URBAN EXPANSION AREA TASK FORCE
MEETING SUMMARY
West Dade Regional Library
9445 Coral Way, Miami FL 33165
November 17, 2017

Task Force Members Present

<table>
<thead>
<tr>
<th>Member</th>
<th>Representing</th>
<th>Present/Absent</th>
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<tbody>
<tr>
<td>Kerri Barsh</td>
<td>Rock mining representative</td>
<td>Present</td>
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<tr>
<td>Ashley McElheny</td>
<td>Florida East Coast Chapter of Associated Builders &amp; Contractors</td>
<td>Absent</td>
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<tr>
<td>Erin Clancy</td>
<td>Tropical Audubon Society</td>
<td>Present *</td>
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<tr>
<td>William Delgado</td>
<td>Latin American Business Association</td>
<td>Absent</td>
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<tr>
<td>Enid Washington</td>
<td>Community Council 15</td>
<td>Absent</td>
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<tr>
<td>Alex Diaz</td>
<td>Community Council 11</td>
<td>Absent</td>
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<tr>
<td>Nick Diaz</td>
<td>Property Owners’ Representative for the Eastern UEA</td>
<td>Present</td>
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<tr>
<td>Linda Benson</td>
<td>Sierra Club</td>
<td>Present</td>
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<tr>
<td>Richard Gomez</td>
<td>Florida Home Builders Association</td>
<td>Present</td>
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<tr>
<td>Steve Green</td>
<td>Tropical Fruit Growers of South Florida</td>
<td>Present</td>
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<tr>
<td>Richard Grosso</td>
<td>Nova Southeast Shepard Broad Law Center</td>
<td>Present</td>
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<tr>
<td>Mike Hatcher</td>
<td>Redland Citizens Association</td>
<td>Absent</td>
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<tr>
<td>Thomas Hawkins</td>
<td>1000 Friends of Florida</td>
<td>Present</td>
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<tr>
<td>James Humble</td>
<td>Agricultural Practices Advisory Board</td>
<td>Present</td>
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<tr>
<td>Matt Johnson</td>
<td>Biscayne National Park</td>
<td>Absent</td>
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<tr>
<td>Robert Johnson</td>
<td>Everglades National Park</td>
<td>Present</td>
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<tr>
<td>Yesenia Fatima Lara</td>
<td>Community Council 14</td>
<td>Present *</td>
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<tr>
<td>Maria Lievano-Cruz</td>
<td>Builders Association of South Florida</td>
<td>Absent</td>
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<tr>
<td>Bill Losner</td>
<td>Dade County Farm Bureau</td>
<td>Present</td>
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<tr>
<td>Francisco Pines</td>
<td>Property Owners' Representative for the Western UEA</td>
<td>Present</td>
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<tr>
<td>John Renne</td>
<td>Urban Land Institute – the SE Fl/Caribbean Chapter</td>
<td>Present *</td>
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<tr>
<td>Laura Reynolds</td>
<td>Friends of the Everglades</td>
<td>Present</td>
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<tr>
<td>Barney Rutzke Jr.</td>
<td>Florida Nursery Growers &amp; Landscape Association</td>
<td>Absent</td>
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<tr>
<td>Paul Schwiep</td>
<td>Urban Environment League</td>
<td>Present</td>
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<tr>
<td>Erick Valderrama</td>
<td>Latin Builders Association</td>
<td>Absent</td>
</tr>
<tr>
<td>Larry Ventura</td>
<td>Homestead Air Reserve Base</td>
<td>Present</td>
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<tr>
<td>Vacant</td>
<td>Miccosukee Tribe of Florida</td>
<td>Absent</td>
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* Present after roll call
Board member Ventura left at 2:55.
Board member Gomez left at 3:00.
Board member Schwiep left at 3:15.
Department of Regulatory and Economic Resources (RER) Planning Division Staff
Jerry Bell, Assistant Director for Planning; Noel Stillings, Senior Planner; Mark Dorsey, Principal Planner; Helen Brown, Principal Planner; Manny Armada, Chief, Charles LaPradd, Agricultural Manager

