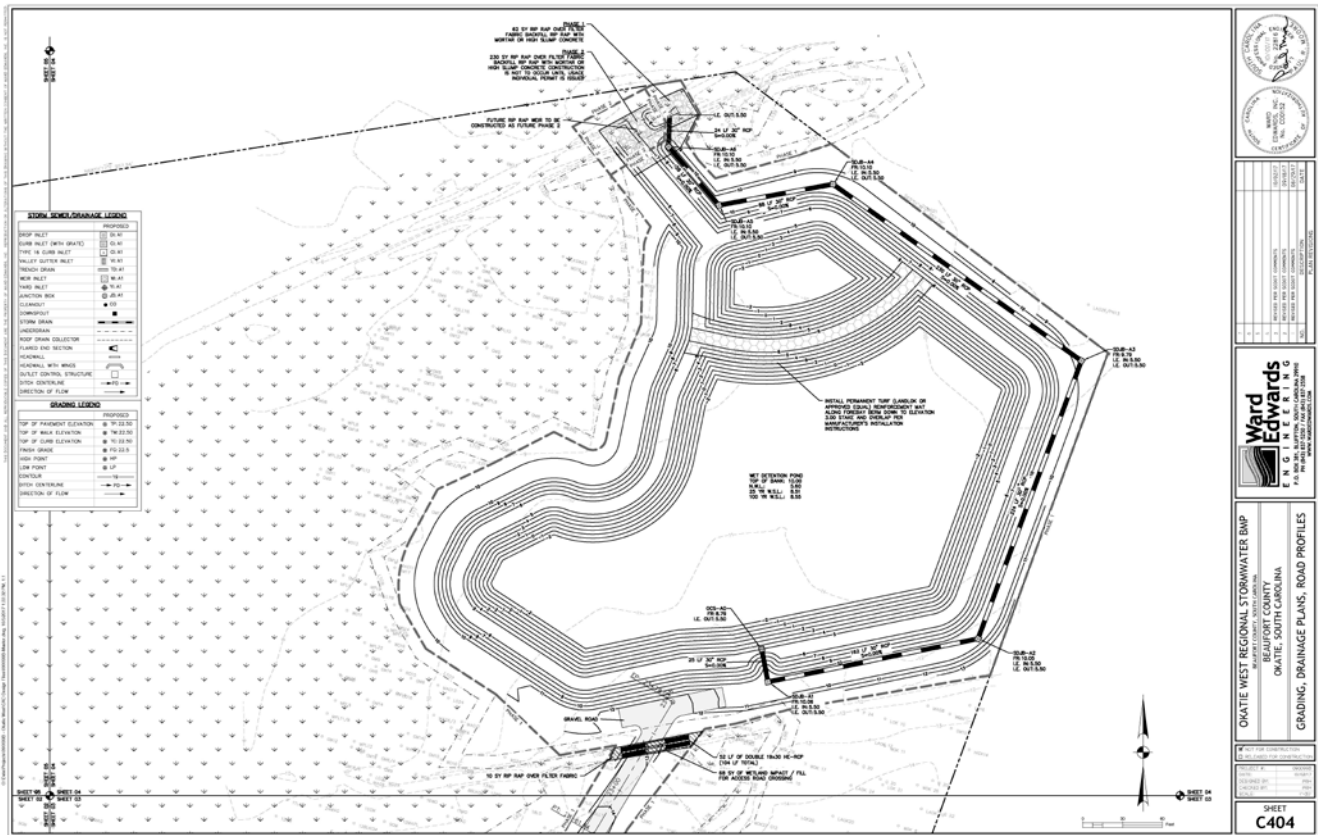


Figure 3 - Pond Grading & Drainage Construction Plan

The project permitting has been delayed by the required wetland impact permitting. The US Army Corps of Engineers has been reviewing the project and considering options for permitting the impacts under separate Nationwide Permits. It was initially thought that all impacts could be completed under three different Nationwide Permits, but it was later determined that the proposed diversion/outfall weir will require an Individual Permit. The USACE Project Manager visited the site in October 2017 to inspect the existing wetland channel that will be impacted by the diversion weir. The Manager ruled that the old constructed channel now functions as a tributary of the Okatie River, eliminating the possibility of Nationwide Permits for proposed impacts in the channel. The proposed road crossings are still being permitted as Nationwide Permits, but the other impacts have been pushed forward as an Individual Permit. The wetland permits are expected to be issued by the end of 2017, allowing the project to start construction in early 2018, for completion by summer 2018. The other State and Local permits are essentially complete, with approvals conditional on issuance of the Wetland Permits. This includes the SCDHEC-NPDES Permit, the SCDOT Encroachment Permit, and the Town of Bluffton Development Permit. There are a few “grand” tree removal issues to work out with the Town, but those will be resolved within a few weeks of this report.

