

## **Waterways Plan for Martin & St. Lucie Counties**

### **Waterways Forum 4: Natural Resources**

THURSDAY, FEBRUARY 27, 2014

2:00 P.M.

*Port St. Lucie Community Center, 2195 SE Airosa Boulevard, Port St. Lucie, FL 34984*

Forum arranged by the Treasure Coast Regional Planning Council (TCRPC)  
as part of the Waterways Plan for Martin & St. Lucie Counties.

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*NOTE TO READERS: This document reflects general meeting notes and key questions and points of discussion raised during the Forum on Natural Resources that occurred on Thursday, February 27, 2014. General meeting notes were prepared by TCRPC.*

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#### **General Meeting Notes**

The meeting was opened at 2:07 p.m. by Dr. Kim DeLaney, TCRPC. Meeting participants introduced themselves (copies of the forum sign-in sheet are included with these notes). The members of the Steering Committee identified themselves.

*(NOTE: Each speaker utilized power point slides, and a copy of the power point presentation is included with these meeting notes.)*

#### **Project Overview:**

Dr. DeLaney provided a brief introduction on the Waterways Plan project. The project covers the waterways in both Martin and St. Lucie counties (about 120 miles of waterways, including roughly 44 miles of Intracoastal Waterway, 25 miles of St. Lucie River, and 25 miles of canals). The plan is funded by the Martin Metropolitan Planning Organization (MPO), St. Lucie Transportation Planning Organization (TPO), and Florida Inland Navigational District (FIND). Each organization is responsible for guiding long-term transportation and capital investments with a goal of maintaining high quality of life, high level of mobility, strong economic development, and sustainability.

This was the fourth forum in a six-forum series. The forums are intended to broaden the general knowledge of waterways-related issues – for the project team, the steering committee, and the general public – and help inform the development of the Waterways Plan.

Dr. DeLaney reviewed the upcoming series of educational forums that will take place over the next couple of months, and she provided an overview of the pending charrette public workshops,

additional opportunities for public input, and the project schedule. Information on the project is posted on the TCRPC website at [http://tcrpc.org/special\\_projects/Waterways/waterways.html](http://tcrpc.org/special_projects/Waterways/waterways.html)

The two remaining forums are scheduled as follows:

<i>Forum 5</i>	<b>Recreation/Cultural/Educational Activities</b>	<b>March 12, 2014</b> Wednesday (2 PM)	<b>Port Salerno Community Center</b> 4950 SE Anchor Avenue; Stuart, FL 34997
<i>Forum 6</i>	<b>Economic Development</b>	<b>April 2014 (9 AM)</b> (Date TBD)	<b>Port St. Lucie Community</b> 2195 S.E. Airoso Boulevard Port St. Lucie, FL 34952

*Table reflects most current schedule as of 2/27/14*

Dr. DeLaney noted that the economic consulting team, WTL Associates, based in Washington, D.C., will attend the Economic Development forum and will present their preliminary findings with respect to market capacity and demand and larger economic indicators. There will also be a similar panel similar to this one to talk through different conditions and identify opportunities.

Dr. DeLaney pointed out the series of public input workshops scheduled for May 7, 8, and 9<sup>th</sup>. Each of the 3 workshops will be identical in format and run from 1 p.m. to 6 p.m. with an opening presentation summarizing initial findings and early indicators of opportunities and challenges, followed by “table sessions” with maps so participants can provide input and ideas for the development of the plan.

<i>Public Workshop a</i>	<b>Public Input Workshops</b>  <b>Open to the Public</b> <b>Identical Formats,</b> <b>Presentations, and</b> <b>Public Input</b> <b>Opportunities</b>	<b>May 7, 2014</b> Wednesday (1 PM)	<b>Port St. Lucie Civic Center</b> 9221 S.E. Civic Center Place Port St. Lucie, FL 34952
<i>Public Workshop b</i>		<b>May 8, 2014</b> Thursday (1 PM)	<b>Indian Riverside Park</b> 1707 NE Indian River Drive Jensen Beach, FL 34957
<i>Public Workshop c</i>		<b>May 9, 2014</b> Friday (1 PM)	<b>City of Fort Pierce River Walk Center</b> 600 North Indian River Drive Fort Pierce, FL 34950

Following the workshops will be a 5-day working open design studio, located at the TCRPC offices, which will have a multi-disciplinary team working through planning ideas and concepts. The studio is tentatively scheduled for late May, and it will provide another opportunity for the public and steering committee to review preliminary findings, recommendations, and provide additional input. The goal is to have an initial plan together by the end of May to bring back to the various organizations who are participating in the development of the plan.

