

## PLANNING AND ZONING BOARD MINUTES

The Brevard County Planning & Zoning Board met in regular session on **Monday, September 17, 2018**, at **3:00 p.m.**, in the Commission Room, Building C, Brevard County Government Center, 2725 Judge Fran Jamieson Way, Viera, Florida.

The meeting was called to order by the Chair, Henry Minneboo, at 3:00 p.m.

Board members present were: Henry Minneboo, Chair, Ron Bartcher, Andy Barber; Brian Hodgers; Ben Glover; Robert Solito; Ron McLellan; Mark Wadsworth; Bruce Moia; and Dane Theodore.

Staff members present were: Erin Sterk, Planning and Zoning Manager; Christine Valliere, Assistant County Attorney; Rebecca Ragain, Planning and Development Assistant Director; George Ritchie, Planner II; and Jennifer Jones, Special Projects Coordinator II.

Henry Minneboo, Chair, announced that the Board of County Commissioners will have the final vote on the recommendations made by the Planning and Zoning Board on Thursday, October 4, 2018, at 5:00 p.m.

### APPROVAL OF AUGUST 6, 2018, MINUTES

Motion by Ron McLellan, seconded by Mark Wadsworth, to approve the minutes of August 6, 2018. The motion passed unanimously.

### Planning and Zoning Agenda

1. **Ahuon, Inc.** requests an expansion of an existing CUP (Conditional Use Permit) for Alcoholic Beverages (full liquor) for On-Premises Consumption in conjunction with a restaurant, to expand existing restaurant, in a BU-1 (General Retail Commercial) zoning classification. The property is 0.10 acres, located on the west side of Highway A1A, approximately 600 feet south of Berkeley Street. (568 & 570 Highway A1A, Satellite Beach) (18PZ00082) (District 4)

Sam Azo, 3178 Brentwood Lane, Melbourne, stated they are expanding the restaurant to next door and building a buffet-style banquet center.

Henry Minneboo asked how long Mr. Azo has been in business. Mr. Azo replied he has been in business at the same location for 23 years.

No public comment

Motion by Bruce Moia, seconded by Ron McLellan, to approve the request for Alcoholic Beverages for On-Premises Consumption in conjunction with a restaurant, and expansion of existing restaurant. The motion passed unanimously.

2. **Happy Landings Homes, Inc.** (Kevin Lee) requests an amendment to an existing BDP (Binding Development Plan), in an IN(H) (Institutional Use, High-Intensity) zoning classification. The property is 5.33 acres, located on the southwest corner of U.S. Highway 1 and Otter Creek Lane, on the east side of Old Dixie Highway. (5925 Old Dixie Highway) (18PZ00088) (District 4)

Dr. Mike Ronsisvalle, 160 Hacienda Dr., Merritt Island, stated he was born and raised in Brevard County and a Merritt Island High School graduate. He has worked in Melbourne, treating addictions

and mental health for over a decade as a psychologist. He stated Brevard County needs a facility where professionals can provide effective treatment for substance abuse because Brevard is faced with an incredible crisis. He said they have all heard about the opiate crisis in the country; in 2017, there were 72,000 drug overdoses nationally; in 2014 it was around 45,000, so it almost doubled in three years; and opiate deaths have almost quadrupled from 2015 to 2017 nationally. In Brevard County it is shocking how residents have a hard time dealing with drugs and alcohol. He said of the top five counties in Florida for overdoses from 2015 to 2016, Palm Beach is #1, and Brevard is #2 with 1,032 drug overdoses. A lot of time, Florida is #1 in the nation, so that would put Brevard #2 in the nation for the amount of drug overdoses it has. People in Brevard County are 44% more likely to die due to a drug overdose than an average American. He stated 1.3 million patients pursue treatment every year in the country. A year after they pursue treatment, 780,000 patients relapse. Journeypure is an organization based out of Tennessee that they have partnered with in order to produce the facility in question on Dixie Highway. Based on self-reports from patients of Journeypure, 70% of patients are healthy with no indication of substance abuse six months after treatment. Journeypure starts with evaluation and treatment; the goal is to treat the causes, not the symptoms; they like to help people with coping skills to help them go forward and lead healthy lives. Once they understand and evaluate what's going on with patients they develop a treatment plan specifically to where they're at and what's going on in their lives. There are four different levels of treatment to put people in a healthy environment. The highest level is detox, then residential treatment, then partial hospitalization, and then outpatient. It's important to note that currently they have had PHP (partial hospitalization) and IOP (intensive outpatient) for almost three or four years in Brevard County, so they have a long history serving Brevard. Six months after treatment at Journeypure, 84% of patients reported not having any substance use at all; 92% of patients seek no treatment for physical or mental health issues; and 68% are working within six months. He said Journeypure is not a recovery house; there's a lot of concern over whether it is a recovery house; there was a recovery house on the property years ago and it was not regulated, with people coming and going as they wanted, and that is not what Journeypure is doing, but it is also not a sober living community. He stated they will serve people who have money to pay privately or have commercial insurance. Once people are at the facility, they do not leave; they do not walk around the neighborhood. Journeypure is a group of licensed professionals, such as counselors, social workers, therapists, psychologists, medical doctors, and nurses, all working together to help people with medical detox, residential, and intensive outpatient services. These people are self-motivated and want to be there and get help.

Kevin Lee, Brentwood, Tennessee, stated Journeypure has a family of facilities in the southeast, including Melbourne and Orlando. They are about helping people be healthy who want to be there and live in a comfortable environment and live a healthy lifestyle.

Dane Theodore stated he has no doubt that Brevard needs these services, but asked why they chose Brevard. He said previously the facility was Resurrection Ranch, and subsequently the Space Coast Center for Women and Children, and then Gabriel's Place, which was run by the same person. He doesn't have any doubt that Journeypure is a fine organization, and Brevard is in need of those services, but his question is why Brevard, and why are they asking for the elimination of some pretty significant conditions of the binding development plan.

Mr. Lee stated the property is a nice, residential facility, it's kind of difficult to access, and it's a safe area. He said he can't think of a better place, or why it would be better or worse than any others. He pointed out that Journeypure's other locations are in areas that border, or are in, residential pockets,

with the exception of the outpatient clinics, which oftentimes are in medical office buildings. He said the proposed facility is a residential-type facility and a good environment.

Mr. Theodore asked why they were requesting to eliminate some fairly significant binding development plan restrictions. Mr. Lee replied there is one with regard to felons that is probably concerning to a lot of people. He said in Florida, if you steal \$600 you're a felon, so Journeypure has about 450 employees and a lot of them have felony records for something they did in the past, but they're healthy now.

Mr. Theodore stated Condition 2 of the binding development plan requires the developer to make available inspections to the FDLE (Florida Department of Law Enforcement). Mr. Lee stated he doesn't have a problem with it, and he thinks it would add value.

Kenny Lee stated the original intent of the FDLE involvement was so they could do the background checks and make sure Happy Landings wasn't employing or housing felons, so there wouldn't be a need for Journeypure to use FDLE; all of their employees go through a background check, but they do have an exception depending on the degree of the felony.

Mr. Theodore stated they are asking that the requirement that Code Enforcement and Planning and Zoning should perform semi-annual inspections be eliminated. Mr. Lee stated yes, they are asking for that to be eliminated. Mr. Theodore asked if Mr. Lee would have a problem with that remaining.

Mr. Theodore asked if the applicant's consultants have said they can connect to U.S. 1. He stated what was there before was a residential-type of establishment coming off of a secondary road, and this is a full-blown, commercial, for-profit establishment, and the comments from staff are that it would require connection to a highway such as U.S. 1.

Mr. Lee stated they cannot connect to U.S. 1, as it is a federal highway. He said Journeypure might only have 15 – 20 cars per day going in and out of the facility. The residents live there for 30, 50, or 60 days, and the employee traffic is minimal, so connecting to U.S. 1 would possibly be cost-prohibitive.

Andy Barber stated the first condition in the binding development plan that they want to get rid of is the restriction of not allowing people who have felonies to work there, and the reason is because a lot of the counselors might have some prior history. He stated he would like to clarify that they are willing to keep the other conditions, such as the FDLE inspections, and the condition of semi-annual meetings with the neighbors. He said the next condition is semi-annual inspections by Code Enforcement, and Mr. Lee said they would keep that one. He asked what type of security would they be providing onsite to protect the neighbors as well as the residents. Mr. Lee stated they have employees who are trained to deal with anyone trying to come onto the property, but there is no security because it's not necessary.

Mr. Barber asked if there are other Journeypure facilities in Melbourne. Mr. Lee replied they are outpatient clinics, not residential facilities.

Bruce Moia stated they are using the existing buildings, but the proposed binding development plan significantly increases the request for square footage. Mr. Lee said some of the buildings that exist are not in use.

#### Public Comment

Jinger Knox stated she is a property owner in the community and also was a very integral part of getting the original binding development plan in place. She stated the company has not met with any of the neighbors, except Mark Leslie, who requested a meeting this morning. She said emailed each of the Journeypure board members when she found out about the rezoning eight days ago. She stated she would like to know how long the notice was on the property, because she doesn't think it was noticed properly. She stated the organization that's in there now got high-intensity zoning because they had the binding development plan, and it took the neighbors over a year to work on the binding development plan, because they understood there was a need for women and children, so they came to an agreement that they could spot-zone the property as commercial zoning, even though they didn't access U.S. 1. She said there is a blind corner on Otter Creek Lane, but they knew with the protections in the binding development plan that the traffic wouldn't be a concern. The new binding development plan does not say they won't have court-ordered people there, and it does not say the residents won't be villains. She stated Mr. Lee just told the board that their main concern are people coming into the facility, and she asked if they are afraid their residents will be attacked or given drugs. It is a residential neighborhood, and there is a 33-foot easement there, and if the board is going to approve they request, it needs to make them connect to U.S.1, which is the only way Community Commercial should be approved. If the binding development plan is going to be stripped, then the zoning should be stripped also and go back to the previous zoning.

Mr. Barber asked if there was ever a traffic problem with the past facilities. Ms. Knox replied that the traffic problem wasn't necessarily vehicles because most of the people were on foot, the issue was the residential area. She said once the facility opens, there is nothing to prevent 48 residents and 22 resident employees from exercising around the block. It takes away the neighborhood's safety and security, so it's not just about the traffic. If they have 22 employees instead of three, like Resurrection Ranch had, it's going to be substantial around that corner.

Mark Leslie, 2665 Hilltop Lane, stated he has been in the neighborhood since 1991, and has been through several different iterations of entities in the facility, but since 2009 it has been quiet for the most part and no real issues. He likes that this particular entity will fall under State licensure and they will have to abide by all the DCF rules, but none of that applied in the past. The two criteria that he would like to see put in the binding development plan are, 1.) that they not take in people from prisons, courts or jails; and 2.) access to U.S. 1. He said since Grills opened traffic has gotten worse, and if Journeypure builds out to 47,000 square feet, and if they house more people than are there now, it's going to add to an already difficult intersection. If anyone has ever tried to turn left onto Otter Creek Lane at 5:00 on a Friday night, you have to sit there and wait until every car has turned off to make the U-turn to Grills, because you can't see the southbound traffic. If you're turning right onto Otter Creek Lane from the north, everyone knows to get on the shoulder and decelerate and make the sharp right turn onto Otter Creek Lane. He said the binding development plan is the tool they have to fix it; DOT is not on board with making it easier for Grills to get their people out, but DOT needs to take some responsibility. He said the Planning and Zoning board has a responsibility to make the right recommendation to the Board of County Commissioners.

Dane Theodore stated Otter Creek Lane is the access off of U.S.1, and there is a parcel there, so they would need to acquire a portion of that parcel and put an entrance road there. What the neighbors are not asking for is an entrance off of U.S. 1, but an entrance off of Otter Creek Lane, and there can't be another entrance onto U.S. 1.

Mr. Leslie stated he spoke with Joe Penovich, the owner of Grills, and he would be amenable to look at solutions, but getting DOT onboard is going to be the challenge. Somebody has to deal with this intersection because someone is going to get killed.

Les Jackowski stated he is not against the facility, but it should be fenced and the entrance should be from another side.

Michael Switzer, 5840 Old Dixie Highway, stated he has lived there since 1993, and he can verify and agree with Mr. Leslie about the issues they've had in the past with the different entities in the facility. It took a great deal of effort between the community to get it squared away. He said they are a small community and they deserve the same consideration for our properties. The entrance to Otter Creek Lane now is virtually impossible to get into from U.S. 1; there's nothing to slow people down coming across the top of the U.S. 1 southbound. Now, they are adding 25 employees, which is not going to change the neighborhood for the better. There was supposed to be a community meeting, but it wasn't to this detail. He said he doesn't think anyone has a problem with people getting private help with addiction, but it's a different story when people are pulled out of jails. He said the main issue for the community is the increased traffic and the security at the facility, and he thinks the entrance needs to be on U.S. 1.

Mr. Barber stated the applicant is asking to amend the binding development plan, and if they don't amend the binding development plan and leave everything in position, then they can do whatever they want. He asked if they have to amend the binding development plan in order to create the new facility. Mr. Minneboo replied that is correct.

Doug Kemp, 2645 Pine Cone Drive, stated southbound on U.S. 1 to turn into Otter Creek Lane is a 5 degree turn and Otter Creek is only 12 feet wide. He stated Old Dixie Highway is a 20-foot wide section.

Sage Morello, 2725 Otter Creek Lane, stated he owns the property behind the marina. He said his property was a wooded area and he has found leftovers from the previous entities at the facility, such as alcohol containers, clothing, food, and other things. He stated the neighborhood has a low traffic volume now, so it's a great place to loiter, and that's what he's worried about happening. He noted there is access to the railroad tracks, and sometimes people will try to walk through the tracks to get to Wickham Road. He agrees with everyone about the turn from southbound U.S. 1, as it's a huge problem, but a deceleration lane would be a solution. He stated if Florida is No. 2 in the nation for drug overdosing, maybe a little spot in a little residential area is not the place to choose to treat this immense problem. If between 60% and 80% of the people drop back into addiction, then they are bringing a bunch of people to the neighborhood who are going to be addicted again and who will know about the neighborhood. He said if they cannot access from U.S. 1, they may not have a viable piece of property.

