MINUTES OF THE MEETING OF THE BOARD OF COUNTY COMMISSIONERS BREVARD COUNTY, FLORIDA

1:00 PM

The Board of County Commissioners of Brevard County, Florida, met in special session on April 18, 2019 at 1:02 PM in the Government Center Commission Room, Building C, 2725 Judge Fran Jamieson Way, Viera, Florida.

CALL TO ORDER

Attendee Name	Title	Status	Arrived
Rita Pritchett	Commissioner District 1	Present	
Bryan Lober	Vice Chair Commissioner District 2	Present	
John Tobia	Commissioner District 3	Present	300
Curt Smith	Commissioner District 4	Present	
Kristine Isnardi	Chair Commissioner District 5	Present	

ITEM I.A. PRESENTATION, RE: NATURAL RESOURCES MANAGEMENT DEPARTMENT

Frank Abbate, County Manager, stated in December the Board gave direction to have an Indian River Lagoon (IRL) Workshop; the IRL and Utilities Program has been top priority; there will be two presentations today to give the Board a brief overview of where they were, where they are, and where they are going with the IRL, Save Our Indian River Lagoon (SOIRL) initiative, and Utility Services; an overview of Utilities proactive steps will be given and more of what they plan to do moving forward; and that will be seen in a lot of areas with the many connections between Natural Resources Management and Utility Services. He advised the Directors are going to try to provide all information fairly briefly and then given the opportunity for public input and comments to the Board; and they are looking for any Board discussion or direction the Board may want to provide, for how they ought to be moving forward consistent with, or modified from, what is being presented today.

Virginia Barker, Natural Resources Management Director, provided the Board with a PowerPoint Presentation on clean water goals, progress to date, projects underway, adaptive management, 2020 opportunities, potential for matching funds, and regulatory considerations: she stated the clean water goals for the IRL are to get this water body back to where it is fishable, swimmable, harvestable, and provides economic value to the community; targets that can be quantified are water clarity, a sandy bottom of the IRL. Seagrass, dissolved oxygen levels that supports healthy fisheries, and natural filtration systems to help restore the IRL after acute, exotic storm related type of events, or other disasters; to do that, it has to be understood where pollution is coming from in the IRL; it comes from many sources; and there is no single one of those sources that is enough to restore the water quality that is wanted. She went on to say this has to be tackled from many angles and to do that efficiently, there needs to be an understanding of how much pollution is coming from which of the major sources in the IRL; a historical approach has been taken of where did the loading use come from; a lot of sewage is put into the IRL like secondary treated effluent into the IRL; Brevard County stopped doing that in the 1980's, then the IRL Act passed in 1990, and the cities also got offline so they were no longer discharging on a daily basis into the IRL; and back in the 1980's the big focus was on the points or its discharges from wastewater utilities. She advised the next highest priority would be stormwater runoff; the County adopted a stormwater utility in 1990 and have been working on stormwater treatment for nearly three decades; in going forward, the current point source pollution discharge has come down to a relatively small amount, and meanwhile the

groundwater pollution and septic pollution levels have nearly doubled, atmospheric deposition has decreased about 10 percent due to clean air emission standards, stormwater runoff has decreased by nearly one-third, but muck has doubled its increase. She stated the Plan comes at this from four different angles by reducing the incoming excess loading of nitrogen and phosphorus, then removing accumulations of nutrients that have been stored and built up in the IRL over the decades, and are found in large accumulations of decomposing muck; restoring the filter feeders that provide a natural filtration service to the IRL; and responding to new information, as progress is measured, costs are updated, evaluate new technology, and consider substitute projects through the annual Plan update process. She advised within each of the different project types of pollution the specific projects were looked at for location, size, cost, benefit, and timing of being the most cost effective projects; they were listed as most to least cost effective, and funded the ones that were most cost effective; and there is a running list of additional project opportunities if additional funds came in.

Commissioner Lober inquired with respect to most released cost effective, when looking at that, is that based on the amount of nitrogen removed on an annual basis and limited to the first year, and how is that tracked.

Ms. Barker responded affirmatively; she stated it is based on an annual average; and she explained most of the projects are to convert the septic to sewer, those septic tanks removed has an equilibration period but after that has worked out, there will no longer be that annual introduction of new nutrients from those septic systems because they are not there anymore, and that same benefit should continue for each year thereafter.

Commissioner Lober stated as a follow-up, he is trying to figure out how this is accounted for in the Plan, if there are for example, two different sources of pollution like muck which is fluxing and a leaking gravity main going to the Wastewater Treatment Plant; obviously, at some point or over a period of time that muck flux is going to flux everything that is in there, that is able to be fluxed such as the one to three percent organic at which point is not going to flux anymore because there is nothing essentially beyond negligible amounts left; and with the sewer line it is not going to get better. He questioned does it stay the same or does it get worse where that is going to potentially leak or cause the contents to go out in perpetuity until it is replaced; and he stated he is curious as to how that is accounted for because 10 to 15 years out, the muck is not going to be fluxing any longer; but that sewer issue is going to continue going. He stated he is wondering if that has been accounted for, or if not if there is some reasonably straight-forward way to track it on an annual basis, but could project it out over the next 10 or 15 years; he knows people like hearing that this is going to be a long-term problem to resolve; but in addition to knowing what it is going to do in the first year, he thinks would have some derived value out of saying what it would do over 10 or 15 years, maybe a little shorter, or a little bit longer.

Ms. Barker replied that can be looked for muck flux if all the new sources were turned off and nothing was going into the IRL but pure, clean deionized water; she stated according to research it would take 100 to 200 years for that muck that is already there to stop fluxing; eventually the muck would reduce, but at this point there is still too much being put in so muck is still potentially increasing; and the decreases would not be seen in their lifetimes. She stated leaks do get worse over time; and she deferred to the Utility Services Director on how to possibly look at that increasing risk over time, because she they have based the cost benefit analysis on current risk.

Commissioner Lober stated he is not trying to make the job inordinately difficult, but if it is something that they can put together to get a longer projection than one year for the impact that it will have on both fronts; it may be helpful in determining, from a long-term approach what the most cost-effective options are; it is certainly much better than nothing; and it is great to know over a one-year period, but over and above that if it is not going to be inordinately difficult, he

would love to see it extract out to a much longer term time frame.

Ms. Barker went on to say there are the portfolio of project types, going after the ones that appear to be the most cost-effective in each project type; they also had to look at what the spatial distribution is of those projects; if all of the least cost per pound of nitrogen projects were in one area, that would not provide clean water everywhere; they had to make sure that they were getting a good spatial distribution of projects in north, south, east, and west but in terms of the IRL Basin Management Action Plans, the North IRL, the Central IRL, and the Banana River Lagoon (BRL); and sequential timing was taken into account, it would be ideal to stop the incoming pollution before cleaning up and removing the muck which was done where they could but because of that 100 to 200 year time on muck flux, cannot be waited for and has to start now. She provided project videos of the Titusville Baffle Box and the Turkey Creek Watershed; she expressed her thanks to the staff of Space Coast Government Television for creating the videos; she noted the Turkey Creek Watershed is under construction right now; and Public Works has been helping to construct part of it; these projects are complex and take a long time to deliver; but coordinating a lot of additional benefits can make the project better. explained a map of SOIRL projects that are completed, underway, and have begun design. engineering, or permitting; there are 17 completed projects, four projects that are under construction right now, eight projects that are being monitored for performance right now, and 26 projects that are in design; when looking at the projects, in terms of distribution of numbers of projects between the different project types, the majority of completed projects has nine that reduce plumbing pollutant load, has two muck removal projects with one still involved in interstitial water treatment, and three oyster bars and two living shorelines projects with monitoring complete of four projects to date; and there are additional projects that have begun or are underway. She pointed out because the projects take so long to deliver, the Citizen Oversight Committee (COC) asked if a tool could be developed that would help them see where the projects are; she provided a one-page spreadsheet that itemizes every project that is underway for the Plan right now; and it shows what step in the process it is with percentage of build and paid, which is posted on the County's website, and updated monthly. She advised another look at how funds are currently distributed and she pointed out the distribution of the tenure costs has slightly more funds spent on reducing incoming loads than on removing the legacy load; the relative benefits can be seen by pounds of nitrogen reduction versus pounds of nitrogen being removed; this is just the SOIRL tax portion of project costs; and the total SOIRL cost for projects is \$126,226,913. She added what is significant is these projects take so long to get underway, from the time that they are envisioned to the time they are completed; the design. engineering, and permitting has been started on projects for several future years; that number of total SOIRL value of projects started exceeding today's revenue, because they are trying to head start those projects for when they will be ready to go, and before the dollars are in the bank; it is a responsive process based on performance measures of updating the County's costs, updating the benefits of the projects annually, looking at new technology or new uses of existing technology, and collecting new project ideas from other departments and from the cities for looking at those opportunities, all of that goes into the annual Plan updates, with being as transparent as possible through the website, the COC, and through the Commission meetings: and the updates are brought forward to the Board to review, approve, modify, or reject. She mentioned wanting to show the Board one example of some of the performance monitoring being done; 45 groundwater sampling wells were installed to represent different community types in the County for natural areas as a control, septic communities, sewer communities, and sewer communities that also receive reclaimed water; in looking at natural areas as a control, the ground level of nitrogen in groundwater is below half of one milligram per liter and in the septic communities it is considerably higher, with six milligrams per liter; they select the worst of those mentioned communities and they convert them to sewer; and the difference between the sewer area and the natural community is that it is occupied, people are living there, it is a residential community with fertilizer, things dripping out of cars, and lots of other things happening, in addition to the sewer service.

