

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

6:00 PM

The Board of County Commissioners of Brevard County, Florida, met in special session on October 17, 2013 at 6:00 PM at the Lagoon House, 3275 Dixie Highway, NE, Palm Bay, Florida.

**CALL TO ORDER**

<b>Attendee Name</b>	<b>Title</b>	<b>Status</b>	<b>Arrived</b>
Robin Fisher	Commissioner District 1	Present	
Chuck Nelson	Commissioner District 2	Present	
Trudie Infantini	Commissioner District 3	Present	
Mary Bolin Lewis	Vice Chairman/Commissioner District 4	Present	
Andy Anderson	Chairman/Commissioner District 5	Present	

**ITEM I. WELCOME - LEESA SOUTO, Ph.D. EXECUTIVE DIRECTOR, MARINE RESOURCES COUNCIL**

Leesa Souto, Ph.D. Executive Director, Marine Resources Council, stated this is her home office and where she comes every day to work. She went on to say they are here to talk about the Indian River Lagoon; she has high expectations of the meeting, because to her it represents a force of community that is completely diverse all coming together with a single mind and a single goal, and that is that estuary outside of the window; and regardless of what each person's world views are, ideologies are, where they come from, where they are going, it is one idea, which is protecting and restoring the estuary. She stated she thinks it is the beginning of that conversation; it will be a long conversation because it will not be an easy fix; there is a big challenge ahead of everyone as a community; people will have to change the way they live a little bit, how he or she does business, change the way developments are built, change the way to maintain the lawns, and make these little tiny changes; and it will have a long-term impact on how that estuary functions. She advised the Board typically holds its workshops at the Government Center; and it took a lot of effort to get it to the Lagoon House tonight. She expressed her appreciation to the Board for having the Workshop at the Lagoon House; Commissioner Fisher assembled the Planning Committee and brought it forward to the Board for consideration; Commissioner Anderson's office and his staff did an amazing job with logistics; Brevard County Natural Resources Management Office did an amazing job of getting all this set up; Eastern Florida State College is doing the televising; and the *Florida TODAY* streaming it live. She went on to add there is a great video that will be presented from Sky Advertising; the Sheriff's Department is outside helping to deal with the traffic; the Space Coast Area Transit (SCAT) is providing shuttle buses; and she expressed her appreciation to the people who are attending the Workshop.

**ITEM II.A., REPORT, RE: COUNTY MANAGER HOWARD TIPTON**

Howard Tipton, County Manager, stated he appreciates Ms. Souto sharing the partnership that it took to make this happen this evening, and he appreciates them being the host; he wants to recognize the Parks and Recreation Department for the use of their equipment; and further recognized Don Walker and the Space Coast Government TV (SCGTV) as part of the production team.

**ITEM II.B., REPORT, RE: SHANNON WILSON, DEPUTY COUNTY ATTORNEY**

Shannon Wilson, Deputy County Attorney, stated the County Attorney's Office is requesting authorization to file appropriate cause of action, not limited to seeking injunctive relief, with respect to owners, tenants, and entities operating or engaging in activities violating any State laws or County Ordinances at 412 Winchester Drive, Cocoa; this would include the actions of Chester Malinowski and Terry Engels; they are currently operating an illegal bed and breakfast at that location; AND the County has instituted some Code enforcement action, but what tends to happen is they switch the nature of the business they are operating, which is a residential location.

Commissioner Nelson stated this issue has been going on and is a real problem in the neighborhood; his staff has been working with the Sheriff's Office, as well as Code Enforcement, related to what they believe is illegal activity; and there is more detail to it, which they can provide the Board. He went on to say the problem is the neighborhood is basically overrun with a party house, and they have no ability to cause it to stop; they are advertising on the Internet; and when the Board sees some of the information that comes out of that, it will understand why this is a big issue. He pointed out this house is in his District by one block; he is still disappointed that it was not Commissioner Fisher's District; the issue is spreading into a neighborhood that he represents; and they have been working with the Sheriff's Office and the State Attorney's Office to deal with the issues that are occurring there.

Commissioner Infantini stated she does not think it is appropriate for the Board to pass something like this at a meeting like today; there is another meeting on Tuesday, which is just four business days away; and if this issue can be held off on because she would like to have some detail rather than a short narrative by the County Attorney's Office.

Chairman Anderson inquired if this is time sensitive, and if the Board can get a report from the County Attorney.

Commissioner Nelson stated they will have to do some paperwork; he would like to move the item; the Board can follow up with the information at Tuesday's meeting; but it will give them the ability to start working on this for filing purposes. He reiterated when the Board sees this, it will understand why.

Commissioner Infantini stated it is not appropriate to vote on something without seeing any data whatsoever on it; and the Board would not make a decision on the Lagoon without having a whole bunch of information. Chairman Anderson stated he would like to see the report.

The Board authorized the County Attorney's Office to file appropriate causes of action, including seeking injunctive relief, against any owners, tenants, and entities (including Chester Malinowski and Terry Engels) operating or engaging in activities violating State Laws or County Ordinances at 412 Westchester Drive, Cocoa.

<b>RESULT:</b>	<b>ADOPTED [3 TO 2]</b>
<b>MOVER:</b>	Chuck Nelson, Commissioner District 2
<b>SECONDER:</b>	Robin Fisher, Commissioner District 1
<b>AYES:</b>	Robin Fisher, Chuck Nelson, Mary Bolin Lewis
<b>NAYS:</b>	Trudie Infantini, Andy Anderson

**ITEM II.C. REPORT, RE: ROBIN FISHER, DISTRICT 1 COMMISSIONER**

Commissioner Fisher expressed his appreciation to everyone who came out today; Bob Stover challenged the Board to get involved more; the Board accepted that challenge; and this is the largest attended event of any issue he has seen in the County since he has been Commissioner, which says how important this issue is to a lot of people.

**ITEM II.D. REPORT, RE: CHUCK NELSON, DISTRICT 2 COMMISSIONER**

Commissioner Nelson expressed his appreciation to everyone who came out tonight; and he is looking forward to the Board working together on this very important issue as it impacts everyone.

**ITEM II.E., REPORT, RE: TRUDIE INFANTINI, DISTRICT 3 COMMISSIONER**

Commissioner Infantini expressed her appreciation for having this Workshop in her District.

**ITEM II.E.1., RESOLUTION, RE: CONGRATULATING RIVER CONNER GRACE FOR WINNING THE BROADCOM MASTERS NATIONAL SCIENCE COMPETITION**

Commissioner Infantini read aloud, and the Board adopted, Resolution No. 13-196, congratulating River Conner Grace on his exceptional achievement and win in the Boardcom MASTERS national science competition.

River Grace expressed his appreciation to the Board for the Resolution, and for Brevard County being so supportive of him with all of his scientific and math endeavors. He stated he is amazingly shocked that he was awarded this prize, because as silly as it sounds, his project he did to get there was about dancing tortoises; he discovered this new behavior in this critically endangered species of tortoise that when it rains, they actually stand up and start shuffling around and moving their legs; and it is a very strange behavior he has not heard of in any other species. He expressed his appreciation to all his teachers, his parents, and everyone else for supporting him that have helped him get to this level.

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	Trudie Infantini, Commissioner District 3
<b>SECONDER:</b>	Mary Bolin Lewis, Vice Chairman/Commissioner District 4
<b>AYES:</b>	Fisher, Nelson, Infantini, Bolin Lewis, Anderson

**ITEM II.F., REPORT, RE: MARY BOLIN LEWIS, DISTRICT 4 COMMISSIONER, VICE CHAIRMAN**

Commissioner Bolin Lewis expressed her appreciation to all for coming tonight; she stated she still sees people walking in, in the back of the room; and it should be a very enjoyable and informative night.

**ITEM II.G., REPORT, RE: ANDY ANDERSON, DISTRICT 5 COMMISSIONER, CHAIRMAN**

Chairman Anderson expressed his appreciation to everyone for being here; he stated this is one of those issues in the community that crosses all political, social, economic, and all sorts of

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ideological areas; and this is something where this community can come together and agree, because whether it is about sports fishing, the environment, or the economic impact of the Indian River Lagoon, it is certainly important to everyone.

**ITEM III. STATE OF THE LAGOON PRESENTATION, BY TROY RICE, EXECUTIVE DIRECTOR, INDIAN RIVER LAGOON NATIONAL ESTUARY PROGRAM**

Ernie Brown, Natural Resources Management Director, stated the first speaker is Troy Rice, Executive Director for the Indian River Lagoon National Estuary Program; Mr. Rice has been a phenomenal partner for a very long time; the National Estuary Program has a real pulse of the state of the Lagoon; and staff asked Mr. Rice to present an overview of the status of the Lagoon.

Troy Rice, Executive Director, Indian River Lagoon National Estuary Program, expressed his appreciation to the Board and the Marine Resources Council for hosting this Workshop; this is the second one he has been to on the Lagoon; Indian River County had one a couple of months ago, and it was very well attended; and it is good to see that the Indian River Lagoon is getting a lot of attention, it has needed a lot of attention for a long time, and it is good to see the concern and effort to move forward on restoration of the estuary. He asked people to raise their hand if he or she came out for the Hands Across the Lagoon event; stated there were about 5,000 people up and down the Lagoon holding Hands Across the Lagoon and Causeways from New Smyrna Beach all the way down to Stuart; the Marine Resources Council organized the event on the 192 Causeway, they had over 2,000 people on the Causeway; and there were kayaks on the Lagoon.