Linda Blumauer, stated she and her husband recently purchased 5920 and 5130 Old Dixie Highway, which is across the street from the entrance to 5955 where they intend to have a facility. While she applauds and commends Journeypure, she agrees with Mr. Morello that a residential neighborhood is not the place for that large of a facility. Otter Creek Lane cannot handle the volume that they are talking about bringing in. She said she doesn't feel safe with an institution like that coming in, and she agrees with the other speakers on everything that was said.

Costas Manouselis, 2750 Otter Creek Lane, stated his daughter is getting ready to build a house next door to him, but she is afraid for her safety, and if this facility opens she might have to pull her contract. He said it's a safety issue, and he worries about the neighborhood.

Brian Bussen, 76405 Genoa Trail, stated the intersection of Pineda Causeway and U.S. 1 is the central part of the county. Circles of Care is up to their eaves trying to take care of the needs in the county. If there is somebody who wants to get treatment for an addiction, even if they have insurance, there's nowhere to go in Brevard County because every place is full. He said this is a great opportunity for Brevard County to have a facility like this at a major intersection. He stated that from what he's heard, the facility is being run by wounded healers, the best that are out there, to help other people to succeed. He understands the neighborhood is a small and quaint neighborhood, but he thinks this is an opportunity for the County that they can't give away. Historically, the property has been used for volunteer efforts to help people, and we now have a professional group that's going to come in and do it right, and those people who are paying to get in are not going to sneak out into the neighborhood because they are paying.

Irma Jolle stated she doesn't know anything about Resurrection Ranch, but she's worked with Lila Buescher for years, who has taken the time to clean up the neighborhood, and she knows Lila had a meeting with the neighbors. She said Journeypure is moving forward to somewhere where they can make a difference, and this is where they want to start making a difference.

Dr. Ronsisvalle stated he understands the concerns of the neighbors and he appreciates everybody coming out and sharing their concerns.

Henry Minneboo stated when there are conflicts between neighbors and future development, one of the first things the board asks is if the applicant has met with the neighbors to discuss the issues. He said 99% of the confusion that comes before the board is because no one was informed. He asked if there is a possibility to set up some kind of formal meeting.

Dr. Ronsisvalle stated they had a meeting with the neighbors, and a lot of them were there, but they are more than happy to meet with anybody who is interested.

Mr. Minneboo asked if the request could be tabled for a month. Dr. Ronsisvalle stated most of the issues are safety, and they can alleviate those concerns by talking to the neighbors about how this is different than what they've experienced with Resurrection Ranch, in that once residents come to Journeypure, they don't leave until they go home. He said he wanted to make sure that everyone understands the binding development plan doesn't preclude them from using the property; someone is going to come in and develop this property; and it's not necessarily a bad thing that Journeypure is going to be there, because they're going to beautify it, and it will increase property values. He

mentioned the amount of traffic coming and going is going to be negligible, and the 15 cars that come to the facility are not going to make a difference.

Ron McLellan stated a lot of the problem is that the neighbors don't fully understand, but something to remember is that the people coming to the facility have to pay to be there.

Dr. Ronsisvalle stated Circles of Care is a community mental health organization that contracts with the State to accept Baker-Acts, indigent populations, and court-ordered treatment, but Journeypure is not going to be one of those because what they do best is work with people who are insured and will have the money to come.

Mr. McLellan asked if Journeypure is similar to Sunrise in Orlando. Dr. Ronsisvalle stated Sunrise is a PPO insurance carrier, so they take a lot of people who have PPO insurance; Journeypure is a lot like that, but they will be in-network with insurance companies. Mr. McLellan asked if people who are there for five days will be able to walk through the neighborhood. Dr. Ronsisvalle replied no, and he understands what was there before. He stated once someone comes to the facility, they are admitted to the facility; they cannot leave and walk outside the gate, hang around, smoke a cigarette, then come back. Once admitted, they are under medical care and will follow through with treatment. He said they cannot ethically let someone walk out the doors without getting transportation.

Bruce Moia asked how many people were at the neighborhood meeting, how were they notified of the meeting, and if it was the same people who received a notice from Planning and Development. Dr. Ronsisvalle stated Lila Buescher has relationships with the community, so when they started talking about purchasing the property she assembled the neighbors together, and there were about ten people there. Mr. Moia stated what typically happens is the County notifies property owners within a certain range, and the applicants take that same range and send a separate notice for a neighborhood meeting, and so the same people who get notified of this meeting also get notified of the neighborhood meeting. Dr. Ronsisvalle stated that is not what happened, and they had the meeting in April or May.

Erin Sterk asked the applicant to clarify if the sign was posted on the property. Dr. Ronsisvalle stated the sign was posted, but not long ago someone from Journeypure retrieved it because he had thought the meeting had already taken place, but it has been up.

Mr. Moia stated there are minimum requirements for how long the sign has to be posted, and asked when the sign was removed. Kenny Lee stated it has been weeks since he picked it up.

George Ritchie stated the requirements are that the sign has to be posted within 15 to 25 days of the Planning and Zoning Board meeting, and must remain posted on the property through the date of the County Commission meeting. If the sign is not posted when specified, the request shall be tabled.

Motion by Bruce Moia, seconded by Ron McLellan, to table the request with the condition that they meet again with the neighbors within at least 500 feet of the subject property.

Ben Glover asked how many residents purchased their homes when the recovery facility was there, and stated they purchased their property knowing what was there.

Ms. Knox asked if he was referring to the illegally-run recovery house that was shut down by the board. She said it took the neighbors a year to get a binding development plan in place. She stated if they were worried about the neighbors they would have already had a meeting with them, so they have already shown that they are not worried about the impact their corporation is going to have on the neighborhood.

Brian Hodgers asked about the difference between the 47 residents that are there currently, maximum, versus the 47 proposed, and stated there's no change there, but they are proposing a 400% increase in square footage. He asked for clarification as to why they need that big of an increase in square footage. Mr. Lee replied only a portion of the buildings there are being used, and it's about 1/3 of the total capacity, so the 47 number of total beds would still apply as it does now, but it's not all being used. Mr. Hodgers asked how many buildings are currently on the property. Mr. Lee replied eight buildings. Mr. Hodgers asked if they're not going to be increasing the square footage, why are they proposing an increase in the binding development plan. He said if they don't propose that, and they've already agreed that they're going to request these provisions to be removed, they've got everything they need already. Mr. Lee stated they will correct that.

Mr. Hodgers said if they correct the square footage they don't need to make any changes other than to post the proper signage and come back next month.

Henry Minneboo called for a vote on the motion to table the request to the October 8, 2018, Planning and Zoning meeting to allow the applicant time to properly notice the property, and direct the applicant to meet with surrounding property owners within 500 feet of the subject property. The motion passed unanimously.

#### Local Planning Agency Agenda

##### **1. Code Revision to Chapter 62, Article VI, Zoning Regulations – TU-1 (General Tourist Commercial), Hotel Density.**

Rebecca Ragain, Assistant Director, Planning and Development, stated on August 14, 2018, the Board of County Commissioners granted legislative intent and directed staff to revise Chapter 62, General Tourist Commercial. The proposed revisions will eliminate the maximum density requirements for hotel rooms in the TU-1 zoning classification for properties adjacent to a collector or arterial road, where located in a commercial node.

Scott Knox, Widerman Malek Law Firm, 1900 W. New Haven Avenue, Melbourne, stated the ordinance originated with his client, who is trying to build a hotel in the Micco area, and he's discovered there's some impediments to doing that. He stated he wanted to build a 100-unit hotel, but is limited to 30 units per acre in that area. He said this was an initial attempt that he made at a County Commission meeting to get the ordinance changed. He explained that the District 3 Commission office made some revisions to it, and that is what is before the board today. He stated it has come to everyone's attention that his client is applying for the BU-1 zoning classification, which also has a restriction hidden in the Code for 30 units per acre, so it will probably take two amendments to make this work. This one will help him build a hotel of 100 units, and the reason that is significant is because the County Commission eliminated floor area requirements for hotel rooms to

let the market dictate the room size of any particular hotel. By putting a 30-unit per acre restriction on property density, it artificially limits what the market may otherwise want.

Henry Minneboo asked why his client would want a 100-unit hotel in Micco, and will he not agree to 90 units. Mr. Knox replied it's a 30-unit limit and he can't make it with 30, so he wants 100 units because he has a particular hotel in mind.

Christine Valliere explained there are two places in the Code with the 30-unit per acre density limitation. One of those is in the TU-1 classification, and the other is in the Permitted with Conditions sections for tourist related hotel and lodgings. That comes into play with BU-1 and BU-2 because that use is a Permitted with Conditions Use in those zoning classifications. There may have been a disconnect in the discussion with the Board as far as which zoning classifications were part of their direction and needed to be amended. What the board has today is a change only to the TU-1 zoning classification, which doesn't touch the 30-unit per acre density limitation for BU-1 and BU-2.

Mr. Knox stated the BU-1 zoning classification points to the TU-1 criteria, and the TU-1 criteria has a 30-unit per acre limitation on rooms, and that is the one his client wanted to try to change. There is also a one-quarter mile distance limitation on major intersections with arterial roads, which they were trying to get changed because Micco doesn't have too many arterial roads going east and west. He said they tried to get those changed initially, and they thought if they changed TU-1 and got rid of the 30-unit per acre it would get rid of the whole problem. Unfortunately, there's another provision deep in the code that says 30 units per acre for hotels and motels are permitted with conditions.

Erin Sterk distributed a map to the board, and stated it was recommended by the BCAC that staff call attention to the parcels that currently have TU-1 zoning in the County. They're not all consistent with the comp plan, so they couldn't come in and build an unlimited density hotel. There are only 30 parcels with TU-1; and obviously, there is significantly more BU-1.

Mr. Knox stated there are also restrictions on what can be put there if you look at the ordinance. He said he had it limited to Micco, but the Commissioners wanted to go countywide.

Bruce Moia stated the BCAC had some pretty vibrant discussion on this, because he didn't think that TU-1 and TU-2 should have density restrictions because he thought that TU-1 and TU-2 was generally in the area of an interchange, and it doesn't make sense to put density restrictions on hotels around interchanges. He said the BCAC asked staff to put the map together, which shows TU-1, and he assumes with most of these there's some TU-2 near an interchange. He stated even though it might be a good thing for density, it would only apply to certain parcels that were at interchanges that backed up to AU or GU, because they're either Government land or owned by an entity such as the zoo, where they couldn't enjoy the additional density because they don't abut commercial zoning. He said the BCAC talked about allowing the removal of density restrictions as long as it didn't proliferate through isolated areas of the County. He said he didn't want to adopt an ordinance that helps somebody only to hurt somebody else unintentionally. He noted that personally, he thinks TU-1 and TU-2 should not have a density restriction when it comes to hotels, and asked if BU-1 should enjoy that. He stated he thinks there should maybe be some limitations on that, specifically some criteria that talks about distance from the interchange. He said there's quite a few TU-1 and TU-2 zonings that back up to AU and GU, so to give somebody a density that might abut a BU-1 but is located in Micco, as opposed to the interchange at Wickham and I-95, doesn't make a lot of sense. He said Mr.

Knox is not seeking to change the zoning to TU-1, he's just hoping to enjoy the TU-1 benefits in the BU-1 zoning.

Mr. Knox stated it's not because he want to enjoy them, it's because the Code requires him to.

Mr. Moia said the discussion is if the board should limit density of hotels in TU-1, TU-2, or both.

Mr. Knox stated he agrees that they should be limited, but the Board actually did that by eliminating the floor area requirements for hotel rooms. TU-1 allows a hotel, but there's TU-1 criteria that has to be followed, one of which was the limitation of being one-quarter mile from the intersection of a collector road and arterial, which his client didn't meet by less than a half-mile, and that's when they wanted to change, because he's across the street from a marina with a big median cut in front of the property. It's almost a commercial node as it is, because it's surrounded by commercial property. The property across the street is a commercial marina that gets business from Orlando and South Florida.

Mr. Moia stated he didn't have a problem with limiting the density, he just had a problem with the additional criteria in order to get it, and it might be more prudent to lift the density restriction in TU-1 and TU-2 and then have some kind of conditional use for hotels in BU-1, that if you want unlimited density you have to have a conditional use. He said he just doesn't like the restrictions in the new ordinance.

Ms. Valliere stated the board has before it the change eliminating the density in the TU-1 zoning classification, and it can certainly take action and recommendation on that; the board can also make a recommendation on a proposal to remove that density limitation for BU-1, and any other recommendation related to this topic that might be appropriate.

Motion by Bruce Moia to recommend that the only criteria under items 1 through 3, under Subsection F, be replaced with, "within a quarter-mile of an interchange between a limited access highway, interchange, main interchanges in the County." He said he would like to add that same language to TU-2 zoning. He further stated the board could add language in the BU-1 zoning to say that maximum density restrictions would need a conditional use.

Ms. Sterk advised when talking about the layering of the Comp Plan with the zoning classifications there's criteria, similar to what Mr. Moia is recommending, in Community Commercial, so anybody who wants to use TU-1 to build a hotel has to have Community Commercial. Many of the parcels on the map have TU-1 and don't have Community Commercial, so they would have to apply for a comp plan amendment to be able to utilize these rights for the zoning they currently have. The locational criteria for Community Commercial includes those kinds of proximity of interchange-type of conditions. Those are the conditions that this property, and many others, can't meet criteria. The argument at the south end of Brevard is there are not intersections there for several miles, so there is nobody who can meet the Community Commercial criteria.

Mr. Moia asked if it would it be just as easy to say the only restriction is they have to have Community Commercial land use. Ms. Sterk replied that zoning classification is only consistent with Community Commercial, if someone is seeking that zoning today.

Mr. Moia stated staff is saying that they should have it if they want to do that use, but they don't all have it, so as long as they can get it, which goes through a public hearing process, then they could take advantage of having no maximum density. He said he is fine with that.