Commissioner Lober inquired what is the conversion for taking milligrams to liter and then working that out to parts per million.

Edward Fontanin, Utility Services Director, responded it is the same number.

Commissioner Lober stated same number; and he remarked he wanted to make sure he is looking at it correctly.

Ms. Barker went on to say there is investment in converting the worst septic communities to providing sewer service and getting them hooked up; if they happen to be in an area that is receiving reclaimed water, the groundwater levels have the highest concentration of nutrients in their reclaimed water; there are models that leads to the belief that nutrients in reclaimed water was important; there is now nine months of groundwater data that demonstrates the percent of nutrients in that reclaimed water is really important, in terms of groundwater pollution; and she noted the projects funded with the SOIRL tax to upgrade the Wastewater Treatment Plants in terms of pounds of load reduction for the cost invested are about one-third of the cost of the septic to sewer conversion costs. She talked about the kinds big changes that have happened in the 2019 Plan, that are part of this adaptive management process; initially the Plan was based on only the data they had, which was estimated distance from the septic drain field to the IRL or some sort of connected waterway; the distance base was estimate of how much of a load is coming out of the drain field and working its way through the groundwater to the Lagoon; during development of the septic Ordinance adopted last summer it had a lot of modeling and measuring of individual septic tanks looking at other factors; and one of the most important factors was not just distance, but also soil type. She reminded the Board in the initial Plan, it was just based on lumping all of the septic tanks into three distance class bins, and using the analysis that was done for the septic Ordinance was taken a set forward for how to use that information to refine, and improve the Plan; 8,000 of the 530,000 septic systems in Brevard County drain to the IRL; 8,000 of them from 55 yards to 219 yards are responsible for over half of the loading; and of those 8,000 a finer distance scale of 10 meter slivers of 11 yards to show 5,600 septic systems are responsible for nearly half of the 400,000 pounds of septic load into the IRL annually. She went on to say they zoom in on these septic systems and significantly reduce the septic loading to the IRL; the tricky part that this not show is for this to be costeffective for Utilities, they have to be clustered; a cluster analysis was done to look for where there are clusters of these highest priority of septic together, which was used to reevaluate all of the projects in the Plan; fortunately all the projects in the Plan all still ranked high, but a few more were identified and added to the Plan; and then with the 2019 revision and the Board's direction to the COC to look for more, Utilities was worked with, identified some additional opportunities, and added more projects that best grab the highest ratio of these super important septic systems, and the lowest number of least important septic systems. She stated once septic systems are understood of how they impact the groundwater that impacts the IRL, they have to start looking at what else works and functions the same way; there are 53,000 septic tanks and 10 percent of those septic tanks are responsible for nearly half of the nitrogen pollution in the IRL; if septic tanks and drain fields pollutes the groundwater and it is known that reclaimed water, once it is distributed out to neighborhoods is polluting the groundwater; but she inquired about the reclaimed water that is still sitting at the Wastewater Treatment Plant in rapid infiltration basins or spray fields. She pointed out the same processes are happening, that water full of nutrients is infiltrating into the groundwater and moving laterally to the IRL; and the 2019 update did a cost benefit analysis on upgrading these water storage areas and added several pilot projects into the Plan.

Commissioner Lober inquired as far as the reclaimed water is there lumping in both the secondarily treated water and the tertiary treated water.

Ms. Barker responded it is whatever the effluent is coming out of the plant.

Commissioner Lober stated in terms of the numbers on the graph showing the relative amount of nitrogen in a community; and he is wondering if that is coming from a Wastewater Treatment Facility that has additional treatment over and above secondary treatment before they sent it out.

Ms. Barker replied wells have been installed in four different communities that have reclaimed water; the bar graph shown is an average of those four communities, some of which have high concentration values, and some of which are very close to Advanced Wastewater Treatment (AWT).

Commissioner Lober stated on average for AWT it would probably be a touch under half the amount of nitrogen.

Mr. Fontanin remarked AWT would have to be under three parts per million.

Ms. Barker replied it is one-tenth.

Commissioner Lober advised it is a little under half of the six for reclaimed water groundwater nitrogen concentrations.

Ms. Barker stated the highest concentrations are 29 Milligrams per liter and AWT is three; and there is a very large discrepancy between the cleanest reclaimed water and the dirtiest reclaimed water.

Commissioner Lober stated if only they were talking about those AWT plants, rather than having the reclaimed water numbers being noticeably higher than the septic systems community numbers, it would be close to half of the amount listed in those communities; and he inquired if they were just talking about those areas that have AWT plants that are treating tertiary treatment.

Ms. Barker replied affirmatively.

Chair Isnardi inquired if further testing will be done on those additional reclaimed water sites.

Ms. Barker responded affirmatively.

Chair Isnardi remarked 29 milligrams per liter is scary.

Ms. Barker advised 29 milligrams per liter is based on the reports from monthly samples that a facility provides to Florida Department of Environment Protection (FDEP). She went on to say a big revision of muck prioritization was done, based on research conducted by the Florida Institute of Technology IRL Research Institute; they went out to all of the sites that the St. Johns River Water Management District (SJRWMD) had mapped as potential muck areas to verify if it is really muck, how deep the muck is, and how wide the muck is; they went out with standard sampling equipment, which is a 20-foot pole; and they experienced muck that was deeper than the 20-foot pole. She noted they had to go back out with a 30-foot pole to collect information in those sites where the muck was deeper than 20-foot for data collection; in addition to that, they collected sediment samples which were taken back to the lab to look at the organic content; the degree to which that organic content was decomposing and fluxing nutrients into the water column above; and with all of that information there was a reprioritization of muck sites in the Plan, zooming in on those with the most nutrients to the IRL, refining cost estimates, reducing the amount being spent on dredging by \$91 million, and nearly half of that was invested in adding interstitial treatment to most of the projects in the Plan, that was not included in the original 2016 version of the Plan. She stated annual Plan updates take all of that information

into account, it also refines revenue projections, updated costs and benefits, applied Consumer Price Index (CPI) to annual construction costs, and collects substitution projects from the community; she provided an example of three Fiscal Years of SOIRL revenues; she stated the first year was at the time when the tax was adopted and she looked at what the Brevard School Board had estimated for its half-cent sales tax, and they estimated \$32 million a year; the County was estimated at \$34 million; when the collection started coming in; and at the end of the first Fiscal Year the revenue projections were revised to about \$46 million a year, with a CPI included. She mentioned in the provided revenue status the green dotted line is State revenue projection; the County has been more conservative than the State; the blue line is the revised revenue projection; the purple line is the actual collection; and the actual collection is right on target with the revised revenue projection. She advised she wanted to compare what was just adopted by the Board to the original 2016 Plan and what the changes were, by investigating more opportunities, and by digging into the data; there are significant increases in wastewater and stormwater projects; and there is a decrease in muck removal, and a shift to interstitial water treatment. She proposed for going forward and looking at the 2020 Plan update, she will continue working with Utility Services by having regular meetings, and looking for septic to sewer opportunities, and working on other related projects; she has been looking at whether some of the old, outdated, and privately owned package treatment plants for whether it makes sense to connect them to sewer, which provides a much higher level of treatment; and she is trying to get that data from FDEP, but that database is not as right with data as she had hoped it be, and there may have to be some field data collected for it to be analyzed. She added if they cannot be connected to sewer because the capacity is not there or the distance is too great. those package plants may be able to be upgrade in the 2020 Plan; last July the State adopted new measures of passive performance system for septic, an alternative to conventional septic; it was based on a single media type using mulch, there are media out there that should perform better, or last longer; they have not been tested in Florida to meet the Florida Department of Health (FDH) testing criteria; there has been work with FDH to understand what those criteria are, and to negotiate a Memorandum of Agreement (MOA), where if the County installs and tests the systems, they will accept that data, and accept those media types as a system that can be permitted in the State of Florida; and the MOA is its final review, and she is looking forward to bring that opportunity to the Board.

Commissioner Lober inquired if most of the media being looked at does not require much in the way of human intervention to keep clean, or if the mixture is being talked about generally.

Ms. Barker responded this is underneath the drain field and ideally it needs to be installed and forgotten about for the most part; she stated what is permitted right now is wood chip mixture, which may breakdown over time; and she is looking at media types that would have 50-year lifespan instead of 10-year lifespan.

Commissioner Lober remarked ceramics and plastics.