He stated the Indian River Lagoon, 156 mile-long coastal estuary, and it is not a river; it does not flow from one point to another like the St. Johns River; it acts more like a bathtub; and a lot of the materials, pollution, and nutrients put into the Lagoon stay there for a very long time. He stated with the Northern Banana River Lagoon, Northern Indian River Lagoon, and Mosquito Lagoon, the nutrients and excess fresh water put in there often stays in there for a long time. He went on to say the Lagoon is considered one of the most biodiverse estuaries in North America; there are over 4,000 different species of plants and animals in the watershed; the Lagoon includes the Indian River Lagoon proper, basically from Turnbull Hammock, north of Titusville, 150 miles south to Jupiter Inlet in Palm Beach, which it also includes the Mosquito Lagoon to the north, and the Banana River Lagoon to the east; and they did an economic assessment of the Indian River Lagoon in 2008 and found the Lagoon provides over \$3.7 billion in economic value to the region and to the State. He added, it also supports over 15,000 jobs per year; the amenity value for homes that are near and on the Lagoon, are much greater than homes three miles away; and that is a result of having a healthy ecosystem and wildlife out in the estuary. He pointed out it is not just an important environmental amenity for the area; it is also an important economic one as well. He noted the Lagoon is a sea grass based ecosystem; sea grasses define the ecology of the system; it is a very shallow system; it averages about six-feet in depth; and it is an ideal environment for sea grasses to grow. He added, the Indian River Lagoon has all eight species of sea grasses; it is very diverse in the habitat the sea grasses provide; sea grasses are an ideal nursery for many of the fisheries in the Lagoon; they also provide food source for the Manatee; and it keeps the total suspended solids down, and does a pretty good job of filtering the other pollutants and things in the other estuaries. He advised sea grasses are the primary indicator of what is used to gage the Lagoon's health overall. He stated in 2011 there was a very bad micro algae bloom in the Indian River Lagoon; it began in March 2011 in the Banana River, and moved to the west through the Barge Canal into the Indian River Lagoon; then it moved into the northern part of the system; and then moved into the Mosquito Lagoon. He pointed out this was an unprecedented bloom; it lasted about eight or nine months; it had very intensive concentrations of micro algae cells associated with the bloom; basically it

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blocked the sunlight from being able to reach the sea grasses; sea grasses, like any other plant, need light to photosynthesize and grow; and by having the cloudy water out there as a result of the algae bloom, a lot of sea grass was lost. He went on to say while that super bloom was going on from basically Eau Gallie to the north, and included all of the Banana River Lagoon and parts of the Mosquito Lagoon, there was also one at the same time to the south that went all the way down to Fort Pierce; while this bloom was not as intense as the area of the super bloom, it certainly impacted water quality and sea grasses in the central part of the estuary; and as a result, significant sea grasses was lost there. He explained in July 2012, the brown tide bloom began in the northern part of the Indian River Lagoon that started in the Mosquito Lagoon and moved to the west through the Haulover Canal into the northern Indian River Lagoon; this is the same species of micro algae that bloomed in the Laguna Madre and Baffin Bay estuaries in South Texas in the early 1990's; it lasted for about 10 years there, basically wiped out their ecosystem for a decade; and so they are keeping a close eye on this particular species. He stated it is not a harmful species; people can still have contact with the water; but the idea is it blocks the sunlight from being able to reach the bottom and the sea grass habitat. He advised the brown tide returned in April 2013, starting in the northern Indian River Lagoon and moving east through the Haulover Canal into the Mosquito Lagoon; it dominated the Mosquito Lagoon for many months; and so there has been significant impacts as a result of the brown tide species in the northern part of the Lagoon. He went on to say overall with all of these blooms over the past three years, a total of about 47,000 acres of sea grass has been lost. He stated he thinks there are a couple of climatic factors that were involved with the super bloom; there has been a long-term drought in East Central Florida for a number of years, which has increased salinities in the Lagoon; they have monitored salinity readings in the estuary of 40 to 45 parts per thousand; ocean water is 30 to 32 parts per thousand; and there has been a hyper saline estuary for a number of years. He stated due to the cold snaps in January 2010 and December 2010, a lot of manatee and sea turtles were lost and a lot of fish kills were a result; they think it may have also affected the prey that prey's on the micro algae, such as invertebrate, shrimp, and things that feed on the micro algae; and so the prey was removed and allowed the micro algae to bloom. He noted there was also a loss of macro algae, which is a different species, kind of the drift algae in the Lagoon, or the tumbleweed of the Lagoon; it all cased in 2010 as a result of the higher salinities; that does a real good job of storing up a lot of nutrients in the system; and when it crashed, it released all of those nutrients and provided a lot of the food that they think the micro algae needed to bloom a year later. He advised the Board the St. Johns River Water Management District (SJRWMD) has four basic core priority areas, water supply, water quality, natural systems, and flood protection; the SJRWMD has recently adopted ten strategic initiatives; and the two that are the more important to this area are the Indian River Lagoon Protection Initiative and the St. Johns Upper Basin Initiative. He stated the Indian River Lagoon Protection Initiative is a \$3.7 million effort over the next three to four years to get a better understanding of the science that resulted in the creation of the blooms to come up with some recommendations to improve the health of the estuary, and to improve the communication about the health of the estuary to all of the stake holders up and down the Lagoon. He stated the National Estuary Program is sponsored by SJRWMD; the Lagoon was declared an estuary of national significance in 1990; they started their program in 1991; they are funded through the Environment Protection Agency; they are a non regulatory program so they do not issue any permits and tell anyone what they can and cannot do in the Lagoon; but they do coordinate a number of stakeholders up and down the Lagoon. He pointed out he saw recently in some of the media reports that this meeting tonight is the first time that federal, State, and local officials have gotten together in a decade; that is not the case; they have been getting together with federal, state, and local officials three times a year for the last 25 years; and there is a lot of coordination going on out there and a lot of information being passed among the different agencies. He stated the National Estuary Program has implemented over \$80 million in projects in the past 25 years, a number of stormwater and retrofit projects and construction projects, a number of planning stormwater projects to help local governments with stormwater master plans, and a number of education projects to let folks know about the estuary and things

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they can do reduce their personal pollution impacts; they have also a very successful grants writer onboard for a number of years that has brought in an additional \$200 million in capital improvement grant funds through primarily 319 funding and Total Maximum Daily Load (TMDL) dollars, as well as some Florida Forever dollars; and they have been very successful in bringing funds to the estuary. He went on to say the pictures in the slide, the top one is the oyster mat work that is going on in the Mosquito Lagoon, in partnership with the Brevard Zoo and the University of Central Florida to restore oyster habitat in the Mosquito Lagoon; that has been a very successful project; the bottom photo is of muck in the estuary; there is a lot of muck sediments, basically organic sediments that have settled into the bottom of the Lagoon that is mostly clay and organic material that has decomposed once it hits the brackish waters of the estuary; and it is good to get that material out of the Lagoon while they can because it is easily re-suspended and blocks the sunlight from being able to reach the sea grasses, and it also covers the benthic habitat and smothers the sea grasses when it accumulates too much. He advised they have dredged three of the main tributaries to the Lagoon; the St. Sebastian River they took over a million cubic yards of muck out several years ago; they have taken about 400,000 cubic yards out of Turkey Creek; and a little over 300,000 out of Crane Creek. He went on to say they recently finished a feasibility study to dredge the Eau Gallie River, and they have about 625,000 cubic yards of muck in the Eau Gallie River they would like to get out of there; and hopefully they will be able to get some resources in the coming years to do that. He stated the Florida Department of Environmental Protection (FDEP) is working with the SJRWMD as one of the Lagoon stakeholders to implement basin management action plans for the Total Maximum Daily Load program or the TMDL; and the goals of the TMDL is to reduce the amount of nutrient pollution, nitrogen and phosphorous, that are entering the estuary. He added, the Basin Management Action Plans (BMAP) are 15-year plans, basically identifying a number of projects up and down the Lagoon to reduce the amount of nutrients going into the system. He stated they have all heard about the unusual mortality events for the manatee, dolphin, and pelicans that have recently been experienced; the Florida Fish and Wildlife Commission (FWC) is working on that with National Oceanic and Atmospheric Administration (NOAA) and National Marine Fisheries Unit, as well as Hub SeaWorld, and they are investigating those deaths; they have not determined a cause yet for those mortalities; but hopefully they will come up with some reasons pretty soon. He stated he is asked what can be done to improve the Lagoon when he gives these presentations; people should use less fertilizers, pesticides, and herbicides in their yards; pick up after their pets; and make sure anything that goes down the storm drain is just rainwater, and no grass clippings and leaf clippings. He went on to say a person should use water wise native plants; a person can order an Indian River Lagoon snook tag; and all of the money go back to the Indian River Lagoon projects in the county where that tag was sold. He stated if anyone needs additional information to visit [itsyourlagoon.com](http://itsyourlagoon.com), and they will find a lot of information on the estuary. He stated in the slide, in the first column there was not a whole lot of change going on; there was stable sea grasses; in 2010, 2011 when the super bloom hit, a lot of sea grass was lost, 100 percent in many of the segments up and down the Lagoon; but once south of Fort Pierce Inlet, there is still sea grass growth going on in a pretty healthy estuary to the south. He stated in 2011, 2012 the grey bars is loss of 100 percent of the sea grass and it has not come back at all.