Dr. DeLaney introduced Dr. Peter Merritt, TCRPC, as the panel facilitator. Dr. Merritt provided an overview of the Natural Resources for the waterway resources of Martin and St. Lucie Counties.

Dr. Merritt clarified that natural resources include not only the water in the waterways, but everything else that is naturally occurring, including the biological and non-biological components of the environment. This includes the animals, plants, water, soil, and air.

Sometimes natural resources are referred to as a single species. For example, the West Indian Manatee is an endangered species that is an important natural resource. Sometimes we refer to natural resources in terms of communities, which are distinct assemblages of populations of plants and animals that are naturally associated with each other. Examples of natural communities related to the waterways are seagrass beds, oyster beds, algal beds, tidal marshes, and mangrove swamps. Sometimes we refer to natural resources in terms of ecosystems. An ecosystem is the combination of natural communities and the physical environment, which is interrelated and functions together. The lagoon, the river, and even the entire earth can be considered an ecosystem. Dr. Merritt discussed ways the natural resources in our waterways connect to other areas, including the Kissimmee River Basin, Lake Okeechobee, the Everglades, St. Johns River Basin, the lagoon systems, and ocean. As we proceed with the Waterways plan, we want to be aware of all the connections and programs that exist to protect and enhance natural resources in and along the waterway. Dr. Merritt concluded by explaining how the panel discussion would be conducted and introduced the panelists.

Dr. Merritt indicated the panel of experts represented two state agencies, one federal agency, two local governments, and one private organization. He noted the panel discussion would include three components:

- (1) each panelist would provide a 3-5 minute overview describing their organization's role in the protection and enhancement of natural resources, including a description of the biggest challenge faced by the agency in its mission to protect and enhance natural resources and waters;
- (2) each panelist would discuss any issues the Waterways Plan could address that would help protect natural resources of the waterways.
- (3) the audience would have an opportunity to ask questions of the individual panelists. Dr. Merritt noted at the end of the panel discussion, there would be a five minute break, after which the Project Steering Committee would meet. The public would be welcome to attend the Steering Committee meeting.

### **Natural Resources Panel**

*Patti Gorman, Science Supervisor, South Florida Water Management District (SFWMD)*

Ms. Gorman addressed the challenges of ecosystem restoration. She pointed out the sixteen counties with huge variability of environmental resources and the historical problems such as hurricanes and flooding leading to the construction of the C&SF project that Congress authorized in 1948. She noted some of the major features of the project in place are river channelization, Herbert Hoover Dike, water conservation, protective levies, and the drainage network. The SFWMD added additional levies, pumps, about 1800 miles of canals, 160 major drainage basins, over 2000 control structures, pump stations and everything from the large structure to the top to smaller culverts that join farms and very large pump stations.

She pointed out the ongoing challenges for the water system, such as the quantity of water in South Florida, which is consistently either too much or too little. Billions of gallons of water are lost to tide, which affects our natural systems as well as a huge loss of drinking and irrigation water. An additional challenge is protecting the endangered species which sometimes impede the restoration effort.

In 1999, the Comprehensive Everglades Restoration Plan was created. The plan features 68 components and will be implemented over the next 35 years. The plan is in its fifteenth year and is moving forward slowly. A challenge for SFWMD is the need to balance different water needs, such as agriculture as well as flood control in urban areas.

Ms. Gorman explained some of the key restoration features, including the Indian Lagoon south project, wetland restoration, watershed of St. Lucie, planned reservoirs, and storm water treatment areas. She also described the broad program approach as “RECOVER” - REstoration COordination VERrification.

She discussed the monitoring and assessment plan, which is a large part of the science that affects this area. The approach is organized by region, and SFWMD covers four major regions: Lake Okeechobee, Greater Everglades, southern and northern estuaries. Ms. Gorman also mentioned the SFWMD covers approximately 46 miles of the Indian River Lagoon. Key additional activities to note include seagrass monitoring and mapping, oyster monitoring, and the Marine Biotic Index.