Ms. Barker replied affirmatively. She continued to say every week or two there is another article to read about surface water remediation technologies for the blue/green algae blooms in Lake Okeechobee, Blue Cypress Lake, Lake Apopka, and Lake Jesup; those technologies are all being rapidly developed for freshwater systems; they have not been tested in a saline environment; those systems that have them have been looked into about whether the developers or investors would be interested in testing their technology in an estuarine environment; and she is hopeful to have some of those opportunities in the future. She stated the State is updating the IRL Basin Management Plans throughout Brevard and Indian River Counties; she has been working with them on updating the stormwater information to refine the IRL Plan, like done with the septic improvements and the muck research; she is hopeful for that to be in the 2020 update, but it all depends on the State's timing and process; and is might be in 2021. She mentioned it would be great to use the SOIRL surtax to leverage other funding

sources like what has been done so far with municipality, utilities, and other partner cost sharing; a few projects were done with a Community Redevelopment Districts, the Merritt Island Redevelopment Agency (MIRA) project on Cone Road, the Bayfront Stormwater Pond in Palm Bay, and they are now looking at the Eau Gallie area for a stormwater project; if those districts continue and they have the funds, that might be a way to help the IRL; it is grant season and she is continuously applying for grants; and the Legislative appropriation process is going on right now, and she is hopeful that some of the submitted projects for cost-share will be provided with some State appropriations. She advised of some regulatory options to consider, that would complement what the SOIRL or what Utility Services is doing; the fertilizer signs at retail outlets are to help the citizens choose wisely when purchasing fertilizer at retail outlets; there is legislative intent coming before the Board on Tuesday to propose an ordinance for signage notification to consumers; there is an existing fertilizer Ordinance, the Board had previously directed staff for when calls or complaints come in about compliance to go out and educate, not to enforce; the fertilizer Ordinance was adopted in 2013 and people have had a while to get used to what those rules are; and it may be time to consider whether staff needs to do some enforcement. She continued by saying in reclaimed water areas that has a lot of nutrients and is free and not metered has people thinking using more is better, but they are using too much reclaimed water; it can be seen on the streets, sidewalks, and on all sorts of paved surfaces where nothing is being watered, and that is creating stormwater run-off; those nutrients are going into the IRL; the SJRWMD has irrigation restrictions that they encourage local governments to adopt; and if local governments do that, when applying for grants from SJRWMD additional ranking points are given, and making the grant application rank higher than if not having that local Ordinance. She stated for septic to sewer projects, gravity lines or force mains are being installed depending on site conditions; once a gravity system is installed, State law currently requires adjacent people to that line have 365 days to connect; if a force main is installed, there is no requirement to connect; and one thing to consider, is whether to mandate when installing force mains to require them to connect. She advised in the Satellite Beach overflows, there was smoke testing done, leaks were identified in the privately owned laterals that connects the homes to the publicly-owned Utility; and while people should make those repairs and there are rules that say they cannot allow anything other than sewage into those pipes, the enforcement mechanisms currently are very difficult to deal with, and is something that the Board may want to grapple with. She added through the smoke testing, there were 30 properties that were identified with leaky lateral's; initially there was certified mailing to those 30 people, saying there is a replacement grant program to help get the repair, and to monitor their groundwater to measure the improvement when this occurs; out of the 30 letters mailed, three people said yes; she provided a brochure about the Program; she noted the consultant has been going door-to-door explaining the benefits of the Program, and enlisting people to let the program help them help the IRL; through that effort, there are six more people who are interested, and there are only nine of 30 who are potentially interested; and that is why the enforcement mechanism is mentioned in her presentation for if the Board wants to look at the enforcement mechanism of how to make these repairs mandatory. She concluded by saying one way to address excess irrigation is through conservation rates, right now reclaimed water is free; one way other communities address the waste issue is by setting a standard home, growing St. Augustine sod, irrigating the amount to keep that sod happy but no more than that. and to use so many inches of water; a volume could be calculated for a typical size house and that could continue to be free; but for homes that use more than that, a rate could be established which would discourage, and has worked in many other places that would discourage people from thinking more is better and from using more because it is free; and it would establish a potential revenue source for managing that Program and enforcing those irrigation rules. She advised of Senator Debbie Mayfield having Senate Bill 1278 that would establish a ban on the placement of Class B biosolids on land; seasonally the high water table comes to surface and interacts with where those biosolids are and washes those biosolids off the land and into adjacent watercourses; there is House Bill 405, that had matching language. but on Tuesday that language was brought into House Bill 973; the timeline for making those

requirements was adjusted from July 2020 to July 2022; and if that goes through all of its requirements, the State would continue to permit people who spread Class B biosolids on land that is underwater during the wet season. She concluded by saying right now that it only a concern in the St. Johns River basis; there are two agricultural interests spreading biosolids in Brevard County, but there is nothing to stop agricultural interests in the IRL basis from applying for permits from FDEP; and that is if those Bills are passed, otherwise the State has no reason not to continue to permit application of biosolids on lands that are significantly connected, and polluting the water.

ITEM I.B. PRESENTATION, RE: UTILITY SERVICES DEPARTMENT

Edward Fontanin, Utility Services Director, provided the Board with a PowerPoint Presentation on how Utilities improve the Indian River Lagoon (IRL); he stated when talking about the IRL the number one objective is to reduce Inflow and Infiltration (I&I); when dealing with operations maintenance there is preventative maintenance and corrective maintenance; he talked about Valve Exercise Program (VEP) being an excellent example of preventative maintenance because on a routine basis, two to three times a year per valve gives staff an opportunity to make sure that everything is working, and if not it can be fixed; lift station inspection is how flow is pumped if there is a problem reducing I&I is implemented; and sewer assessment is going on to check out all of the assets, by finding out what needs improvement, developing a program, developing a budget around the program, and initiating it. He stated the was talk about reducing nitrogen in reclaimed water, when nitrogen is too high and the runoff gets into a waterway that has a detrimental effect.

Frank Abbate, County Manager, remarked he wants to focus on preventative maintenance; in the past there has been some preventative maintenance but has been reanalyzed this year, prior to Mr. Fontanin being made the Director; when talking about the VEP, Mr. Fontanin is in the process of hiring 11 additional positions to be able to do that; and one reason known is that it is very important in how to prevent larger issues.

Mr. Fontanin stated there are industry standards of what the expectation is as a level of service with preventative maintenance; Brevard County is growing, as subdivisions grow there is more jurisdiction taken of water and sewer and reclaimed water; and when comparing where staffing levels where, Mr. Abbate is allocating more positions to be more robust.

Mr. Abbate advised that goes for the lift stations, as well as the new mechanics coming in; an initiative has been undertaken to appropriately address the VEP lift stations and what needs done at the plants, the extra staff is needed; for a long time, organizationally there has been reductions, and at this point they are trying to catch up to avoid problems from the past on infrastructure improvements and deferred maintenance; and not only are they trying to catch up but avoided problems that have occurred, and they are in a better position moving forward.

Mr. Abbate pointed out a rate comparison chart was a part of the presentation, but it was dropped off; the County's sewer rate is relatively low and it is considerably lower than a variety of other comparable jurisdictions or cites; what Mr. Fontanin is talking about is when that adjustment occurred, it was to cover that \$150 million improvement program to do some pickup of some deferred capital maintenance that was needed; it also had a built in Consumer Price Index (CPI); but that was so there would be a continuum of what it was able to catch up on deferred maintenance, to try to keep that on a par.

Mr. Fontanin went on to say the opportunities with Save Our Indian River Lagoon (SOIRL) related to Utility Services is septic-to-sewer conversions for getting areas online, connecting private package treatment plants to the County's system, reducing nitrogen in reclaimed water

by upgrading rapid infiltration basin and spray fields, and smoke testing for lateral lines and lateral service caps; and when lateral lines have cracks, that becomes a point source for rainwater to enter into the collection system, and that then becomes a component to having to do discharge because the capacity of the lines, as they were designed are no longer efficient, and thus there is a surcharge effect.

Commissioner Lober stated with respect to smoke testing, it was his understanding that there were actually dollars available for the folks that were inclined to fix those leaky laterals; they could have picked their own plumber and gotten reimbursed, so it is not even that they have to pick people of the County's choosing; and he inquired if that is Mr. Fontanin's understanding as well.

Mr. Fontanin responded that was a program through SOIRL; and he asked Virginia Barker, Natural Resources Director, to respond.

Ms. Barker replied that was the intent; she stated the problem is the consultant had boxes of caps in the truck as they were going along, if a cap was missing they would just screw a caps on as they went along, but found that many of the vertical pipes that the caps screwed onto were also broken; she does not know which ones those were; and she added that information was trying to be collected, to offer that grant program again.

Commissioner Lober inquired if the smoke testing was done with caps off in some cases.

Mr. Fontanin responded the caps may have been off; and he stated it is the smoke testing that will identify if the cap is missing.

Ms. Barker remarked then they had to look into why the cap was missing.

John Denninghoff, Assistant County Manager, advised sometimes a cap is missing because a lawn mower hit it and that can also damage the pipe that the cap is screwed into.

Chair Isnardi stated that is probably the biggest cause, because twice in 10 years hers had to be replaced; and she inquired if the consultant neglected to give those addresses.

Mr. Denninghoff replied it is being looked into to rehabilitate that situation.

Chair Isnardi advised to not use them again, if that is the case.

Mr. Fontanin stated any future smoke testing done will be done with a Global Positioning System (GPS); there has already been consultation with the County's Survey Department; and GPS is the best mapping to have, and that will be addressed. He went on to say there is no argument that septic-to-sewer has benefits of reducing the nutrients that gets discharged into canals and bodies of water; from a land use perspective, it gives more opportunities of what land can be used for; a few cons for septic-to-sewer are increase of utility operation costs, sewer bills, and the need to increase plan capacity; as the system grows, the mentioned allocated employees will help to maintain the level of service for preventative maintenance; capacity of the plant has to be looked at; and the treatment plant, where all of the flow comes into and does not have capacity to it, the septic-to-sewer cannot be done.

Commissioner Lober stated he knows in District 2 there are not any capacity issues with municipal system or the County's system; but he inquired if any of the other Districts are teetering close to capacity.