Florida Representative Tom Goodson inquired if Mr. Rice has any data related to the cold weather prior to 2011 and 2012 that would show the same kills or no kills due to cold weather. Mr. Rice responded there have been other cold-related kills in the estuary in the past, but nothing like what we saw in 2010; they have monitored the Lagoon for about 25 years now; and they have good data for that amount of time. Representative Goodson stated Mr. Rice made a comment that he thinks the high nutrient release possibly could have been the reason for the grass kills; and inquired when will he ever know what can be identified as the cause of it, or will it never happen. Mr. Rice responded they know the cause is nutrients and nitrogen and phosphorous coming off surface areas, lawns, parks, golf courses, as well as septic systems because the older systems were not put in the proper elevation above the ground water table;

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the watershed has been expanded over the years; it was about 500,000 acres, and it has been expanded artificially to the west to drain the land for agricultural purposes through a series of drainage districts, and that has introduced excess fresh water that historically did not go to the estuary; and that has had a long term impact as well. Representative Goodson inquired if Mr. Rice has a count of septic tanks of each county that border the Lagoon; and can he provide those to him. Mr. Rice responded affirmatively. Representative Goodson inquired if Brevard County has a higher than normal than the other counties. Mr. Rice responded affirmatively; and stated as the County has grown, more and more tanks have been built with the homes; and the newer tanks do a much better job of treating the waste than the older systems do.

#### **ITEM IV., LOCAL IMPACT OF CURRENT CONDITIONS VIDEO**

Ernie Brown, Natural Resources Management Director, provided a brief video to the Board and audience of members of the community who actually are working on the water, and they are sharing their thoughts and testimonies. He went on to say the video highlights people who make their living on or around the water and just getting their perspective of the current conditions.

#### **ITEM V., HISTORY AND VALUE OF THE LAGOON, BY R. GRANT GILMORE, JR., Ph.D., PRESIDENT ESTUARINE, COASTAL AND OCEAN SCIENCE, INC.**

R. Grant Gilmore, Jr., Ph.D., President of Estuarine, Coastal and Ocean Science, Inc., stated he has never seen such a large crowd for this Lagoon; and it is extremely important considering what is happening. He went on to say he first began with Harbor Branch Oceanographic Institute, he worked there for 27 years; he was their first employee; Brevard County was one of their targeted collecting sites; and he worked at the Kennedy Space Center for five years. He added over those years, they have concentrated on the fish and fish ecology, but he took salinity temperature of dissolved oxygen every time they collected a fish, so he has over 42 years of data on temperature salinity dissolved oxygen; he has been very interested in taking a more global view of Brevard County; and when doing that, they find out how unique Brevard County is. He stated one of the things he wanted to talk about is how the Indian River Lagoon compares to other estuaries throughout the United States, Florida, and its vulnerabilities; Brevard County has unique attributes separate from the other counties; and he wants to talk specifically about that. He went on to say he wants to define the vulnerability of this estuary relative to others in the Southeast United States; to reveal how water connects everyone in coastal Florida; it will help reveal why this estuary is special relative to other estuaries; and it will help visualize which remediation efforts may be most effective. He advised what sets up the County and its Lagoon system is climate and oceanography, geo-morphology, and water movement; the Florida Peninsula is going north and south here, which is different from the other states in the Southeast United States relative to winds and climate; that is the Gulf Stream there; and it is a warm climate. He added other currents contribute to it. He stated he grew up in Sarasota; he did not know what a Sail Fish was; it is on this coast because of that Gulf Stream, Atlantic, and of course the cold fronts come down through the Northwest making a big difference in what is happening here. He pointed out Fort Meyers, directly across from Stuart, is quite different as far as climate, oceanography, and everything else; as a consequence, there are fewer fish species over there than over in Stuart; and a lot of that is because of the Gulf Stream. He added, it actually goes further offshore the further up north, so its further off Cape Canaveral and Port Canaveral than it is off of Jupiter and Stuart; and that makes a big difference as far as the geology of Florida; notice that south of Stewart and Jupiter, Florida begins to migrate 17 degrees to the west; that is because of the winds; and the Bahamas platform there blocks the wind, so a person does not surf in Miami they surf up here. He stated the black arrows are the inlets, which are at the southern end of the Lagoon closer to the Gulf

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Stream, hence the higher diversity; note the Florida Bay is colder than the Southern Indian River Lagoon, even though Florida Bay is 200 miles further south; the change in temperature along this coast is greater than any other location on the East Coast of the United States; and that is from Jupiter to Daytona. He went on to say prevailing winds are out of the east, and that means there are higher waves off Brevard County's coast; and Ron Jon's Surf Shop has got to be here, it cannot be anywhere else. He noted each red line is an old beach dune and ridge; there is one along the beach and one along U.S. 1, the Sugar Sand Ridge; it is a bluff in some places; and I-95 is going down another ridge. He added, then there is the Kissimmee Plateau, and then the Mid-Florida Rig, which reaches an altitude of well over 150 feet; Kissimmee Plateau has the Kissimmee River going down into the lake; and then there is the St. Johns River going north. He advised what that means is there are no major rivers here; talking about salinity, when he measured salinity up and down the Lagoon 40 years ago, he was getting hyper saline conditions then; he commonly got 40 parts per 1,000; in 1999, in Mosquito Lagoon and the intercostals, he got 65 parts per 1,000; and it has the highest salinity in Indian River County at 166 parts per 1,000. He added, the ocean is 35, and he had to crack the salt to collect the fish. He went on to state the historical salinity and temperature data needs to be looked at to see what has changed here. He pointed out the Gulf Coast is completely different; on the West Coast, the openings to the ocean are large, with the size of the opening from Tampa Bay to the Gulf is miles; Boca Grande is over a mile; it is three miles from Sanibel Island to Fort Meyers; and they have larger rivers. He stated they have learned a lot from Chesapeake Bay; and he thinks what needs to be learned from Chesapeake Bay is how to try to solve some of these problems, because as far as he is concerned, it is the public at large that has to solve these problems. He went on to say Chesapeake Bay has a lot of fresh water going into it; Brevard County has no major fresh water sources; but as Mr. Rice said, they have made fresh water sources through the canals. He stated this is the sharpest climatic transition zone, so what is going to be the solution in Stuart is not going to be the solution in Brevard County; there is a different situation up here; the tropical transition is phenomenal; and in the time he has been working here, he has seen Red Mangroves migrate north from the Cocoa Beach Recreation Center to St. Augustine. He added, tropical species have migrated north; this could be a reason that the cold kill in 2010 was more significant; there was more tropical species further north in the Lagoon that died in the cold kill in 1977 or 1978; and 1977 and 1978, it snowed in Miami and Grand Bahamas, and there was significant cold kill throughout the Lagoon. He stated Brevard County is situation on a transition zone between the Caribbean and the Carolinian primarily, and get some of the Virginian fish called a Striped Bass, and there are Bone Fish here as well. He advised he looked at the Texas estuary as it is the same latitude; when he looked at Tomoka Marsh in Daytona, it looked similar to a comparison with the Laguna Madre; he did not look at any of the physical parameters; and then he looked at Merritt Island Wildlife Refuge, and noticed the Mangroves coming in. He stated the wetlands he studied that had no Mangroves are now Mangrove Forests; and inquired what that means for the Lagoon. He stated in South Hutchinson Island in St. Lucie County, which was an ocean inlet during the last hurricane; it will happen again where there are ocean inlets forming. He stated there are now Roseate Spoonbills in the Merritt Island Wildlife Refuge; and inquired what that meant for the future of the Lagoon. He noted Brevard County is in between these two inlets, which are a substantial distance apart; that means, as Mr. Rice said, whatever goes in here is likely to stay in here for a long time relative to the other counties in the Lagoon; and that means it will be more vulnerable to whatever goes in here than St. Lucie, Indian River, or Martin County to the south. He went on to say Brevard County has a greater human population than those counties all put together; some of the natural assets in this County is the largest protected wetland on the Indian River Lagoon; it has the largest submerged aquatic marine protected area on the Indian River Lagoon; and it has the only large estuarine spawning population of Red Drum in the southeastern United States. He advised the next picture was taken from the NASA helicopter; it shows all adult Red Drum in the Northern Banana River Lagoon; they think they are all sizable adult Red Drum; they tried counting; and they estimated it to be about 10,000. He went on to say a lot of that was happening north of NASA Causeway; this particular location was one of the