Allen, Melissa

From: Larson, Eric
Sent: Monday, January 08, 2018 4:03 PM
To: Allen, Melissa
Subject: FW: Stormwater's Okatie West CIP project contract Award in January

For the SWUB at the January 10, 2018 meeting. Please print this email for the packet.

Eric W Larson
Director, Environmental Engineering & Land Management
Director, Disaster Recovery Task Force
Manager, Stormwater Utility

-----Original Message-----

From: Flewelling, Brian
Sent: Thursday, December 14, 2017 6:48 PM
To: Larson, Eric <elarson@bcgov.net>; Vaux, Tabor <tvaux@bcgov.net>
Subject: Re: Stormwater's Okatie West CIP project contract Award in January

Eric,
I don't have any problem with that. Tabor, do you? Let me know and we'll talk it over. Otherwise Eric, plan to give us a briefing on the situation at the NRC on January 16.

Brian

Sent from my iPhone

> On Dec 14, 2017, at 4:11 PM, Larson, Eric <elarson@bcgov.net> wrote:

>

> Brian,

>

> We began advertising for bids today on this project. We were looking to receive bids on January 16th. Here's the situation... SC-DHEC and EPA accelerated our project and are requiring us to be complete with the project by July 31, 2018. We have moved as fast as we can to get permitting complete and bids out ASAP. We anticipate a 120 day construction schedule. Looking at the calendar, missing the SWUB mtg. Jan 10, NRC Jan. 16, and CC mtg. Jan 22 means we would lose a very valuable month if we wait for Board-Committee-CC approval to award in February.

>

> Would you be willing to allow us to take bid award straight to CC on Jan 22?

>

> I plan on briefing SWUB on Jan 10 and could do the same Jan 16 at NRC, but I doubt I'd be ready to stand up and give a recommendation.

>

> Please let me know. Please call me if you wish to discuss further.

>

> Sent from my iPad

> Eric W. Larson

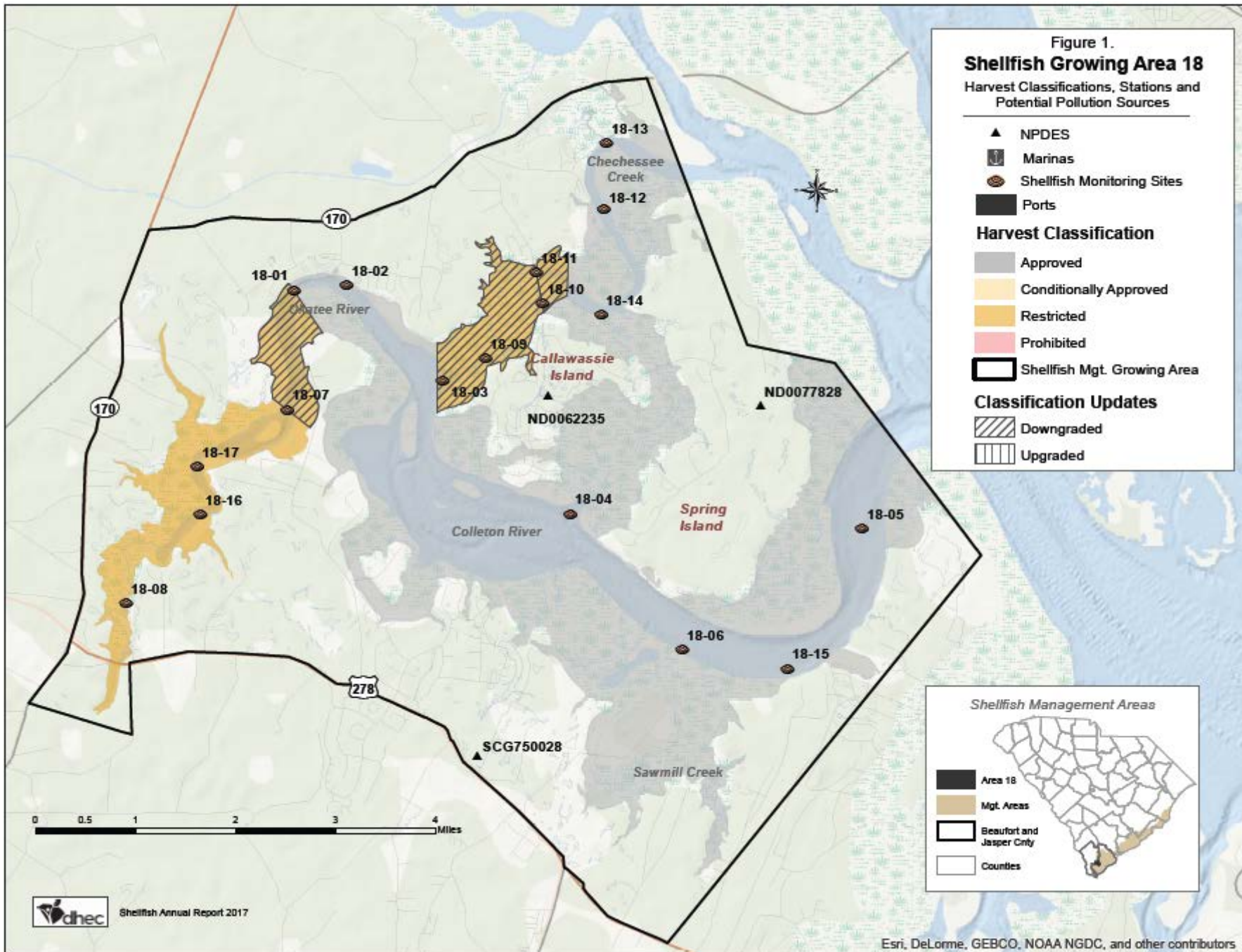
> 843-592-1252 (cell)