Other Miami-Dade County and Government Staff
Christine Velazquez (RER-Division of Environmental Resources Management); Katie Hagemann, RER-Office of Resilience; Alan Whitehouse, Florida Department of Environmental Protection

I. Attendance
Ms. Stillings called roll of the members, 14 members were present. The meeting commenced at 1:08 pm.

II. Approval of the October 30, 2017 Meeting Summary
Motion. Board member Pines made a motion to approve the October 30, 2017 meeting summary. Board member Schwiep seconded the motion. The motion passed unanimously as follows:

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<td>Absent</td>
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<td>Absent</td>
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<td>Absent</td>
<td>Bill Losner</td>
<td>Yes</td>
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III. Staff Coordinator’s Report
Mr. Bell announced that the meeting summary from today’s meeting will not be provided one week in advance as we have in the past due to the upcoming Thanksgiving holiday. It will be provided 3 days prior to the next meeting which is scheduled for December 1st.

Mr. Bell provided a follow-up on a request from the prior meeting where the Task Force requested additional information from the SFWMD on the Bird Drive Basin, and that info was emailed to the taskforce yesterday.

Mr. Bell reviewed the handouts that were provided to the Task Force including: 1) a memo showing the Task Force meeting dates through January 5th, and 2) a revised Policy Constraints map which is intended to reflect those areas identified in CDMP policy LU-8G which identifies areas that “shall not be considered” and/or “shall be avoided” (for UDB expansion). Board Member Pines indicated that the original map which showed the entire
wellfield protection area under “shall not be considered” category, when in actuality the CDMP policy only identifies a certain geographic area within the wellfield that shall not be considered. Board Member Losner asked staff to review the map designation for an area located at the north corner of Krome Avenue and Hwy 41 which he indicated is shown as parkland when the current use is a casino. A letter from the Everglades Coalition was also distributed at the request of Board Member Laura Reynolds. A map depicting ownership in the Bird Drive Basin area was also distributed at the request of Board Member Pines. Discussion ensued between Board Members Pines and Reynolds regarding the location of tribal lands in relation to CERP project footprints.

Board Member Reynolds asked about changes to Urban Expansion Area No. 2 that were recommended by staff as part of the last Evaluation and Appraisal Report and recommended that staff provide a presentation on the prior recommendations. Mr. Bell replied that the information was written and those documents can be provided. Mr. Bell indicated that the information could be sent by email and any follow-up questions can be discussed during the meeting.

Mr. Bell announced that Board Member Barsh has asked to give a presentation today related to rockmining. Board Member Barsh indicated that her presentation will be in relation to blasting because no one was scheduled to speak on the issue.

IV. Scheduled Presentations: Relevant CDMP Policies

Bell: This (PowerPoint) presentation will put some of the issues into context. The issues today are rock mining, coastal high hazard areas and sea level rise.

- Mr. Bell reviewed the state statutes that require the County to address rock mining and include policies that protect the industry in our CDMP. Section 373.4149 (Florida Statutes; F.S.) states that when amending comprehensive plans that we shall strongly consider limestone mining activities; any amendments to comp plans that concern lands within 1-mile of the Lake Belt area shall be compatible with limestone mining activities; and a requirement that no amendments to local comprehensive plans for any residential purposes shall be approved in certain sections.

- Mr. Bell presented a map showing the Lake Belt area, the County Rockmining Overlay Zoning Area (ROZA), which permits mining by right without a public hearing; and the Pennsuco wetlands, which is a mitigation area for rock mining activity.

- Policies in the CDMP include CON-3E which states that the area west of the Turnpike, east of the Dade-Broward Levee, north of NW 12 Street, and south of Okeechobee Road shall be reserved for limestone mining and approved uses, and the entire area west of the Turnpike north of NW 25 Street and south of Okeechobee Road shall remain unurbanized. Policy CON-6A states that the areas of highest suitability for mineral extraction shall be reserved for that use.