*Patrick A. Pitts, Biologist, U.S. Fish and Wildlife Service (USFWS)*

Mr. Pitts complemented Ms. Gorman on her overview and the status of CERP and particularly the RECOVER program for which Patti and he are both involved. Mr. Pitts is the regional coordinator for the southern end of the system around Biscayne Bay, Florida Bay, and the Southwest Florida Shelf.

He pointed out that the USFWS is responsible for carrying out certain legislative acts. The two that get the most attention is the Endangered Species Act and the U.S. Fish and Wildlife Coordination Act. The Endangered Species Act is charged with protecting threatened and endangered species. The U.S. Fish and Wildlife Coordination Act is charged with reviewing large water resource projects for which there is a federal nexus, and Mr. Pitts noted the best example is the Comprehensive Everglades Restoration Plan. He noted that USFWS is required to provide a Fish and Wildlife Coordination Act report on every CERP project.

Mr. Pitts indicated the Migratory Bird Treaty Act is applicable to the waterways plan, the Indian River Lagoon, St. Lucie Estuaries, and St. Lucie River. An example is migratory shorebirds. For the Marine Mammal Protection Act, the manatee is highly prioritized. For the Bald and Golden Eagle Protection Act, although the Bald Eagle is no longer threatened or endangered, it is still protected through this Act. He noted that there are 69 listed endangered species in south Florida and three species relevant to the waterways plan are the wood stork, manatee, and green sea turtle.

The agency is also responsible for protecting seagrasses and mangroves, and other species for which the waterways plan will be applicable include migratory birds, bald eagles, and habitats for all fish and wildlife resources.

Mr. Pitts noted the USFWS concerns regarding the discharges from Lake Okeechobee, which affect the health of the St. Lucie Estuary and the Southern Indian River Lagoon. Other concerns regarding the waterways are storm water runoff, septic tank leaching, climate change, over-drainage of the watershed, boating impacts, and habitat fragmentation. Among the greatest challenges to the agency are a lack of funding and staffing.

*Brian Sharpe, Indian River Lagoon Aquatic Preserve Manager, Florida Department of Environmental Protection*

Mr. Sharpe pointed out the interagency coordination among the group and how interlinked all the different agencies are. He noted that within the Florida Department of Environmental Protection, his office is in the Florida Coastal office known as Coastal and Aquatic Managed Areas (CAMA). The Indian River Lagoon Aquatic Preserves consists of seven separate, yet connected Aquatic Preserves.

The Aquatic Preserve was first established with the Florida Aquatic Preserve Act of 1975, with a focus on preservation areas set aside for the benefit of future generations due to their exceptional scientific, biological, and aesthetic value. Mr. Sharpe indicated the state manages more than 108,000 acres of submerged resources, and he indicated the management boundaries and all the submerged resources within those areas using maps (included in the Natural Resources Forum power point presentation). Mr Sharpe also noted CAMA manages more than 120 spoil islands.

Mr. Sharpe indicates one of CAMA's biggest challenges is staffing, noting the difficulty of balancing the needs and desires of the community, public recreation rights and expectations, enhancement of key spoil islands for public enjoyment, and the need for protection of the environment. He also noted the agency's responsibilities for sea grass monitoring and oyster reef restoration. Another agency challenge is adjustments due to decreased state and federal funding and fewer/smaller grants.

Dr. Merritt pointed out how the different state agencies and the federal government complemented each other regarding natural resource issues.

*Deborah Drum, Manager, Ecosystem Restoration & Management Division, Martin County*

Ms. Drum pointed out the lands that are managed by Martin County to help protect and restore natural resources and conversation land as well as complete water quality improvements. The County is challenged with creating appropriate public access to and through conversation lands, which total roughly 35,000 acres in Martin County. She noted the County's highest priority is the completion of the Indian River Lagoon South Project. The project's components include water quality, oyster restoration, and muck removal, all of which are key elements to regional restoration that involves Everglades Restoration.