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locations he went to in the late 80's early 90's and record sounds of Red Drum there; and the sea grass has disappeared there, which is unfortunate because it creates a lot of the forage for Red Drum and other fish that spawn up there as well. He pointed out as they approach ocean inlets, there is higher diversity typically; Sebastian Inlet was extremely valuable for the Grouper/Snapper complex; they would enter the Lagoon as little juveniles and settle in sea grasses. He showed the Board a slide with an image in 2006 where there is a sea grass bed; and he is trying to find it this past year as it is gone. He stated Fort Pierce Inlet is the largest inlet in the Lagoon; it is an important ocean inlet because it is really keeping that portion of the Lagoon alive; this is one of the most productive right now in the Lagoon; and he would not have said that 10 or 11 years ago. He pointed out even through water quality measurements have to be taken, biology needs to be put over that; the organisms, the sea grasses, blue crabs, and fish tell the story of what is bad and what is good; estuarine animals can take more change than the Sailfish that does not want to take any change at all; a Snook tagged off the Space Shuttle launch pad showed up at Long Key in the Florida Keys; four tagged in Stuart ended up in Fort Meyers; and he has taken Snook out of 31 parts per 1,000 salinity, salty water, and put them in fresh water with no ill effects and they live for several years. He noted the Sheep head Minnow has the highest salinity rate of any fish on the planet, which have 166 parts salinity with a temperature of 108 degrees Fahrenheit; those readings were taken from the Indian River Lagoon, 1955 to 1979; and he encouraged whatever researchers do, for them to look at the historical data to determine what is really a problem. He stated the Tarpon does not need oxygen in the water; when it comes in it comes in as larvae; juvenile Snook do not require oxygen in water under 150 millimeters; they go back in the Mangroves where there is no oxygen; and the message that these fish are telling them is they do not need oxygen. He stated they go back to the Mangroves where there are terrible water problems by their standards, but that is the way they survive; there has to be the mimic of mother nature; so all of that information needs to be looked at on salinity, temperature, and dissolved oxygen and let the organism tell them about it. He advised the eggs of a Spotted Sea Trout are much more sensitive; they spawn in the Lagoon; they usually do not go more than four or five miles from their spawning site; he thinks this should be the Canary in a cage for the Lagoon, the indicator species; it is associated with sea grass, and if sea grass is lost, it is the prime prey of the Bottlenose Dolphin; and Bottlenose Dolphin will starve without the Spotted Sea Trout. He went on to say they have plotted the Sea Trout's spawning sites from Ponce Inlet all the way down to Jupiter Inlet; it would be nice to repeat that now that sea grass has been lost; the juveniles settle in sea grass; and they will die at low salinity. He added, the nurseries are very critical for shelter from predation, for feeding, and for reproduction; it is true for other fish as well, such as Lane Snapper, Sheep head Porgy, and Permit; and they need to be in shallow areas of the Lagoon so they are not eaten by mom and dad. He stated Brevard County estuarine attributes and vulnerabilities, because it is basically the only non-tidal estuary on the east coast of the United States; and it means it flushes less than any other estuary, and therefore, is more likely to trap anything that enters it, more likely than any other U.S. east coast estuary. He stated the Indian River Lagoon is the only estuary south of Cape Hatteras that is not fed by a major ravine system; and it means that it will routinely experience hyper-salinities and under natural conditions have limited freshwater runoff contributions. He went on to say Brevard County has more people than the other three counties south of it put together; it has the only deep water port on the Indian River Lagoon with significant large ship traffic, cruise ship, military and commercial shipping; and it has a number of causeways that have acted as effective barriers to Lagoon water movement. He stated due to suburban and urban development's, it has reduced water perk area which increases runoff; there has been an increase in chemical quantity and diversity in the watershed; and there is reduced wetland habitat areas. He pointed out there are suburban/urban areas; and there have been major population change from 1970 to the present in Satellite Beach, Eau Gallie, Melbourne, and Palm Bay. He showed the Board a picture of a home in Palm Bay. He stated people fertilized their lawn and it travels through canals and end up in Turkey Creek and down into the Indian River Lagoon; no matter where a person lives, he or she is connected to the Indian River Lagoon; and he thinks the answer is everybody. He

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stated he grew up cutting grass in Florida; if someone told him to fertilize his grass between June and September to help it grow, he would say they were crazy; and he does not know where that came from. He pointed out it will look the same whether or not the body of water is dead or alive, but what is going on under the surface of the water is what needs to be changed.

**ITEM VI.A., COMMUNITY - BY KEITH WINSTEN, EXECUTIVE DIRECTOR, BREVARD ZOO, AND LEESA SOUTO**

Keith Winsten, Executive Director of the Brevard Zoo, stated the saddest sound was the last recorded sound they have of a little species of bat that lived off Australia called the Christmas Island Pipistrelle; that was recorded in August 2009; the people from Zoos Victoria had been brought in to try to save this bat, they thought there were 11 left; they put out audio traps all over the Island; and they caught that one. He advised it was one last lonely male looking for a female, the last of its species; and a month later it was gone. He stated those folks from that Zoo were so depressed, they came back and made a pledge; there are 16 other species only found in their little corner of Australia; and they said not on our watch, they are not going to let one more species blink out while they are here to do something about it. He stated he was so touched by that, because a person never gets to hear or see a species go extinct, and they saw and heard it. He pointed out that is why everyone is here tonight, because everyone is saying the same thing, which is not on our watch; the people are not going to be the ones to see their heritage slip away; Brevard County citizens are not going to be the ones who have to tell their children they used to see Manatee and Dolphin in the Lagoon; and he is confident everyone is here tonight for that reason. He went on to say Friday he was in San Francisco with wildlife conservationists from all over the world; he heard about a crisis with African Elephants; there are some real similarities between Elephants and the Lagoon; in the 1970's and 1980's the Elephants populations were crashing because they were being killed for their ivory; and in 1989, because of grass route efforts, they actually passed a moratorium on ivory, and the Elephant populations came back. He stated the same slaughter is happening again; 25,000 Elephants were killed last year alone; one of the reasons was the rise of the middle class in China; and it is considered a status symbol to have ivory in a person's home. He noted if a person were to ask someone in China who actually buys ivory what they know about where it comes from, they would tell you Elephants shed their tusks like deer shed their antlers; there is no knowledge there that this is what has to happen, that they have to actually chainsaw a tusk off a dead Elephant to get it; and part of the solution with Elephants is education, letting people know what is going on. He went on to say there are dozens of countries involved in the Elephant trade; there is a role for government change; and there is big dollars involved because of the economies. He quoted Margaret Mead by saying, "Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has." He stated he is preset because the Brevard Zoo was actually built by the citizens of Brevard County; it was not just the desire to have a Zoo, but it was also the Houser Zoo was going out of business, and people rallied together to save the animals; other places get a small group of citizens together; and Brevard County get 16,000 people to build the a Zoo. He went on to add, that is the tradition in Brevard County to get people together in unique ways. He stated the Zoo is celebrating its 20th birthday next year, and they have convened a group of people together to tell stories of how the Zoo was built; Jim Swann told him an amazing story about commitment to change; and a lot of people took off time from work to come build the Zoo. He stated one gentleman took off two weeks of work, and on a Friday he told them he had to go back to work; on Monday, the first person people saw was that person; and he took a week of paid leave to come back and finish the Zoo. He advised Brevard Zoo, in partnership with University of Central Florida, has been doing oyster restoration in the Mosquito Lagoon; oysters are the kidneys and the liver of the Lagoon; kidney because they filter all of the expended stuff and clear the water; and they are the liver because they take out the nitrogen that feeds the algae blooms. He went on to say the good news is, around the restored oyster reefs in the Mosquito

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Lagoon, the sea grass beds appear to be very healthy. He stated the Lagoon is like someone's audio immune system shutting down; when natural things like cold snaps, floods, and all these things, the Lagoon no longer has its ability to come back from those. He stated there are four things needs to save the Lagoon; one is to reduce pollutant source input of groundwater, stormwater runoff, and air pollution; two, is restore filtration, and that is oysters, clams, and wetlands; three, to remove the muck using economic and ecologically beneficial dredging; and four, to research, which is the foundation. He advised many years ago he went to a great presentation in Washington, D.C. that was looking at how to change human culture, and they listed four things that effect people. He stated the first is crisis, nothing changes things faster than a crisis; the second thing is market forces; third, is leadership, which is a very important role; and the last piece is education that actually connects with people and tells them how to do things better and find out what motivates them. He provided a video to the Board and the audience.

**ITEM VI.B., LOCAL - MAYOR JIM TULLEY, JR., CITY OF TITUSVILLE AND PRESIDENT OF SPACE COAST LEAGUE OF CITIES**

Jim Tulley, Jr., City of Titusville Mayor, stated he was rummaging through his desk this afternoon on a completely unrelated topic, and he stumbled across a photograph of two Hobie Cats in the Indian River Lagoon, which dates back 10 or 15 years to his sailing days; as he drove to Palm Bay, he was thinking about that, and he chose to drive U.S. 1; and he had the whole drive with the Indian River Lagoon to his left. He stated the thought that came to mind is everyone is here because of that Lagoon; he or she may have come originally because of a job or may have grown up here; but he would be willing to bet a sizable portion of the population of Brevard County stays here because of the Lagoon; and whether talking about power boaters, sail boaters, kayakers, wind surfers, fishermen, or people who just like to visit the waterside parks, this County has a love affair with the Lagoon. He advised the citizens of Titusville, eight or nine years ago, voted to tax themselves to the tune of \$10 million just so they could maintain a view of the Lagoon; and people love to not only go out on the Lagoon, but to look at it. He pointed out this is not a new problem; they went to Washington, D.C. and fought the Environmental Protection Agency (EPA) so they could use TMDL's rather than a way of tracking nutrients that the EPA wanted them to use; the TMDL's are in place; the BMAP's and action plans are in place; and the will is there from the folks, because the Lagoon means so much to everyone. He went on to say people need to understand it from both dimensions, from an economic and ecological point of view; and now it is a matter of execution and making it happen. He pointed out for the last nine months, there have been quarterly mayor's meetings in Brevard County; at the last meeting there were 11 of the 16 mayors at that meeting, and this was one of the topics they talked about; and it is definitely on the radar of Brevard County's mayors. He stated speaking on behalf of Space Coast League of Cities, they passed a resolution Monday night to affect the preservation and restoration of the Lagoon; the effort and recognition is there by the Space Coast League of Cities; and that is made of up individuals from all 16 municipalities. He advised in Titusville they have passed a new stormwater ordinance that changes the way stormwater is billed, because they have better tools now to recognize where the impervious surfaces are; and they bill according to that now, which is a better and more technological way. He concluded by saying the recognition is there that everyone has to work together, work smarter, and certainly have to spread the word. He quoted Mahatma Gandhi by saying, "We must become the change we wish to see in the world."