- Policy LU-8G states that when considering land areas to add to the UDB should avoid the coastal high hazard area east of the Atlantic Coastal Ridge. The coastal high hazard area is the area below the elevation of a Category 1 storm surge line. Policy CM-9A which states that land use amendments to the CHHA that would increase residential density or decrease LOS below the established standards shall be prohibited. The coastal high hazard area policies we now have do not take into account the compounding impact of sea level rise on storm surge. Board Member Reynolds inquired about the surge height when referring to a Category 1 storm surge. Ms. Hagemann replied that storm surge heights vary. In response to questions from Board Members Barsh and Schwiep, Mr. Bell indicated that the definition of Coastal High Hazard Areas is outlined in State Statutes, the
CDMP and there is a published storm surge atlas that identifies inundated areas according to elevation. He indicated that these maps could be provided.

- As part of the 2010 EAR, the County added policies to the CDMP to address sea level rise. Policy LU-3E states that Miami-Dade County shall initiate an analysis of the impacts of climate change on the built environment, addressing development standards relating to investments in the infrastructure development of public facilities. There is also a resolution that the County study and make recommendations on considering how sea level rise is considered when reviewing land use and zoning applications. County staff issued an initial report, and this is what we are looking at in the current EAR as we go forward. In 2015, the State passed a bill addressing Peril of Flood, which requires the Coastal Management element of the CDMP to include development and redevelopment principles, strategies and solutions to reduce flood risk in coastal areas, that encourages best development practices and redevelopment principles, strategies and engineering solutions in order to allow for the removal of coastal properties from designated coastal flood zones, and to identify site development techniques to reduce losses due to flooding.

V. Scheduled Presentations: Miami-Dade County Lake Belt Plan

Alan Whitehouse, Florida Department of Environmental Protection, Mining and Mitigation Program, provided a presentation on the Miami-Dade County Lake Belt Plan including:

- Florida has six large mines that are ranked in the top 20 in the Country, five are located in Miami-Dade County’s Lake Belt including Cemex, White Rock North, Tarmac Pennsuco, Cemex Krome and Florida Rock Miami. These mines provide high quality rock and serve a large area that includes Jacksonville, Tampa, Kennedy Space Center, Disney World, FDOT and other parts of the country.

- In 1912, the first two companies were mined in Miami-Dade County, they were located in North Miami Beach, the Maule Lake, and the Ojus Mining Company (Greynolds) just after the railroad was completed. During the depression the companies fell on hard times, Ojus Mining Company gave the land to the County for Greynolds Park and Maule Lake was sold to private owners and developed.

- Mr. Whitehouse noted the location of the Northwest Wellfield within the Lake Belt Area and the West Wellfield adjacent to the Lake Belt Area.

- As urbanization crowded the east side, miners started looking for land on the west fringe of the County, where former sugar cane fields were located. In 1962, the first mine was established on the Pennsuco lands. At about the same time mines were being established in the Lake Belt area, the County was looking for large undisturbed areas for a large wellfield. When the Northwest Wellfield was established in the 1980s, it is almost completely surrounded by mining lands. In 1985, the Miami-Dade County Commission adopted the Northwest Wellfield Protection Plan which required that urban development near the Northwest Wellfield should be discouraged and limestone quarrying activities should be encouraged.

- In 1990, the six largest mining companies in the region formed the South Florida Lake Belt Mining Coalition which pushed for the creation of the lake belt plan and hired a consulting firm to prepare the plan. In 1992, the Governor signed a bill creating the Northwest Dade County Freshwater Lake Plan Implementation Committee. The committee was tasked with developing a plan to enhance the water supply for Miami-Dade County and the Everglades and to maximum the efficient recovery of limestone while protecting the environment and educating various groups on the benefits of the plan.
• In 1997, the committee issued Phase I of the plan which was adopted by the legislature. Phase II of the plan was adopted in 2001 which provided more detail for the Lake Belt plan, it established the footprint of future mining and distinguished areas suitable for mining, areas suitable for environmental mitigation, areas where further analysis was needed to determine mining suitability, and provided the basis for a wetland mitigation fee.

• The Lake Belt Plan resulted in the establishment of a per-ton fee on the extracted limestone which has restored 12,200 acres in Pennsuco, and groundwater monitoring requirements to protect the Northwest Wellfield water supply. The Plan also envisioned that the area may be used in the future for recreational areas or reservoirs for excess stormwater.

