MIAMI-DADE COUNTY
FINAL OFFICIAL MINUTES
Miami-Dade Sea Level Rise Task Force

Dade County Courthouse
73 West Flagler Street
Suite 242
Miami, Florida 33130

May 8, 2014
As Advertised

Harvey Ruvin, Clerk
Board of County Commissioners

Christopher Agrippa, Director
Clerk of the Board Division

Maryse Fontus, Commission Reporter
(305) 375-4906
The Miami-Dade County Sea Level Rise Task Force (Task Force) convened a workshop on Thursday, May 8, 2014, at Dade County Courthouse, 73 West Flagler Street, Suite 242, Miami, Florida, at 2:00 p.m. Present were Honorable Clerk of Courts Harvey Ruvin, Task Force Chairman; and members Dr. David Enfield, Ms. Sara Fain, Mr. Arsenio Milian and Mr. James Murley; (Mr. Willard T. Fair, and Mr. Jorge Gonzales were absent).

In addition to the Task Force members, the following staff members were present: Ms. Nichole Hefty, Chief, Office of Sustainability, Planning Division, Miami-Dade Department of Regulatory and Economic Resources (RER); Assistant County Attorney Christopher Angell; and Deputy Clerk Maryse Fontus.

I. Welcome and Introductions

Assistant County Attorney Christopher Angell informed the members that the agenda item on sea level rise which was proposed by the Board of County Commissioners’ (BCC) Chairwoman was considered by the full Board yesterday (05/07), and passed with the consent agenda. He said that as it was not on the pull list, there was no discussion on the item.

Pursuant to Mr. Milian’s request for more information on the item, Assistant County Attorney Angell explained that this was an infrastructure item related to sea level rise, which would require all County infrastructure projects, modifications, and renovations to consider the potential impacts of sea level rise during all project phases including, but not limited to planning, design and construction; and would direct the Mayor to evaluate the existing infrastructure in the face of sea level rise.
Chairman Ruvin said that he attended the Infrastructure and Capital Improvements Committee (ICIC) meeting, at which the resolution was considered, to express the Task Force’s full support for it, as it demonstrated Chairwoman Sosa’s ownership of this issue. He noted the comments from the Committee members were very positive, and this resolution set the stage for the Task Force’s presentation to the BCC.

Chairman Ruvin called the meeting to order at 2:25 p.m. and requested that the record reflect the presence of four Task Force members. He noted today’s (05/08) meeting had been properly noticed in compliance with the Sunshine Law.

II. Approval of Minutes

It was moved by Mr. James Murley that the minutes of the April 4th, 2014, Sea Level Rise Task Force meeting be approved, as presented. This motion was seconded by Mr. Arsenio Milian, and upon being put to a vote, passed by a unanimous vote of those members present.

III. Discussion on the Report

Chairman Ruvin said that the purpose of the meeting was to seek feedback from the Task Force members to improve the draft report, the overall assessment of expected impacts, and the potential graphics for the report. He noted due to the Sunshine Law constraints, he would work with Ms. Hefty to revise the draft, and within another meeting or two, a final draft would be presented to the members of the public at a final meeting to solicit their feedback.

Chairman Ruvin informed the members that Ms. Hefty received a telephone call from Ms. Virginia Walsh, Miami-Dade Water and Sewer Department, who wanted to bring to their attention a technical meeting, held on April 28 and 29 at Florida Atlantic University (FAU), during which a
working group made some recommendations that could be included in the Task Force's report.

Mr. Milian noted the Future Climate Scenario Working Group, to which Ms. Walsh was referring, was recommending that the County solicit funding from the federal government for capital improvements, and that the South Florida Water Management District (SFWMD) play a major role.

Chairman Ruvin pointed out that if the County Commission endorsed the Task Force’s recommendation to hire an engineering firm to develop a capital improvement plan, it would have to be implemented in phases. He said that the engineers would have to coordinate with federal, regional and local entities, including the Southeast Florida Regional Climate Compact (Compact), the SFWMD, the U.S. Army Corps of Engineers, etc. Chairman Ruvin noted the challenge would be how to proceed with this amorphous group while conforming with procurement rules, and allowing everyone to contribute. He said that legislation may have to be adopted, and perhaps the SFWMD could provide an overarching funding mechanism.

Mr. Milian noted he agreed that the engineering consultants would deal with the technical aspects, but he believed that the Task Force should identify the elements of the plan.

Ms. Fain said she concurred, noting the Task Force was mandated to provide a framework. She pointed out that the Climate Change Advisory Task Force (CCATF) created a framework; however, there was no political will to implement it at the time. Ms. Fain noted it appeared that this Task Force had more momentum. She said she revised Chairman Ruvin’s draft, and tried to include a framework. Ms. Fain acknowledged the work of Ms. Julie Dick, her program attorney, who had worked on the draft.