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**ITEM VI.C., STATE - REPRESENTATIVE TOM GOODSON, CHAIRMAN BREVARD LEGISLATIVE DELEGATION**

Tom Goodson, Florida State Representative, stated Brevard County citizens has six representatives in the County, two Senators and four representatives; people's voices need to be heard in Tallahassee, as far as him helping to get funding for stormwater; there is Andy Gardner, Thad Altman, Steve Crisafulli, and him; and he is already on board. He went on to say as a child in Cocoa, when the water came up behind Travis Hardware, when he went fishing and caught Drum and sold them or traded them to the Fish House for bait, so he knows how important it is. He reiterated people need to have their voices heard in Tallahassee; Governor Rick Scott just spent \$60 million on the springs in Lake County; he thinks they will be in a good position to get money for runoff, and retention ponds, and stuff like that; but people's voices speak volumes. He asked everyone to please save the Indian River Lagoon.

**ITEM VI.D., FEDERAL - CONGRESSMAN POSEY, FLORIDA'S 18TH DISTRICT**

Ernie Brown, Natural Resources Management Director, stated the plan was to have Congressman Bill Posey be present; but Pam Gillespie is present to speak on his behalf.

Pam Gillespie stated Congressman Posey is disappointed he could not be here personally tonight; she is here to take very copious notes to bring back to him; he is working very hard to see what can be done to help the State and local community resolve this issue; and that is including Mr. Rice's salary and all of the good things he is doing with the projects. She went on to say this issue is key for Congressman Posey; business and the Indian River Lagoon are two of his top priorities; and the people has him and his staff's full attention. She advised the audience to contact her or the Congressman with anything he or she has.

**ITEM VI.A., COMMUNITY - LEESA SOUTO (CONTINUED)**

Leesa Souto, Ph.D. Executive Director, Marine Services Council, stated she is proud to be part of the Marine Services Council; they have been working in the community for 30 years collecting citizen science; they have done water quality monitoring in the Lagoon; they have engaged people in Brevard County and the other five counties in Lagoon restoration activities; and she started in January kind of when the worst was happening. She stated they need to be the force for change by engaging people; she found Diane Barile's notebooks from the American Assembly's that were conducted for 13 years; this was a consensus building process that disconnected the wastewater treatment plants from the Lagoon in the 1990's; and it was one of the powers behind the formation of the National Estuary Program. She went on to say they are building support; there is some funding in place; and they are going to proceed with the Lagoon Action Assembly in May, and it involves delegates. She added, she tells everyone this because they will be recruiting delegates; a delegate will be someone who is responsible for an interest group, will bring information at that Assembly back to that interest group; and if he or she thinks they can be responsible as a delegate, there will be three different delegates representing up to 35 different interest groups, that would be willing to spend two days in a room working on consensus building, and send a resume and a note to her as to why they think they would be an important delegate. She stated they will be building their volunteer efforts here, working in cooperation with the Zoo and other volunteer organizations Lagoon-wide, to train volunteers on doing habitat restoration; she wants to turn this venue into a place where they can meet all of the time and have meetings like this all of the time; there are sign up sheets being passed around; people can write their name and email address, and they will send them a monthly update about what is going on about the Lagoon, policies, and different educational and

volunteer opportunities; and she expressed her appreciation to everyone who attended the Workshop.

#### **ITEM VII., BOARD DISCUSSION**

Ernie Brown, Natural Resources Management Director, stated the sea grass is kind of the keystone indicator of the health of the Lagoon; Dr. Gilmore talked about the Trout, which is iatrical as well; sunlight is critical to the sea grass; and there are three major issues that block that sunlight, color, chlorophyll, and turbidity. He went on to say nitrogen and phosphorus are essential in the ecosystem in the right amounts; for two decades they have been focusing on stormwater, which is important; stormwater runoff is really looking at 18 percent of the nitrogen; and almost 40 percent of it is coming from groundwater. He pointed out the bottom line is they have been working hard with stormwater and it is working; now there is a dominant flow out of the groundwater; over 50 percent is coming out of the groundwater; and it is time for a paradigm shift. He noted whether it is septic, fertilizer, or lichgates, they need to start looking at it objectively; since 1996, there has been a steady decline in nitrogen inputs from a stormwater perspective into the waterways; stormwater efforts have been effective; there is the same basic trend in phosphorus; but the declines are not being seen in groundwater. He stated Brevard County is very unique; 71 percent of the surface area of the Indian River Lagoon is within its jurisdictions; and it bears the largest responsibility when it comes to being stewards of the Lagoon. He went on to say a lot of the economy is based in the Lagoon system ecosystem, including clams oysters, crabs, not to mention the sports fish and eco-tourism; a lot of people do not pay attention to a Lagoon system until they see it dying; they have seen this happening for years; in 1986 Brevard brought in 60,525 pounds of oysters, versus in 2013, having 434 pounds of oysters; and the harvest of oysters is .7 percent of what it was 27 years ago. He pointed out in 1986, Brevard's harvest of clams was 1,272,380 pounds versus 2,685 pounds in 2013; and the harvest of crab was 1,151,196 pounds in 1986 versus 131,194 pounds in 2013, which is 11 percent of what it was 27 years ago. He stated what needs to be done is reduce pollutant and nutrient inputs; restore oysters, claims, and wetlands; remove detrimental muck; and continue to do research.

#### **ITEM IX., PUBLIC COMMENT**

Gordon England stated he is a retired Brevard County Stormwater Utility Engineer; he worked for the Stormwater Utilities in the decade of the 1990's; he was there when the Stormwater Utilities was first created; and it was the same time Mr. Rice started the National Estuary Program. He went on to say this is the first time he remembers having a Workshop on stormwater; he is glad to see the Board is coming together to address this critical issue that is a great concern to many; his mission for the last 23 years is to save the river, restore it, and make it what it used to be; he thought progress was being made; but in the last couple of years, he found out people have not been doing enough. He pointed out he worked a lot to put in the \$30 million or so of projects that were built; it is not just putting the clams, dredging the muck, or cleaning the stormwater; the public has to be involved in reducing the fertilizer; and the public needs to do their part as well. He stated a combination of federal, state, and local funding is necessary to address the issues. He stated the stormwater rate has not gone up since it began; people are not paying the same price for cigarettes, utilities, Internet, or beer; and the fees have not gone up, yet money has been spent and more money has to be spent. He advised he is on the Board of Directors of Florida Stormwater Association; they took a poll of stormwater utilities throughout the State recently; Brevard County is one of the last of the counties that has not increased their fees; most counties are at around \$6 a month for their stormwater utilities; and another \$2 per month per homeowner would bring in over \$2 million. He noted \$10 million will have to be spent to reach the goals of cleaning the river; and it is not too much for each person

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to spend \$2 per month to try to make more progress and put more improvements into the infrastructure.

Tony Dutton stated this evening people have heard many of the ills affecting the Indian River Lagoon; people have heard the causes of those ills; people have heard a lot of actions that must be taken to restore the Lagoon to reasonable health; but people have not heard a lot about how or by whom the cost of this restoration will be paid; and those costs realistically cannot be borne by the five counties along the Lagoon. He went on to say the planning and execution of the Lagoon's rehabilitation is complex, expensive, and will require a long-term integrated effort; the County Commissioners are to be commended for having this Workshop and for starting the restoration process; however, the planning must be done and the costs must be paid by the State of Florida with whatever federal assistance it can gather; inquired if the State has the political will to undertake such a chore; and the evidence indicates it does not. He pointed out since 2009, the legislature has slashed funding for conservation programs by more than 95 percent; in order to ensure that the funds will be available over the long haul for the restoration of the Lagoon, and for Florida's many other conservation needs, the League of Women Voters of Florida, including the local Space Coast League, and more than 100 citizen groups from the Wildlife Federation to the local garden clubs have been working with Florida's Water and Land Legacy to amend the State Constitution by adding a water and land conservation amendment that will require one-third of the documentary stamp tax that is paid whenever real estate is sold and other similar transactions to be set aside for conservation and restoration purposes for a period of 20 years; the stamp tax produces \$2 to \$3 billion of revenue each year, sometimes more; the one-third set aside would produce at least \$600 million each year to protect Florida's natural heritage, its economy, and its quality of life; and while that sounds like a lot of money, it is less than one percent of Florida's annual \$74 billion budget. He went on to say because of the amount of the stamp tax to be set aside is tied to a percentage of it, 33 percent, the tax collected in good years will produce even more revenue; and in lean years it will be reduced because it is a percentage and not place a burden on the State's budget. He added, Florida's stamp tax revenues have been used for conservation purposes for decades, for Florida Forever and Conservation 2000; they just want to see a significant portion of those revenues continued to protect the water, beaches, and wildlife; and to ensure that those funds will not be subject to the ever shifting political whims.

David Sinton stated Mr. Brown's slide represents the essence of his point beautifully; this is a superb natural environment; and it is chopped up into funny little squares by the property boundaries. He went on to say people have arbitrarily imposed on the environment their own control; it rarely has anything to do with what the environment is going to do; people should reflect on the issue of stewardship by the property owners, businesses, municipalities, and by everyone who is going to make individual decisions; he makes decisions daily about how to treat his lawn; real estate agents make decisions about how to present Brevard County and how to sell properties; and people need to be told who buy properties on the water that they are now stewards of the Lagoon. He noted this is complicated because this nation was built on the principles of property rights; he does not like people coming along and telling him what he can or cannot do; but the last four months he has been trying to sell a fertilizer ordinance; and he was quite surprised of how many people he thought were Melbourne Village environmentalists who came out as Libertarians and they do not want him to do anything. He stated people need to go away from here this evening and try to develop the idea of selling to their community, not just politicians or government; people have to control the environment responsibly and pay their fair share to solve the problems.

