

**MINUTES OF THE COLLIER COUNTY
EAST OF 951 AD HOC COMMITTEE MEETING**

Naples, Florida, May 21, 2024

LET IT BE REMEMBERED, the Collier County East of 951 Ad Hoc Committee in and for the County of Collier, having conducted business herein, met on this date at 7:00 PM in REGULAR SESSION at the Heritage Bay Government Services Center, 15450 Collier Blvd., Naples, Florida, with the following members present:

Mark Teaters, Sr., Chairman
Robert Raines, Vice Chair
Michael Ramsey
Rae Ann Burton
Christina Aguilera
Kim Ellis (arrived 7:20 p.m.)
Aaron Zwiefel (absent)

1. **Pledge of Allegiance:** Led by Parker Klopf.
2. **Roll Call:** Quorum established.
3. **Approval of the Minutes from Previous Meeting:**
One change made to the April 16, 2024, minutes; page 3 under Michele Mosca – restudy of specifically the Rural Estates – corrected to: restudy of specifically the Rural Golden Gate Estates.
Mark Teaters: Motion was made to approve the minutes as corrected; Robert Raines seconded the motion. *Approved unanimously.*

Housekeeping – Mark Teaters, Sr.

We had some confusion at the end of the last meeting. The county brought up something about the restudy of the Golden Gate Master Plan. The staff has realized now that we are not yet to that point, so we are going to finish our job, which is the East of 951 Committee, all the while taking input on the Master Plan and the other issues at the same time. I want to reiterate again what we are here to do. The preliminary research of the East of 951 Committee was a project that had different programs in it one of which was to study economic development, transportation, public utilities, schools, parks and recreation, law enforcement, EMS, fire, life cycle of the landfill, libraries, stormwater management, and the health, safety and welfare issues in eastern Collier County in that area. We are not here to make any rules or demands. We are here to gather good information. People need to be prepared when they come to the meeting.

The staff realized last month that there were some things that may come forward before we get to the Master Plan that could be important to discuss. One of those was the rural architectural standards that are being discussed today at 3:00 p.m. at the DSAC meeting as part of the LDC review now. They are going to continue with that discussion. But because that is a Golden Gate Estates issue, when it comes to the Board of County Commissioners, (Comm.) Bill McDaniels is going to table the issue and hold it until we get into the Master Plan. The Master Plan is basically goals, objectives and policies. The main thing is we will get more in depth with all of these. We used to do it every 10 years. Obviously, growth has told us that it's time to do it every five years.

Moving forward, we have plenty of topics left to discuss, and one area is Immokalee. We plan on having a meeting with the people to discuss economic development for that area, innovation zones, and parks and recreation who are partnering with the school system.

4. Stormwater and Water Quality Discussion:
Brad Jackson, South Florida Water Management District Naples office
PowerPoint Presentation

- The Big Cypress watershed, our area in South Florida, is a little unique. This is a little different than the rest of the south Florida water management district's area. It is hydraulically disconnected from the rest of the south Florida water management system. Every drop of rain that falls within our area has no connection between areas to the east or to the north. The water that falls on that area either must be managed through canals, stormwater systems, drinking water or discharged out to the Gulf of Mexico. We have watersheds and canals that we manage throughout the area broken up into different watersheds – Faka Union, Henderson Creek, Golden Gate Main and the Cocohatchee. These are the primary canal systems and are like a highway of stormwater management in Collier County. The district, south Florida water management, operates and maintains the primary canal system and the county operates the secondary systems. The district operates for the county through an agreement, but all canals are owned by Collier County. We do the operations and maintenance, vegetation removal, debris removal, capital improvements, anything to improve the flood control of the bands in the system. We have secondary systems; the roadside swales and stormwater management systems and they all must work together.
- We have stormwater lakes, HOA's that are inside your neighborhoods, inside your commercial areas and those are called tertiary systems. Those operate and are discharged into the secondary system. The HOA's flow into the secondary and then the secondary flows onto the highway like a street system. The highway is the main outfall, the main thoroughfares of stormwater conveyance throughout the system. All of those must work together. The area is flat, and gravity based, and the canals are a very slow-moving system that doesn't respond very quickly to operations because you don't have a lot of slope on how things operate. We must be very careful about how we may manage things and be sure we are checking rainfall forecasts – monitoring and governing everything in the area. The canals also regulate the surrounding groundwater. It takes the groundwater and moves it out when there's too much of it basically to lower the groundwater just enough to provide flood control. It is a balancing act. There are a lot of decisions that go into how we operate the system.