Chairman Ruvin noted this was precisely what he had hoped the members would do today (05/08). He said that it was necessary for the members to identify the priorities, the cost, etc.
Ms. Fain noted the Task Force members had two charges: to provide a comprehensive and realistic assessment of the likely and potential impacts of sea level rise and storm surge over time; and to develop a number of recommendations relative to the Comprehensive Development Master Plan (CDMP), capital facilities planning and other priorities.

Ms. Fain said on the second page, she added to Chairman Ruvin’s recommendation that the Task Force should urge the County to (1) update the recommendations of the CCATF; (2) establish formal oversight; and (3) dedicate sufficient resources and staffing to ensure implementation.

Ms. Fain suggested that on the fourth page, the following sentences be added at the end of the second paragraph: “Specific infrastructure and planning projects should design for the projected sea level during the life expectancy of a project. For example, an infrastructure or capital project with a life expectancy up to 2100 should incorporate design criteria based on sea level rise projections for 2100.”

Chairman Ruvin noted perhaps the Task Force should adopt Mr. Landers’ suggestion about the systems approach to adaptation: short-term for what was already built; and long-term for what would be built over the next 50 years to reduce future risks.

Ms. Fain said she would suggest that the Task Force recommend both planning for new projects and adapting existing projects.

Chairman Ruvin noted reference was made to sequencing in the draft, and suggested that the draft refer to actions already undertaken in Miami Beach.

Mr. Murley said he believed that the Task Force members should stress in their report and presentation that the CDMP was satisfactory and did not need to be amended; only to be implemented.

Chairman Ruvin asked Mr. Murley to draft a paragraph along those lines to be included in the report. He noted the report’s discussion on the CCATF...
made reference to the CDMP, and could also refer to Adaptation Action Areas (AAAs). Chairman Ruvin said that he wanted the report to focus on the big picture.

Ms. Fain suggested that on page 7, the title “Risk Management” be added.

Chairman Ruvin said that before that paragraph, the report could have a paragraph distinguishing sea level rise from storm surge.

Ms. Fain suggested adding on the following page that while it was important to improve the built environment, “… the natural environment, land-use planning and the utility of natural systems will provide as much, if not more value than the built environment in maintaining resilience in the face of sea level rise.”

Chairman Ruvin suggested that a reference be made to Mr. Dan Kimble’s committee on adaptation and to the Environmentally Endangered Lands (EEL) program.

Mr. Milian suggested that the report provide examples of natural systems, such as the mangroves, the dunes, and the Everglades.

Ms. Fain said that on the next page, at the end of the sentence which begins with “The plan once developed …,” she added “as an overarching guide to updates and implementation of this plan, as will be federal government directives and resources.” She noted this would acknowledge that the different levels of government have to be involved.

Ms. Fain noted the next two pages contained specific recommendations on water supply, the built environment, natural systems and land-use planning, insurability, funding action items, and legislative needs and outreach. She said that some of the recommendations were from this current Task Force, and some were from the CCATF.
Chairman Ruvin thanked Ms. Fain for her suggestions, noting they expanded his vision for the report. He pointed out that a number of the recommendations could be attributed to the CCATF.

Pursuant to Ms. Fain’s explanation that she and Ms. Dick extracted the most relevant and timely recommendations from the CCATF, Chairman Ruvin said that all of the CCATF’s recommendations would be placed in an appendix.

Ms. Fain noted she agreed with the comments made by Attorney Paul Regensdorf at the last meeting regarding the need for a marketing program, or an educational component to the capital improvement plan to convince the residents of its necessity. She also suggested that if it was decided to have bullet points for the recommendations, an introductory paragraph would be needed. Ms. Fain said she agreed with Mr. Murley that the CDMP was satisfactory, and that the SFWMD could potentially provide a means of collecting the funding for improvements aimed at addressing sea level rise.

Chairman Ruvin said that the Task Force could make general suggestions regarding funding; however, it appeared that the interest in sea level rise was increasing, and the commissioners would give the Mayor the responsibility to identify ways to implement the recommendations.

Chairman Ruvin noted the elements of the plan would be implemented in different stages, each of which would be tied to vital signs. He explained that if the Task Force’s recommendations were endorsed, the next step would be for the Mayor to put in place structures to implement the mandate from the County Commission.

Assistant County Attorney Angell informed the Task Force members that at the May 6th County Commission meeting, a group of students received an award for a film which they produced on pollution and climate change. He advised that on the third page of Ms. Fain’s draft, last paragraph, it would be necessary to refer to the BCC Chair as Chairwoman Sosa, and to recognize Commissioners Edmonson, Heyman and Jordan as co-
sponsors. Assistant County Attorney Angell clarified that the resolution’s number was R-451-14; legislative file No. 140804.