• Board Member Robert Johnson asked about why the mitigation areas north of SW 8th Street form a substantial buffer but south of SW 8th Street there is no buffering, as the rockmining area is directly up against the levee adjacent to the Everglades. Mr. Whitehouse indicated there was a historical mine that was in place prior to developing the Lake Belt plan. Board Member Johnson further clarified that there is additional land directly adjacent to the levee that is not currently mined but designated for potential mining. Mr. MacVicar, of MacVicar Consulting, further clarified that there is a strip of land, approximately 230 feet, between the canal and the mine, which has no wetland or habitat value, this is the area where the seepage barrier has been constructed. The biggest problem with this area is not the size, but that it is adjacent to the L-31 North Canal and there is no way to keep it wet for wetland restoration.

• Mr. Whitehouse discussed plans for the Lake Belt area after mining ceases which includes wellfield protection through land preservation. Mr. Whitehouse showed a map depicting areas that will be donated to the County once mining is complete and areas that will be put under conservation easements to protect the water quality of the wellfield after mining is complete. Board Member Schwiep inquired if there is an equivalent donation protection around the West Wellfield. Mr. Whitehouse indicated there was not. Board Member Schwiep further inquired on how the protection area was determined. Mr. MacVicar indicated that it generally coincides with the 210-day travel time contour. Discussion ensued between Mr. Whitehouse and Mr. MacVicar as to whether it followed the 210-day or 60-day travel time contour.

• Mr. Whitehouse reviewed the groundwater monitoring requirements and network that ensures that the mining operations are not impacting water quality at the wellfield.

• Over $97 million in mitigation fees have been collected. It has been used for mitigation at Pennsuco, the Dade Broward levee, Southern Glades, and the C-139 Annex. It was also used to construct the L-31N underground seepage barrier south of Kendall Krome quarry which was constructed to a depth of 35 feet to create a barrier to reduce water seepage out of Everglades National Park.

• The Pennsuco Wetland Seepage Control Project is a future project that is planned as an above ground system that will help to divert water into the Pennsuco wetlands and sustain the hydorperiod in order to offset any potential seepage impact from the expanded mining.

Task Force Discussion. Board Member Pines inquired about the meaning of “seepage mitigation”. Mr. Whitehouse indicated that seepage means that when you remove rock from the ground and create a lake even though the rock is very porous it still provides some resistance to water from the west flowing eastward, so if you pull that resistance out it could potentially increase the flow and draw water out of Everglades National Park.
Therefore, by creating artificial barriers it reduces the rate of seepage to compensate for the impact of mining, this can be done with an above or below ground barrier. The County’s aquifer is more porous than other areas.

Board Member Green inquired on what environmental protection has been provided in the Lake Belt Plan. Mr. Whitehouse indicated that no environmental protection has been done on-site but that littoral zones would be created that would provide habitat for wildlife. Board Member Grosso inquired on the number of acres that have been mined and mitigated. Mr. MacVicar indicated that 15,000 acres have been mined, and 12,000 acres mitigated. Mr. Whitehouse further clarified that most of the mining was done prior to the Lake Belt Plan. Board Member Grosso asked how much of the mitigation money has been used to acquire Everglades-related wetlands. Mr. MacVicar indicated that $130 million has been spent on wetland mitigation, $20 million on the seepage barriers and the remainder of the funds spent on acquisition or restoration. Board Member Grosso asked about the value of a ton of limerock and the current per-ton mitigation fee. Mr. Whitehouse was unsure of the exact value of limerock but indicated that it is approximately $10 per ton. Mr. MacVicar indicated that the mitigation fee per ton is currently approximately 11 cents but has been as high as 60 cents per ton in the past. Board Member Barsh indicated that the permit requires payment in advance, 100 credits in advance, and currently they are paid 700 credits in advance.

Board Member Grosso asked Mr. Whitehouse about the relevance of his presentation to the task force’s charge, particularly how liberal or strict the County should be in moving its development to the west. Mr. Whitehouse indicated that is out of his purview. Board Member Humble noted that up until 1973 there was no urban development boundary line. Mr. Jerry Bell indicated that the reason for this presentation is that rock mining is a major use outside the UDB along with agriculture and environmental protection areas and it is important to understand the impacts of these uses.

