MINUTES OF THE COLLIER COUNTY COMPREHENSIVE WATERSHED IMPROVEMENT PROGRAM COMMITTEE

Naples, Florida, April 7, 2017

LET IT BE REMEMBERED, the Collier County Watershed Improvement Program

Committee in and for the County of Collier, having conducted business herein, met on this date at 1:15PM in a REGULAR SESSION at the Growth Management Department

Building, Room 609/610 2800 N. Horseshoe Drive, Naples, FL with the following persons present:

Chairman: Jocelyn Nageon De Lestang

Vice Chairman: Dennis Vasey

Gregg Strakaluse Chadd Chustz Brent Bachelder

Jeff Carter (Vacancy)

ALSO PRESENT: Jerry Kurtz, Stormwater Planning, Staff Liaison

Tabitha Stadler, Stormwater Planning

Kris Van Lengen, Community Planning Manager

Any persons in need of the verbatim record of the meeting may request a copy of the audio recording from the Collier County Growth Management Department -Contact Mr. Evy Ybaceta at 239-252-2400.

- 1. Call to order

 The meeting was called to order at 1:15 pm and a quorum was established.
- Approval of Agenda Committee action requested
 Mr. Strakaluse moved to approve the Agenda. Second by Mr. Vasey. Carried unanimously 5 0.
- 3. Approval of Minutes Committee action requested Mr. Vasey moved to approve the minutes of the January 29, 2016 meeting as presented. Second by Mr. Strakaluse. Carried unanimously 5-0.
- 4. Staff Announcements Jerry Kurtz, Collier County Government None
- 5. Workshop/Discussion Session Tabitha Stadler, Collier County
 - a. City of Naples Stormwater Utility and Master Plan Update Gregg Strakaluse, Streets and Stormwater Director

Mr. Strakaluse presented the PowerPoint "City of Naples Stormwater Master Plan Update - Public Information Meeting" for information purposes highlighting:

- The City of Naples receives an average annual rainfall of 56 inches per year yielding approximately 14 billion gallons of water.
- The stormwater is discharged into the Gulf of Mexico, Naples Bay, local lakes and waterbodies and the groundwater.
- In 1993 a Stormwater Enterprise Fund was developed to address flooding in the City which imposed a fee of \$4.00 per Average Residential Unit (ARU)
- In 2008, the fee was increased to \$11.40 per ARU to address projects identified in the Stormwater Master Plan.
- Also, included in the changes at the time were a 30 percent credit for properties with stormwater management systems and a requirement for new single family homes to provide onsite stormwater management systems.
- The rate was increased again in 2017 to its current rate of \$13.06 per ARU with the allocation of payers as follows: Commercial 47%; Multi Family 33%; Single Family Residential 20%.
- The program also allows an option for multi-family properties being billed based on impervious area or number of residential units providing they submit a certification from a licensed land surveyor identifying the total impervious area of the site and any common area used by the property.
- The City has a Stormwater Master Plan which identifies goals for the City by tracking and
 evaluating current stormwater management practices and measuring the components of
 management including flooding and recovery, water quality and ecology, stormwater
 infrastructure operations and maintenance, regulatory activities and capital projects.

During Committee discussion, the following was noted:

 Do the multi family options encourage large roof area construction with creating greater quantities of runoff which may impact water quality? – Staff noted data indicates many

- The project will improve habitat and water quality, enhance the marine life environment and provide a better overall experience for those utilizing the area.
- The cost of the project is estimated at \$10.5M for the south end and \$10.0M for the north end.

c. City of Naples ASR program - Gregg Strakaluse and Andy Holland

Mr. Strakaluse presented the PowerPoint "Stormwater Reuse Through Aquifer Storage & Recovery dated April 7, 2017 highlighting the following:

• The City's has four ASR wells with the goal of:

- Developing up to 5 MGD of additional water sources to reduce consumption of potable water from 270 gallons per capita per day (GPCD) to below 200 GPCD.
- Conserving existing potable water supply from the Lower Tamiami Aquifer and increasing supply of supplemental water for irrigation.
- Reducing reliance on expanding water treatment facilities and meet the conditions of the renewed water use permit, 100% reclaimed status.