- We have 135 miles of canals, 35 water control structures, all with various types of controls and buttons and levers that we use to move water in different directions. We have telemetry throughout the whole south Florida Water Management District. We have a public-facing website where you can see what is going on in your canal; how much rain we got; how much flow is going through a structure.
- The primary canal system was originally dug and developed by the developers of the region. They dug canals to drain the wetlands and swamps so people could move into the area. With that comes a few limitations – for instance, the 100- or 25-year storm, and that's just how often could a certain rainfall event happen. So, the canals, the way they are today, do not handle a 100-year storm. Everyone probably knows our canals are landlocked. To just change the size of the canals, there are downstream constraints we must look at as well as the physical constraints as far as widening the canals. There is not a way to do that.
- The district is making a lot of investment in the stormwater system. We have been investing in the last couple of decades, putting in real time telemetry to limit staff from going out to do things manually. We can make those real time decisions from anywhere. I can do it from home or if I'm traveling and then we can move those gates and make those decisions instantaneously. We have been systematically going through the bigger structures first, working our way upstream and there are several more to be upgraded enhancing that operational flexibility.
- At the Vanderbilt Beach Road extension project, we are building a new canal and water control structure. That was a \$5M capital investment the district made to improve the flood control for that area and then that would couple and go along with the sight risk and new improvements that are scheduled to be done in about two years and that will improve the flood control for that whole region of Cyprus.
- Our next project is canal control improvements. The Union Canal and the new development of Skysail, the canal cross section has filled in with sediment debris and is not able to move water anymore. We have \$3.5M budgeted to remove the sediment and debris and is in our plan for 2025 to 2027.
- At the south Oil Well Road almost to Immokalee, we are undertaking a study on how to improve these structures which get completely blocked with vegetation and debris during a flood event. Our goal is to retrofit these with more resilient structures to operate them more quickly and with bigger gates that don't get blocked. We want to eliminate obsolete infrastructure as well. We must do some modeling exercises and designs which will take construction into 2026. This will be a \$7M investment.
- The next project is Golden Gate #5 at Randall Bridge over Golden Gate Main which is where the manual structure is located. The main improvement is the performance of this structure to allow us to increase groundwater during the dry season. It is in acquisition for this year and next year. We will then start the designing phase following that. This is an \$8M investment.