Ms. Drum noted three key issues related to natural resources: Everglades restoration, water quality protection and enhancement, and exotic species removal. Among the challenges to Martin County's efforts regarding natural resources are funding opportunities (federal, state, and local level), Lake Okeechobee releases to the St. Lucie, public awareness of watershed connections, and multi-generational implementation. She noted the potential solutions to the address those challenges include support for recurring funding for water quality protection and enhancement, natural resource management at all levels, sustained public support throughout the life cycle of project implementation, awareness through educational outreach for natural resource challenges, and opportunities to make a difference locally.

*Steve Fousek, Environmental Lands Coordinator, St. Lucie County*

Mr. Fousek discussed the management plan process for state lands as well as the acquisition/management process for the Florida Communities Trust program. He noted St. Lucie County manages roughly 1,200 acres, which along the North Fork of the St. Lucie River, including Ten Mile Creek, which is approximately 200 acres. The County manages about 5,000 acres on the island and some west of the lagoon, mostly for mosquito control. The County has developed a needs assessment to determine how best to manage those resources, a master plan, and utilizes a nine-member advisory committee who analyzes the plans and ensures all the concerns are addressed.

*John Nelson, President Elect, Audubon of Martin County*

Mr. Nelson described the goals of Audubon and showed an educational video. He noted the for Audubon include getting the public involved and aware of what the organization is doing. He noted that he hosts a public radio program called the Audubon Moment and recently received a grant from Toyota Corporation and Natural Audubon to promote the program to other public radio stations throughout the state of Florida. Mr. Nelson indicated the core premise of the Audubon moment is to encourage individuals discover what's in their own backyards and expand awareness from there. Dr. Merritt noted Audubon can play a key role in helping increase public awareness, especially for the May public workshops.

## **Panel Discussion**

Panelists were asked to respond to a question posed by Dr. Merritt: Is there one thing that could be put in the waterways plan that would assist their efforts?

Ms. Gorman (South Florida Water Management District) suggested a good summary of all the different efforts that are going on in the waterways, including identification of the different individual agencies and their missions.

Mr. Pitts (U.S. Fish and Wildlife Service) noted that he was not clear on the purpose and objective of the waterways plan and it is really important to make that clear in the plan. Dr. DeLaney explained the purpose and objective of the waterways plan. Mr. Pitts asked if the plan would address economic benefits that are provided through ecosystem services. Dr. DeLaney noted that one of the things they have been asked to do is try and value the waterways and she

pointed out they have economists and an economic team who is working on various economic indicators related to the waterways.

Mr. Sharpe (Florida Department of Environmental Protection) pointed out that funding is becoming limited, and it is important to get that funding. Grants are more limited and competitive; therefore, it is important that everyone is on the same page and with the same goal in mind. The focus could be encouraging the public to use existing facilities rather than installing new facilities that could impact mangroves and other habitat.

The panel discussed the concept of levels of service for marine and natural resource facilities.

Ms. Drum (Martin County) indicated that in natural resource management, a continuing challenge has been placing value on improvements for the community, and this waterways plan could address questions along those lines ... what is the value of an accessible clean waterway? What does that do for the quality of life? What is the value for communities? Those types of broad questions will help people understand the value of supporting something like this within their own communities. It can include discussion of the value of having integrated access points with well-maintained, protected and high quality natural resources.

Mr. Fousek (St. Lucie County) suggested a review of studies that address the value of green space for communities.

Dr. Merritt noted the value to the waterways and abutting lands to those lands that are totally inland. While inland properties appear to be disconnected, they are actually highly connected through storm water, groundwater, and drainage. The plan should address that point as well.

Mr. Nelson (Audubon of Martin County) suggested the use of the county's waterways through ecotourism as well as responsible ways of being able to utilize these resources would be valuable outcomes.

### **General Questions and Answers**

A member of the audience asked about the status of the Kissimmee River Preservation Plan. Ms. Gorman said the plan was about 2/3 done.

It was asked if a waterway suitability map had ever been done. Mr. Sharpe was not aware of a map, noting his agency's focus on the mapping of sea grass beds and oyster reefs. He noted the WMDs are conducting additional mapping of oyster reefs and much within the waterways.

Dr. DeLaney indicated the environmental data would be very useful for baseline maps for the plan, noting they would further inform the development opportunities and constraints in the areas likely to be considered for infill development and redevelopment such as the community redevelopment areas.

Melissa Carter asked what the citizens could do to help. Ms. Gorman stated lobby, lobby, lobby. Ms. Drum noted the sample letters on Martin County's website at [www.martin.fl.us](http://www.martin.fl.us).