Henry Minneboo stated Mr. Moia's motion failed for a second.

Motion by Bruce Moia, seconded by Ron McLellan, to strike 1 through 3 under Subsection F and create one condition that says the subject property must have Community Commercial land use. The motion passed unanimously.

Motion by Bruce Moia, seconded by Andy Barber, to make the previous motion apply to TU-2 zoning.

Ms. Sterk stated the board's recommendation can be conveyed to the Board, but staff would have to go back for legislative intent to make those changes.

The motion passed unanimously.

## **2. An Ordinance Replacing the 150-day Conventional Septic Moratorium**

[Note: The staff from Natural Resources Management referred to a PowerPoint presentation, which is attached to these minutes.]

Anthony Gubler, Natural Resources Management, stated staff met with the Florida Home Builders Association and the septic industry in August. Next, they met with the building officials of the cities and the County at the end of August. On September 12, 2018, staff met with the BCAC (Building and Construction Advisory Committee), who made two motions, both of which failed with tie votes. The first motion was to approve the ordinance removing some exemptions, and to apply the ordinance countywide; and the second motion as to approve the ordinance as presented. He said one of the things questioned during the monthly citizens oversight committee meetings is if the County is making progress by spending so much money and putting in new systems. He stated a little dent will have been made in 10 years, so when the money runs out the County will not be making any more compromises for all the systems being installed. He said in May 2018, the County Commission asked if they adopted a moratorium would the County stop paying for new septic systems, and the answer is no, because the County can't stop the ability to develop land, but there could be a compromise made for people who need the alternative treatment systems, something that removes nitrogen from the effluent before it's released to the groundwater. The Board approved a 150-day moratorium for all new septic systems within 50 meters of the Indian River Lagoon system. The moratorium only affects new modifications, and the modification is that if you expand a house and you trip DOH's (Department of Health) allocation of how much wastewater can go inside that septic system, you would have to increase the tank and increase the drainfields. One of the options available is the NSF 245 approved aerobic treatment units, which use air and re-circulation through anoxic aerobic chambers to process the nitrates and de-naturify them out. He stated the technology adds about \$10,000 to \$15,000 to the cost, so when an average conventional septic system would cost from \$5,000 to \$8,000, the new ones would be \$10,000 to \$20,000. Another option that has just been approved by the State is the in-ground nitrogen-reducing bio-filters, which is a standard septic system, but with a meshed-in producing media below the drainfield. The reason this was approved was because of the requirements in place for the springsheds, so in Central Florida, the springsheds

that have been shown to be impacted by nitrogen by septic systems have to comply with 65% nitrogen removal through their septic systems. He said this option is about \$4,000 more, and the increased cost is due to having to dig out the entirety of the drainfield area and add in this layer, and this system does not have the same lifespan of a typical drainfield.

Henry Minneboo asked the point of most significance from the Home Builders and the others. Virginia Barker replied the point of most significance was time to get used to the scale of this; and at the time staff met with the Home Builders, they thought the scale might be significantly larger than what is being presenting to the board today. Mr. Minneboo asked if somebody who was 300 meters from the Lagoon wanted to participate in these programs, would they be a candidate. Ms. Barker replied the systems proposed in this regulation are systems that are already on the books with the Department of Health, so anybody could apply for permits to put these systems in, but it wouldn't be mandatory outside of the overlay area. Mr. Minneboo asked what would happen if somebody wanted to comply but wanted the County to pay for the tank. Ms. Barker stated the \$68 million that is budgeted out of the half-cent sales tax is for specific parcels identified as posing the greatest risk of pollution to the Lagoon, and unless the County is going to spend more of the half-cent sales tax on additional parcels, they would not be eligible for funding.

Ms. Barker stated there were concerns from homeowners and realtors that people have purchased homes with some of these advanced systems and didn't know they had an advanced system, and they didn't know they had special maintenance requirements with that advanced system, and they would have liked to have known that at the time of purchase, rather than when something went wrong, or when they got the notice from the Department of Health that they hadn't upped their operating and maintenance permit. There is language in the ordinance that says if someone installs one of these systems because they are required to, they also have to record that in the public records so that future owners will know what they are buying. In the process of going through the cCode to figure out where to put these new requirements, the search on Municode comes up with many places in the, so staff is going to ask for legislative intent to go through the code, a lot of which is duplicative and out of date from back when the State had delegated septic permitting to the County. That tri-party agreement was dissolved many years ago and the code was never cleaned up.

Mr. Minneboo stated the unique thing is that the County is creating the codes, but yet the State makes the determination and provide the permit to install a septic tank. Ms. Barker stated this requires some good coordination with the State, and as people come in for a permit application the State has agreed to notify them. Right now, with people who are in the moratorium overlay, the State is telling them they are not going to get a building permit unless they show they have permitted the right kind of septic system. While the State is willing to permit the conventional systems, they are warning people that it is not going to be acceptable from the County. Mr. Minneboo asked if the State can delegate that authority back to the County. Ms. Barker replied staff will research that.

Ron McLellan's absence was noted.

Ms. Barker stated when staff brought forward the moratorium language there were a number of requests from the community for exemptions for different circumstances, and there were several exemptions that were included in the moratorium. She pointed out there is one more exemption staff is adding to the ordinance, and that is that properties that are within project areas that are identified in the Save Our Indian River Lagoon plan, properties that are one of those 3,734 parcels that are going

to get connected to sewer anyway, those would be exempt from having to put in one of these more expensive higher performance septic systems, because hopefully in a couple of years they will be hooked up to sewer instead. If homeowners want to take advantage of that exemption, they have to sign a contract with the County that says they acknowledge that as soon as the sewer is available they have to hook up within 180 days. The moratorium included all of the beaches, all of Merritt Island, and then a 50 meter buffer from the water; and the proposed ordinance is all of the beaches, all of Merritt Island, a 40 meter buffer within the Melbourne-Tillman Water Control District, and a 60 meter buffer in the rest of the County. The Home Builders Association wanted time to respond to any change in the overlay. Staff thought they already had since May to adjust to most of this overlay, and the change from 50 to 60 meters in part of the County did not merit a delay in the timing, so the effective date has not changed in what is before the board today.

Mr. Minneboo asked if there is a chemical that can be flushed in toilets that can reduce the nutrients significantly. Ms. Barker replied there are chemicals that will bind with phosphorus, but nitrogen is very difficult to treat chemically. The only chemicals she is aware of that will address nitrogen are fairly caustic, so the nitrogen treatment that happens in wastewater treatment plants is based on a biological system using microbes. There are additions that you can flush, such as bugs in a bag that you can buy to flush down your toilet to enhance your septic system. Natural Resources Management has a pilot project to use some of those products and to test them in up to 100 homes to see how much of a difference that makes, but that is not the direction that the State is going in the springsheds, and so the way staff wrote the ordinance is consistent with all of the State's science on what sort of treatment technologies are out there that are unknown to perform at this level. She stated staff is dealing with it in muck dredging projects as well, trying to treat that muck-returned water before it discharges back to the Lagoon; the phosphorous side is fairly easy to block, but the nitrogen side is extremely difficult. The ordinance would be countywide, so it would apply within municipalities unless they specifically adopt an ordinance to opt out.

Andy Barber stated staff's number of 1% for the County issues going into one inch of the Lagoon, he finds that hard to believe because when there is a spill it's millions of gallons, and some of it is untreated or partially treated, and he knows historically there were package plants that were dumping all the time, so much of the damage occurred because of the institutional damage.

Ms. Barker stated the 1% takes into account the 22 million-gallon spill last year following Hurricane Irma. There was a sampling done by the Utilities Department on what was the concentration of that spill and staff applied that concentration by 80 times the millions of gallons spilled by the County and the cities combined. Staff looked at a seven-year history of overflows and that's the 1%. She said there were other discharges and leaks that staff is not aware of.

Mr. Barber asked if cities required to tell Natural Resources when they have a discharge. Ms. Barker replied they are required to report it to the State, and staff gets the files from the State.

Mr. Barber asked, regarding fertilizers, if there is any way at the point of sale to stop the sale of nitrogen. Ms. Barker replied based on fertilizer sales in Brevard County, it is responsible for about 5% of the problem, so slow-release makes a huge difference.

Bruce Moia stated even though there are fewer septic tanks closer to the water, you have less impact, but because there are so many systems farther away, the cumulative impact is greater. Ms.

Barker stated for Melbourne-Tillman, by the time you get to 30 or 40 meters, you've captured 90-plus percent of the load. Mr. Moia stated that's for the individual, and asked, because there might be so many septic tanks outside of that distance, is the cumulative impact still at 100%. Ms. Barker replied it is cumulative load from the septic systems. By going 40 meters in Melbourne-Tillman, you are capturing only 95% of the load in Melbourne-Tillman, and that's a combination of many factors, but the two most important ones are: 1.) there's 300 miles of interconnected canals in Melbourne-Tillman, so every single lot is close to a waterway; 2.) the soils don't conduct nutrients very far, so once you get beyond 40 meters other systems aren't contributing much into the canal system.

Mr. Moia asked about areas where there is a high density of systems, like Port St. John, and if that cumulative impact still a big source of pollution to the river. Ms. Barker stated she could go into the data and look at that region, but there is a divide there between what drains to the Lagoon versus what drains to the St. Johns River, but then there is also a higher ridge and that elevation gradient also carries, so there are a lot of factors to look at.

Mr. Barber asked if staff is going to contact people they want to assist, and if they know who those people are. Ms. Barker replied yes, staff is going to use this more detailed study and verify those before sending out postcards and distributing door hangers. Mr. Barber asked if there is going to be any requirement for the homeowners to pay, or if it is going to be covered by the tax. Ms. Barker replied there is \$16,000 available per property, and anything more than that the homeowner would have to cover.

Mr. Barber asked as one of the first projects, is there going to be a sewer system run down Newfound Harbor Drive, and is there going to be a cost to those homeowners. Ms. Barker replied the \$16,000 is if they are upgrading their septic systems to an advanced system; if they are hooking up to sewer staff currently has a budget of \$20,000 each. Staff is working on updating the Lagoon plan based on the cost of sewer that was received from consultants who are designing the unincorporated area sewer expansion. Mr. Barber asked if the \$20,000 is for the entire system and not just for the connection from the house. Ms. Barker stated that is correct, sewer has to get to the community.

Mr. Barber stated homeowners would have to handle the extra, which could be tens of thousands of dollars. Ms. Barker said the cost is in the range of \$25,000 to \$28,000 for the latest cost estimates, and also reaching out to the other communities who are doing septic-to-sewer projects. She stated staff is trying to update the plan to include a larger dollar amount to be able to help more.

Mr. Minneboo asked if staff has determined how much impact a manatee has on the grass. Ms. Barker replied that the manatee, while it is converting nutrients from one form to another, it is eating nutrients that are already in the system, and it's not adding any additional nutrients to the system.

Ben Glover asked, of those properties that would be getting hooked up on the sewer line, if they didn't want to come up with the additional \$8,000, would they continue to have the same septic system they have. Ms. Barker explained that everything in the Lagoon plan is voluntary, and the way staff worded this exemption is that if they want to exempt out from having to upgrade their system at the time of development, they would have to sign a contract that says when sewer comes, they will hook up within 180 days. If they claim the exemption, the hook up would no longer be voluntary.

Mr. Barber stated he hopes sewer isn't run down Newfound Harbor and then hook up is voluntary. Ms. Barker noted the Board has not done anything to make anything other than voluntary at this time.

Mr. Moia stated the BCAC talked about if someone could connect, they have to connect. Ms. Barker said if they are in this overlay, from this new ordinance, and they choose to claim that exemption, then they would have to hook up. She stated she thought Mr. Barber's question was separate from this overlay, just parcels having sewer brought to them by the plan, if they have to hook up, and right now that is voluntary.

Christine Valliere stated it depends on the circumstance. If the County is putting in a gravity line, State law will require all property owners who are adjacent to that new gravity line to hook up within 165 days, but not for a force main. Ms. Barker pointed out the County is trying to do gravity everywhere it can design gravity.

Mr. Moia stated there is an issue that people might not be able to connect because there might not be capacity in Barefoot Bay to accept those people anyway. One of the discussions at BCAC was to not let them be exempt, because if we're going to do that then they either connect or put in the upgraded system.

Ms. Barker stated one of the recommendations from the Home Builders was for repairs to not be exempt, and the repairs would have to install the newer advanced system, but State law pre-empts the County from doing that at this time, but that's something staff can continue to work on with the State. In the springsheds, the Department of Environmental Protection directed the Department of Health to look at trying to modify their rules within the next four or five years.

Mr. Moia stated the County can't be more restrictive and say that if people are going to make an upgrade or repair they have to put in a new system, and they won't be given a permit for a repair. Ms. Valliere stated the problem is that the County doesn't issue the permits.

#### Public Comment

Jeff Joseph, with Joyal Homes, stated they build a lot of properties on the water, and the lots are generally maxed out with the houses, and asked if the 50-meter distance is to the drainfield, or if it is to the unobstructed area. Ms. Barker replied it is the drainfield. The system only consists of the tank and the drainfield. If Mr. Joseph can fit the system on the lot outside of the overlay, then he can still go with conventional, but if it has to overlap within the overlay area, then he would have to use a more advanced system.

Mr. Moia referred to an article he read in the newspaper that says it's no secret the Indian River is in a state of ecological collapse. He said everyone agrees the first step is to stabilize the river, and that's why dredging the muck is so important. The top priority should be the cause, and the number one cause is septic, so if the board is going to address the Indian River Lagoon it should really be addressing the cause and addressing it aggressively. He noted Tampa Bay has done some drastic measures and have seen some improvement. The dredging of the muck is going to fix decades of neglect, but if the number one cause of what is happening is septic, then something drastic needs to be done. He said normally, he's on the side of development, but he thinks the economy will be affected if the river is impacted negatively, so he thinks it's only prudent to address it strongly

because it's a benefit to everyone. He said he thinks the upgraded systems should be required countywide. By putting the distance requirement depending on the area of the county, it is confusing to homeowners, difficult for staff to implement, and costly.