> Director, Stormwater Utility

Graphical Longitudinal Analysis of DHEC Shellfish Monitoring Stations 18-01, 18-02, 18-07, 18-08, 18-16 and 18-17

**D. Alan Warren, Danielle Mickel and Mike Monday
USCB Water Quality Laboratory
December 6, 2017**

Figure 1.
Shellfish Growing Area 18
 Harvest Classifications, Stations and Potential Pollution Sources



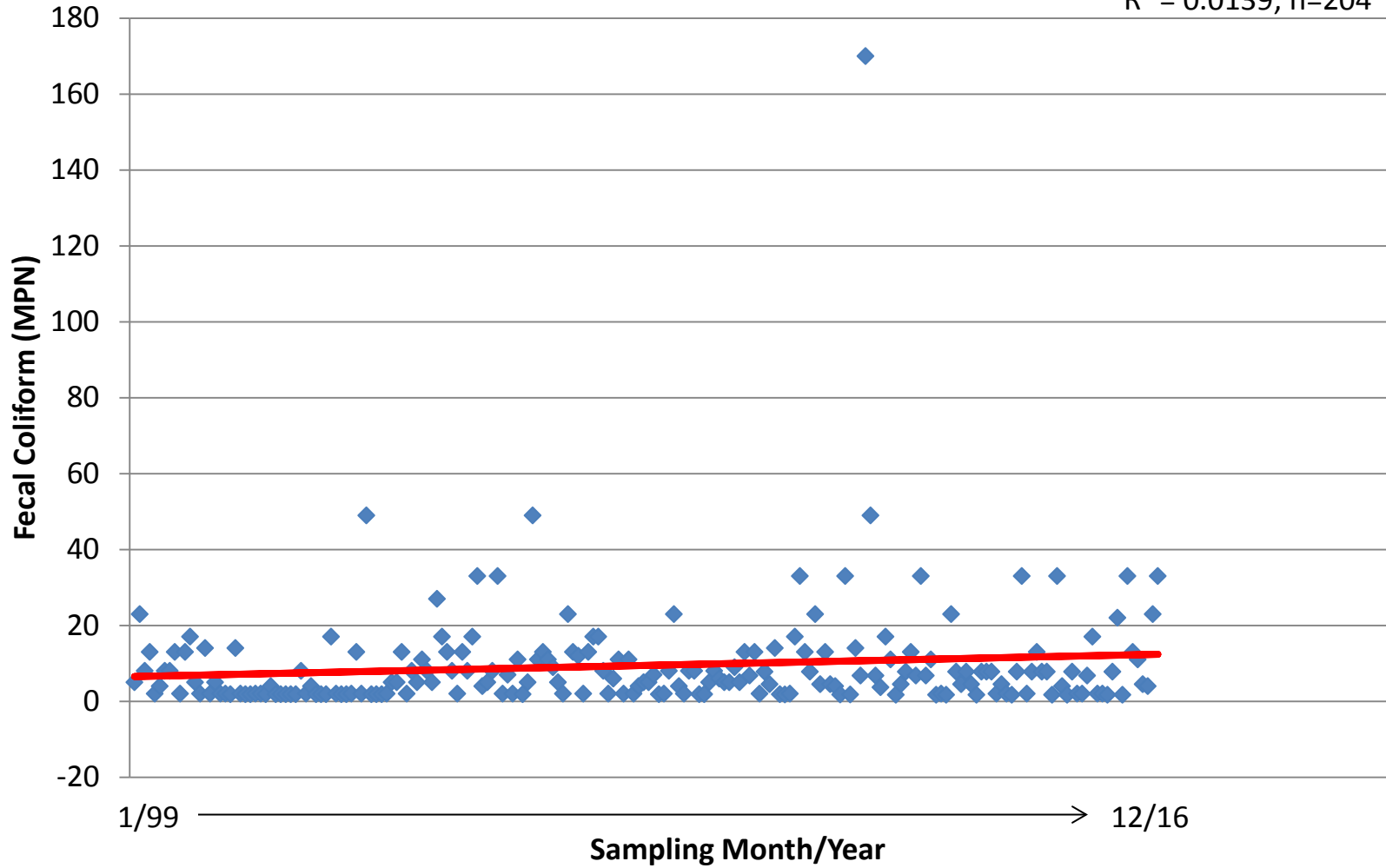
Monitoring Station Descriptions

Station	Description
18-02.....	Okatie River Behind Bailey's Oyster Dock
18-01.....	Okatie River at Camp St. Mary's Dock
18-07.....	Okatie River at Indigo Plantation
18-17.....	Okatie River at Confluence of Cherry Point Tributary
18-16.....	Okatie River at Confluence of Pickney Colony Tributary
18-08.....	Okatie River at Dock without House