Mr. Fontanin responded affirmatively; and he explained some due diligence is further going to

be touched on. He went on to say connecting private package treatment plants to the County system has benefits for less nitrogen runoff in canals and in the IRL; Utilities started in 1966 and the trend of package plants being incorporated as part of the County is evident; if those plants were a part of the system, there is a greater control in the operation and in the future discharges, and by doing future Advanced Water Treatment (AWT) on those flows; Utilities has a robust team in the field, there are programs, standard operating procedures, and it is felt from an operation and maintenance benefit the department knows what it is doing and how to incorporate that into other components; and the cost to convert those private package treatment plants to the system, it is not just the cost within the jurisdiction or the Homeowners Association, but given the length of Brevard County it is the investment of running a line for where these package plants are to connecting them into the existing utility which could be one mile or two. He added there is a cost and it is a cost that keeps the maintenance level of service costs down which is done as a department and has to budget for that cost; reclaimed water nitrogen reduction is a benefit with less nitrogen running off in the canals and the IRL; the majority of treatment plants are AWT, so there are low nitrogen levels that is under the three Parts Per Million (PPM); it also gives an opportunity for when nitrogen is reduced, because it takes the reluctances off of the lawn from needing that; St. Augustine grass is a hearty grass, but if it is spoiled by over watering or over fertilizing it actually becomes dependent on it, and it does not know how to function without it; if encompassing that with lowering how much irrigation is done, the grass can get to a point of reducing the fertilizer need; and the cons are the investment, to make sure that all treatment plants have low nitrogen, whether it is AWT or a level just above AWT, but to get that investment to do so and the costs associated. He talked about the number one reason why he loves smoke testing is it is an excellent way of identifying point sources on private property that feed into the system; it is a great opportunity to identify points of where wet weather discharge events; smoke testing identifies cracks in laterals and sewers; it is really not a costly program to do smoke testing, it is actually cheap but the difficultly is, is that a lateral is on private property so when GPS or cataloging these events is getting onto the private property. and 99 percent of the people are very receptive to it and one percent will say get off my property; and the lack of regulatory compliance is if a lateral is broken, it has to be fixed. He stated Utility Services does have initiatives that are underway by minimizing I&I, repair and maintenance, and the reclaims, but the sewer assessment and lining is being done, which was the Board saw a month or so ago as an Agenda Item for doing the budget transfer for a Fiscal Year (FY) 2019 program by assessing the remainder of the South Beaches and Barefoot Bay; A Fiscal Year 2020 program will assess Merritt Island and Port St. John; the reasoning for that is trying to identify areas where there were discharge events, or there is a likelihood of being adjacent to open bodies of water; they will not be done in FY20 and the plan is to continue that until other needed areas are assessed. He went on to say in FY13-14 the Board approved a rate increase to do an aggressive program to do improvement with the existing assets, which is being continued; the benefit of that is taking lift stations that are 20 to 30 years old and putting an investment in them to get another 20 to 30 years; every year 10 to 15 are being a year; force main replacement and expansion are being focused on in the system, all with the goal of how to minimize discharge; and treatment plants are nearing capacity. He explained in the same report that Ms. Barker talked about, all treatment plants have to submit monthly to the Florida Department of Environment Protection (FDEP) that identifies nitrogen and what not, but also have to tell what the flow level is; the FDEP understands what Brevard County's capacity is and when getting above 80 percent, that becomes a measure where the FDEP starts to monitor more closely, and a few plants are above the 80 percent capacity, the approach of investment on nitrogen to reduce the nitrogen on a treatment plant that may need more capacity is three to four years down-the-line for the best dollars spent, or to decide on if a new plant is needed; as part of the funding for that plant, the SOIRL dollars can be used as a part of that; due diligence is being done on this by doing a population projection analysis, which is a collaboration with the Planning and Development department trying to find a crystal glass that will give the data of what is currently in the projection and trying to get an idea of what the shape of Brevard County is going to be from a land development side. He explained if areas in North and South Brevard

are looked at a lot of empty land can be seen; he questioned if in five or 10 years that land will still be empty; he noted if it is not, there needs to be planning ahead for the ability to provide the water and sewer so that if things are more than just three-acre lots with a septic tank and a well, causes the need to plan for it; and in the meantime on a short-term basis on the plants with capacity issue has engineering assessments going on for those plans, and what the options are to expand the capacity for future expansion with feasibility to accommodate current development that may be wanting to come in now but may be problematic or logistically limited due to capacity. He asked if his explanation answered Commissioner Lober's question.

Commissioner Lober responded affirmatively.

Commissioner Lober's absence is note at 2:21 p.m.

Mr. Fontanin stated sewer lining and assessment has eight, 10, and 12-inch sized pipes in the majority of the gravity system; from FY2013-2014 to the current FY, 69 miles of gravity sewer were lined, and that works out to be about \$185,000 per mile; it is not a cheap initiative. however, when lining a sewer there is up to 50-year lifespan out of that sewer; if a person is into cost pay back, the cost pay back there sucks because of having to pay the initial capital to get there; if a program was taken that was not assessed and just lined every sewer the County has, whether it is thought to be good or bad is about another 490 miles, and costing an additional \$90 million; to assess a line costs about .80 to \$1 per foot, so for \$5,000 a line could be assessed in lieu of just spending \$185,000, and blindly going into it; and that is why this kind of gives the dollars of why the approach is what it is. He went on to say in FY2018-2019 for South Beaches and Barefoot Bay are in the program to asses 150 miles of sewer; the benefit is identifying critical areas and developing a program to focus on the worst leaks; and a national grading system is used to develop what will be lined in the future. He advised 40 lift stations were rehabilitated and 11 lift stations had been reconstructed since FY2013-2014; seven additional lift stations are in the rehabilitation, and eight lift stations are currently being designed for rehabilitation for FY2019-2020; and on average the cost per list station is \$750,000, and if preventative maintenance is done the 20 to 30-year lifespan can be seen from it. He talked about Florida Power & Light Company not always being there, whether it is a brownout or a hurricane situation; there are 297 lift stations in the County system, 20 of them have generators which are based on what the FDEP requirement was at that time of them being permitted, and those 20 were classified as a re-pump station; in addition, there is also 35 portable generators for when an emergency comes up that are mobilized in 30 minutes; all of the lift stations are grandfathered in through the FDEP, however, when talking about the new standard that the FDEP has in reclassifying as a re-pump station has identified 13 additional lift stations; those 13 lift stations will be program in FY20 to be addressed; and a cost to install generators is approximately \$175,000, but it gives certainty that when power is cut there is ability at major lift stations to minimize the probability of a discharge event; and monthly preventive maintenance is a big component.

Mr. Denninghoff mentioned the City of Satellite Beach is partnering with the County to help with the generators; one problem the County has with portable generators and trying to run generators that do not have a permanent standby generator sitting there is there has to be manpower fueling and servicing the generators, and if one is left someplace there is a generator that does not have the standby; in moving them around and reestablishing them to be operational at a new location does take a lot of manpower and a lot of coordination; and there has some help received from some cities with that, but in particular Satellite Beach has been very helpful with this.

Mr. Abbate remarked especially after reevaluating them last year for how things can be done better; the City of Satellite came to table asking how it could be helpful to Utility Services; this is something that had occurred in the past 12 to 18 months; and he expressed his appreciation for

the partnership, which is helping tremendously.

Mr. Fontanin stated 14 miles of force main replacement has been done since FY2013-2014; the cost for construction is \$1 million to \$3 million per mile; the cost depends on the proximity, amount of traffic and what is already in the ground; five miles of expansion has occurred and some of that has been through development and anticipation of further growth; the North Courtenay Parkway force main, phase 3, is in the process of being designed because of the requests for connection to sewer in the North Merritt Island area are increasing; he is looking at getting the design ready and if there is ever an opportunity for shovel ready plans for funding, he plans to purse that; and that is being programmed and planned to be pursued in the 5-year Capital Improvements Plan (CIP).

Commissioner Tobia's absence is noted at 2:29 p.m.

Mr. Fontanin added the Riverside force main is the three miles replacement as part of consent decree; this project has to be completed as part of the consent in December 2020; the \$12 million was an Agenda Item at the last Commission meeting, allowing Mr. Abbate to sign on the State revolving fund applications; and as a collaboration with the SOIRL funding is the design of the Micco force main.

Commissioner Tobia returned at 2:35 p.m.

Mr. Fontanin stated there are 13 SOIRL Plan funded septic-to-sewer projects; SOIRL looks at septic-to-sewer for if the project can get nitrogen reduction for less than \$1,500 per pounds of nutrient removed; and it will contribute \$33,000 per unit for the construction. He provided the Board with the current SOIRL map illustrating where the 13 projects are located; he added in addition to the 13 projects, there are also 22 other areas that are not identified on that map that are currently unfunded; the logistics as a Utility Services department and how it functions are the 13 projects meets the SOIRL criteria; 11 of the 13 do not have enough funding, if SOIRL is the full-source of money; there is enough money for the design of the project, but when getting to construction there is a shortage; and the lack of funds is in the range of \$380,000 to \$2.8 million. He explained that he likes to use the 50 percent rule, which is a capture rate of 17 of the 35 projects, and \$55,000 per unit would get to that; it may not meet the criteria of \$1,500 per pound removal, but from a cost perspective of getting the project to completion the \$55,000 would get it to the 50 percent; 50 percent means in total quantity is 2,623 septic customers to hook up to sewer; the total cost of those 17 projects would be about \$113 million; and however. two of those 17 projects is \$38 million, which is the logistics of getting them into the system. He talked about some options, in no particular order, that could be ranked to get these projects funded; option one is the partnership that SOIRL has with any utility is a way to do more costsharing; option two is looking for State or Federal appropriations, there has been some House Bills that talked about a funding mechanism for projects like septic-to-sewer that could be used; being the Utility Services Director, he is a big fan of that because the more outside funding received, the softer the blow it is on everyone else; option three is to look at increasing utility rates, in order to bridge the gap, and he is working with the County Attorney's office in looking into the legality for if that is even an option; and option four is creating Municipal Service Benefit Units (MSTU), where if existing funding is in place and there is a delta, and that area getting the benefit of that do ten or 20-year special assessment to supplement that cost. He continued talking about the other opportunities of how to partner with SOIRL, by connecting private package treatment plants to the County's system, and by converting all wastewater treatment plants to AWT standards; SOIRL is looking at it in the form of nitrogen reduction; Utility Services is looking at it because it gives greater control and it would rather take over an asset that may down-the-line come under its jurisdiction; Utility Services is right now looking at wastewater treatment plants because 11 of the 15 million gallons of total flows are currently under AWT, which is also called the five-five-three-one that is all the treated effluent having to be below five

PPM of suspended solids, five PPM biological oxygen demand, three PPM of nitrogen, and one PPM of phosphorus; and it is a stringent requirement but there is an investment in order to make sure there is redundancy in order to assure that because once a plant takes on the AWT designation, and it falls above the five-five-three-one it would be out of compliance. He pointed out at a per unit cost it would cost about \$75,000 per unit of an area to connect and to convert a package plant, and getting them connected to the system; and to do a ballpark conversion of what the unit cost is to convert package plant to lift station is about \$75,000.