Mr. Milian noted he agreed with Ms. Fain’s suggestions regarding the draft report. However, he suggested, on the fourth page where the Everglades restoration was mentioned, the Task Force should explain why this restoration was important to address sea level rise.

Ms. Fain noted she agreed and suggested that the same be done for all of the natural systems.

Ms. Hefty said it would be helpful to have a separate paragraph for each impact; and this would be followed by the recommendations.

Mr. Murley suggested that the recommendations be placed at the front of the report, and that they be written as directives.

Chairman Ruvin said he agreed, noting the recommendations would be highlighted if they were placed at the front of the report.

In response to Ms. Hefty’s question as to whether the information should be organized by impact, Mr. Murley said he agreed.

Dr. Enfield provided his comments on the latest revision of the draft, dated April 24, 2014. He noted on the sixth page, last paragraph, instead of saying that 2060 was the planning “target”, the term planning “horizon” should be used. He said that two lines down the word “principal” was misspelled; it should be “principles”. Dr. Enfield suggested that on the following page, the phrase “but for planning purposes, three feet should be utilized,” should be modified to read “but for planning purposes, prudence dictates that three feet should be utilized.” He said that he liked the paragraph below the figure, but he suggested adding the following sentence at the end of that paragraph: “Because the County is now confronted with a changing environment, the challenge is to craft flexible policies that can adapt to evolving needs.” Dr. Enfield said that perhaps the sea level rise concerns were not evident to the County administrators
who would be tasked with implementing the Task Force’s recommendations. He noted it would be necessary to condition both the commissioners and the County administrators to think differently about sea level rise.

Chairman Ruvin noted a major destabilization in Greenland or Antarctica would render all of the planning obsolete; therefore, the planning had to be flexible. In addition, he pointed out, perhaps new ideas would emerge to address sea level rise.

Dr. Enfield said he agreed, noting every ten years the science and technology had to be reviewed, and adjustments had to be made.

Mr. Milian noted the existence of maps indicating what areas were going to be impacted at various sea level rise projections; and this should allow the County to prioritize the areas in need of protection against sea level rise.

Ms. Virginia Walsh, Miami-Dade Water and Sewer Department, called in to participate in the meeting. She referred to the hand-out that had been distributed at the beginning of the meeting, and said that last week she was invited to participate in the April 28-29 USGS, CES and Florida Sea Grant-sponsored technical meeting. Ms. Walsh noted she participated in the Future Climate Scenario Working Group, which was tasked with working on the urban environment. She said that the working group identified immediate actions and long-term goals, that she believed could be integrated into the Task Force’s final report.

Ms. Walsh indicated that the recommendations requiring immediate action were the following:

- Integrate local-scale surface/groundwater flow modeling between southeast counties, building on existing Miami-Dade and Broward County efforts;
- Request from SFWMD a comprehensive study and recommended plan to restore/improve flood damage reduction and protection against salt water intrusion;

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Miami-Dade Sea Level Rise Task Force
➤ Provide County request for funding to FEMA and State agencies, along with a cost-sharing by the County for rainfall and storm surge future prediction modeling, higher resolution LIDAR data, and development of better models that incorporate the complex coastal geomorphology of South Florida.

Ms. Walsh indicated that the long-term goals were as follows:

➤ Support the development of a regional assessment that integrates natural system and built environment exposure to a broad range of sea level rise and climate scenarios;
➤ Develop a coordinated water management response at the federal, State, and local levels that will be used to guide private and public sector decision-making.

Chairman Ruvin explained to Ms. Walsh that the Task Force members wanted to call upon the County to direct the Administration to procure engineering expertise to develop a robust capital improvement plan; and the elements of the plan would be triggered by vital signs. He said that he wanted the Task Force's recommendations to have a general overtone; and the County would be tasked with developing a plan.

Ms. Walsh noted it appeared that the long-term goals would be more appropriate for the Task Force's report, as they were more general.

Pursuant to Chairman Ruvin's question, Ms. Walsh confirmed that the working group would continue to meet periodically.

Mr. Murley noted it appeared that the working group's recommendation regarding a regional assessment coincided with the Task Force's conclusion that an on-going regional assessment process was crucial; and the assessment should be tied to vital signs, which, once reached, would trigger policy discussions.

Ms. Fain said she agreed, noting the working group's recommendations were broad enough to be included in the report. She pointed out that
Miami-Dade County could motivate the SFWMD to address sea level rise, because more than 40 percent of the taxes that the District collects come from the County.

Chairman Ruvín indicated to Ms. Walsh that pursuant to their discussion, the Task Force members were in agreement with her recommendations.

Ms. Walsh thanked Chairman Ruvín for giving her the opportunity to present the working group’s recommendations to the Task Force members.