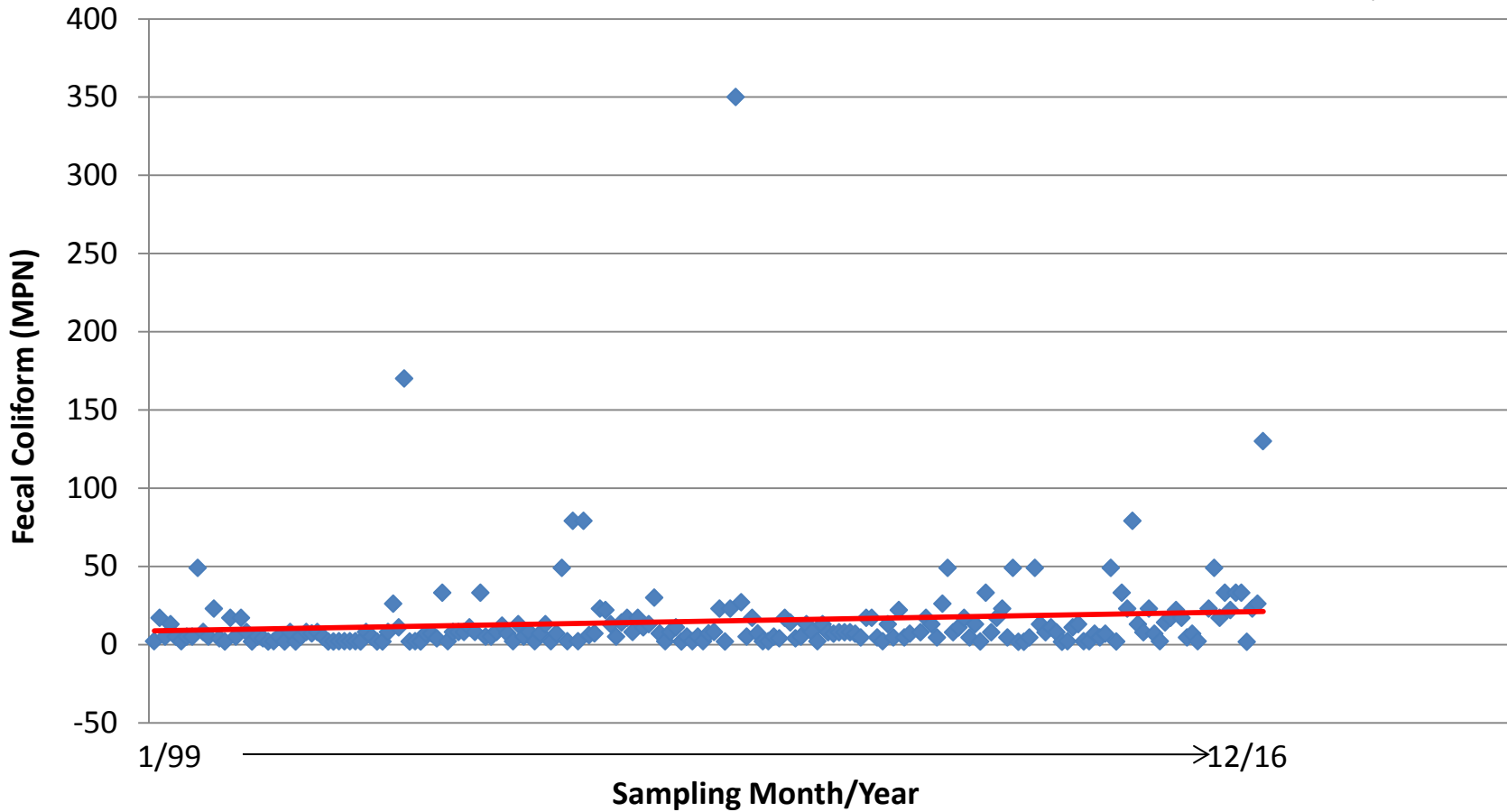
Station 18-02

$$y = 0.029x + 6.5234$$
$$R^2 = 0.0139; n=204$$



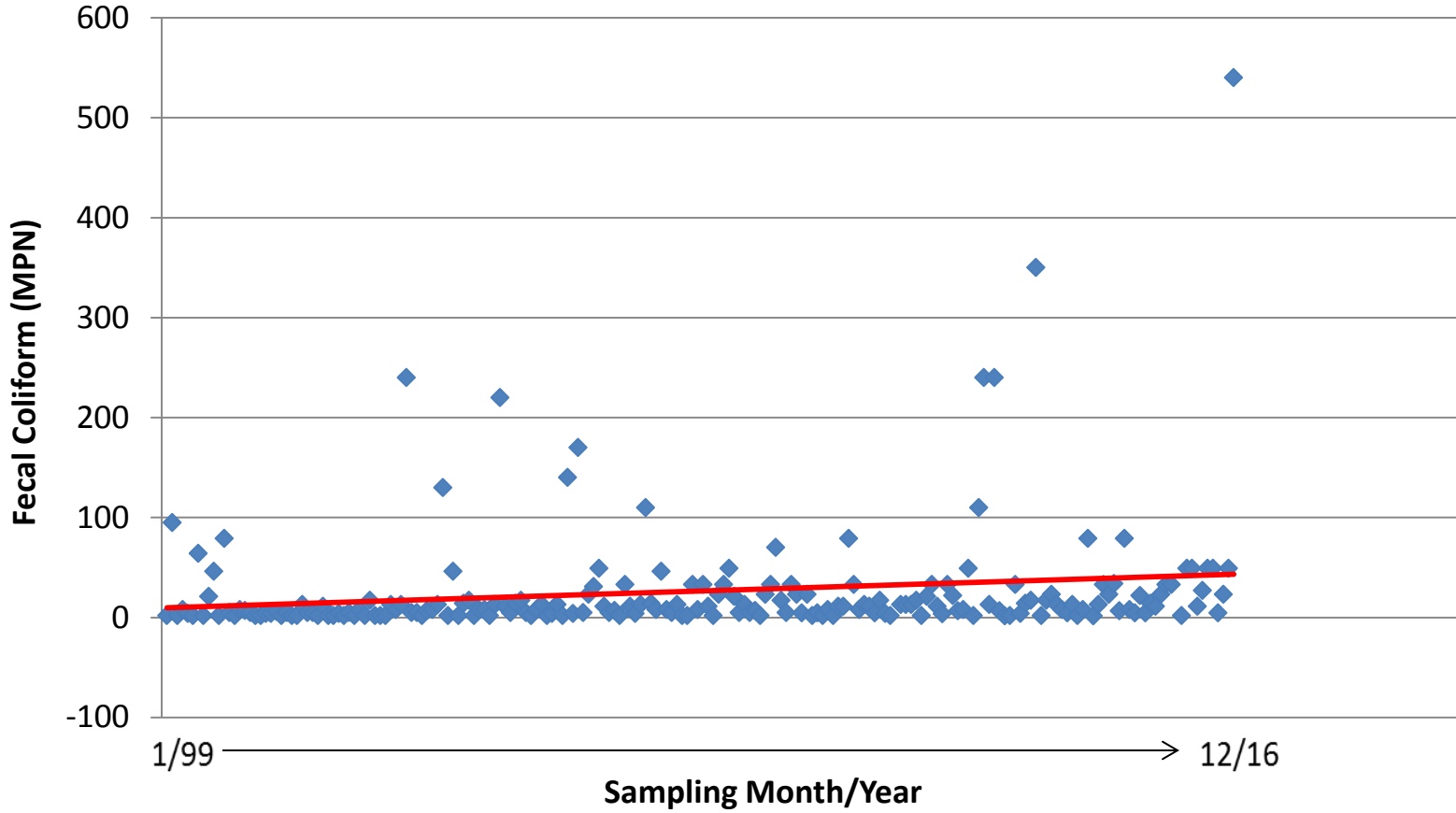
Station 18-07

$$y = 0.0609x + 8.7286$$
$$R^2 = 0.014; n=202$$



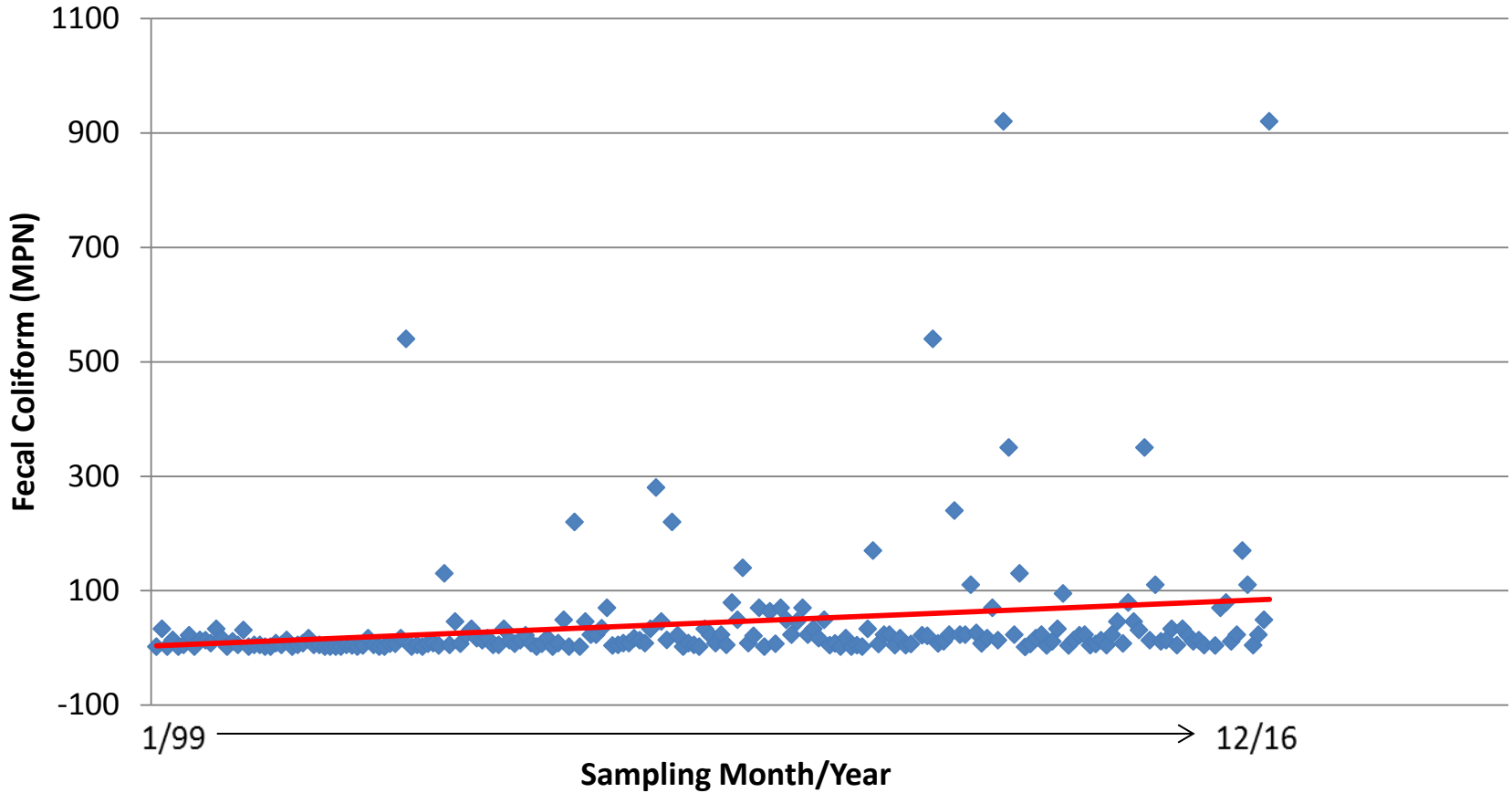
Station 18-17

$y = 0.1624x + 9.7163$
 $R^2 = 0.0276; n=203$



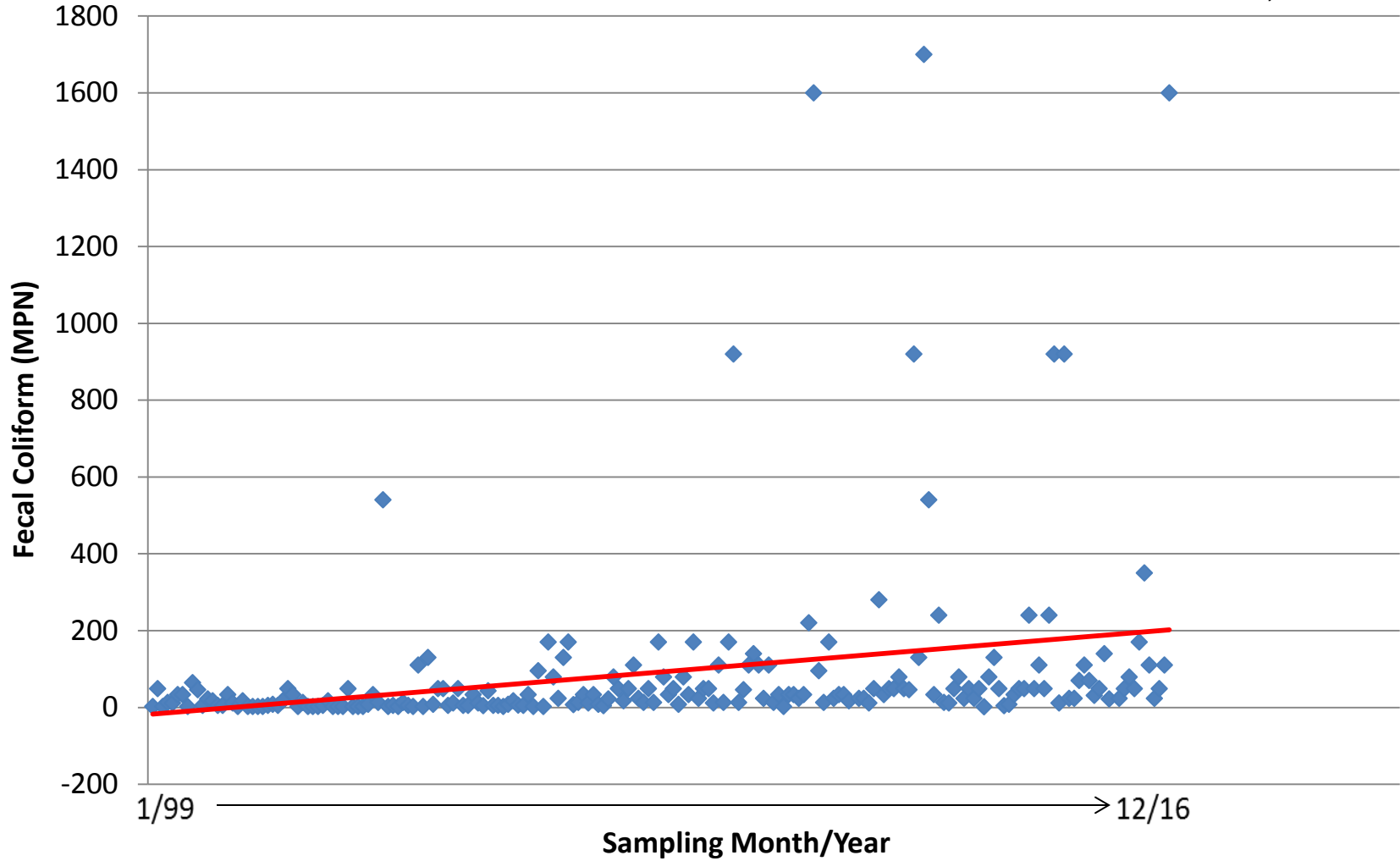
Station 18-16

$y = 0.396x + 3.1825$
 $R^2 = 0.0428; n=203$



Station 18-08

$$y = 1.0813x - 18.279$$
$$R^2 = 0.072; n=203$$



Trendline Slopes and Summary

Station	Trendline Slope
18-02	+ 0.029
18-01	- 0.0102
18-07	+ 0.0609
18-17	+ 0.1624
18-16	+ 0.396
18-08	+ 1.0813

Summary: Based on linear trendlines of positive slope that were fitted to DHEC water quality data, five of the six monitoring stations saw increasing trends in fecal coliform