Diane Barile stated she is here tonight to confess that she failed, everyone in this room failed; a lot of money was spent doing crazy things; she will never put money in an education program again, because 35 years ago a lot was spent on education for the school kids; it is a great way to have a program, and a person gets out of really doing anything; and the effects are felt 35

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years later. She went on to say there were three things they were working on; she was the first Executive Director for the Marine Resources Council; she was the Field Superintendent for the Melbourne-Tillman Water Control District; she was the Environmental Planner for Palm Bay for 15 years and wrote half of the first comprehensive plan, and all of the plan for Malabar; and she taught Coast Systems Management for 35 years at Florida Tech. She pointed out the one thing she did not fail on is she thinks she counted six of her ex-students here, and they are doing more work than she ever could do. She stated they knew there was too much fresh water coming in the Lagoon carrying sediments, nutrients, and heavy metals; in Palm Bay they had a super fun site that took the heavy metals and organics out of the water; a lot of money has been spent on dredging; but unless the sediments are stopped that are coming down the stream and ending up in the mouth of the creek, dredging will need to be done every 10 years. She noted they did work in Indialantic; the press was coming; they had people raking stuff into the river and asking when they were coming back to dig it out again; and they had to pull their canoes through the sediment. She stated the second thing was the sea grasses was being lost, the Mangroves were being lost, and something needs to be done about it; this weekend she could not go out in her backyard; there was a toxic algae bloom; people were sick and their eyes were watering; last night she went down by the water and there were bubbles coming up; and before she got into the house, her eyes were swollen, her face was red, and she was sick. She stated there was multi-jurisdictional problems, 33 cities, six counties, 10 water control district, two water control districts, NASA, United States Air Force, five inlets, and aquatic preserves; it is still not all the way together. She stated it is political; there was enough information and there was enough money; and what happened, everyone took the easy way out. She went on to say the sea grasses are gone; there were four Manatee eating by her dock today in the area where the algae bloom was; and it is not right. She stated the Board has a lot of power, it controls stormwater; there is money for parks; the County can make parks into retention areas; 45 years she has been working on this; and this is a travesty. She stated every homeowner should keep their stuff on their own property; St. Augustine grass needs to be outlawed; there is a problem in the perception of people who move here; they are sold property and told it is paradise, and the property should look like the brochure; and then they come back asking where is there Palm tree. She pointed out by taking the stormwater, hold it in a pond that water becomes the base flow; and if retention is spread out over an area, the water stays there and slowly seeps into the ground and is filtered before it gets to the Lagoon. She stated the two water controls districts have two different agendas and they are not working together; there needs to be one water control district for the Indian River Lagoon; when the Marine Resources Council started, St. Johns River Water Management District was not even permitting on the Indian River; and if there was one water control district that went into the watershed of the Lagoon, it could be managed better. She stated she had a telephone call after the Hands Across the Lagoon; it was a former legislator who called and said he is on a septic tank in an area that has one of the highest bacteria counts on the Indian River Lagoon; he asks what he could do; he called Brevard County Utilities; and they said they were extending a line, and it looked like he and his neighbors who are all on septic tanks could be put on the new line. She pointed out those are the things that have to happen.

George Rosenfield stated he remembers the Lagoon from the 1950's and 1960's when a person could see the sandy bottom; he used to dig clams in the little bit of spare time he had from his work on the missile range; he returned now 28 years ago and joined the Marine Resource Council as an Environmental Engineer; he was active for 10 years or more; and even his 20-year old t-shirt from the Marine Resources Council is in better shape than the Lagoon. He went on to say they did Hands Across the Lagoon to get money to form the National Estuary Program; they stopped the sewer plant outflow into the Lagoon; and they caused retrofitting of roads to storage ponds. He stated they did a lot more and the sea grasses and the animals came back; they cleaned up and saved the Lagoon; he just did the second Hands Across the Lagoon; inquired what has everyone did this time; and stated to get started and correct it.

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John Hitchcock, Chairman of United Waterfowlers of Florida, stated they are duck hunters, and most of their members are in Brevard County; Brevard County is one of the best places to duck hunt in the southeastern United States; and it was a lot better 10 or 15 years ago than it is now. He stated the Indian River Lagoon is the most important stopping point for the diver ducks; the members of Waterfowlers are all over the map politically; they are all over the map economically; but this is one thing they do not argue about. He noted things have to change with the Indian River Lagoon. He stated the priorities for repairing the Lagoon are to upgrade wastewater treatment plants to advance wastewater treatment to remove nutrient pollutants; septic tanks should be phased out and hookup to municipal wastewater treatment plants with coastal zones being targeted for priority elimination of especially the older septic tanks; there should be a ban on the use of phosphorus in lawn fertilizer year round; and a ban on the use of fertilizer with nitrogen in it during the summer rainy season. He went on to say there needs to be active restoration and management of public wetlands, both saltwater and fresh water; nutrients must be removed from the wetlands; to continue and expand construction of reservoir and filter marshes to mitigate stormwater runoff; and to develop an alternative water supply and pipeline network to supply Florida to augment the seven billion gallons a day of water that the State now consumes. He noted there needs to be the cooperation of federal, state, and local to fund the efforts; and the State document stamps should be used for most of this work. He expressed his appreciation to everyone who put the event together; and stated it is a very productive event.

Gail Meredith stated her family has been very involved with the Lagoon; she has heard a lot of complicated ideas; but she has a simple idea that would save the area money, and that is to stop putting fluoride in the water. She went on to say she does not know how much people know about fluoride; she has given the Board packets about fluoride; and anyone who is here can ask her about one after the session. She stated fluoride is a neurotoxin; it made from hazardous waste; this hazardous waste has never been approved by the Food and Drug Administration (FDA); it is unsafe to drink; and it is being dumped into every drop of water put in people's homes. She pointed out recent research has proved it has no beneficial uses and is not good for a person's teeth; it is bad for the environment; and there is absolutely no reason to use it. She noted it can be turned off immediately, and people should do nothing that poisons the ecosystem. She stated when she came to the area she immediately began to have serious health problems with her digestive tract; the water she was drinking was filtered; she found out it was because she was not using the right kind of filter to filter out the fluoride; and all of the bacteria in her body was being poisoned. She added, the same thing is happening to the ecosystem with every drop of water that a person is paying for is poison; this is one thing that can be done tomorrow; and it would save money and stop poisoning people. She advised the packet she provided copies all of the studies.

Jim Swann stated Diane Barile was her mentor; she should be thanked by all; and she pushed a lot of people to get a lot of things done. He stated a year ago he thought people have failed; now he thinks it is different kind of like when the bully knocks a person down; the Indian River Lagoon is really sick; and if everyone pulls together and pool resources, people can get up and punch that bully in the mouth and bring the Lagoon back. He noted he hoped the Board leaves here realizing how many people really care. He stated when the NEP Program was first started, they did a survey and 70 percent of the people in the Indian River Lagoon region said they would vote to pay higher taxes to protect the Lagoon; and that is an unheard of number. He requested that everyone get together, get up, and to fight back.

John Fergus expressed his appreciation to Ernie Brown and Virginia Barker of Natural Resources Management, for the leadership they have shown for addressing the stormwater component. He stated the main reason he wants to speak is to support the proposed resolution soliciting State support in restoring the Indian River Lagoon; more is needed than money; the State regulators need to remain flexible in working with the stakeholders that are trying to come



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up with solutions to the problems; the technical dream team built by Ms. Barker and funded by the municipalities and the County has done much to refocus Florida Department of Environmental Protection (FDEP); and it has made a change. He stated FDEP is actually talking about giving stormwater credit for removing muck from the system. He pointed out significant political pressure is needed to keep FDEP focused on working with the stakeholders to do what is right; and FDEP is going to need encouragement to work with the people to do what is right.

Tuck Ferrell stated it is about the quality of life; and the river and ocean is an important part of the economy. He stated if the water can be filtered, it is a key thing; it is a simple fix; if the water can be cleaned and held in marshes, holding ponds, and divert the water; and he is excited about the new things that are happening. He stated there are a lot of causes being dealt with; a lot of things go into the river people do not think about; but it will take a lot of different solutions to solve the problem. He stated tomorrow he is headed to Tampa, and they have set him up with an appointment to look at their estuary program; he will then try to get in touch with the Chesapeake Bay people; and he is working with Indian River County.

John Mongioi stated there are multiple water control districts along the Indian River Lagoon; each are primarily drainage districts; and their procedures that they believe are the best for the drainage is not always the best for the Indian River Lagoon. He went on to say St. Johns River Water Management District (SJRWMD) recently upgraded the MS-1 water control structure as part of Phase 1 of the C-1 Rediversion Project at a cost of approximately \$20 million; this plan has the potential that when fully-implemented to divert through the St. Johns River up to 45 percent of the water that normally drains through the Melbourne-Tillman Water Control structure into the Indian River Lagoon; SJRWMD has determined it needs an elevation of 10 feet in that Melbourne-Tillman system in order to maximize the westward pumping into the Sawgrass Lake area; and SJRWMD and Melbourne-Tillman Water Control District are meeting monthly. He pointed out the two entities are trying to resolve issues associated with the operation of the C-1 Rediversion Project, including development of an operating scheme for the new MS-1 structure and the pumps at the west end of the canal; and progress is being made but it is too slow. He stated over the past three months, they have released more than 15,000 acre feet, 4.8 billion gallons of water into Turkey Creek and the Indian River Lagoon through the MS-1 structure; there are plans to increase the pumping capacity by approximately 50 percent in the next nine to 12 months, but no agreement has been reached yet on how to control the structure to supply the pumps with water; and the biggest problem between the two entities is how to define a storm event. He stated his suggestion is put all water control districts under the responsibility under the SJRWMD; it may take changes to the Florida Statutes and the taxing structure, but it will resolve many issues; and to use the National Weather Prediction Center, which gives quantitative precipitation forecasts to define a storm event, and establish storm release procedures based on the amount of rain predicted by them.