Chair Isnardi inquired if it is a whole unit.

Mr. Fontanin responded as an example, if there were 40 parcels of in a homeowners association in some remote area of Brevard County on a package plant, it would be \$75,000 times the 40. He reiterated there is a cost to convert the package plant to a lift plant and the cost to take that from the location and constructing a force main to the County's system, and whether or not there is a cost associated with taking ownership of that existing package plant; when he talks about AWT at a wastewater plan, the rule of thumb ballpark is that it costs about \$8 to \$10 per gallon of treatment to do this on a new facility, that is a planning and budgetary amount, and when final bids come in it could be somewhere in the range of \$7; of the 15 million gallons per day that Utility Services treats every month, only four of those million gallons per day does not meet AWT; and using partial SOIRL funding may be available for AWT conversion and/or He stated there are ordinance opportunities for discharge events that are mandatory to hook-up to gravity for low pressure systems; Florida Statute 381.0065, only applies to gravity system with no mention of low pressure system which is a consideration that can be done at the State level, or possibly at the County level; the mandatory repairs of sewer laterals and caps is there is no mechanism in place requiring residents to fix them; if they are not fixed, when there are rainy events it becomes a point source that takes up capacity during those events; he wants to make sure there is not a correlation made, there were 10,100 homes identified by smoke testing, and the 240 of the lateral caps missing and the 30 that were identified as leaky works out to be three percent; the questions get raised about spending money because its only three percent that is captured; with that captured three percent, what is not captured is the volume of water that can enter that three percent; and that is the significance of what is trying to be identified. He went on to say Fats, Oils, and Grease (FOG) ordinance is catered for commercial restaurants and is a means of developing a program, that ensures restaurants are disposing of FOG by not putting it down the sewer; FOG relates to the capacity of the sewer lines and when FOG gets into sewers it does not flow, and it just stays in the sewers and takes away capacity; he is working with the County Attorney's office to develop the FOG ordinance; and he is hopeful to be bringing that forward to the Commission soon. He mentioned conservation of reclaimed water and right now reclaimed water is not given away for free, but it is the best bang-for-the-buck; for someone who lives in Viera it is \$6.43 a month for all the reuse wanted; from the intent of getting into use all that is wanted, takes ability away as a Utility to provide a proper level of service; and if reuse lines are brought into any development, it is to provide a service that is felt to be accommodating to a level of service that the residents should get; when getting into use all that is wanted, a person may not reap the benefit; it may require individuals to be metered with monthly rates; and over watering is discouraged. He concluded by saying the goals of Utility Services related to the IRL is sewer assessment and lining, smoke testing, expanding treatment capacity with AWT standards, expanding septic-tosewer, continue with the removal and replacement program, and to connect private wastewater treatment plants to the County system.

Commissioner Smith inquired if some kind of enforcement rule is needed from the Board for the leaky laterals.

Mr. Fontanin responded affirmatively; he asked the Board to remember the Utility Services does go into incorporated cities; and he advised for interlocal agreements to be done.

Commissioner Smith stated the cities can be worked with, hopefully they are on the same page as the County is and are willing to participate; the same thing for the individuals with reclaimed water; and he inquired about meters.

Mr. Fontanin replied most of the reuse system is in the County's jurisdiction and the funding would have to be looked at; he knows the St. Johns River Water Management District (SJRWMD) promotes metering for this and he can look into that; and he is willing to start that initiative and he will get back with Commissioner Smith.

Commissioner Smith inquired what has rates done over the last 10 years versus where they should have gone to cover the cost of increases and if the rates are being adjusted upward to accommodate the increased needs of costs for lift stations, assessments, new lines, and force mains.

Mr. Fontanin replied an adjustment was made in FY 2013-2014 on the rates, prior to that there were not any adjustments, and there was a shortfall that compounded over the years; he explained the rate structure is being worked on; but the basis of those rates were to really fix the existing assets, it really was not catered for the expansion of the system.

Mr. Abbate pointed out a rate comparison slide was dropped off the presentation; the County's sewer rate is relatively low and it is lower than other comparable jurisdictions or cities; when Mr. Fontanin talked about an adjustment, it was to cover that \$150 million improvement program to do some pick up of deferred capital maintenance that was needed; it also had a built-in Consumer Price Index (CPI); and that was to have an ongoing continuum of what it was able to catch up on deferred maintenance to keep that on a par. He advised of things that were not contemplated then are being talked about today, such as preventative maintenance, capacity issues, replacement of force mains or the addition of other force mains to provide other capacity, and upgrading to AWT; and all of that was not included in what has been done. He added there were significant improvements done in FY2013-2014 through the present and are in the six-year of the 10-year program; a lot of what was heard today are things that are additional, or would go beyond from a utilities only perspective; and the other part is what is appropriate from a utility and/or SOIRL partnership perspective.

Mr. Denninghoff added there is a 10-year plan with Capital Improvement Plan (CIP) with improvements to fix deficiencies across-the-board in the utility system and it was not going to fix everything, but just to fix the things that were the most critical in that 10-year period of time; the rates would then continue and there would be another 10-year period of time, and they would just keep doing that; it was not intended to introduce new programs or additional programs that were not in existence, or to be funded at that time; and the new portions talked about today was not contemplated at all, or considered at the time the rates were raised in 2013. He went on to say there were adjustments done that were phased in but did not do all of them at once, and did do them over a period of time; that is now completed; and now they are into the CPI with adjustments only at this point.

Commissioner Smith inquired how to pay for what is being suggested with the increased projections of more sewers being installed and created throughout the County; and he inquired if the new rate payers will cover the cost of the monies required.

Mr. Fontanin replied that was the benefit of the slide with the four options of how to pay for it.

Mr. Denninghoff remarked it is unlikely to do is the how he would answer it.

Commissioner Smith felt that is kind of what his supposition was.

Mr. Denninghoff stated for septic-to-sewer being in a remote location has to be pumped a very long distance with a long force main, which is a lot of maintenance work for the Department to have to take on; if it is only serving 10 houses, the rates they are paying are probably not going to cover the cost of the maintenance of the entire system; and if it is for a cluster of 200 houses and it is a short distance to reach the force main, those might cover the cost of the new maintenance requirements.

Commissioner Smith opined the problem that he sees with the septic-to-sewer conversion is an awful lot of what has been mandated is along the tributaries, but they are not 200 units of housing authorities; and he inquired what the projections are of how to fund that because there are not enough units to help pay for it.

Mr. Denninghoff replied that is something that has to be figured out; and unfortunately, there is no answer to the question.

Commissioner Pritchett stated when she saw the \$75,000 amount per unit, that is quite a big load for a homeowner to take on; if it expanded further away from the IRL, maybe a mix of an assessment, a rate increase, and SOIRL funding could be done; the projects will have to come back to the Board because they all have to be individually constructed; she is going to count on Mr. Fontanin's expertise that they are good projects to do above some of the replacement of force mains to keep problems for all of the customers in a good place for all of the Brevard County system.

Mr. Fontanin agreed; he stated that is part of the reason why the projection analyses are being done because he is trying to get an idea; and then he will report back to the Board of the process.

Commissioner Pritchett mentioned being way under the rest of the municipalities that sell water, as far as rates; she is not against catching up on the rates a little bit for more money coming in to get this system running at a good rate; if Brevard County is paying an average of \$44.58 per month, Barefoot Bay is paying \$67.80, and City of Titusville is paying \$53.57; she does not think it is unreasonable for the County to do that especially when .45¢ more for a single-family home would get \$350,000 in extra revenue; if there is not enough money coming in to properly run the system, small adjustments need to be done; she is in favor of looking at that so there are not spills into the IRL; and this is like an enterprise fund.

ITEM II. PUBLIC COMMENTS

MJ Waters stated her job used to be to find unintended consequences of decisions that were made at a corporate level; the first thing she would like to bring up is morphine, because morphine was a great idea for all of the World War I solders who had horrific accidents and injuries in the field, and it was able to relieve pain; then it found that morphine was addictive, so something extra was found called heroine which seemed like a great answer at the time; and nobody thought to say what are the unintended consequences of it. She went on to say that she can remember when reclaimed water came into being, because she was employed with an HOA community who thought it was fabulous; nine years later the Florida Department of Environmental Protection (FDEP) came in asking if the HOA realized what its nitrogen levels were in its community; and it was a big problem even though it was free. She added another great idea is to keep the taxes at zero or low; what happens is being known as the cheapest place to live in the country, there are more people, and with those people there are more toilets; and then the costs go up because of the need for more roads and water. She mentioned there being unintended consequences; when FP&L costs go up, her bill goes up; when her HOA costs go up, her bill goes up; she lives in Viera and many cities have much higher costs for

water and sewer than she has; she thinks if water and resources are used, they need to be paid for; and she is very much in favor of looking seriously at increasing rates. She advised within 20 to 30 years there will be almost one million people in Brevard County, which is a lot more stuff going into the Indian River Lagoon (IRL) than there is right now; she is passionate about fixing the IRL; she thinks that needs to be done reasonably; and rates can play a good role in that.