concentration during the period 1/99 to 12/16. Of those stations showing trends of increasing concentration, the rate of increase was greatest at station 18-08, occurring at a rate 2.7- and 6.7- fold that of stations 18-16 and 18-17, respectively. Considerably more modest rates of increase were seen at stations 18-02 and 18-07, while a slightly decreasing concentration trend was observed at station 18-01. In general, the rate of increase in fecal coliform concentration is, at least in part, a function of where a particular monitoring station is located relative to the headwaters of the Okatie River (i.e., the rate of increase became greater as one moved further up river). In addition, the same pattern emerges when one examines the average concentration of fecal coliform bacteria at each monitoring station over the period from 1/99 to 12/16 (i.e., average fecal coliform concentrations were 9.5, 29.9, 15.0, 26.4, 43.9 and 91.9 MPN at monitoring stations 18-02, 18-01, 18-07, 18-17, 18-16 and 18-08, respectively). ¹⁰

Narrative Summary of the Analysis of DHEC Shellfish Monitoring Stations 18-01, 18-02, 18-07, 18-08, 18-16 and 18-17

**Eric W. Larson
Beaufort County Stormwater Utility Manager
December 15, 2017**

Narrative Summary

- The attached analysis consists of a series of graphics showing trends of fecal coliform concentrations, as reported by SC-DHEC, at six sampling stations within the Okatie River from 1999 to 2016. The sampling stations are shown on the accompanying map.
- In general, the concentration of bacteria increased as one traveled upriver toward the headwaters. The higher concentrations in the headwaters are believed to be a function of its relatively shallow depth and the fact that it doesn't "flush" well by comparison to downriver locations.
- Bacterial concentration trends over time were upward at five of the six sampling stations. In other words, bacterial concentrations generally increased over the 18-year period analyzed.
- Monitoring efforts have not included the measurement of surface runoff or overland flow within the Okatie River watershed. However, increased runoff volume and flow rate are suspected following rain events that have occurred over the period analyzed.
- The following milestones in Beaufort County's Stormwater Utility program are noteworthy:
 - 1) The Stormwater Utility was formed in 2001, and
 - 2) the Okatie River TMDL report is based on data through 2010.