Dr. Enfield said that after the paragraph on the Geneva Association, he inserted the following sentence: “This principle should guide County planning in all aspects, as it involves vulnerability to climate change and sea level rise, not just insurance. Static standards are no longer acceptable in a drastically changing environment. County planners should engage in obligatory reviews every five years to ensure that standards are updated to meet the requirements of evolving needs.”

Dr. Enfield said that below the reinsurance paragraph, “critical” should be changed to “critically”.

Dr. Enfield said that on the next page, at the end of the paragraph that begins with “The plan, once developed …” he inserted the phrase “an overarching framework for action.”

Dr. Enfield reiterated that it should not be assumed that County administrators who would be responsible to implement the plan had the same appreciation of sea level rise as the Task Force members. He suggested that a mechanism be implemented to educate these people.

Chairman Ruvín noted Chairwoman Sosa sponsored a resolution that was adopted by the County Commission. He said that this resolution was now part of the official County policy, and it directed the County administrators to consider the potential impacts of sea level rise during all project phases including but not limited to planning, design and construction. He reiterated that he attended the ICIC meeting, at which the resolution was considered,
to express the Task Force’s full support for it, as it demonstrated that Chairwoman Sosa was taking ownership of this issue.

Assistant County Attorney Angell pointed out that the Mayor was effectively the County Manager. He noted the resolution directed the Mayor, or the Mayor’s designee, to establish recommended priorities for adapting existing County infrastructure located in areas at increased risk of flooding, and to present such recommended priorities to the Board for approval within 120 days of the effective date of the resolution.

Mr. Milian reiterated that the task Force may have to recommend the implementation of an educational component, to ensure that the commissioners and members of the public understood the necessity of undertaking a robust capital improvement plan.

Dr. Enfield expressed concern that the County administrators who would be responsible for implementing the plan would not have a good appreciation of the impacts of sea level rise and the importance of addressing it.

Ms. Hefty said that the Regional Climate Action Plan and the Sustainability Plan would have to be integrated into the work of various County departments, and this could not be accomplished without the appropriate tools.

Mr. Murley pointed out that the Department of Transportation (DOT), and the Climate Central had maps that were accessible online.

Dr. Enfield noted the inundation maps all worked the same way, and they were unable to predict when the inundation was likely to occur. He said that the U.S. Army Corps of Engineers had developed a region-specific tool for its engineers. He explained that these tools used the tide gauges in each region, and the tide gauge rate to make regional projections.

Chairman Ruvin suggested that the Task Force recommend that the County develop tools to assist with the implementation of its recommendations.
Mr. Murley pointed out that Miami-Dade County had two national parks that would be impacted by sea level rise; it would be necessary to include the National Parks Service in this discussion; and this would hopefully assist with funding. He suggested that the report reinforce this message, as the parks would be greatly impacted by sea level rise, and could be monitored for vital signs. Mr. Murley said that he would solicit Mr. Mark Woerner’s assistance to draft a section for the report on the national parks.

Assistant County Attorney Angell advised that Chairman Ruvin could work with Ms. Hefty directly, but was precluded from accepting contributions from the members outside of Sunshine meetings. Therefore, if Mr. Murley were to draft a section on the national parks, he would have to wait until the next meeting to present it to the Task Force.

Pursuant to Ms. Hefty’s question as to whether the members had any input on the graphics, Dr. Enfield indicated that he had not had a chance to review them.

Assistant County Attorney Angell noted during the presentations, various projection maps were shown. He recalled one map in particular that showed the flooding inland, and said that in his opinion this map would capture the attention of the commissioners, because it showed the sea level rise impact inland.

Chairman Ruvin said he agreed with Assistant County Attorney Angell’s comment, noting in his cover letter he planned to emphasize that this issue did not only affect wealthy people living on the coast.

Dr. Enfield said he believed that Assistant County Attorney Angell was correct, and it was important to secure the endorsement of as many commissioners as possible.

IV. Next Meeting

Chairman Ruvin informed the members that the next meeting would be held a week from today (05/08).
V. Adjournment

There being no members of the public present, and no other business to come before the Sea Level Rise Task Force, the meeting adjourned at 4:09 p.m.

[Signature]

Chairman Harvey Ruvin
Sea Level Rise Task Force
## EXHIBITS LIST

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Miami-Dade Sea Level Rise Task Force Meeting
May 8, 2014
2:00 PM – 4:00 PM
Dade County Courthouse
73 West Flagler Street, #242
Miami, Florida 33130

- Welcome and Introductions
  Honorable Clerk & Sea Level Rise Task Force Chair, Harvey Ruvin

- Approve Meeting Minutes

- Draft Report Review and Discussion

- Questions and Comments from the Public

- Schedule Next Meeting

- Adjourn
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<th>TASK FORCE MEMBERS</th>
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Four (4) members constitutes a quorum
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<td>Planning, Regulatory &amp; Economic Resources</td>
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<td>Nichole L. Hefty, Chief, Office of Sustainability,</td>
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