Motion by Bruce Moia to approve the upgraded systems to be required countywide.

Mr. Minneboo asked if a homeowner in Port St. John would have to meet those requirements. Mr. Moia stated it makes it fair for everybody, and he thinks everyone had a part in this, so everyone should be part of the solution.

Kim, Holiday Builders, stated as a builder, she encounters issues with the increase in cost of construction, and she agrees that a septic system should be required if it's going to cause a problem where it's bleeding off into the Lagoon via canals. She asked if Mr. Moia is saying every single septic system that goes in anywhere, no matter where it is related to runoff, should be this highly expensive septic system. She said that will be very costly to first-time homebuyers. Mr. Minneboo stated yes, that is what Mr. Moia is saying.

Mr. Theodore stated he wants to support Bruce's motion because he likes the concept and simplicity. He said Ms. Barker answered his earlier question by saying the mainland accounts for such a small portion of the impact, and that would be his concern about making this countywide. He asked if the County were to do that, would the cost of that have to be included in the program, how far reaching is the program, and what would that do to the economics of the program as it stands. Ms. Barker replied, with the mainland county, there are areas that are beyond 60 meters, and you start capturing a lot more areas where the overlay would impact a lot of lots that aren't having a lot of loading impact on the system.

Mr. Theodore stated while the concept may be a good one, where you want to capture everything and get all of the nutrients out of the Lagoon, the cost of that might be significantly higher.

Ms. Barker stated the next step of the study staff has underway is to try to estimate the impact of an overlay on new development, and the best thing to do is look at existing septic systems and where they are and how much impact they have. The ordinance is about the location of the vacant land and where the next permit is going to come from. She said what staff really wants to know is the distribution of vacant land. If the County were to upgrade every single one of these existing systems at an average cost of \$16,000 each, it would be approximately \$1.2 billion, so by expanding this countywide she doesn't know how fast development is going to continue, and if it's going to continue at 800 permits per year. What staff is proposing might be affecting one-quarter of the lots, and making it countywide might quadruple the cost to future homeowners and homebuilders.

Mr. Barber stated he likes the extreme action, too, and he thinks something needs to be done fast, and the citizens need to pay the price; however, he thinks it should be one step at a time and he doesn't think a blanket over the whole county is appropriate.

Mr. Minneboo stated the problem with the blanket is the construction trailer that needs to go on a home site, and there are still homes that people are paying \$20,000 for up in Mims.

Mr. Moia stated he believes the high price is temporary, and the more the demand the quicker the price goes down. It doesn't seem fair to him that one guy falls within 40 meters and he has to put in the new system, but his five neighbors don't, and if you add up the cumulative impact of the five neighbors they are making more of an impact. Mr. Minneboo said he is looking at the guy in Hog Valley in Scottsmoor who is not even part of the problem. Mr. Moia said maybe it could be based on lot size, but that hasn't been discussed.

Henry Minneboo called for a vote on the motion as stated, and it died for a lack of a second.

Motion by Mark Wadsworth, seconded by Andy Barber, to approve the ordinance as written. The vote passed 7:1, with voting Moia nay.

Upon consensus of the board, the meeting adjourned at 5:40 p.m.



# **Brevard County Septic Moratorium & Ordinance**

**September 2018**

## Background

- Indian River Lagoon is an ecological, recreational and economic treasure
- Intense algae blooms since 2011
- Unusual mortalities in 2013
- Unprecedented fish kill in 2016
- Half cent sales tax approved in 2017
- Save Our Indian River Lagoon Project Plan allocates \$68 million to remove or retrofit 3734 of the worst OSTDS, in 10 years
- FL Department of Health permits ~800 new OSTDS/yr in Brevard



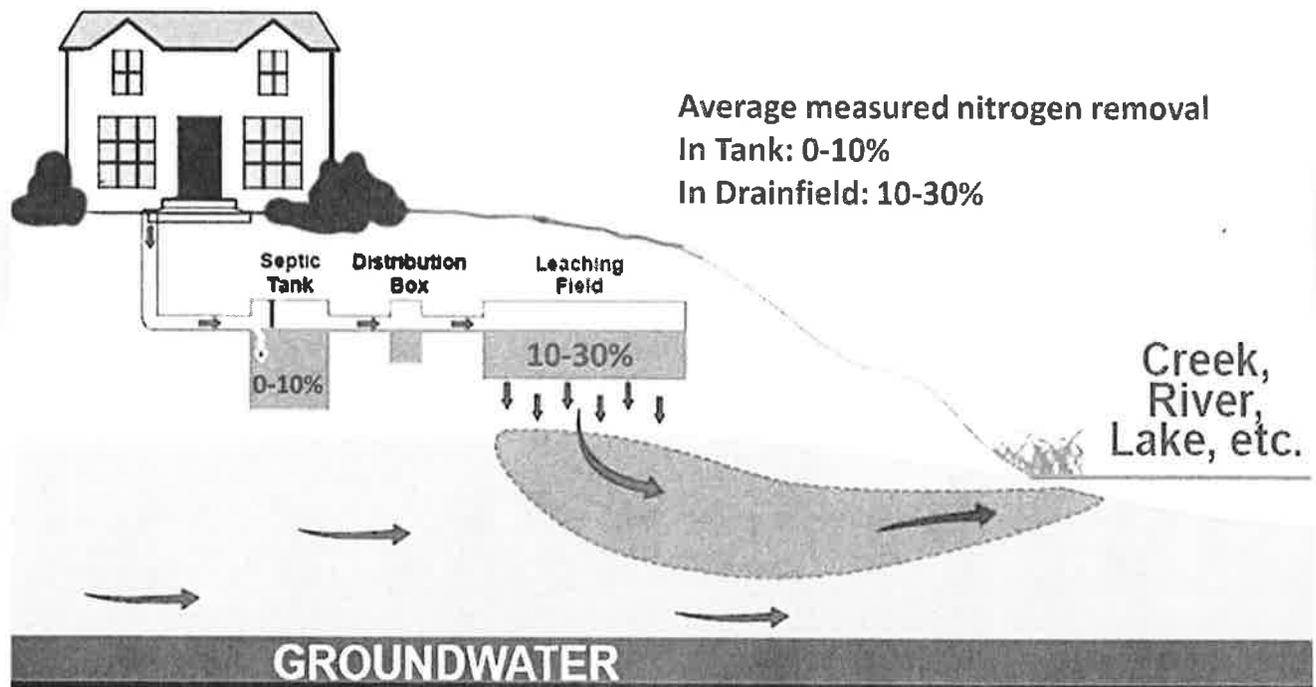
# Moratorium



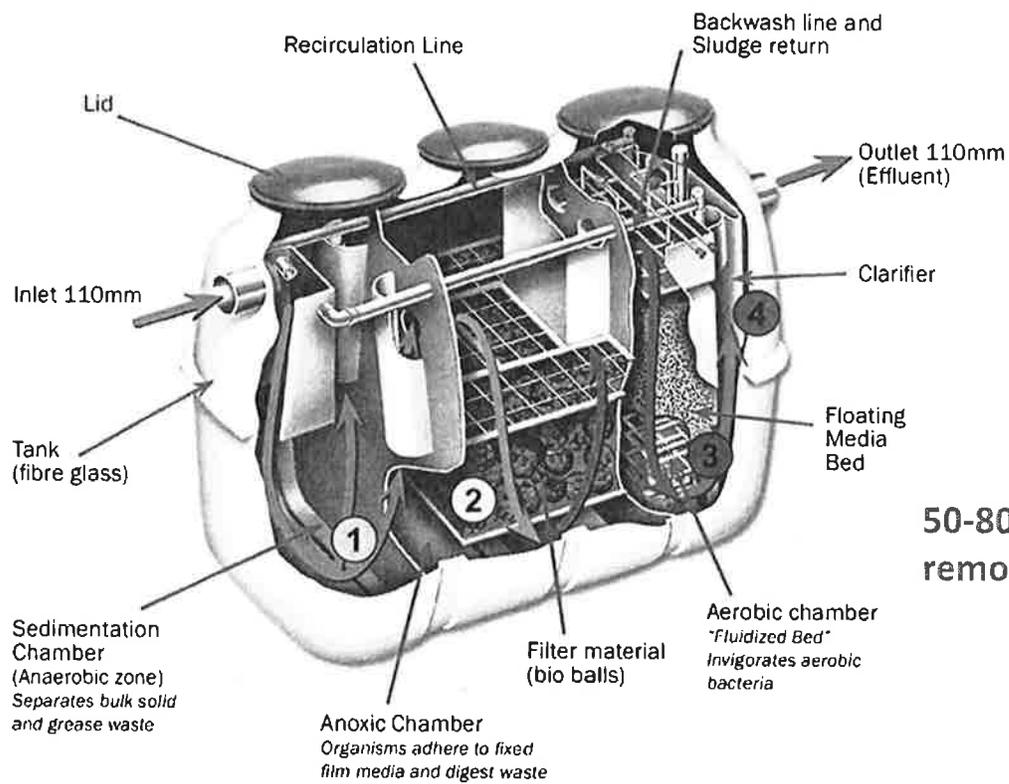
- 150 day septic moratorium adopted May 22<sup>nd</sup>
- Moratorium overlay area:
  - the barrier islands, including Merritt Island
  - within 50 meters of the IRL System
  - including all natural and manmade tributaries.
- New OSTDS in Overlay must reduce total nitrogen in effluent by at least 65%
- Based on information from South IRL studies

# Typical Septic System near Waterway

Nutrients from leach field seep into groundwater, nearby creeks, rivers, lakes, etc. if placed too close