What Does This Mean?

- The upward trend in fecal coliform concentration does not reflect a lack of concern by the County for the “health” of the Okatie River or development within its watershed.
- Though the watershed has seen some development, it has been relatively undeveloped over the time period analyzed, suggesting the predominant bacterial input has been from “natural” sources. Nonetheless, development without adequate BMPs has the potential to further increase runoff volume and flow rate, thereby amplifying the amount of bacteria entering the Okatie River via suspension and transport within channels.
- As the County finds the upward trend in bacterial concentration unacceptable, a more proactive approach to management of the Okatie River watershed is needed compared to years past. The Okatie East project completed in late 2014 was an initial step in the right direction. However, it must be viewed as the first of several such efforts to be implemented at strategic locations within the watershed.

Looking Ahead

- The County's goals are to be vigilant in its regulatory oversight, pursue land preservation, and construct new BMPs throughout the Okatie River watershed in an attempt to slow/stop the upward trend in bacterial concentration and ideally, reverse it.
- Given the “naturally occurring” bacterial sources and proposed development within the watershed, it is imperative that BMPs be well-designed, well-maintained, and well-functioning when development does occur.
- Comprehensive water quality monitoring plans are needed to identify priority areas within the watershed and determine the effectiveness of BMPs.
 - Such plans will inform the County and allow for early intervention and appropriate enforcement, thereby supporting the goal of natural resource preservation.



BEAUFORT COUNTY STORMWATER UTILITY
120 Shanklin Road
Beaufort, South Carolina 29906
Voice (843) 255-2805 Facsimile (843) 255-9436
wstormwater@bcgov.net



M E M O R A N D U M

TO: Natural Resources Committee
Stormwater Utility Board

FROM: Eric W. Larson, PE, AICP, CPSWQ, CFM

DATE: January 10, 2018

SUBJECT: Condemnation for easement – Goude tract @ Palmetto Ridge St.
Easement abandonment – Multiple tracts @ Bessies Ln. & Young Cir.
Cease easement acquisition – Multiple tracts @ Orange Grove Rd. @ Sam Doyle Rd.

The attached easement exhibits have been proposed by Staff, at the request of adjacent property owners and/or County Council members York Glover, Alice Howard, and Gerald Dawson. After multiple unsuccessful attempts of communication, negotiation and consultation with the respective Council member, it is now recommended to either begin formal condemnation procedures to acquire the easement, abandonment of existing easements, and/or seize easement acquisition.

Palmetto Ridge Street

The process to obtain the easements needed for this regionally significant ditch system formally began in December 2016. The single remaining tract, noted as 21F on the exhibit, has not granted an easement. Staff and County Council representative Alice Howard made 12 separate attempts to discuss the request with the owners, including 2 letters, 2 door hangers, and 3 personal visits. The owners have verbally denied the request. All of the other 16 property owners have signed easements; however, only one of those easements has been recorded pending this condemnation process. Staff is recommending condemnation on the Goude tract, R100-33A-21F.

Bessies Lane and Young Circle

The process to obtain the easements needed for this regionally significant ditch system formally began in March 2017, although conversations with one of the residents offering to assist in garnering community support began several years ago. Through past efforts, the County has recorded several easements. However, there are gaps in easement coverage to fully cover the system. While we have signed (unrecorded) easements on two tracts, we have numerous tracts still unsigned. All remaining property owners have been contacted by letter at least twice and have had multiple other attempts to communicate with them. Rev. Venice Young initially volunteered to assist us. We communicated with him 12 times, including 4 “no-show” meetings. Recently, one of the property owners, in which the County has a recorded easement, has stated verbally they desire to have the easement abandoned and do not want the County to continue to maintain the system. Due to lack of interest, Staff is recommending abandonment of all current recorded easements, ceasing further attempts to acquire easements, and ceasing future maintenance of this system. Abandonment would include easements on Tracts R100-16-199, R100-13-8A, & R100-13-17.

Orange Grove Road & Sam Doyle Drive

The process to obtain the easements needed for this regionally significant ditch system formally began in June 2017 and was prompted by complaints from one of the property owners in September 2016. Staff has sent a series of 2 letters, left door hangers, and made multiple attempts to communicate with property owners. The resident with the initial complaint has even refused to grant the needed easements. None of the 10 easements needed have been granted. Staff recommends ceasing all further attempts to acquire the easements and ceasing future maintenance of this system.