Jim Glass advised he is familiar with stormwater and wastewater programs and he has worked with a lot of developers; he read the impact fee Ordinance but he did not see any money in impact fees for water and wastewater; and he inquired if that is correct.

Mr. Fontanin responded they are referred to as connection fees.

Mr. Glass inquired if there were any fees collected that paid for the extra capacity that was added to the Viera plant.

Mr. Fontanin responded the fees are collected at the time they submit for building permit of each home or for each property.

Mr. Glass pointed out he works with a lot of developers on a piece of land where there is no sewer or water, the developer has to pay to put the sewer and the water in that development; and he ask if there is enough money to pay for the cost of expanding the Viera plant.

Mr. Fontanin replied affirmatively; and he stated the plant expansion at South/Central is being funded through State revolving fund and the debt service is tied in with the master projection related to the development, not only for Viera but any of the adjacent developments.

Mr. Glass mentioned the dredging of canals in Tortoise Island; there are wealthy homes located there with million dollar yachts sitting behind them; he asked if the HOA could fund a part of the dredging of those canals because the people benefiting from the dredging lives in that Subdivision; and he thinks because the residents are wealthy they could pay something towards dredging.

Linden Campbell stated it was said there is no enforcement for the laterals and the clean outs: the Health Department has the authority to take care of public health issues, a leaking sewer or open vent is a public health issue; and he asked if the Board could not just ask for 60 to 90 days fix it, otherwise, it will be turned over to public health, because there is regulation. He mentioned he has been fishing in the Lagoon since the 70's and it got to the point where he did not even want to wade in it; he is real happy that there is finally some serious attention given to it; it concerns him a little that it got to this point, and it is now being handled by the government; and there seems to be shift in society. He explained Farmington is focused on a lot of green space and a whole different approach to housing; there is permaculture which has become a political movement about micro-agriculture, Fleet Farms over in Orlando, the term agri-hood is coming into use, and they are being built across the country; a food forest involves planting a bunch of different plants instead of making the golf course mentality that exists in Florida where there is green carpet and a couple palm trees, a monoculture that is detested by nature and is not very effective for removing pollutants; and he inquired if the County could not move and educate, try a whole different approach to how the environment is run. He commented he knows it is a big ask but if there is a steady push in that direction it would seem to make things better, that way the plants act like sponges and take up the stuff that everyone is trying to get rid of, like nitrogen and phosphorous, because they act like carbon sinks; currently to get the green grass people put a whole bunch of herbicide, pesticide, and fertilizer, which is what the trouble is; if instead of enforcing against plants growing, it goes to slash and burn because people want it mowed and flat; he advised the County should reverse what Code Enforcement does and try to get it so people grow plants intentionally build 80 plant forests and let them be the sink, it may save the

County quite a bit of money; and he thinks public health may improve as well. He noted if it was done with education like Fleet Farms, there could be an individual level pollution control, and he advised do not mow and clear, plant and cultivate.

Leesa Souto commended the Board members for being great leaders, holding this workshop, and for the presentations presented today; the Board really has a great team effort going on between staff in Natural Resources Management, Utility Services, the Citizen's Oversight Committee (COC) in considering and listening to the best available science; she pointed out she knows the Board keeps hearing that but when it comes to best adaptable management and dealing with the problems and issues here, it needs the most recent information and that is why the team is working with the local scientists to gather data now; once it gets into the journals it has been years and almost outdated by then; this Board needs decisions now and it needs to be collecting data as it goes along and adapting the progress so it knows the information as it goes along; the best available information is what is being collected by the team right now and is being listened to every month by the COC, who are investing their time, energy, and thoughts just like the Board, in solving this problem; and she believes the Board needs to trust in the system and value what is being done. She encouraged the Board to stick with the plan; she stated she agrees wastewater is a huge issue and that it needs to be invested in: but she agrees with Commissioner Pritchett that increasing utility fees is the way to do it; know that wastewater infrastructure and the service to the community is an ongoing service and it will go on long after, assuming the Save Our Indian River Lagoon (SOIRL) funding will sunset, the County is still going to have to provide a service of wastewater infrastructure hopefully improving well beyond advanced treatment to the innovative technologies that are coming and being used in other countries, continuing to build this quality of service, continuing to be able to fund the great infrastructure needs that the County will have long after the Lagoon issues have been solved; that is a different fund of money that needs to be continued and infrastructure tax or utility fees are the way to do that; and she encouraged the Board to increase the utility fees to match the levels of the cities in Brevard County.

Lew Kontnik stated as a voter who came at the time when the Plan and the referendum was up for vote, he saw that there was a draft Plan and a whole system, and it seemed sensible; as a voter he is pleased with what has happened; the plan has been revised; and the COC is supported by staff, and increasingly supported by Utility Services. He mentioned there have been different discoveries made in terms of impact of reused water, the variety of septics with proximity as well as the soil; basically he thinks it is great the Board chose to have this workshop; he hopes the Board walks away with as much as he has; he commended the stronger connection between the SOIRL and the Utility Services; and he thinks the County should keep going because everyone wants the same thing, clear water in the Lagoon.

David Botto congratulated Virginia Barker, Natural Resources Management Director, her team, and everybody who has been working on SOIRL Plan. He stated the problem is it does not address the root cause which is five decades of decisions made on land use development and construction without regard to its impact on the IRL; unfortunately it appears they are continuing with business as usual and still not regarding impact on the Lagoon in all of the decisions as far as development; as the Board knows development is accelerating now and will continue; the estimate of population growth in Brevard County from the University of Florida is staggering; and the request for density changes are pouring in. He advised there is a program to solve this called low-impact development; it is being done all over the Country and actually all over the world, because they all have the same problem of population growth; there is a way to approach it; the things to do is retain the water runoff on the property, not place it in a storm drain system at all, with in yard swales and percolation areas, rain gardens, and roof runoff into containers or into percolation areas where it can either percolate into the ground or be evaporated; permeable pavement is a very advanced technology, there is permeable concrete, asphalt, and paving blocks that do not puddle at all and have no runoff, it goes straight into the ground; he noted it is

fairly cheap, easy, it relieves from massive stormwater treatment, and it must be incorporated in permitting, zoning, and in all the County regulations; both Lagoon basin action plans address this and require the community to address stormwater management on the property as well as reducing the runoff in all ways; and many counties in Florida have taken the concept of low impact development and incorporated in a best management practices manual that can be used as bridge as this County converts the permitting and zoning laws and the ordinances to accommodate low impact management.

Laurilee Thompson stated she wants to talk about fisheries because the reduction in nutrients going into the Lagoon is one of the priorities of the SOIRL Plan, but restoration of fisheries is also a priority; she is afraid that the County is losing sight of fisheries as it argues about dredging and whether to money away from dredging; dredge holes are critical habitat for spawning fish and for fish that seek shelter in the deeper dredge holes when there are cold snaps; 24 years ago the public was led to believe that Florida fisheries would improve if there was a net ban, so 70 percent of the voters approved the net ban; and now the fisheries are still declining. She noted taking the net fisherman off the water did not help. She continued the use of the dredge holes like when fish are spawning, they are out on the flats until they spawn then they move into deeper areas adjacent to the grass flats; there are no grass flats left because of the muck being stirred up; by having these dredge holes full of muck, it reduces the dissolved oxygen for the fish and then the fish eggs do not act right; they do not hatch when they are buried in muck; and she encouraged the Board to not throw out the dredging, the fisheries, and the clean dredge holes for the fish. She went on to say the best thing to do in her opinion is to raise utility rates to a reasonable level so the County can do the fixes it needs there; and let the SOIRL money be used for what the voters intended it for, which is projects that cannot be covered by utility fees.

John Windsor stated County staff is awesome and the Board has a great team working for it; the Board meets three times a month and the COC only meets once a month; the Board occasionally sends challenges out to the COC; two meetings ago there was a suggestion that the COC should come back to this meeting with a message, but they have not had a meeting yet because they are in the sunshine, and not allowed to talk to anyone about what the Board asks them to do except at the meetings; and he asked the Board to please give them enough time to address the questions they have. He continued to say this workshop is very important but something is missing, the municipalities that have wastewater treatment plants need to be part of this discussion for a bigger vision of where the County is going 20, 30 or 40 years from now; and if everyone keeps working as individuals and not working together it is going to be more difficult to solve the problem.

Claudia Listapod stated she has done a lot of sampling and modeling in the Lagoon; she is really dedicated because she is a resident and wants to see the Lagoon restored; the County needs to keep the course and keep the progress moving; there are annual updates and the plan allows them to adapt, but if it keeps changing it does present problems; and one of those problems is that the progress either slows down or stops. She continued it does decrease the confidence of not only the taxpayers that funded this but also the municipalities that are planning their projects around being able to substitute those in the plan; if they do not feel confident of the plan, there is going to be funding for stormwater projects a few years down the road, and they may skip doing the plan and less gets done with the Lagoon; another thing is the science needs to continue; she knows sometimes the science has a negative connotation but the data is needed to adopt a plan; therefore, she thinks the plan should change once they have all the data. She noted there are several studies, some were presented here, they are preliminary and have not been finished yet but once the studies are at completion that data can be used to adapt the plan for 2020. She went on to say one of the key messages from those preliminary data points is that these studies need to be done long term; they need to be looked at seasonally because sometimes during the dry season versus the wet season there might be

different concentrations coming from different types of communities; it is important to not just take one snapshot or do one sampling and make a lot of conclusions based on it; and the data also changes for space so it should not be only using one community or one location, it needs to be studied across the Lagoon. She advised that was seen with the soils and how different they are, there are a lot of other variables that change spatially around this big watershed; and she recommended the County keep doing the science, keep the Plan adaptive, and use good science and long term studies to make the right decisions.