Larry Moroni stated he lives in Indialantic on the Indian River; when he first moved in he made a decision to pull out about 15 foot of grass and created a faux beach with crushed coquina; he did it for aesthetic purposes; but that in essence has created a buffer between the St. Augustine grass and the Indian River; it is low maintenance; and a person is not dumping nutrients into the water. He stated his proposal would be to do some sort of a tax credit; it beautifies a person's property, cuts down on the amount of nutrients dumped into the Lagoon, and it is a win/win situation; and he hopes the Board will embrace that idea as a possible solution to the problem.

Suzanne Valencia inquired if people remember when they tried to pass a law to have people routinely clean their septic tanks; stated people cried that would cost too much money; she has lived in Florida 43 years, and every month she has paid a tax to have her sewage taken away; and that is more money than it would cost to get a septic tank cleaned out every five years. She stated she the Sierra Club has worked hard with the cities; they failed with the County because

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it refused to have a rainy day ban; and the Board has heard people say today it is a good idea. She pointed out there are cities now doing good fertilizer ordinances, and they are working hard with the cities in the County so everyone will get on board; one size does not fit all; the State requirements are not sufficient; and Brevard County has a unique situation here.

Laurilee Thompson stated it brings joy to her heart to see this many people supporting the Lagoon; and she grew up on the Lagoon and it breaks her heart to see what has happened to it. She stated not only is State funding needed, but federal funding is required; there is a very unique reef system offshore called Aquinas Reef; it is a nursery ground for rock shrimp; and she is very interested in the health of the reef. She stated her shrimpers are telling her is they start out on the south end of the reef this time of the year looking for rock shrimp; there is nothing alive on the bottom out there; there are not only no rock shrimp, but there are not bat fish or lizard fish; she has been told there are aerial photographs that show the plume coming out of the St. Lucie River going right into the Gulf Stream; and that is why the Aquinas Reef is so big off of Brevard County, because it is being fed by the Gulf Stream. She stated the Gulf Stream is carrying the stuff coming out of the St. Lucie River straight into the Aquinas Reef; the federal government has been working for more than 20 years to protect the Reef; they have worked with the commercial fishing industry and recreational fishing industry; and it makes zero sense to her why the deep water corals would be protected and then allow the Army Corp of Engineers to let toilet water go into and wipe out the Reef. She advised they have also protected 54,000 square miles of even deeper reefs; sitting on the Secretary of Commerce's desk in Washington, D.C., right now is further legislation to double the size of the Aquinas Reef; they have also smothered the near shore Worm Rock Reefs down in the south end; and those are habitat for endangered and threatened Loggerhead and Green Sea Turtles. She stated the National Marine Fishery Service in her opinion has been asleep at the wheel for decades; they are supposed to protect the fisheries of the United States; a lot of the important offshore fisheries start in the Lagoon; and when a person talks to them it falls on deaf ears. She pointed out legislators, especially Congressman Posey, have been so supportive of the fisheries; and now they should be slammed for not protecting the reef.

William Klein stated he has a proposal he would like to make for Sand Point Park; a lot of retention ponds are not being taken care of in the best manner; they hold up stormwater; they use chemicals in the ponds to kill growth in and around the ponds; and this does not remove nutrients, it decays the plants. He stated if they plant around the pond plants that absorb nutrients, kind of like a rain garden, before they enter the pond, it could help eliminate; he has worked in wastewater treatment facility where a lot of plants are used for the final filters for the wastewater plant in Palm Beach; if floating islands of plants are installed in the ponds, these plants will absorb the nutrients out of the water; after these plants grow large, they are very easy to remove; and it will eliminate chemicals, absorbing nutrients, and preventing a lot of plant decay that just washes into the pond from the chemicals that are now being used to kill the plants. He stated if any of the organizations would like for him to volunteer and work on developing this project, he would love to see it at Sand Point Park; and it will be the greatest demonstration area in the whole County.

Maureen Rupe stated she has a *Florida TODAY* article from December 11, 1995, and it says, "Can the Indian River Lagoon be Saved." She went on to say in 1995 the article said that scientists estimate 570 million gallons of polluted runoff water goes into the Lagoon every day in an area from Ponce Inlet to Vero Beach; each year almost 120 million pounds of sediments and fertilizers are added from Brevard County's cities and towns; the federal government has spent \$5 million; and \$88 million is being asked for to clean up the Lagoon. She advised it was never done; and she does not want this to happen this time because people will make sure it does not. She stated a national British newspaper, *The Daily Mail*, on the front page is an article about the Indian River Lagoon. She stated the environmental community is knocking itself out going to

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every city begging for the fertilizer Ordinance; and if it is not done now, it will not be, and the Lagoon will die.

Linda Behret stated it is 17 days past another rainy season with no ban on fertilizer in the Lagoon; she is not surprised there are red algae out there; and there are flesh eating bacteria in the water as well. She stated people are here because they love the Lagoon; and they want to see it cleaned up and made better. She advised the Board passed a fertilizer ordinance, which was close to the State minimum model ordinance; she asked the Board to revisit the fertilizer ordinance and make it stronger so it will do more to help the Lagoon; and the justification needed for that would be to help the Indian River Lagoon recover. She stated there should be a rainy season ban on nitrogen and the year round ban on phosphorous; and suggested of having at least 10 feet of coquina shell between the water or sea wall and a fertilized area.

The Board recessed at 8:57 p.m. and reconvened at 9:10 p.m.

Eric Burritt stated he heard the Board talk about an action plan, but no one said what that was; he heard Thad Altman talking about putting oysters in the river; but he does not think an oyster will live in the water. He inquired what is the plan to get the water clean again; stated as soon as plants are put into the water, the nitrogen is removed instantly; and it gives the fish a place to hide. He stated impact fees were not mentioned; people mentioned to him that impact fees were designed to protect the river, but they are doing just the opposite because people cannot afford to get off of septic; and if the impact fees were relaxed people could afford to get off of septic.

David Botto stated he serves as a volunteer on the Marine Resources Council (MRC); the MRC is very encouraged about this meeting and what they hope will follow from the meeting; the Board knows where the problems are, such as nutrients; and when Mr. Brown showed his slides, it pointed out that runoff is one transportation vehicle for nutrients into the Lagoon. He went on to say now they find that groundwater not only equals that problem, but may exceed it; that is a very dramatic change; it calls for very different approaches of how to control it; but everything that has been done has been to control and to clean out the water. He stated almost everything the Board has heard as far as solutions are costly as far as time and money; there is one that is needed; it is not costly in either time or money; and it has been proven in over 50 communities in the State of Florida. He stated the taxpayers of Brevard County are paying over \$1,000 a pound to clean nitrogen and phosphorus from the water; a good, strong fertilizer ordinance will take care of some 20 to 30 percent of that problem; that is a big savings, which cost almost nothing. He challenged the Board to immediately start the process to amend the County Fertilizer Ordinance to include the strong measures that will help the Lagoon within two years.

Jay Barfield stated he is here to talk about low hanging fruit; for 10 years, they have been associated with a technology that solves the major problem on a short-term basis in the Indian River Lagoon, which is algae; and it chokes everything out and the sea grass dies. He went on to say technology improves the Total Suspended Solids (TSS), the oxygen level, and Biological Oxygen Demand (BOD); they have primarily been dealing with private industry because they get the problem quicker because it hits their pocketbook quicker; if private industry discharges nasty water, they pay huge penalty assessments for the utility to clean up that water; and this product, as well as two other technologies they deal with, takes care of that problem. He stated the technology is non-chemical and works on a Decibel (DB) signal; it kills and controls algae by popping the cell and causing the algae to sink and die; it shortens the life cycle of the algae; they have 3,000 clients throughout the world; the technology works; and the only reason it would not work is if it was not installed properly. He pointed out it is very inexpensive; units are ran on solar or plug in; it is low voltage; and a unit cost about \$10-\$12 to run it. He went on to add they are talking to water management districts that are receiving them

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well now, a few years ago they would not talk to them; and they have engaged one of the water management districts that are now using the product. He advised their thrust has been Wachovia, Silver Springs, and those areas because they are close to them; water management is still researching; and the universities have done testing. He stated there is a spring in Pinellas County, and now they have a lot more critters in the spring than they used to.

Spence Guerin stated there was a plan called the Indian River Lagoon Conservation and Management Plan established in 1996 addressing septic tank non-point sewage pollution was a high priority; mitigation of deep well injection of human sewage pollution was a medium priority problem; and today some deep injection wells in Brevard County are leaking treated sewage waters into the drinking aquifer. He stated fertilizer pollution to the Lagoon was a high priority item just like it is now; people need the political will; and the people want to push the Board to make sure it has the political will to take this problem on and move on it.

Tony Sasso expressed his appreciation for holding the Workshop; there is a wealth of political, administrative, and environmental science people in the community present looking at the Lagoon; whatever is done will cost money; he is sure most people would add taxes or stormwater fees to save the Lagoon; and that is the legacy for these people. He stated sometimes a person has to bite the bullet and do the really hard things; a dredge needs to be bought to get rid of the muck; Cocoa Beach did it; and the County can do that. He stated get the filter system and oysters in there; and people need to start doing something about it. He pointed out this group should get together once a month until the Lagoon is fixed.