Board Member Schwiep inquired about how the state deals with blasting complaints, Mr. Whitehouse indicated it is strictly handled by the State Fire Marshall, not Florida Department of Environmental Protection.

Board Member Renne noted his understanding is that the primarily role of the urban growth boundary is for expanding urbanized area for residential purposes, so for the lands being used for mining what is the feasibility of those lands being converted to residential uses. Mr. Whitehouse noted the ones to be donated to the County for wellfield protection or conservation easement cannot be used for residential uses. Mr. Whitehouse indicated that most of the Lake Belt area will remain lake. The Task Force discussed the possibility of the Lake Belt area being suitable for development following completion of mining including the possibility for floating development. Mr. Whitehouse indicated that when the lakes are built out they are approximately 600 acres and 60 to 80 feet in depth which makes them very hard to fill back in. Board Member Pines asked when mining is expected to conclude in the Lake Belt area. Mr. Whitehouse replied that the Lake Belt Plan is a 50-year plan commencing in 2001, but it is dependent upon economic forces.
Board Member Reynolds inquired if any of the current lakes become briny at depths of 60 to 80 feet. Mr. Whitehouse replied that they have not, the chloride levels have been very low. Board Member Losner inquired if any of the lakes can be used to store drinking water in the future, Mr. Whitehouse they can be used for flood control but not for drinking water. Board Member Losner further inquired about a large lake being built south of Lake Okeechobee for storage of drinking water for the Everglades. Board Member Reynolds commented only if it is lined and the water quality is good. Mr. Whitehouse further commented it is very difficult to use these lakes for storing drinking water but they can be used for flood control.

Board Member Benson inquired on the status of Southern Gardens, Mr. Whitehouse noted that Southern Gardens was agricultural not rock mining and is being restored to wetlands. Board Member Clancy asked whether there is an infinite amount of rock that can be mined and what is the timeline for turning it over to the government. Mr. Whitehouse noted that rock mining takes time, and economic and market forces determine the need for rock mining. He further noted that some of the mining land has already been turned over to the South Florida Water Management District and the Corp for conservation.

Board Member Barsh provided a map of the area that is referred to as the ROZA, and future rock line overlay. The drag line is used to excavate, this drag line alone took over a year and half to assemble, and it is a big capital contribution. Board Member Barsh touted the economic impact of mining in South Florida. Rock mining is finite based in a limited area and can only occur where geological formations are located.

Board Member Reynolds inquired about the rules on blasting. Board Member Barsh noted that blasting is essential and very expensive and causes neighbors to be unhappy. Chapter 552.30 of the Florida Statutes governs blasting, Florida state regulations stricter than national guidelines. Miners try to have a good neighbor policy. Board Member Barsh noted that mining cannot occur without blasting. Board Member Barsh indicated blasting is handled by the State Fire Marshall’s office, it is done per Chapter 552.30, F.S., and regulation. Rock miners establish the peak particle blasting, which is the ground vibration limit. The key is that miners are required to measure the blast to the peak particle velocity at the closest occupied structure property not owned or mined by the blasting company. This means that if residential is built close to a quarry, their criteria has to be measured at the closest structure being compatible with residential and other uses. Miners understand the issue and challenge is they want to be a good neighbor and coexist. One of the primary concerns for miners is residential uses occurring in close proximity to where blasting is conducted. For example miners had an issue with an area requesting moving the UDB, near NW 41 Street, miners opposed that application as we still had active mining going on in that area and felt that use which had residential and other compatibles was not compatible. In other areas miners have supported moving the UDB as it is industrial and did not have a conflict.

Board Member Barsh noted that the legislature found that there is a strategic and critical need for available supply of construction aggregate and that a disruption of the supply would cause a significant detriment to the state’s construction industry including FDOT, and overall health, safety and welfare. Florida is probably 2nd in the nation for the consumption of limestone.
Board Member Barsh noted that Florida Statutes indicates the Florida Department of Transportation should weigh in on whether an application for zoning, comprehensive plan, land use permit, or ordinance would have an effect on the availability, transportation, cost and potential extraction of construction aggregate materials on the local area, the region and the state. The overarching goals of the Lake Belt Plan include: 1) enhance the water supply for the county and the Everglades, including wellfield protection; 2) maximize efficient recovery of limestone while promoting the social and economic welfare of the community and protecting the environment; and 3) educate various groups and the public of the benefits of the plan.