Courtney Barker stated she would like to talk about the idea of an ordinance for the lateral maintenance; before Mr. Fontanin became Utility Services Director, she was working with Jim Helmer on Satellite Beach actually drafting an ordinance as a pilot for that; she thinks it would be a really good countywide ordinance that the cities could either opt out or in; she does not know if that is possible for a property maintenance issue; she would be glad to float that in front of her City Council if that is something the Board wants her look at; or she could bring it to the League of Cities and see if they would support it; however, she thinks that is a good first step in getting the lateral issue off the ground. She continued staff is great, the presentations were great; she thinks in all of those recommendations there is an opportunity both in rates and SOIRL funds; she thinks there is a good ratio there and a balance to come up with and do all of those things; and as a COC member she is really excited to see Utility Services get involved. She stated she thinks it would be a good thing to get the cities together in a workshop, on a staff level even to talk about the upcoming projects they might have; she thinks the County is headed down the right path; and she thinks the County is doing a great job.

ITEM III. BOARD DISCUSSION

Chair Isnardi stated as far as the mandatory lateral thing, she heard the arguments made that it is their property, and if they are polluting the Lagoon or affecting the neighbor then the property owner should be responsible for that, and her concern is what about the people on low or fixed incomes; if the County mandates that people fix the pipes, these people may not have the funds to do that; and she does not know how the County would create different situations for different people.

Frank Abbate, County Manager, stated 30 were contacted, and SOIRL funding was available.

Chair Isnardi mentioned the County does not have a program in place that says that is what the County will do for every smoke testing the County does.

Mr. Abbate said he thinks there is a potential for opportunity of SOIRL to participate in that.

Chair Isnardi inquired if it is full funding.

Virginia Barker, Natural Resources Management Director, stated it was up to \$10,000 and they would consider more.

Chair Isnardi stated looking at the impact, she is not saying someone deserves it more; that was her initial thinking of how to make different rates for different people if it is affecting the Lagoon; if someone goes in and says they want to buy this property and get free lateral lines, that is silly, but if it is polluting the water then it makes sense to take care of it; and maybe that is just part of the mandatory. She noted she does not know how to force somebody to be allowed on someone's property but if the problem is not fixed it is all for nothing; and she inquired if Volusia County is floating a tax now, because they used Brevard County as reference, and she thought that was pretty cool. She stated someone brought up Tortoise Island and she inquired if that is an issue and if it is something the County is paying for because she knows there are

communities that self-assess for that stuff.

Ms. Barker stated this was one the legislature approved \$60 million for muck dredging in the County; it was one of the five sights selected for that funding; the legislative appropriations are not fully funding that project, so Lagoon tax dollars are being used in concert with those State funds to complete the funding for that project; therefore, it does have impacts.

Chair Isnardi noted it does have impacts, just like saying nothing should be done in Turkey Creek, knowing that it has impacts.

Ms. Barker agreed. She stated the Board asked Natural Resources Management to contract with Ocean Research Conservation Association (ORCA) to install four kilroys so they will locate two of them at the entrance canals through the grand canal system; and they can then measure how much of the nutrients are defusing out of that muck and how much is moving into the Lagoon as storm events happen.

Chair Isnardi stated obviously there are a lot of issues; she is not saying the utility system has been completely ignored but as far as identifying, trying to do maintenance, trying to talk about the hundreds of miles of piping all over the County, she asked if it would make more sense, even though it may cost more initially, to increase that capacity now because everyone knows the population is coming; it can then slowly peck away simultaneously the causes of the I&I, like what is wrong with the system, what needs to be realigned, and what bigger pipes are needed in certain areas; and if the County is expanded in capacity it is not discharging. She noted someone said earlier the Board wants to keep the public's support if the plan changes; the County loses complete support when it discharges into the Lagoon; it needs to keep the public involved, engaged, and in support of the Lagoon tax, so it needs to do whatever it can to stop the discharge; however, increasing capacity in the short term may allow it to accept the extra capacity which hopefully reduces over time; and she asked if anyone understands where she is going with this.

Edward Fontanin, Utility Services Director, stated he thinks they already do that; he always says he does not build the watch so when they design lines they have some excess because they recognize that only in a perfect world would there be a tight system and no stormwater going into it; he takes into account for that, it just becomes the measure of cost, so if he says the calculation is 24 inches and he sizes it to a 30 or he could make it a 42; and he asked to what magnitude do they oversize.

Chair Isnardi advised she believes there was a plant that took over \$5 million more than it was supposed to, so obviously that plant is not in capacity; and maybe they need to hit those areas.

Mr. Abbate stated the Chair is talking about plants and Mr. Fontanin is talking about the lines.

Chair Isnardi explained if they increase capacity then they can address what causes that capacity; the most stark difference between older systems and what Viera is pumping through, the amount is staggering when it is doubling the amount of gallons being pushed through and that is new development so most of those families are larger families; and to her that was eye-opening. She went on to say she knows there are problems with the system but she wants to do everything that can be done now; she wants to keep everyone on board to support the program; and although there may be some disagreements, she thinks there is a good combination of funding. She stated if the County has not been increasing rates at al then the Board needs to look at CPI or things that are reasonable; all of the people in Brevard County pay this tax so that is an argument that has been made to her and she would make that same argument; everyone is paying the Lagoon tax as well, so if the County is not going to seek the benefit of it and do things that prevent the discharge into the water that creates the muck, because it is the utility

too, but she does not believe it should just be the rate payers; and she thinks there is enough money to address both and that there is a good balance between the two instead of just making the rate payers pay it. She noted the rate payers are already paying the tax.

Commissioner Smith noted he agrees with Chair Isnardi except that, like the people in Titusville are paying their rates and they are also paying Lagoon tax; and he inquired why their Lagoon tax should be going to fix units or sewers in Satellite Beach or Indian Harbor Beach; and the other argument he hears a lot and agrees with, is if the County takes Lagoon tax money to fix sewer systems, sewer systems are paid by rate payers, they will continue to be funded adinfinitum in the 12th year or 20th year, but the Lagoon tax is only good for 10 years, and if the County starts siphoning that money off to fix sewer systems.

Chair Isnardi stated Commissioner Smith has been on the Board for four years and Commissions have failed to keep up the system, so now this Board is left with trying to get the County at an acceptable level; she is not saying to take even half of that Lagoon money, what she is saying is to take some of it, in her opinion; the person in Titusville is still using the Lagoon and still benefiting from the Lagoon; and they have been included in the tax because they are part of the County and still reaping the benefits of the Lagoon.

Commissioner Pritchett stated on that note, Titusville is paying \$9 more for water.

Chair Isnardi advised that it is to their municipality.

Commissioner Pritchett explained they have started lining their pipes and adding capacity whereas Brevard County citizens, granted might be the ones in the path, but everyone is enjoying a whole lot less payment; so to make the entire County double pay that, she does not know if that is a fair tax unless they give the entire water system the same proportional amount of money; and she thinks that would be fair and something she could understand.

Commissioner Tobia inquired if Titusville just received an \$8 million SOIRL project for their water treatment facility. He went on to say to be very clear they are paying but they are also getting benefits as well.

Commissioner Pritchett advised it was for the reclaimed water not the new water system or to change capacity; and for all the proportion for all the Districts, they are still under the amount of money that is going to the North Brevard District compared to the other four Districts, which is fine because most of the problems are in the Banana River area, so that is good; she just wanted everyone to know that was not to expand capacity; and she agrees that it needs fixed and if it was divided across so everyone is getting the same amount, because all five Districts are paying into this, so it needs to benefit all five Districts as a fair tax. She commented if the County starts concentrating on certain areas then maybe what should be done is to get rid of the Lagoon tax and just change the rate structure so people are really just paying for what they are using, that is just thought, if the County starts using it for things that Enterprise Funds use the money for; and she mentioned she hears Chair Isnardi and maybe there is a way to get there.

Chair Isnardi stated she would be interested in looking at some of Mr. Fontanin's projects; she would like to see a bigger breakdown if possible; she is not suggesting to revamp the plan; she likes some of the changes that have been made to the plan to address the septic because she had no idea reclamation water was that toxic; and she inquired if there is a way to put in a system to treat some of that water and to remove some of those nutrients.

Ms. Barker explained that is what the Titusville example is doing; they are upgrading treatment in the plant so that the reclaimed water will be much cleaner; and they are doing the same thing

at the Palm Bay plant, and a similar thing in Melbourne.

Chair Isnardi advised she is talking about big subdivisions and large areas that have all of that retention.

Ms. Barker explained the reclaimed water comes out of the plant then goes through distribution lines back towards the communities so while it is at the plant, they want to scrub it before it gets distributed back out for irrigation.

Chair Isnardi inquired but everything they are taking in, is it how it is being collected.

Mr. Fontain noted the only way to do the reduction is at the treatment process.