# NSF 245 Approved Aerobic Treatment Unit

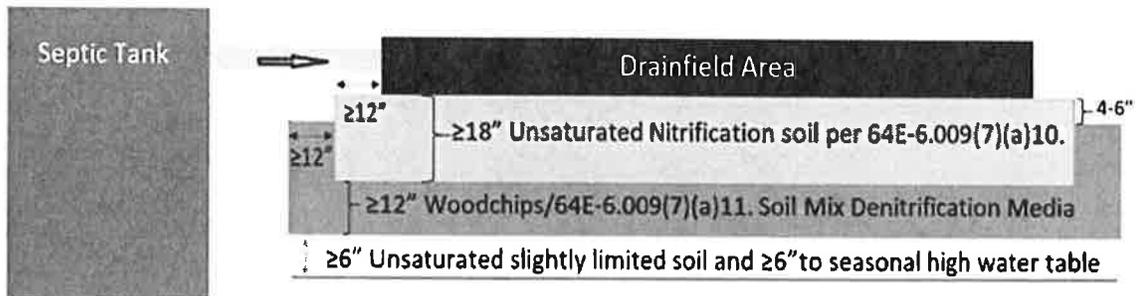


**50-80% nitrogen  
removal within tank**

# In-Ground Nitrogen-Reducing Biofilters

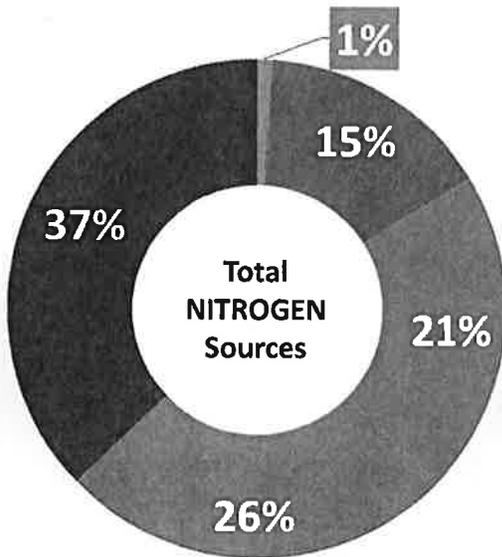


65% nitrogen removal  
within drainfield

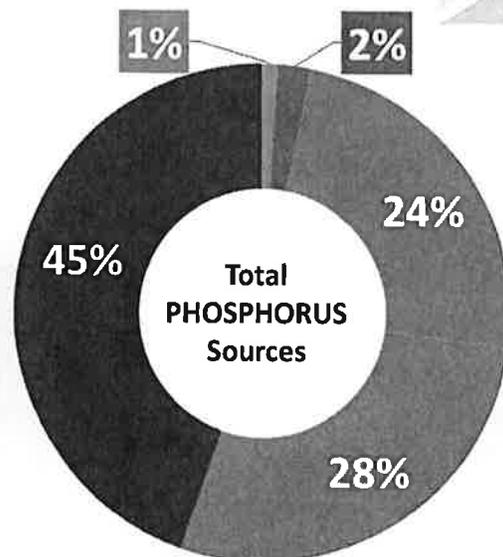




## Sources of Pollution in the IRL



- Point Sources
- Stormwater Runoff
- Muck Flux



- Atmospheric Deposition
- Groundwater Baseflow

# Septic System Impact

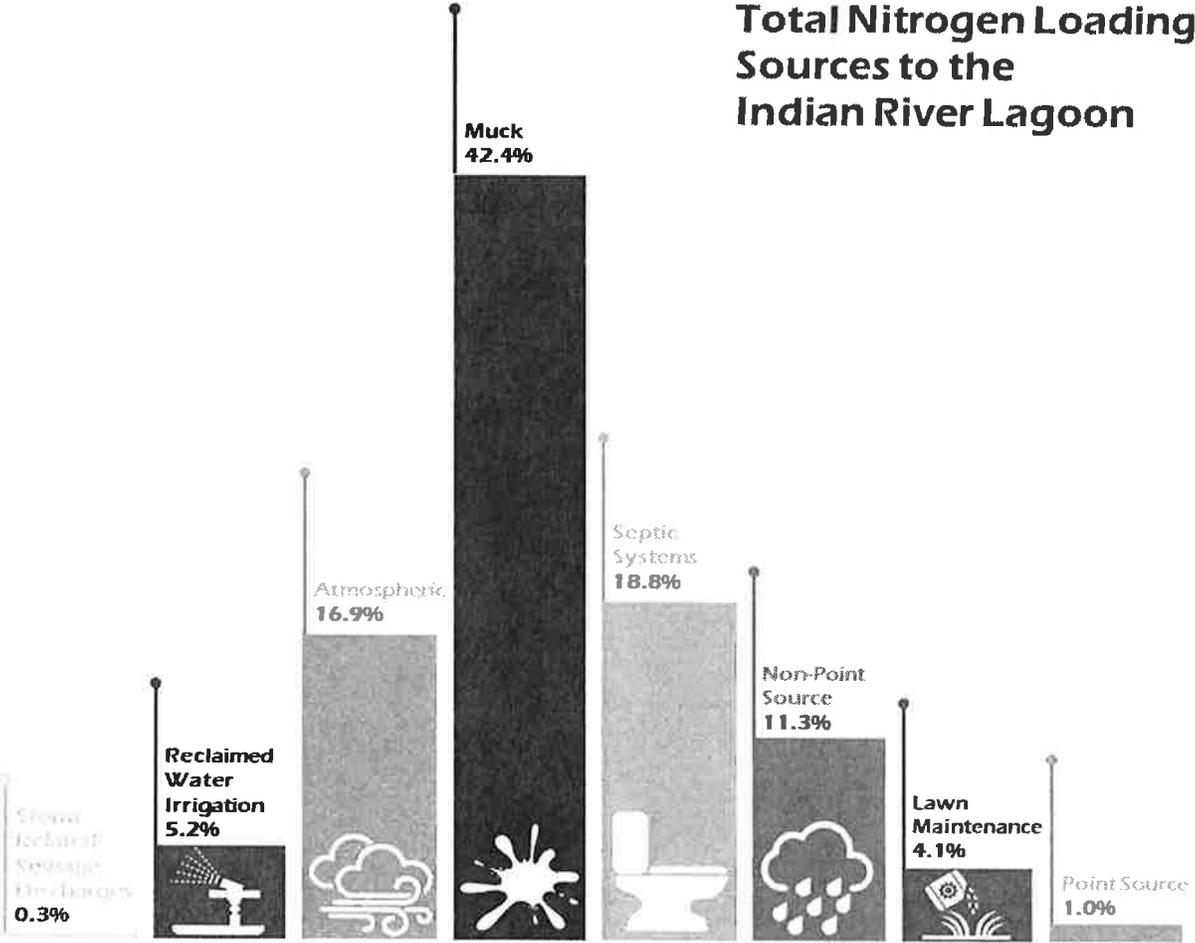


Septic System Distance from Surface Water	Number of Septic Systems	TN (lbs/yr/system)	TN (lbs/yr)	Total Cost	Cost/lb/yr of TN
Less than 55 yards	15,090	27.095	408,863	\$301,800,000	\$738
Between 55 and 219 yards	25,987	6.865	178,395	\$519,740,000	\$2,913
Greater than 219 yards	18,361	0.0005	10	\$367,220,000	\$37,624,010
<b>Total in IRL Basin</b>	<b>59,438</b>	<b>N/A</b>	<b>587,268</b>	<b>\$1,188,760,000</b>	<b>\$2,024 (average)</b>

Estimated TN load per year per system based on data from a St. Lucie study

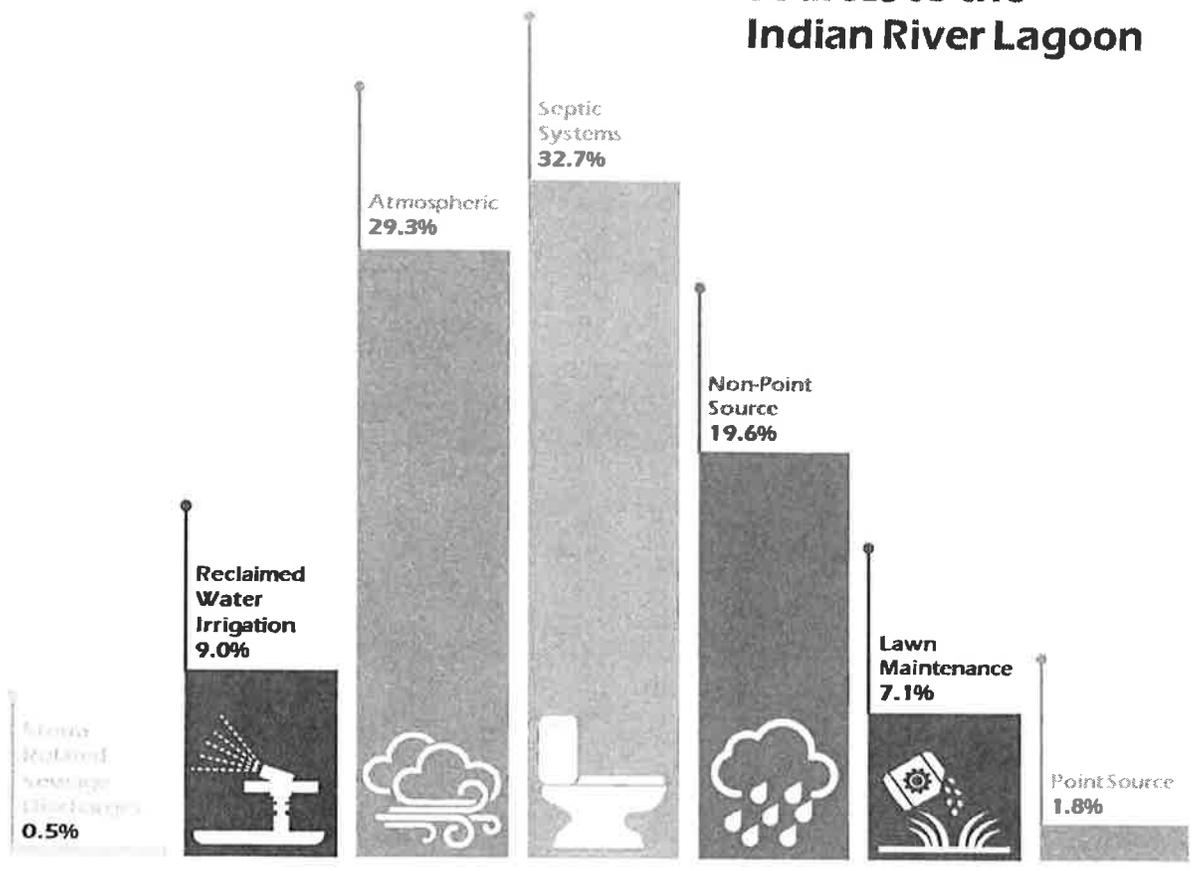
Estimated cost of \$20,000 each per County's Utility Services Department

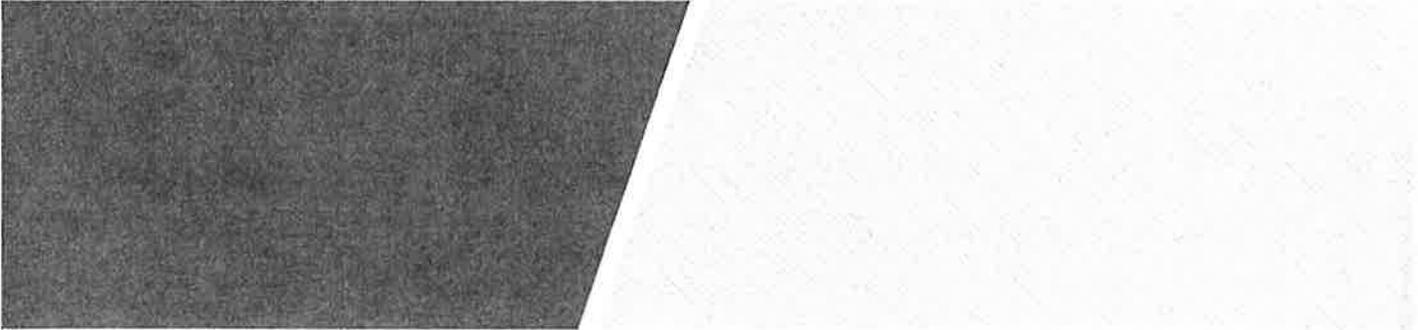
# Total Nitrogen Loading Sources to the Indian River Lagoon



Brevard County Natural Resources Management Department  
Save Our Indian River Lagoon Program 2018

# New Nitrogen Loading Sources to the Indian River Lagoon





# Understanding the Potential Nutrient Loading from Septic Tanks

September 11, 2018



\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

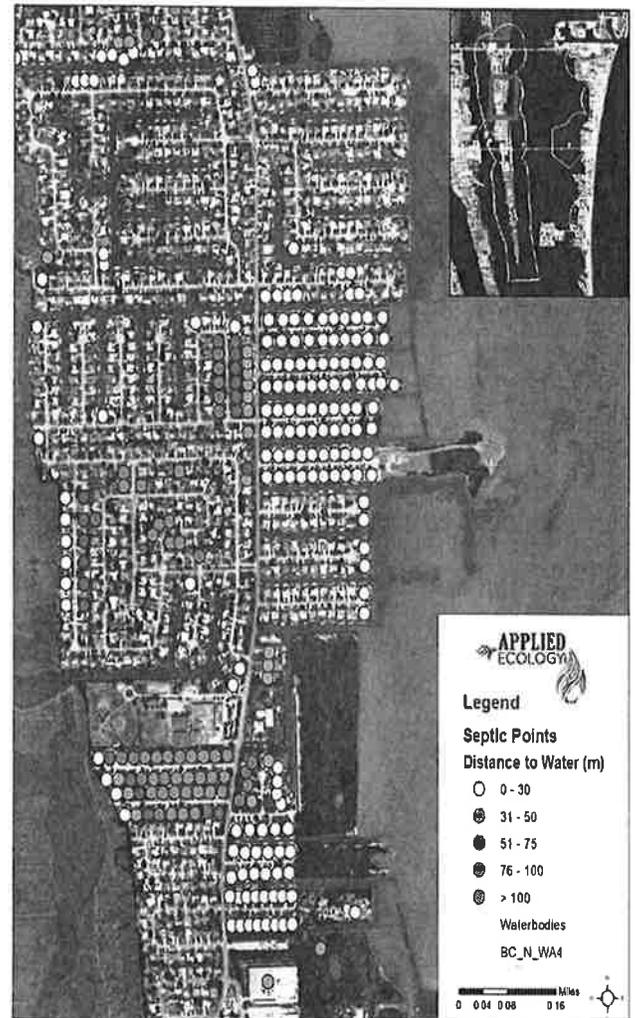
# OSTDS Pollution Potential Analysis



- Purpose – Limit Increased Pollution from OSTDS
- Details - Minimize Area of Impact and Cost
- Data - Spatial Analysis
- Methodology - Subdivide the County into 10m wide slivers and model the impact of OSTDS in each sliver using ArcNLET (Arc Nitrate Load Estimation Toolkit)

# How did we do this?

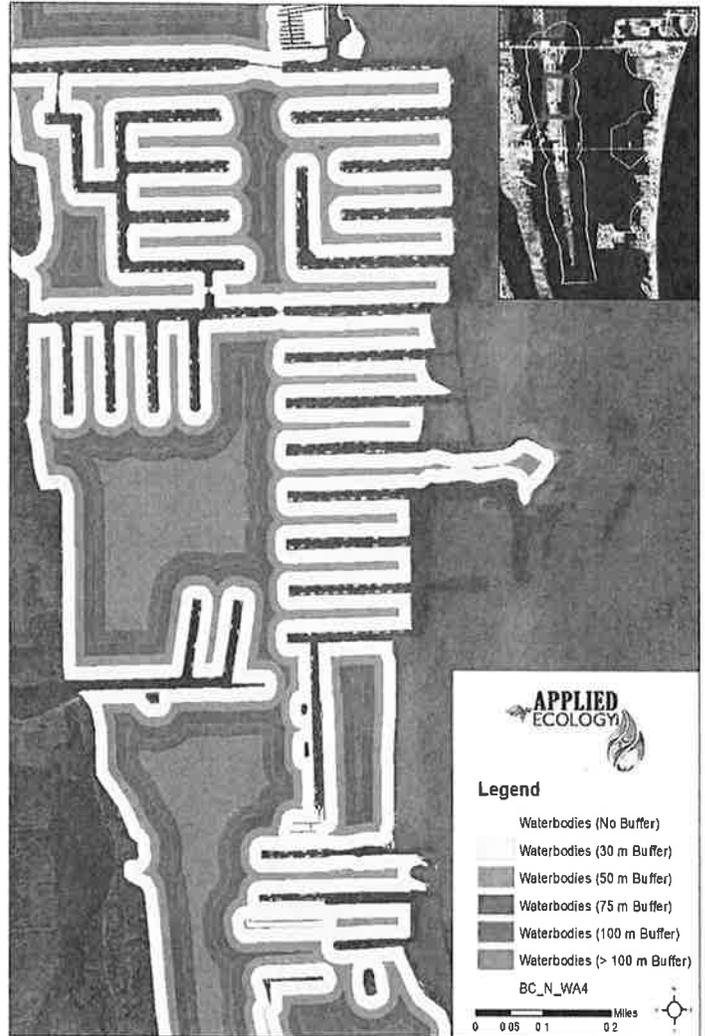
- Defined all County parcels on septic (with OSTDS)
- Delineated waterbodies
- Calculated distance of each OSTDS to water
- Assigned every OSTDS in the County to a distance class:
  - 10-m bins from 0-100-m
  - 25-m bins from 200-400-m
  - 100-m bins 400-1000m-m