Board Member Renne indicated that it sounds like the rockmining industry wants to preserve and protect the boundary in close proximity to where it operates. He inquired if there are specific areas that where there are development pressures that may come in conflict with what the miners want. Board Member Barsh indicated that the industry looks at applications on a case-by-case basis looking at the timing and phasing. She further noted that there are state mandates regarding compatibility. There was a FDOT Strategic Aggregates Study in 2007, which included representatives such as miners, environmentalists, cities and counties, etc., on the committee. It was an attempt to look at the challenges ahead. Permitting of new mines can take 7 to 10 years. Mr. Barsh indicated 90% of the aggregate is moved by truck and 10% is moved by rail. Ms. Barsh identified the areas of active mines in relation to the UEAs.

Board Member Barsh noted that the key considerations related to rockmining include: 1) limerock is a finite, place-based resource, 2) it is a heavily regulated industry, 3) there is significant capital investment required to participate in this industry, 4) Florida is heavily dependent upon it, 5) it is a major economic engine; 6) compatibility with development, particularly residential development; and compatibility with environmental neighbors based upon buffers, seepage barriers and 7) ongoing environmental oversight. Board Member Barsh indicated that development could occur in the area north of Okeechobee Road once mining ceases since it is not restricted by conservation easements, and does not have a requirement to dedicate to the County.

Board Member Reynolds asked whether Mr. Harold Wanless could be moved up on the Agenda, members agreed to move up Mr. Wanless’ presentation on the Agenda. Board Member Schwiep suggested that we should follow the process the members had agreed to, that is to hear from government staff only, and if members wanted to hear from someone else it should be done through a motion and vote. He further noted that the Agenda was published and any changes should be done through a motion and voted on, as the process needs to be transparent. Mr. Bell noted that he had asked at the beginning of the meeting about Board Member Barsh’s presentation and no members opposed. He further noted that, in the future, any revisions to the Agenda will be done through a motion and vote by the members.

VI. Other Presentations (requested by the Task Force): Dr. Harold Wanless: Sea Level Rise Vulnerability in South Florida
Dr. Harold Wanless, Professor of Geological Sciences, University of Miami, provided an overview of sea level rise vulnerability in South Florida including:

- Overview of how the burning of fossil fuels has contributed to global warming. Global warming is rays from the sun coming in and bouncing off of the earth and being trapped by greenhouse gases and heating the atmosphere. Over 93% of the heat is transferred to
the oceans. This makes the impact of global warming irreversible over the coming centuries. Over half of the heat that has been trapped in the ocean has occurred since 1997. The warmer ocean is expanding and causing ice sheets in Greenland and Antarctica to melt, it is doubling every seven to ten years.

- Predications released in the 2012 U.S. Climate Assessment that incorporate acceleration of ice sheet melt predict that we will be at between 4 feet and 8.2 feet of sea level rise by the end of the century. Dr. Wanless recommends using an assumption of 6.6 feet of sea level rise by the end of the century. Dr. Wanless showed a map depicting the impact of sea level rise on Miami-Dade County at different levels of sea level rise.
- In response to a question from Board Member Reynolds, Dr. Wanless clarified that the gravity-based components of the stormwater management system will no longer operate as designed as sea levels rise, water will instead need to be pumped.
- Sea level rise also increases the height and devastation associated with storm surge.
- Dr. Wanless explained historical trends in CO2 concentration and sea level rise.
- In response to a question from Board Member Pines, Dr. Wanless explained that the purpose of the information presented is to demonstrate that some of the areas within the Urban Expansion Areas may be unlivable with future sea level rise, some as recently as the next 30 years.
- In response to a question from Board Member Losner, Dr. Wanless clarified that levees along the coast will not hold back ocean water because of the porous limestone. Everglades restoration that raises water levels will help hold back saltwater intrusion and protect our drinking water supply.
- Dr. Wanless showed a map of sea level changes over the last 120,000 years and stressed the importance of not expanding development into the most vulnerable areas.