• The critical period is March through May, the height of the dry season.

- The program assumes a 30% recovery rate with the volume to meet irrigation during critical periods = 1,000,000,000 gallons (6.24 mgd for 90 days) and one ASR well can deliver 1 to 2 mgd.
- The program is heavily regulated to protect underground drinking water sources with permitting and construction being a multi-year endeavor including an Exploratory Well Construction permit, ASR Well Construction Permit, Cycle Testing the Storage Zone Permit and an Operating Permit.
- The program is cost effective given the high demand for irrigation water and the low availability of the resource during the dry times.

Under Committee discussion, it was noted a recent goal for the County is to reduce discharges into the overall system with items such as a new policy decreasing the allowable discharge rates from certain watershed basins into the canals. A concern was expressed there is a Land Development Code amendment proposed to allow single family residences constructed in Golden Gate Estates to discharge waters directly off site providing less than 25 percent of the land is developed into impervious areas.

6. Member and Citizen Comments

None

7. Old Business

None

8. New Business

None

9. Set or announce next meeting date

The next meeting will be held on May 9, 2017.

There being no further business for the good of the County, the meeting was adjourned by the order of the Chair at 3:15PM.

- developers incorporate the roof drain components of the building into the stormwater management systems as opposed to direct runoff.
- The Utility was well received by environmental groups and residents as they realized the flooding issue needed to be addressed.
- The City of Marco Island has begun investigating the feasibility of a Stormwater Utility and a workshop is being held by the Waterways Committee on the item in the near future.

b. Naples Bay Water Quality Project at the Cove Pump Station and Beach Outfalls Project - Andy Holland, P.E., Engineering Manager

Mr. Holland presented the PowerPoint "The Cove Stormwater Pump Station Outfall Improvements and Water Quality Project and Naples Beach Restoration" dated Thursday January 28, 2017" noting:

Cove Inn Outfall

- The project involves reconstructing the outfall area at the Cove Inn to minimize erosion at the end of the outfall, improve the aesthetics of the area and improve water quality.
- The area will be redeveloped with the introduction of an oyster bed, developing a living shoreline, improving sidewalks, installing benches and providing educational signage.
- Approximately 1,000 cubic yards of sand will be removed in constructing the 40-foot-wide outflow channel which will follow the path of the current flows.

During Committee discussion, the following was noted:

- Consideration should be given to installing rock rip rap along Coast Guard Station edge to ensure the area is not scoured by the water flows.
- The stormwater entering the system is currently pretreated to remove debris and the City is considering upgrading the treatment with additional separators upstream of the discharge.
- A portion of the sand may be reused on site if deemed suitable, or disposed of at the landfill if it is comprised by contaminants or organic matter.

Naples Beach Restoration

- The project involves combining the 10 Naples Beach outfall pipes with individual discharge pipes located at the north and south ends of the beach.
- The project is moving from the 30 percent to 100 percent design stage.
- The water will be centrally collected at a pump station and dispersed via a series of diffusers along the pipe located approximately 1,000 feet offshore of the beach
- The discharge pipe at the south end will be located at 3rd Avenue North.

Under Committee discussion the following was noted:

- The existing water quality protocols will remain in place and if specific standards are not met, measures need to be taken to address the deficiencies (this has not been an issue in the past).
- The predominant flow of water does not contain suspended solids as the stormwater flows through a series of roadside swales as opposed to the curb and gutter street designs prevalent in the Cove Inn discharge areas.
- Given the water depth of the discharge pipe, there should not be a problem for boat navigation; however, precautions may need to be taken to ensure boat anchors do not get caught on the diffusers or pipe.

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These Minutes were approved by the Committee on _ amended	$4/7/17$, as presented \nearrow , or as

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