Marshal Miller, Road, Bridge and Stormwater Maintenance Director

PowerPoint Presentation

- I am more of the small picture guy. I have staff that are doing the maintenance behind your home and trying to keep that stormwater off the roads and out of your home. One of the main contributors to the saltwater program is the roadway sweepers. These roadway sweepers, while everybody thinks they are for getting all the dirt and debris off the road, the primary purpose is to keep all the pollutants and debris out of the stormwater system, so we don't have to clean it once it's in there. The second thing is our vectors. We have a vector team that we run 365 days a year: day and night, like our sweeper program. They run on a TRS program, which is a one mile by one mile section. Doing local roads only two employees and two trucks go out and do all the culvert, pipes, and local drainage, in the secondary and tertiary systems to make sure that the pipes in the front, back, and side of your homes are conveying water properly to those primary ditches and canals.
- We also do some of the major ditch systems that connect some of those different canals in areas with low lying or not great connectivity to a ditch system. In the last year or two we started pinpoint maintenance where we put barriers up in our water-based canals, ditches, and ponds so that it catches the vegetation before it blocks up pipes and culvert systems. When we go in with our harvesting equipment, we can pull it out in a single point of maintenance instead of tracking up and down the canal, wasting time and productivity. We also have the Spring program. It is the best way of dispersing an agent that will stop the growth of excessive vegetation, so we don't have to spend all that time and money pulling it out of canals and disposing of it. We also have our labor groups that work all week during the dry season to keep vegetation down. They use weed eaters and hand tools and work on the embankment slopes and dry retention areas.
- We have successively navigated a grant program to get a watercraft. It's a small vessel that we can put in certain areas of canals, ditches, and wet retention ponds that we can send out into areas that our machines either cannot reach from land or have no access due to growth population and/or development.
- There is an underground infrastructure program that goes down your arterial roads throughout Collier County. These roadways get the biggest impact of the stormwater debris and pollution materials in the system. We hire a contractor to go out and clean the system and then blocks it off so that way we can send a camera down. The camera's purpose is dual purpose – it creates a database for us that keeps our infrastructure in check during storms and other emergencies that may happen where we need to back up and look at documentation to ensure if it did or did not happen during that emergency event. It also helps us find some of those parts of the system that need repair ahead of a failure due to structural defects from construction debris, impacts from different things like vegetation or washouts that could severely impact the underground system that is not otherwise caught until a failure happens. It also lets us budget for those repairs in a better manner.
- The Estates Swale Maintenance Program is new and started this year. We split up the Golden Gate Estates area into four sections. The north side of Oil Well Road along Everglades Blvd is our number one area. We have already identified two outfall pipes that

were not working properly. We are now entering our third location which takes time to locate and move forward on a scheduled manner.

Chad Ward, Pollution Control Manager in Collier County

PowerPoint Presentation

- Pollution Control has been monitoring surface water and groundwater within the county since 1988. And in 2017, we began to monitor sucralose to determine wastewater impacts and identify sources. Fecal indicator bacteria were previously utilized as wastewater tracers but were determined to be difficult to use because it continues to grow in the environment, and they cannot distinguish between animals or humans. The sucralose sampling efforts began in 2017, with wet season and dry season sampling collection from 51 monitoring wells completed from four different aquifers. Additionally, during the 2017 wet season, we collected samples from 24 randomly selected residential potable drinking water wells. Pollution Control collects surface water samples from 57 fixed locations.
- The surplus was detected in surface water and in shallow groundwater samples indicating wastewater influences. We continue to monitor surface water and groundwater resources within the county. We conduct source tracking investigations, which includes reviewing aerial photographs, land use and applicable permits, inspecting and testing infrastructure, and ultimately, we walk the watersheds to look for potential sources. We then promptly repair and replace any compromised infrastructure.

5. Public Comments:

Trinity Scott, Department Head for Transportation Management Services, currently with the Estates Swale Program. We need to start with a pilot program to show that there are benefits. We are accepting any feedback not just for East of 951 but throughout the county for stormwater management and a more sustainable dedicated funding source.

The funding source was a resolution that had a semi-dedicated mileage rate; many years ago, the resolution was changed to a certain mileage rate. The Swale Program we put forth last year was around \$2.5M with a large portion of that used for purchasing equipment for the two new crews. Once that is up and running, get the second crew hired, we will start seeing benefits to the overall program.

Jaime Cook, Development Review Director at Growth Management

New projects going through ERP permitting with the Water Management District or a local engineer for a single-family home, both are required to retain their water on their site. They can discharge to the swales or canals, and this stormwater plan is designed by an engineer at time of permitting.

Mike Ramsey:

- Will there ever be another primary canal built in Collier County? (No plans.)
- The drainage from the entire county, all its impervious services, is based on the limited primary canal volume?

Brad Jackson:

- The primary canal system can only convey as much water as it can. Their performance won't necessarily improve with future build-out and those types of things. That's why storage is so important so that extra water doesn't make it to the canal when they can't take it.

Mike Ramsey:

- Do all tertiary and secondary canals in the county empty into the primary canal?