Ms. Gorman noted the distinct boundaries for the different water management districts, noting the map for the St. Johns River WMD versus SFWMD. She indicated the WMDs closely coordinate regarding environmental monitoring assessment activities, but there can be differences in the approach for the state and FDEP versus the WMDs.

Ms. Drum indicated the TDMLs are being established consistently; however, if any disconnects exist among agencies, it is how agricultural lands are treated versus municipal governments in terms of what is required to clean the water. She further noted the challenge of maps adopted with a baseline assumption that water from Lake Okeechobee was clean water, and further, there would be no releases from the Lake. Currently, eight years later, the region is receiving releases from the Lake, and the local agencies – counties, cities – cannot meet the TMDL requirements as long as we are getting Lake Okeechobee discharges.

The public further noted the fisheries need to be addressed in the plan as there is a high value to the industry. Dr. Merritt noted at the next forum there will be discussion on fishing with recreational opportunities.

Dr. DeLaney thanked the panel. The meeting forum adjourned at 4:25 p.m.

**STEERING COMMITTEE MEETING**  
**Waterways Plan for Martin & St. Lucie Counties**

THURSDAY, FEBRUARY 27, 2014

4:30 PM

*Port St. Lucie Community Center, 2195 SE Airoso Boulevard, Port St. Lucie, FL 34984*

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**General Meeting Notes**

The meeting was opened at 4:32 p.m. by Dr. Kim DeLaney, TCRPC. She pointed out the updated schedule for the next forums and also talked about the upcoming workshops in May. She noted that the steering committee did not have to attend all the workshops, but it would be helpful if they could attend at least one.

Waterways Forums – Review & Discussion

The Committee discussed the key points raised during the panel discussion regarding natural resources, including:

Dr. DeLaney talked about outreach to the local governments, advisory board members, stakeholder organizations, chambers, marine industries, realtors, etc. for the upcoming workshops. She noted that the workshops will be advertised in the newspaper and also try and use public access channels. Ms. Lathou mentioned advertising through WPSL radio. Dr. DeLaney also noted that flyers will be distributed city/county department heads and city/county managers.

Ms. DeLaney noted the discussion from today's meeting included education outreach to build advocacy, need for resources and staffing, special focus on the interconnectedness of the systems, and watershed.

Ms. Landry suggested a good visual for the upcoming workshops would be to show the way the flow used to be versus the way it is today.

Mr. Donaldson liked the idea of working the data on terms of the spoil islands or various public lands along the way as well as which agencies are responsible for the various resources. It is not a main focus of this plan but could be incorporated in the plan. There is a need to advocate our federal projects, the IRL programs, and support the local community efforts.

Dr. DeLaney noted that efforts regarding Lake Okeechobee are underway at various levels, and the plan can focus on the local fisheries, local resources, and our local responsibilities and opportunities to improve conditions. The agencies responsible for natural resources have good plans in place, which were discussed by the panelists. The plan will include an inventory of existing regulations and plans, identify any gaps, and address those gaps as tasks for the plan and implementation.

The committee discussed the challenge of mapping sea grasses and the changes that occur from year to year, as they can change dramatically on an annual basis. Discussion focused on the potential for the plan to address sea grass restoration and/or mitigation.

Mr. Donaldson noted the WMD appeared to be maintaining sea grass data. The larger point is for the plan to indicate the data need, which agency is maintaining the data, and how often the data is updated. Also, the plan could note what's been accomplished regarding restoration and habitat, the level of success, and maintenance.

Michael Williamson (Cambridge Systematics, Inc.) identified several key issues for the committee to consider. The plan can be used to support grant applications to increase competitiveness and funding. The purpose and objective of the plan needs to be clarified and more focused. Another key point of discussion is a matrix resource, which can be a resource for the professionals and local governments or in a modified and less technical form, a resource for the public.

Dr. DeLaney pointed out that there is a lot of information that needs summarizing, which would best be identified in ledger fold-outs (11x17") in the plan to make the data digestible for the public. The plan will also identify publicly owned lands along the waterways along with restrictions on those lands, which is information that will be valuable for the planning process going forward.

The meeting was adjourned at 5:02 p.m.