# Mapped shoreline of natural and man-made tributaries

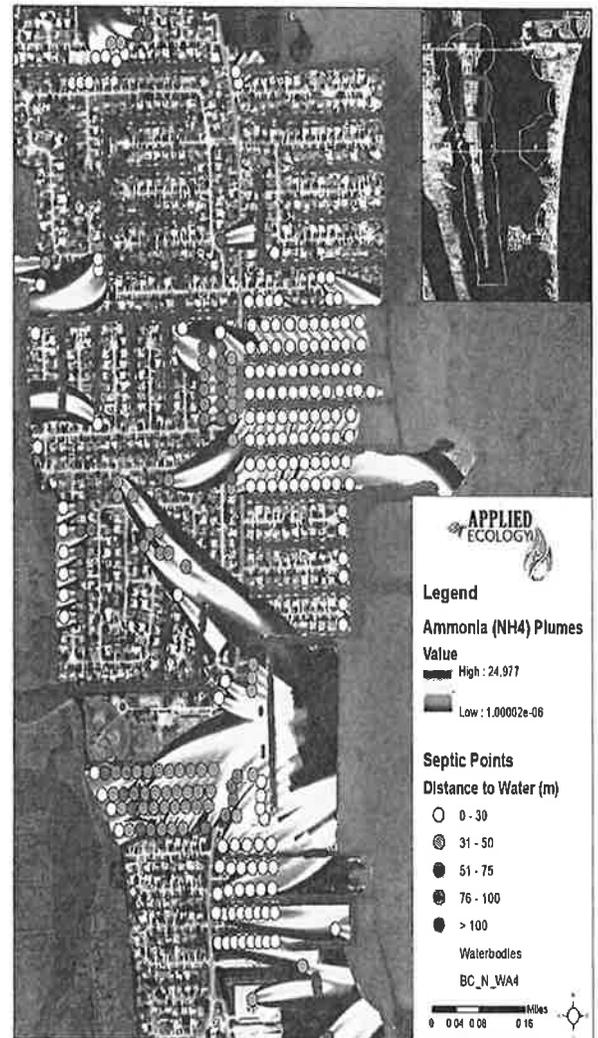


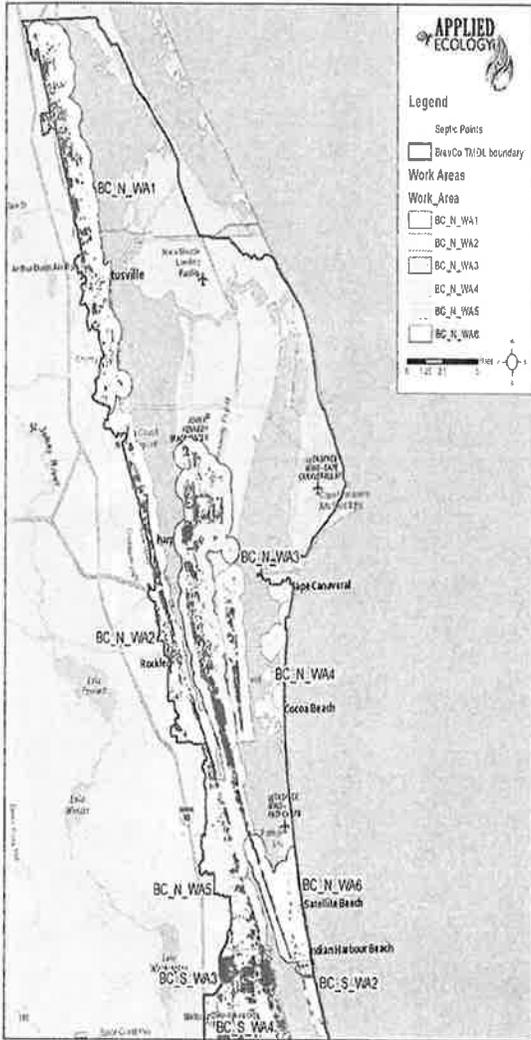
**Buffered land  
boundary layers  
utilizing various  
distances from  
the original  
waterbody layer**



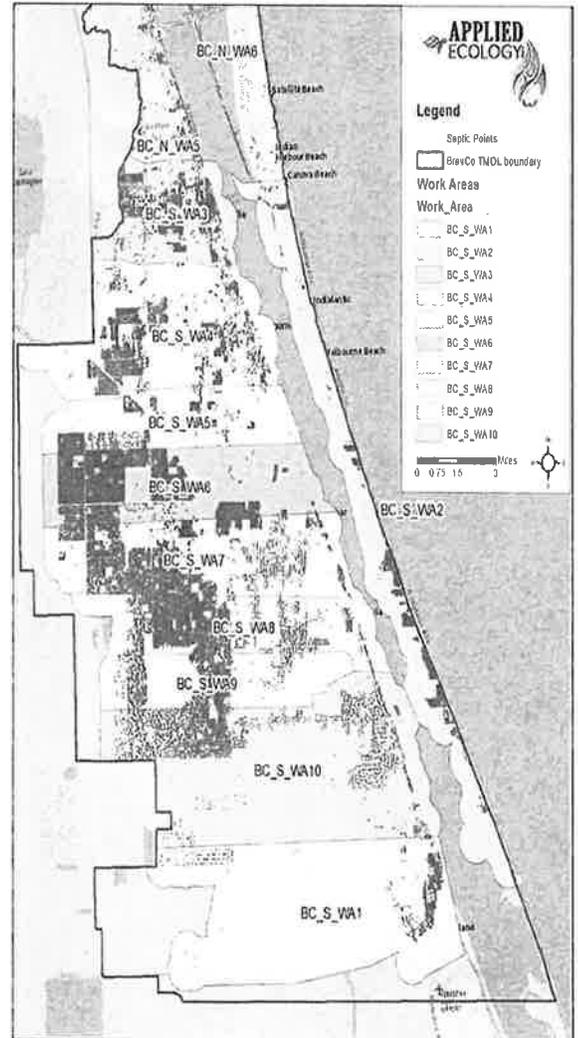
# Predictive Modeling

- Used FDEP approved groundwater flow and transport model for OSTDS
- ArcGIS-based Nitrate Load Estimation Toolkit (ArcNLET)
- Produced nitrate and ammonia plumes associated for > 27,000 OSTDS at different distances from water
- Summarized data by distance from water





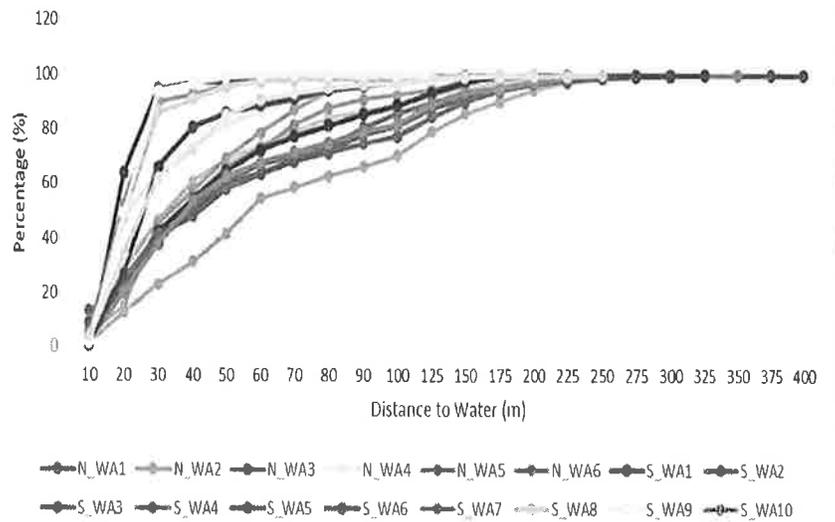
- Modeled 16 Work Areas
- Used existing OSTDS
- Examined Results by Area and Region



# Results Varied by Location!



Cumulative Percent for Predicted Nitrogen Loads by Distance to Water of all 16 Work Areas throughout Brevard County



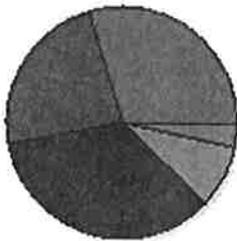
# Results



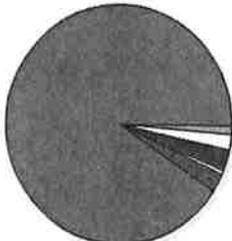
## Soils cause variable response to distance Work Area North 1

This work area occupies a large extent of the northern mainland portion of the county from Titusville through Mims. The distribution of soil types is described as almost equal parts A, A/D, and B/D soils, with largest area being occupied by B/D soils type (Figure 3).

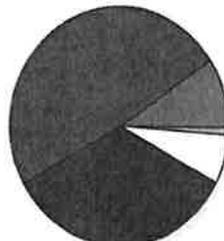
Graph of BCNWA1 Soil Stats



Graph of BCNWA6 Soil Stats

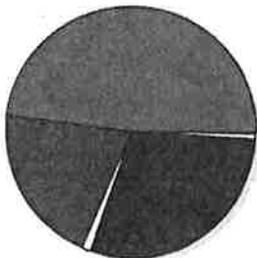


Graph of BCSWA5 Soil Stats

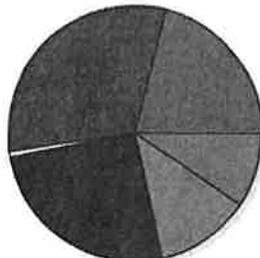


Acres By NEW_HYDGRP	
■	878,079 A
■	4,481,195 A/D
■	16,538 B
■	3,198,303 B/D
■	607,248 C/D
■	96,293 D

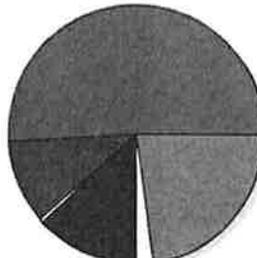
Graph of BCNWA2 Soil Stats



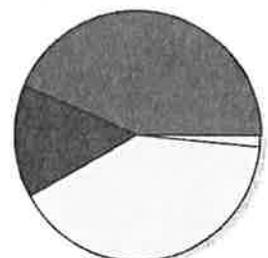
Graph of BCNWA3 Soil Stats



Graph of BCNWA4 Soil Stats

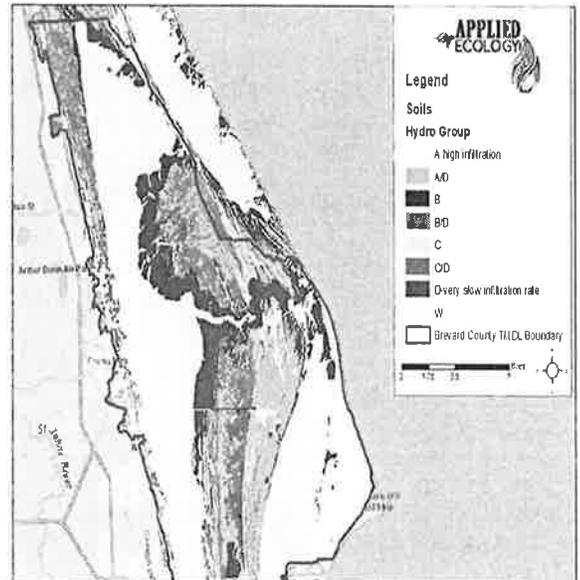


Graph of BCNWA5 Soil Stats

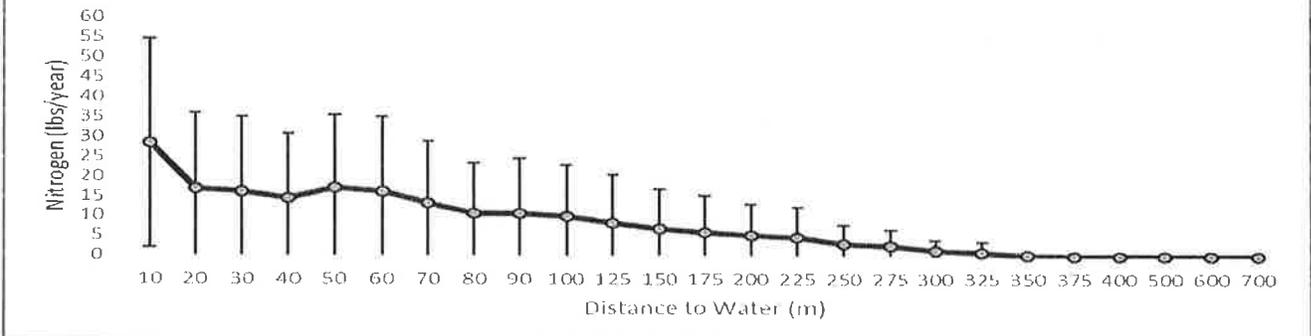


# Soil Analysis

- Drivers impacting how fast & far nutrient loading travels
  - Hydrologic Soil Type
  - Soil Hydraulic conductivity
- Sandy "A" soil nutrients travel faster, less denitrification
- High hydraulic conductivity allows nutrients to travel further

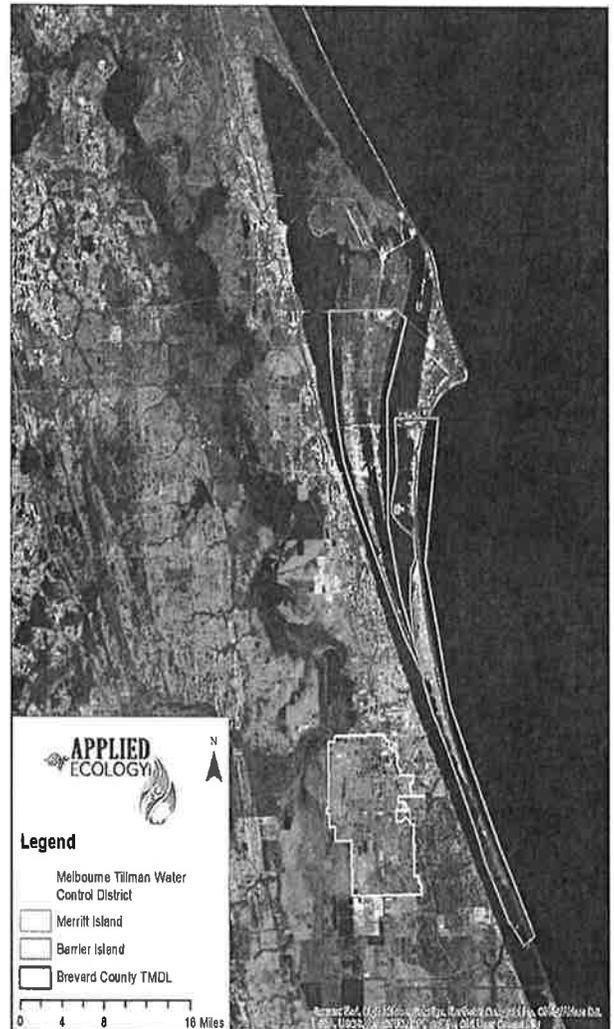


Average Predicted Nitrogen Loads by Distance to Water for Soil Type "A" throughout Brevard County (including 0 values)