Brad Jackson:

- Yes. However, there are some secondary, in the area that we're talking about tonight, that drain into the Union and Golden Gate Main areas. There are other areas of the county that don't have a primary canal like down in the southwest part of the county.

Mike Ramsey:

- So basically, most of the Rural Estates and most of East of 951, their drainage from impervious surface is dependent on primary canals.

Brad Jackson: Primary canal and the secondary systems.

Mike Ramsey:

- So we do have a limitation in volume based on the primary, especially in Rural Estates. The more impervious surfaces we build, the more we pour water into the limited system. (That's correct.)

Mike Ramsey:

- Immokalee is dependent on the SR29 canal?

Brad Jackson:

- Part of Immokalee drains into the SR29 and part goes to the Cocohatchee.

Further discussion ensued regarding the flow of water into the primary canals and secondary systems, etc.

Chad Ward:

- There are multiple types of wastewaters. For domestic wastewater, non-industrial, non-commercial, testing is done from a home or a residential property.

Mike Ramsey:

- The issue that we've been wrestling with out in the Estates and especially my station, is this issue popped up about specific nutrients, called blue-green algae infestation.

Chad Ward:

- There are nutrients within the canal systems of all the water bodies in Collier County, so it is not unique to the Estates. There are less in the Estates because the population is less there. Anytime you increase population, you're increasing input. If you have a larger area to treat, the system is going to treat it better than a much smaller area.

Further discussion ensued regarding septic and city water treatment systems, multiple sources of nitrogen and phosphorus go to the primary canals, testing/sampling of water sources, removal of vegetation and decay, etc.

Jaime Cook:

- The code allows homeowners in the Estates to clear up to one acre. Anything beyond that one acre would need an additional permit. Staff want to keep the native vegetation on the

property, for instance, the existing pine and cypress trees that are existing. There is no fake grass being put in – there are code requirements on turf. With subdivisions, they are required to maintain a level of preservation depending on the size of the projects as well as the amount of native vegetation that is within that project area, and they would have to maintain a preserve that is a conservation easement.

If someone is doing an interior remodel/improvement it is not required to remove exotics; when expanding the footprint of their home or adding a structure, that is when it is required.

Trinity Scott:

- A great system in the Estates is open swales. One of the things that open swales do for us is remove those pollutants. Not every roadway is going to be rebuilt with a new retention pond, etc. Sometimes you will have water in the roadside swale. That's where it is meant to be, and it allows that water to percolate down and allows those pollutants to come out. Those are things in Golden Gate Estates we are fortunate to have because it is something that is great for water quality.

6. Committee Recommendations Update

Parker Klopff: I wanted to talk about what our topic will be for the next meeting – whether it be the school district, the sheriff, a presentation for the Town of Immokalee, specifically the life cycle of the landfill, Parks and Recreation, and the library. We need to have a discussion and come up with a determination to plan for the next meeting.

The other thing was the homework where the committee would provide me with some information and/or needs and wants on the items that we have already discussed. This is necessary for me and Staff to put together a recommendation list that we are ultimately taking to the Board of County Commissioners. Mr. Ramsey has provided me with some information. If within the next week the rest of the committee could provide me with your information before the next meeting, I would appreciate it.

The timeframe for the Town of Immokalee meeting would be in July. I would like to get in touch with the CRA out there as well as any local leaders that are involved; coordinate a location that can support the meeting; reach out to members of the public/community; ask them for any input. This is part of the study area and Immokalee has been historically underserved.

Robert Raines: Motion was made to approve having the July meeting in Immokalee; Mark Teaters seconded the motion. *Approved unanimously.*

Parks and Recreation will be at least one topic for the Immokalee meeting.

7. Adjourn

Robert Raines made a motion to adjourn; seconded by Kim Ellis. *Approved unanimously.*

The meeting was adjourned at 9:00 p.m.

Collier County East of 951 Ad Hoc Advisory Committee

Mark Teaters, Sr., Chairman

These minutes were approved by the Chairman of the East of 951 Committee

on _____, (check one) as submitted _____ or as amended

_____.