John Denninghoff, Assistant County Manager, stated one of the problems at the subdivision level with the raised water is over watering to the point where the ground is saturated and the water now just runs off and into a retention area if it is a new subdivision, or if it is an old subdivision and it does not have retention it runs right into the discharge and wherever that discharge goes; and those nutrients, just from the water itself, goes straight out. He continued in addition to that, the water that soaks into the ground does so at a rate that exceeds the grasses ability to soak up the nutrients to uptake the nitrogen and phosphorous, so it goes into the ground water below where the plants cannot get to it and works towards the Lagoon just the same way a septic system does; depending on the proximity of where the treatment plant is to a discharge or the Lagoon, it is going to get into the surface water eventually; the idea is to get the water clean enough to where at least if it goes down to the ground water and there is not a problem there; however, if people over water that is another problem. He noted that goes back to the metering idea and discouraging the excessive use of water in the first place.

Ms. Barker stated she thinks she finally understands Chair Isnardi's question; part of the reclaimed water turns into stormwater runoff and part of it soaks into the groundwater where it becomes a groundwater problem; the only way to address a groundwater problem is at the plant; the stormwater runoff could be addressed through stormwater runoff projects that will help, not so much baffle box projects that focus on the sediment other than the dissolved nutrients; but stormwater ponds, swales, and other stormwater best management practices (BMP) will help, but they cost more than the improvements at the wastewater treatment plants.

Mr. Denninghoff stated if a customer can be motivated by using reused water appropriately to start out with, then it is not going into the stormwater in the first place, so there is not clean up.

Chair Isnardi commented she thinks it is going to be a hard sell putting a meter on reclaimed water that is not supposed to cost anything and trying to educate people enough to explain what it is and justifying why there is money being collected; and she inquired how that would even be measured.

Mr. Denninghoff explained this is why they continue to go forward with the baffle boxes and other options to put in the advanced biological systems that are being used now to pull water out of a ditch and run it through a biological system and then allow it to go back into the ditch; they are removing the nutrients that way, regardless of whether it came from use water, septic system, or some other source such as fertilizer; they are still doing all of those things because it is a multi-faceted problem and it required multi-faceted solutions; and some areas are going to respond better to some approaches, while others will work with other solutions. He mentioned staff is learning more and more and they are measuring; every time he hears about more of the things being measured he is more impressed; it is hard for him to figure out where they make super obvious improvements in what they are trying to do; and clearly there is a huge problem and it is going to take a while to do this.

Chair Isnardi stated she cringes every time she sees someone blowing grass into the street or into a ditch.

Mr. Denninghoff stated he is encouraged by what he sees, living on a canal, he almost never sees anyone blowing their grass clippings right into the canal deliberately; when he was a kid he lived on that same canal and he would see grass clippings floating by like people literally dumped it into the canal; but at that time there was no curbside pickup; and people have come a long way, but there is a legacy of muck in that canal that used to be 14 feet deep and it is now about six feet deep. He continued while there is a lot in there, he thinks people are doing better; and there is also a long history of problems that need to be dealt with.

Chair Isnardi stated she still gets people asking her about street sweeping; it seems like something very inexpensive that the County could do if it helps some; and maybe it could be done just as a trial to see if it helps.

Ms. Barker advised when the stormwater fee was increased in 2014, one of the promises made with that was to expand street sweeping; and they are sweeping every curbed lane, quarterly now in the unincorporated County.

Chair Isnardi inquired if Ms. Barker is seeing a big return on that.

Ms. Barker responded they are collecting a lot of material that would otherwise be making it into baffle boxes or out into the Lagoon; and they cannot measure reduced load in the Lagoon.

Chair Isnardi asked if Ms. Barker thought that was something the County should be doing more of.

Ms. Barker stated they are collecting tons and tons of material.

Mr. Denninghoff stated street sweeping has a direct benefit to baffle boxes in that it intercepts a lot of material before it gets into the baffle box, which allows the baffle box to function better for longer periods of time; they only function well up to a certain amount of capacity getting full of material; and then they need pumped out.

Chair Isnardi stated she sees grass going straight into the stormwater too; and she gets asked that question more often than people would think.

Commissioner Tobia stated when he was in the legislature, FP&L meters were analog and the legislature let them go to smart meters; smart meters can be read where an individual does not have to come onto someone's property to read what it was last time; he thinks it is a great idea and so did the legislature as it passed unanimously; people could public record request his office to see how many emails he received from people who believed the County was monitoring their power usage on an hourly basis; and that was just a change from one box to another that was digital. He noted he just wants people to be aware of the number of calls that will come in.

Commissioner Smith commented they can get free water for grass, and they want to mow it so they can fertilize it and mow it more often.

Commissioner Tobia stated he is not arguing, he just wants everyone prepared.

Commissioner Smith stated now he is being told he has to pay to make his grass grow faster.

Commissioner Tobia stated that is the least of the issue; he does not think the money will be it;

the fact that the County is monitoring water consumption will be the big issue; and he advised the Board and staff to be prepared for it.

ITEM IV. OTHER BUSINESS

Frank Abbate, County Manager, stated he has three quick issues; the first one, his office was contacted today by Patrick Air Force Base, who is in the process of applying for a program, through the Department of Defense, for a STARBASE program, which has been in existence for a while; they are applying now to start a partnership with the School Board so the fifth grade level has a program in place to encourage Title One schools to have a program at Patrick so the kids would go there for either an entire week or one day per week for a month; and they would like the Board to show community support by signing a letter of support that he has prepared. He noted there is a PowerPoint presentation for the STEM program and the kids would participate in it; the Economic Development Commission (EDC) and the School Board already signed those letters; it is urgent because he believes they are planning on submitting it tomorrow; and he inquired if the Board would approve it and sign it.

The Board executed and approved sending a Letter of Support to the Patrick Air Force Base for the STARBASE Program, for the potential impact it will have on fifth grade students through STEM education and programs.

RESULT: ADOPTED [4 TO 0]

MOVER: Rita Pritchett, Commissioner District 1
SECONDER: Curt Smith, Commissioner District 4

AYES: Rita Pritchett, John Tobia, Curt Smith, Kristine Isnardi

AWAY: Bryan Lober

Mr. Abbate stated it has come to his attention that the School Board has scheduled their final budget hearing on September 10, which is the same day this Board is scheduled for the tentative budget hearing; according to Florida Statutes 200.065 and TRIM requirements the School Board has first priority on hearing dates and the County cannot schedule the budget hearing on the same day as the School Board; they usually have been successful with that, but not this time; therefore, he is requesting to reschedule the tentative budget hearing from Tuesday September 10, to Thursday September 12, at 5:00 p.m. which will meet the statutory timeline for holding the tentative hearing within 65 to 80 days of the certification of the taxable value. He added the final budget hearing will be advertised the following Friday and the final budget hearing will be September 24, as initially scheduled.

The Board rescheduled the September 10, 2019, 1st budget hearing to September 12, 2019, at 5:00 p.m.

RESULT: ADOPTED [4 TO 0]

MOVER: Rita Pritchett, Commissioner District 1
SECONDER: Curt Smith, Commissioner District 4

AYES: Rita Pritchett, John Tobia, Curt Smith, Kristine Isnardi

AWAY: Bryan Lober

Mr. Abbate stated he has met with Rockledge and he believes there will be an agreement coming back on the Community Redevelopment Agency (CRA); he met with them a couple times and he thinks they are bringing it before their council; he believes it will work out well; and he believes the Board will be happy with it. He went on to say he is waiting to hear back from Cocoa; he has met with them as well; and he believes they are moving forward so that is good news on those two fronts. He continued he has been talking with the City of Melbourne on the Eau Gallie one about something that relates to the potential project that may be stormwater related for the Lagoon; that is something he may be able to bring back to the Board; and then the City of Palm Bay, he believes they are going to the City Council on something; he just received some information on it yesterday and he does not fully understand it because it talks about potentially extending the CRA, which is nothing that has been discussed; and he went through the notes of the last meeting where the Board extended it and gave them until the end of the year.

Chair Isnardi advised she did extend the CRA.

Mr. Abbate replied he understands and that is why he is mentioning it now.

Chair Isnardi stated just for some background on that, they did not understand what their big planner/developer down there that is doing a bunch of projects was concerned because they did not know what the interlocal agreement would mean or if it would interfere with what the City of Palm Bay was doing; and initially the thought by City Management and possibly counsel, the direction was to give a little more time so the developers are not scared away from finishing some of the projects they wanted to do, and to find out they are more concerned about the unknown. She noted they are more than happy if the County moves ahead with it, but she made it very clear what the County's position has been with the CRAs, transparency, not extending, and no bonds so at least they know where the County stands on this, just like with the others.

Mr. Abbate stated he thinks that is consistent with what he has heard.

Chair Isnardi stated she is not negotiating with the developer; if that extensions goes before their board she does not know what other message this Board could give to say that it will not likely support such a thing.

Mr. Abbate explained he just wanted to make the Board aware of it because he thinks what Chair Isnardi just said is what was said at the prior meeting.

Upon consensus of the Board, the meeting adjourned at 3:56 p.m.

ATTEST

SCOTT ELLIS, CLERK

KRISTINE ISNARDI, CHAIR

BOARD OF COUNTY COMMISSIONERS

BREVARD COUNTY, FLORIDA

As approved by the Board July 9, 2019

Kimberly Powells

From:

Kimberly Powell

Sent:

Wednesday, June 5, 2019 2:11 PM

To:

Commissioner District 1; Commissioner District 2; Commissioner District 3;

Commissioner District 4; Commissioner District 5; Eden Bentley; Sally Lewis

Cc:

Tammy Rowe

Subject:

04-18-2019 Workshop /draft minutes

Attachments:

04-18-2019 Workshop.doc

All,

Attached are the minutes from the 04-18-2019 Workshop which will be considered by the Board on July 9, 2019.

Have a wonderful day.

Kimberly Powell
Recording Secretary
Clerk to the Board
(321) 637-2001
Kimberly.powell@brevardclerk.us