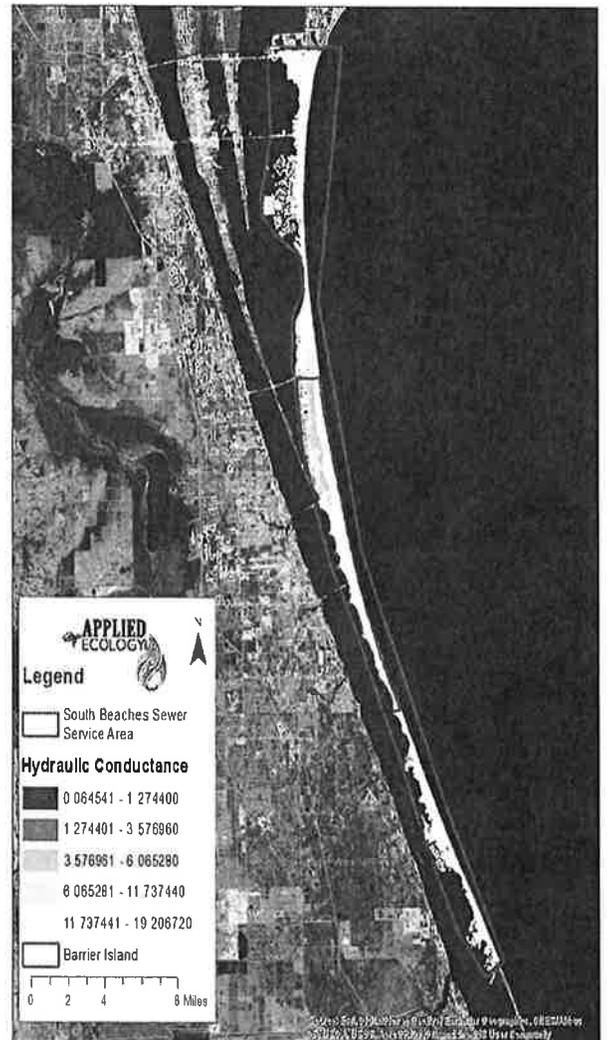
## Four Regions – Four Stories

1. Barrier Island
2. Merritt Island
3. Melbourne-Tillman Water Control District (MTWCD)
4. Brevard County Mainland



# 1- Barrier Island

Type A Soils  
High  
hydraulic  
conductance

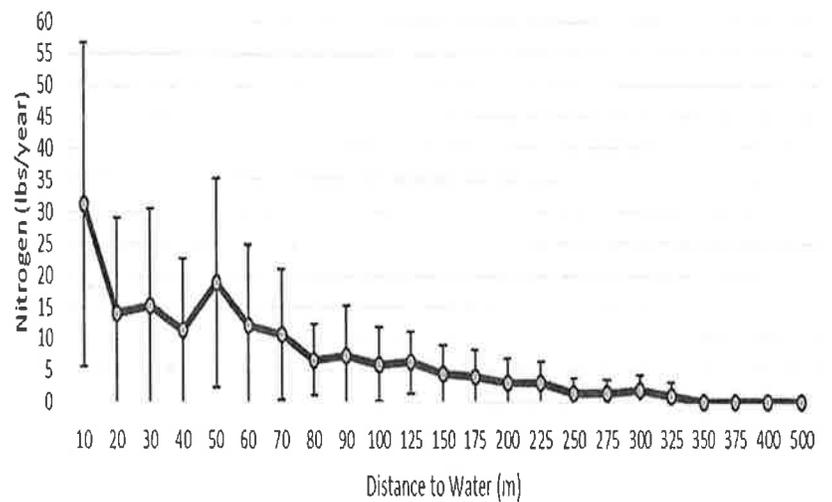




# 1- Barrier Island

Substantial nutrient loading at 125-m

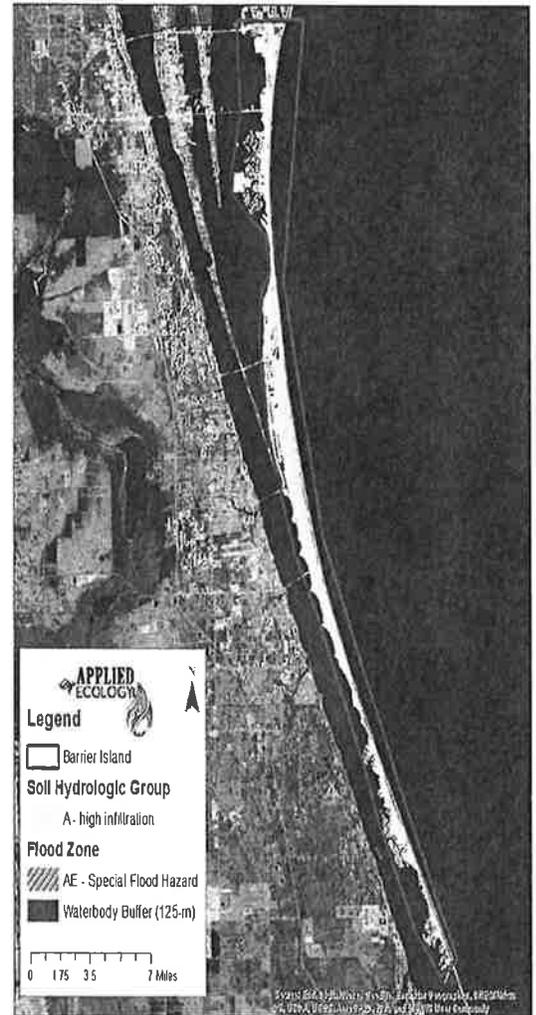
Average Predicted Nitrogen Loads by Distance to Water within the Barrier Island Region (including 0 values)



# 1- Barrier Island

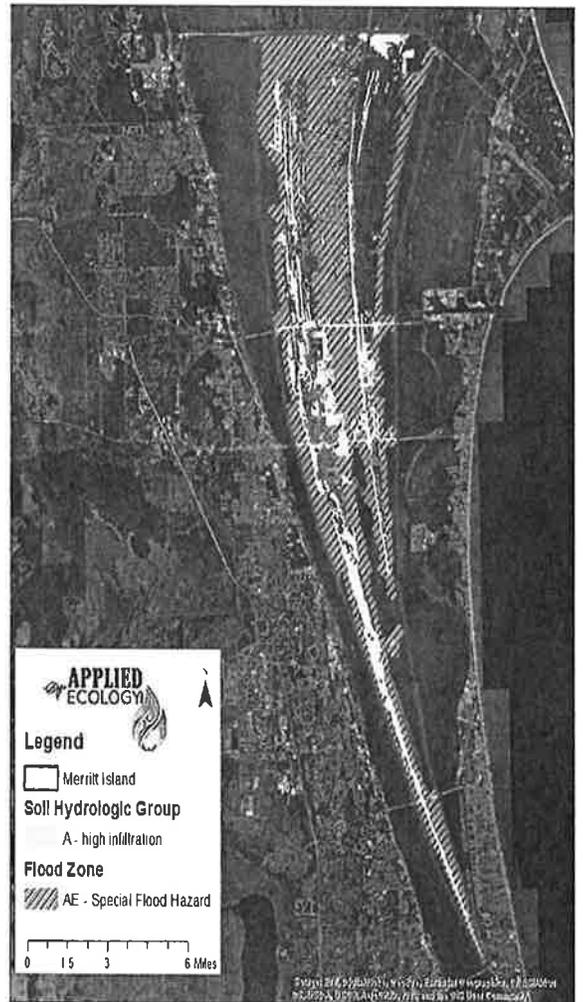
---

Soil,  
Floodplain  
125-m Buffer



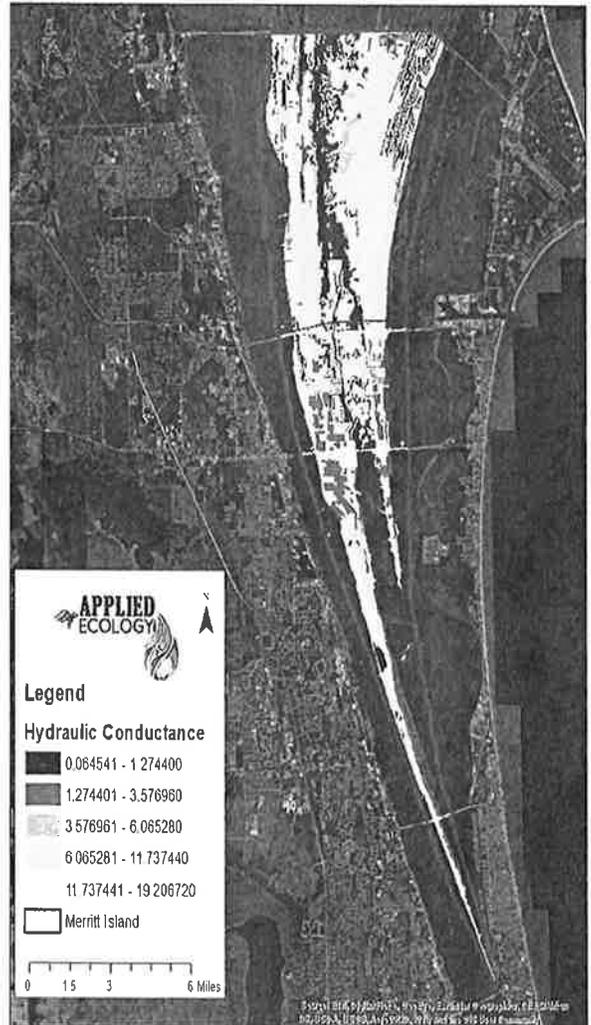
## 2- Merritt Island

Flood Zone  
Type A Soil



## 2- Merritt Island

Medium to  
High  
Hydraulic  
Conductance

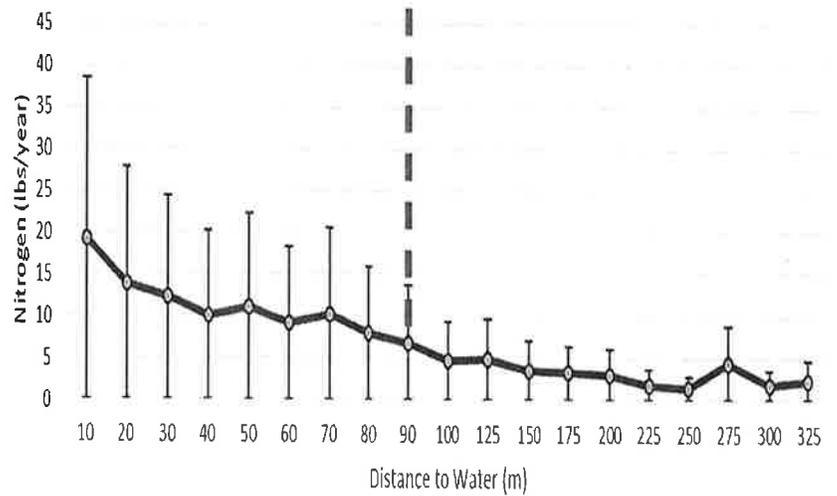




## 2- Merritt Island

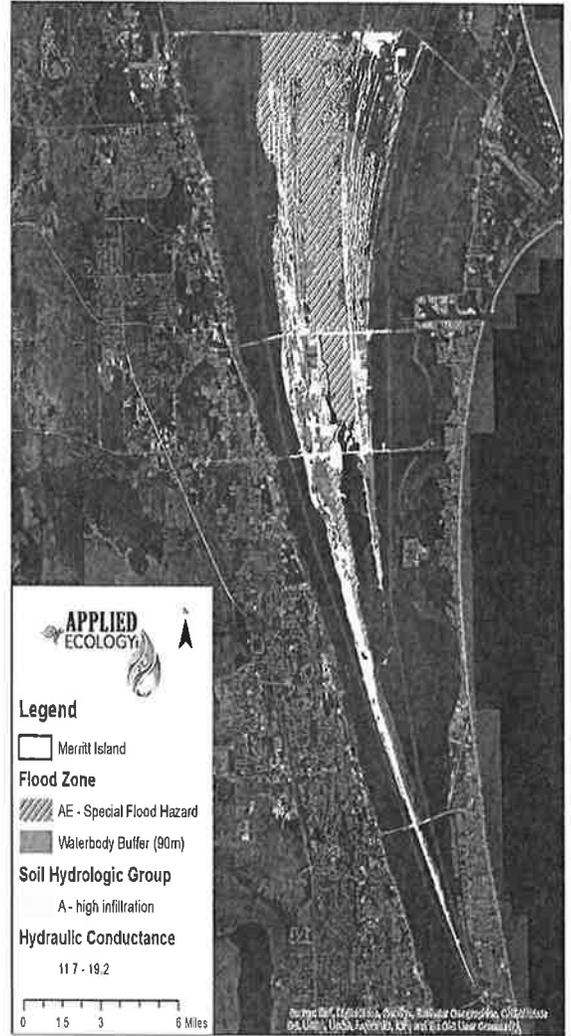
Substantial  
nutrient  
loading at  
125-m

Average Predicted Nitrogen Loads by Distance to Water within the Merritt Island Region (including 0 values)