**Task Force Discussion:** In response to a question from Board Member Grosso, Dr. Wanless indicated that sea level rise is also raising water levels on the west side of the County. Dr. Wanless further stated that, at some point, the Everglades will be an estuary that will reach up to Lake Okeechobee. Dr. Wanless indicated that over 80% of our water control structures will be compromised with 2 feet of sea level rise. He indicated that development of areas that are currently open space would exacerbate the problem and may add population to vulnerable areas. He further indicated that, at some point, it may be cheaper to pay people to relocate rather than continue to rebuild infrastructure. Dr. Wanless also discussed the importance of environmental remediation before redeveloping. Board Member Grosso asked where future development should be directed. Dr. Wanless replied that developers are already seeking out land on high ground for new development opportunities.

Board Member Green inquired about the effect of sea level rise on saltwater intrusion and the importance of ensuring sufficient recharge of the aquifer. Dr. Wanless expressed the importance of the freshwater systems to the natural systems, agriculture, residents and future economy. He also indicated that is has become cheaper to do reverse osmosis and expressed his view that we may be forced in the future to let salinity encroach into the aquifer and increase the use of reverse osmosis.

Board Member Losner indicated that more fill is needed to raise houses and expressed skepticism about the sea level rise modeling.
VII. Scheduled Presentations: Sea Level Rise Vulnerability in South Florida
Katherine Hagemann, Resiliency Program Manager, Miami-Dade County RER-Office of Resilience, provided an overview of sea level rise vulnerability in South Florida including:

- Ms. Hagemann described historical changes in sea level and the effect of glacial ice sheet melt on the rate of sea level rise.
- The network of tidal gauge data and NASA data demonstrate that sea level rise is occurring and show consistency in the trends.
- Key West Tide Gauge includes 100 years of records. It shows that there has been 9.5 inches of sea level rise over the last 100 years.
- King Tides are occurring more frequently in recent years, as much as 29 times per year. The effects of sea level rise will be felt first, not as immediate permanent inundation, but as more frequent flooding events.
- Miami-Dade County uses the Southeast Florida Regional Climate Change Compact Sea Level Rise Projections for planning purposes. The County is currently looking at the vulnerability of critical infrastructure. In addition, new County facilities are being built to account for sea level rise.
- The County is working with SFWMD to address stormwater infrastructure that currently relies on gravity-based conveyance which will no longer be effective with sea level rise. In some cases, the gravity system has been replaced with pumps.
- Ms. Hagemann reiterated that sea level rise is not only a coastal issue, there are already inland properties in low-lying areas that are experiencing repetitive losses due to flooding.

VIII. Other Presentations (requested by the Task Force): Tom MacVicar: Water Management Issues in South Florida
Tom MacVicar of MacVicar Consulting, introduced himself as a water resource consultant and provided a presentation on water management issues in South Florida including:

- Mr. MacVicar characterized the federal water projects which have occurred in South Florida as being done in three phases:
  1. Phase I which Mr. MacVicar characterized as a “Plan, authorize, build and operate” phase, where traditional planning methods were followed to develop a flood control plan, Congress authorized it, and the U.S. Army Corps (Corps) and the South Water Management District (SFWMD) built and operated it. Mr. MacVicar displayed a series of aerial maps showing the entire region from Lake Okeechobee to South Miami-Dade County, with the authorized flood control projects displayed on the maps. In this phase were included:
    - Flood Control Act of 1948
      - Authorized Lake Okeechobee being managed up to 17.5 feet above sea level.
      - Authorized the Central and Southern Florida Comprehensive Plan.
      - Authorized the East Coast Protective Levee
      - Authorized the Water Conservation Areas (WCAs) outlet structures
    - Flood Control Act of 1954
      - Authorized the completion of the WCAs
      - Added East Coast Canals
    - Flood Control Act of 1962
• Authorized the South Dade portion of the project for the South Dade Canal System and the Cutler drain.