Marjorie Derrick stated the ionosphere is involved with the space shots; every time they go off, it destroys the ionosphere for 100 miles around; it acts as a shield between the people and absolutely total radiation from the sun; and *Florida TODAY* said a few years ago that Brevard County has the highest skin cancer rate in the whole country. She advised it has never been investigated what effect it has on people.

Terry Mott stated she wanted to make a comment about leadership, which is her second favorite passion; she has been working with most of the people in the room for five years; when she first learned about native plants and Florida friendly landscaping, she thought she was doing a great thing to bring to her community the books about native planting, she put a presentation together, and she went to her board of supervisors; and these people advised her none of this applies to them because their water does not flow into the Indian River Lagoon, it flows into the St. Johns River. She pointed out she has served on her homeowners board for several years; when she talks one-on-one with the homeowners they are concerned and are willing to change their behavior; and they are willing to pay more taxes. She advised the first level of authority is the homeowner boards. She stated it seems the leaders are running from the conflict and the people at the bottom are the ones trying to resolve it; and she requested the Board to reach out as leaders in the community and try to visit each of the homeowner's organization to show a force that Brevard County leadership is behind this resolution. She stated she would like to see a mobile team coming into the communities.

## **ITEM VII., BOARD DISCUSSION (CONTINUED)**

Commissioner Fisher stated it is not going to be one thing to fix this. He stated he was told in some places they actually will put oysters on a barge and throw them into a body of water, and it is a faster way to filter these things than doing the little oyster beds; and inquired if that would speed the process up. R. Grant Gilmore, Jr., Ph.D., President, Estuarine, Coastal and Ocean Science, Inc., responded taping them on to mats or putting them in bags keeps them together in storms, plus it can be tracked on how it is progressing; putting the oyster reefs out is a viable way of increasing both habitat for the invertebrates and juvenile fish that settle in the areas, and

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to clean up the water at the same time; Brevard County has lost a lot of structure, such as sea grass; and he encourages getting sea grass back and not just oysters. He went on to say there are several ways to getting oysters out there that people have used for years; and those should be used whenever possible.

Chairman Anderson inquired if that is because when the oysters are small, they are susceptible to be eaten by Red Fish, and they need to be mature. Dr. Gilmore responded the larva is in the water column to begin with and they will settle on the oyster shell.

Keith Winsten, Executive Director, Brevard County Zoo, pointed out every habitat needs to be looked at and different techniques should be used on that; they are looking at beach heads and some that will hang off docks; and the process changes with each one. He went on to say it has to be customized; and research needs to be done of where it is viable for oysters to be grown in the Lagoon because of the water quality issues.

Commissioner Fisher inquired if there are any advantages in creating some reefs. Dr. Gilmore advised of a lot of it is done offshore; they do have reef fish communities in the Lagoon; but typically that is within two to three miles of an ocean inlet; he does not think building reefs in the estuary will replace the sea grasses that have been lost; the sea grasses were the most important reef they had in the Lagoon; and it also serves as food. Commissioner Fisher stated part of the challenge to get people to move off of septic tanks into the sewer system is a lot of times the hookup fees; the Board should explore if it has the ability to consider waiving the hookup or connection fee to encourage people instead of redoing the septic tank; and he would like to explore that. He advised he is not opposed to bringing the fertilizer Ordinance issue back up; he was one who voted for it and thought the Board was doing the right thing because of modifications; and he reiterated he would like to hear both sides of that issue.

Chairman Anderson stated he still has issues of how to enforce the Ordinance; inquired if it will be neighbor calling on neighbor; stated he does not want to get into the situation where the Board does something; and the people needs to know that is just one step of 100 steps.

Commissioner Nelson stated there are other jurisdictions that have had this in place for year; the Board can figure out how to do it; he is comfortable enough to know the citizens can do that; and it needs to come back to the Board.

The Board directed staff to bring back legislative intent to the Board for its consideration the fertilizer Ordinance, including stricter measures to help reduce runoff pollution within 90 days.

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	Robin Fisher, Commissioner District 1
<b>SECONDER:</b>	Chuck Nelson, Commissioner District 2
<b>AYES:</b>	Fisher, Nelson, Infantini, Bolin Lewis, Anderson

Commissioner Nelson stated there is the aspect of what the Board is getting into is sometimes it will get into the economics; the water is working its way into the Lagoon; and there is a trailer park with over 150 trailers that did not hookup.

Chairman Anderson inquired if the County can force someone to hook up when a main waterline goes in front of their house by State Statute unless the property is transferred. Deputy County Attorney Shannon Wilson replied she has not looked at that Statute in quite some time,

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but she will look into it and bring the answer back to the Board. Commissioner Nelson stated they were under a consent order in this instance and the State changed the consent order.

Commissioner Fisher stated he has a rental house in Titusville that is one house away from city sewer and the septic tank failed on them; he had a choice to either reset the tank or try to hook up to the city sewer, which would have cost him to run the line and a hook up fee, and it was three times more to fix it than hook up to sewer; and this can be part of the stormwater, maybe some sort of fund can be established to help with the hookup fees.

Commissioner Infantini stated the economics are going to play a factor; one of the beach side communities near her wanted to hook up to sewer; all they are asking for is to add on to the water line currently operated; and they were told if all 150 households decided to join it would cost each household \$10,000. She stated it is great to have a good idea, but until there is a financial solution, it cannot be done. She noted the solution should be Countywide; there are a lot of communities that want to hook up to city water but do not have the financial resources to do it; and each person has the same financial struggles.

Chairman Anderson stated even if the County finds a solution, the cities cannot be forced; and maybe the County can work with the cities.

Commissioner Nelson inquired how the Board is going to structure this so the improvements are identified and implemented; and how can it be structured where it can actually perform.

Commissioner Infantini inquired what the most important priority is.

Commissioner Fisher stated if someone cares about public safety, law enforcement is important; everything is important; and he can fill the chairs up with 5,000 people that say parks and recreation is important to their family.

The Board directed Natural Resources Management Director, Ernie Brown, to develop for the Boards consideration a basic structure to manage information flow, information sharing, and dissemination; identify and coordinate implementation strategies for partnering entities and counties within the Indian River Lagoon Restoration Initiative; and identify the resources necessary to implement the structure.

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	Chuck Nelson, Commissioner District 2
<b>SECONDER:</b>	Trudie Infantini, Commissioner District 3
<b>AYES:</b>	Fisher, Nelson, Infantini, Bolin Lewis, Anderson

The Board approved scheduling a full stormwater workshop after the first of the year to include stormwater assessment (fee) structure, septic tank conversion fee waivers, and grants to assist residents to defray the cost of sewer connections.

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	Robin Fisher, Commissioner District 1
<b>SECONDER:</b>	Chuck Nelson, Commissioner District 2
<b>AYES:</b>	Fisher, Nelson, Infantini, Bolin Lewis, Anderson

**ITEM VIII.A., RESOLUTION, RE: SUPPORTING COLLABORATIVE RESTORATION EFFORTS IN ALL SIX INDIAN RIVER LAGOON COUNTIES**

Commissioner Nelson stated he is representing Brevard County with the Indian River Collaborative; Ed Fielding, who is a Martin County Commissioner, asked that they look at a resolution in support of the issues. He read aloud a portion of the resolution.

The Board adopted Resolution No. 13-197, supporting the efforts of all cities and counties within the Indian River Lagoon Watershed, to include participating in the Indian River Lagoon County Coalition for the protection and restoration of the Lagoon and its Tributaries.

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	Chuck Nelson, Commissioner District 2
<b>SECONDER:</b>	Trudie Infantini, Commissioner District 3
<b>AYES:</b>	Fisher, Nelson, Infantini, Bolin Lewis, Anderson

**ITEM VIII.B., AUTHORIZATION TO REQUEST STATE AND FEDERAL ASSISTANCE TO RESTORE THE LAGOON**

The Board authorized staff to actively pursue all available grants, funding sources, and partnerships with and through Regional, State, and Federal agencies and other applicable organizations to effect the restoration of the Indian River Lagoon ecosystem; and granted permission to apply for all appropriate and applicable grants to further the restoration efforts, with all grants requiring local match and formal partnership agreements to be brought before the Board for consideration prior to execution.

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	Trudie Infantini, Commissioner District 3
<b>SECONDER:</b>	Mary Bolin Lewis, Vice Chairman/Commissioner District 4
<b>AYES:</b>	Fisher, Nelson, Infantini, Bolin Lewis, Anderson

**ITEM VIII.C., AUTHORIZATION TO LAUNCH LOCAL OYSTER GARDENING PROGRAM**

The Board authorized staff to develop and implement a Countywide Community-Based Propagation Program in partnership with the Brevard Zoo, Marine Resources Council, and other organizations to place up to one million oysters in the Lagoon providing for the filtration of up to 25 million gallons of Lagoon water per day; and authorized all necessary contracts, budget change requests, temporary staffing actions, and capital acquisitions to effect the outcome of the project within the defined budget, subject to County Attorney approval.

<b>RESULT:</b>	<b>ADOPTED [UNANIMOUS]</b>
<b>MOVER:</b>	Trudie Infantini, Commissioner District 3
<b>SECONDER:</b>	Robin Fisher, Commissioner District 1
<b>AYES:</b>	Fisher, Nelson, Infantini, Bolin Lewis, Anderson

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Upon consensus of the Board, the meeting adjourned at 10:03 p.m.

ATTEST:

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ANDY ANDERSON, CHAIRMAN  
BOARD OF COUNTY COMMISSIONERS  
BREVARD COUNTY, FLORIDA

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SCOTT ELLIS, CLERK