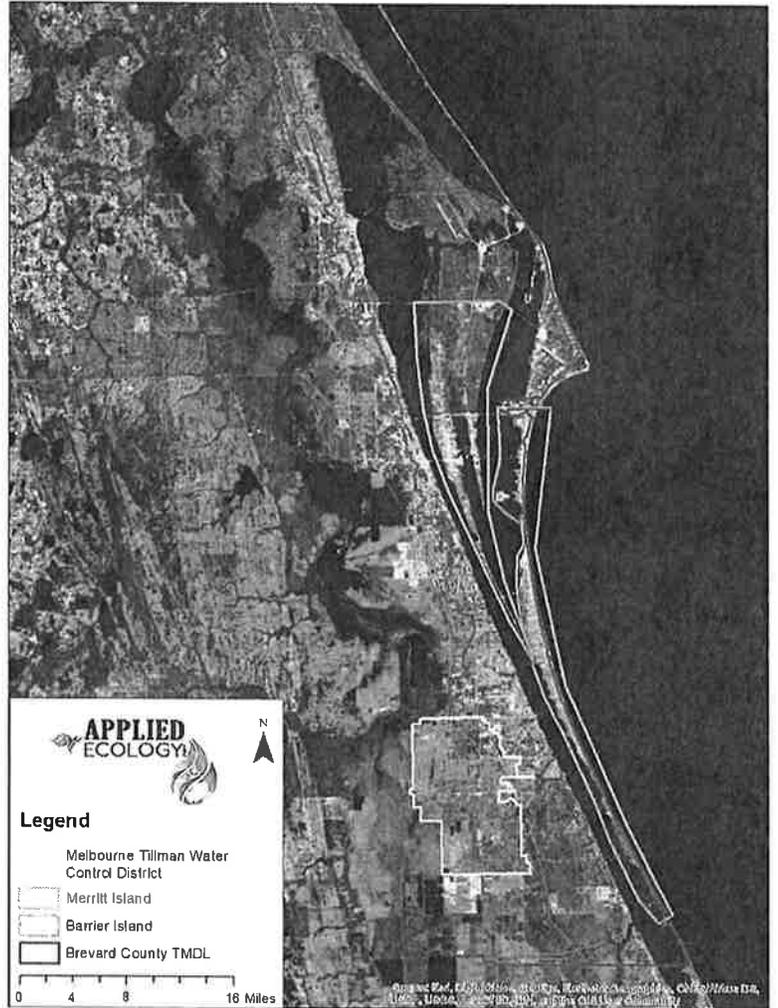
## 2 - Merritt Island

### Flood Zone, Soils, and 90-m Buffer



**3 –  
Melbourne-  
Tillman WCD**

**Large  
Watershed  
>50% of  
existing OSTDS**

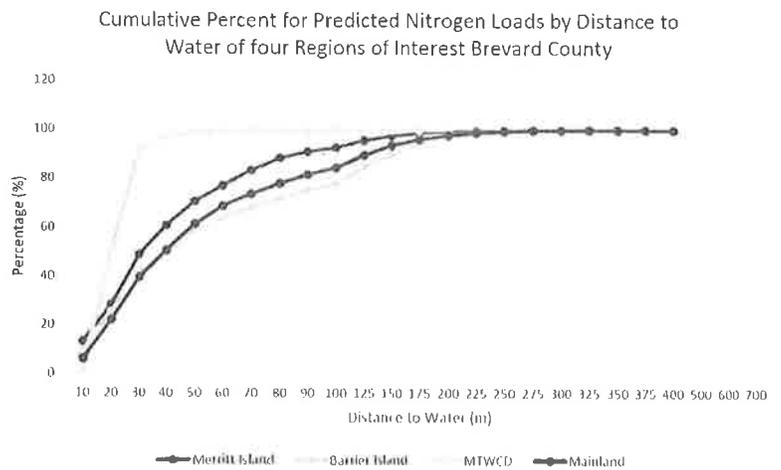


# 3 – Melbourne Tillman WCD

## Different Loading Curve



MTWCD has more low conductivity soils and less high conductivity soils than other regions of Brevard



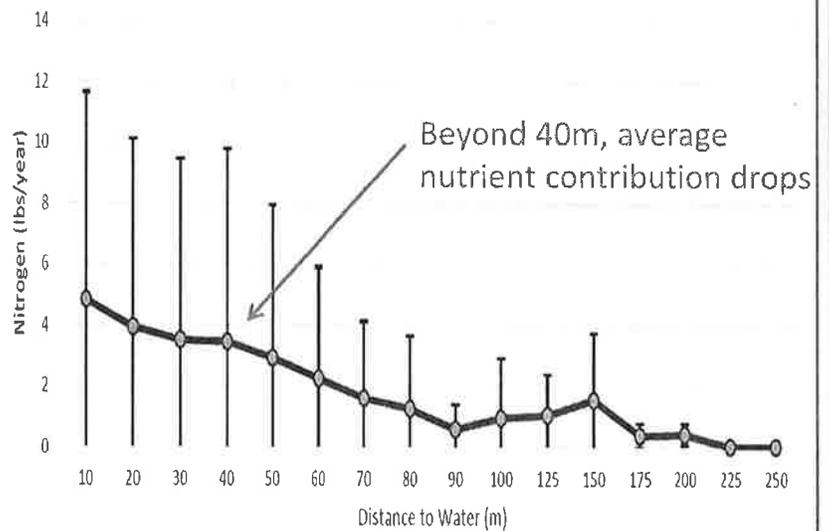


**3 –  
Melbourne  
Tillman WCD**

---

**40 m (130 ft)  
Recommended  
Overlay**

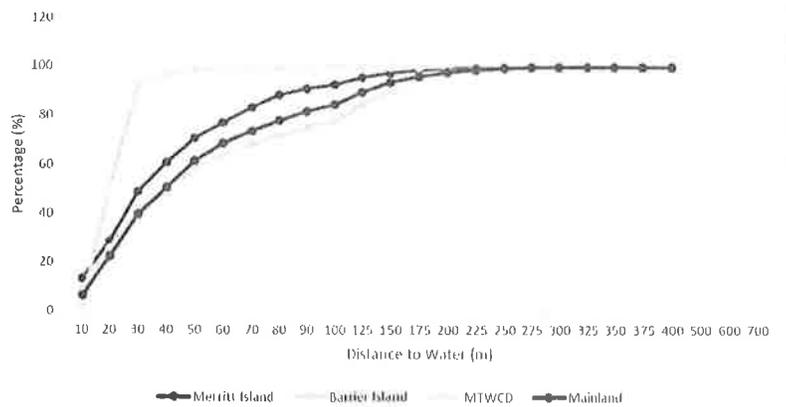
Average Predicted Nitrogen Loads per OSTDS by Distance to Water within the "Melbourne Tillman WCD" Region



# 4 – Mainland Distribution Curve



Cumulative Percent for Predicted Nitrogen Loads by Distance to Water of four Regions of Interest Brevard County



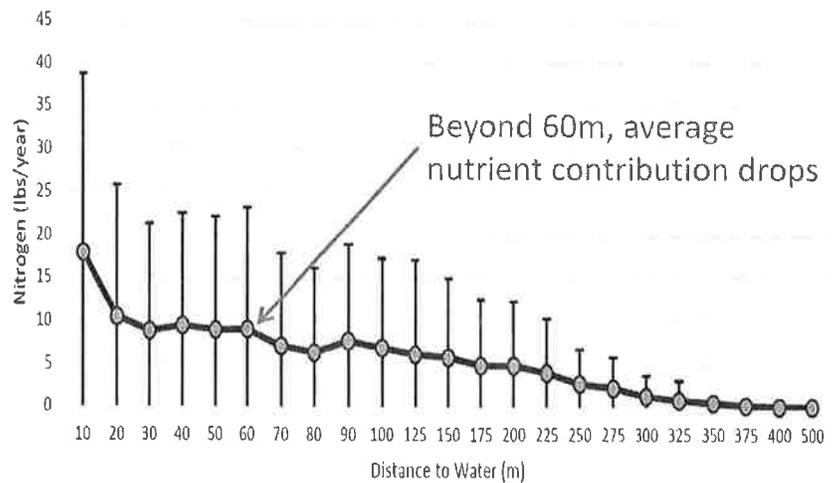


# 4 – Mainland

---

## 60 m (200 ft) Recommended Overlay

Average Predicted Nitrogen Loads per OSTDS by Distance to Water within the "Mainland" County Region



# Ordinance Modifications



- State vs. County regulation authority
- Science-based overlay and criteria
- Recording for any system requiring maintenance or monitoring
- Identify remnant and duplicative criteria
- Exemption for properties expecting sewer
- Maintain May 22<sup>nd</sup> effective date

# County-wide Ordinance



- County Charter Sec. 1-7 allows for the enforcement of a county-wide ordinance where there is no direct conflict with a municipal ordinance. Both the municipal ordinance and the County ordinance shall be effective, each being deemed supplemental to the other
- A “conflict” means that it’s not possible to comply with both ordinances.
- The proposed county-wide ordinance does not conflict with state minimum setback requirements for OSTDS. It’s possible to comply with both state OSTDS setbacks and the 65% nitrogen reduction standard within the overlay area.
- The adoption of a county-wide nitrogen reduction overlay would not conflict with a municipal ordinance that adopted the minimum state OSTDS requirements.
- If enacted, to avoid the county-wide ordinance, a municipality would likely have to enact an ordinance to specifically opt-out of the county’s nitrogen reduction overlay requirements.

## Public Input

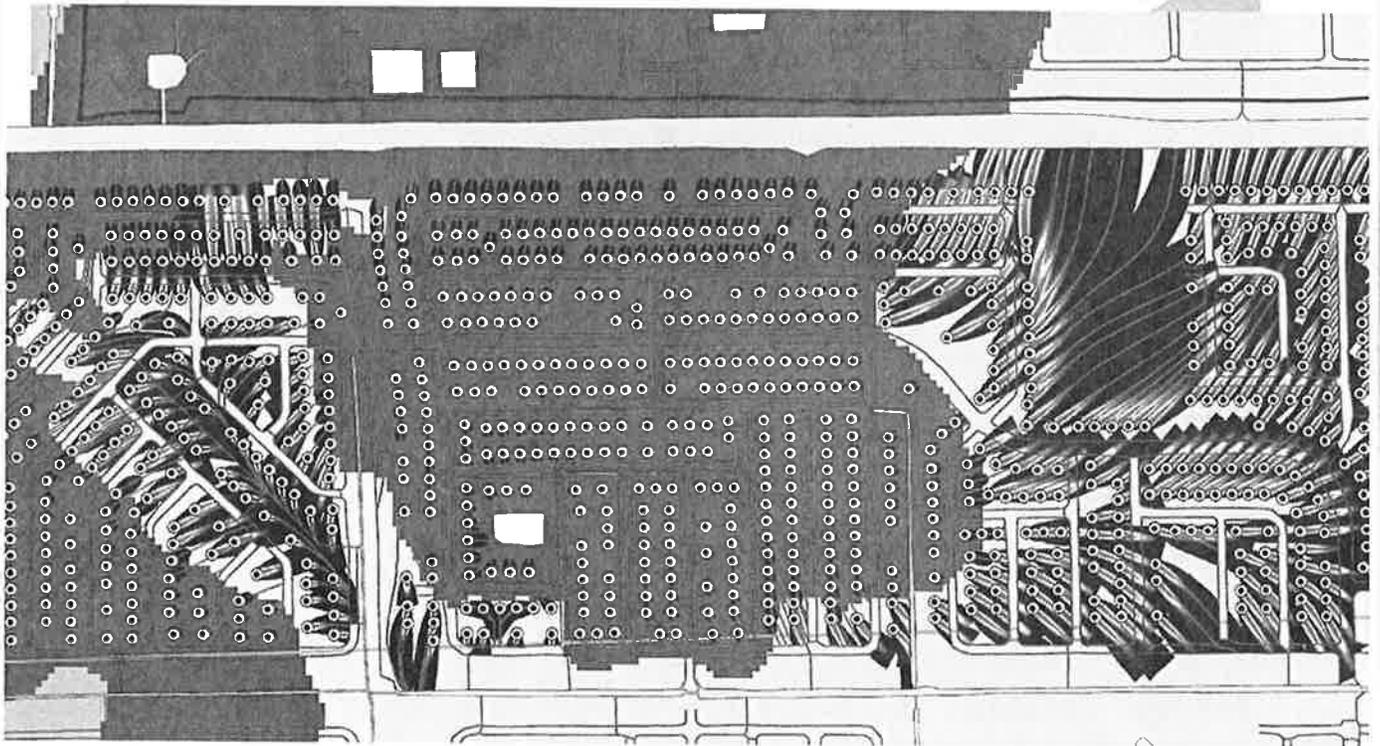


- HBCA & Septic Industry – August 7
- Environmental Outreach – August 28
- Building Officials – August 30
- BCAC – September 12, 1:00
- LPA – September 17, 3:00
- BOCC 1 – September 25, 5:30
- BOCC 2 – October 9, 5:00
- Moratorium Expires – October 19



# Feedback

# OSTDS Plumes in Low vs Moderate Conductance Soils



# Project Plan Summary



Project Category	Project Type	Estimated Total Project Cost	Nitrogen Reductions (lbs/yr)	Average Cost/lb/yr of TN	Phosphorus Reductions (lbs/yr)	Average Cost/lb/yr of TP
Reduce	Fertilizer Management/Public Education	\$625,000	6,123	\$102	813	\$769
	WWTF Upgrades for Reclaimed Water	\$9,400,000	40,778	\$214	TBD	TBD
	Septic System Removal	\$41,764,000	56,509	\$852	N/A	N/A
	Septic System Upgrades	\$22,192,000	27,659	\$802	N/A	N/A
	Stormwater Projects	\$10,800,000	118,440	\$88	17,026	\$612
Remove	Muck Removal	\$198,100,000	491,300	\$408	73,650	\$2,733
Restore	Oyster Reef Living Shorelines	\$10,000,000	21,120	\$473	7,181	\$1,393
Respond	Projects Monitoring	\$10,000,000	N/A	N/A	N/A	N/A
<b>Total</b>	<b>Total</b>	<b>\$302,881,000</b>	<b>761,929</b>	<b>\$398</b>	<b>98,670</b>	<b>\$1,377</b>