2. Phase II was a “Plan, authorize, and don’t build” phase, which Mr. MacVicar characterized as where a plan was developed and authorized by Congress, but was never built. In this phase were included:
   o Flood Control Act of 1965
     ▪ Authorized the Hendry County and Southwest Dade Plan, of which neither was built. However, it affected future plans, which were designed assuming that these plans were approved.
   o Flood Control Act of 1968
     ▪ Authorized Lake Okeechobee being managed up to 21 feet.
     ▪ Built the South Dade Conveyance Project, which erroneously assumed that the previously referenced Southwest Dade Plan was built. Mr. MacVicar stated that no analysis was performed for the wet season water levels, and did not take into account the groundwater flow into the L-31N canal.

3. Phase III, which Mr. MacVicar characterized as a “Plan, approve, change plan, build something else” phase where plans were developed and approved, but changed without the required authorization and constructed. Mr. MacVicar opined that since 1989 water resources have been at this stage.
   o Everglades National Park Expansion Act of 1989 (Modified Water Deliveries)
     ▪ Modified Water Deliveries was to re-establish sheetflow from WCA-3B to Everglades National Park (ENP) and provide flood protection for the 8.5 Square Mile Area.
       ❖ Mr. MacVicar stated that the Corps provided “flood mitigation” instead of flood protection for the 8.5 Square Mile area, and that the water goes south, instead of north.
   o Water Resources Development Act (WRDA) of 1996
     ▪ C-111 General Re-evaluation Project, which included the acquisition of the Frog Pond, Rocky Glades and buffer cells in the west.
       ❖ Mr. MacVicar noted that Board Member Humble was part of the team that owned the Frog Pond, and that Board Member Rutzke’s father owned a grove in the Rocky Glades.
       ❖ Mr. MacVicar stated the idea was to pump the water out of the L-31 canal into the buffers built into the Frog Pond, where it would flow into northern Taylor Slough.
   o WRDA of 2000, the Central Everglades Restoration Project (CERP).
   o Tamiami Trail Improvements and the 1-mile bridge.
     ▪ Mr. MacVicar stated that the 1-mile bridge was not even part of the plan but has very effectively opened up water flow from the Tamiami Canal into ENP.
   o Mr. MacVicar stressed that the C-111 Environmental Assessment Report was published in 2007, seven years after the project was already built. Mr. MacVicar noted that due to this, no public outreach was done on this and Mr. MacVicar contrasted that to the extensive public outreach performed concerning the Cape Sable Sparrow.

• Mr. MacVicar showed a series of charts depicting historical levels in groundwater stations around the South Dade agricultural area. Mr. MacVicar pointed out with the South Dade
Conveyance System the dry season was lost in areas and that the water levels increased in the wet season. Mr. MacVicar declared that the Modified Waters Project and the C-111 project did not improve the water table conditions. Mr. MacVicar contended that thousands of acres of agricultural land experienced persistent increases in the water table elevation. Mr. MacVicar stated that projects such as the Modified Waters and C-111 were only meeting a portion of its objectives, and that the Central Everglades Planning Project cannot solve it because it has no function to handle seepage and impacts to the west. Mr. MacVicar concluded his presentation in stating that the County’s Comprehensive Plan protection of agriculture should protect agriculture against all opposing interests, including federal.

Task Force Discussion: Board member Grosso questioned Mr. MacVicar as to his point of reviewing the water restoration history and asked if Mr. MacVicar believed that the Everglades restoration was unnecessary and if the Corps was the wrong agency to be performing that. Mr. MacVicar replied that the proper planning methods were not followed, and that the County’s Comprehensive Plan stressed the value of agricultural lands but failed to protect it from the federal government. Board member Grosso pointed out those actions were part of the process to restore the historic water flows in Everglades National Park (ENP). Mr. MacVicar replied that water flows have not been restored, and that agricultural lands were impacted in the process. Board member Grosso observed that there may be other opinions from people representing different clients and industries who may believe that the Corps and SFWMD operations of the flood control system overly benefits farming at the expense of the ecosystem. Board member Renne noted that the Board’s task regarding the UEAs has no bearing on agricultural lands lost to federal takings, and asked for Mr. MacVicar’s advice regarding the Board’s task. Mr. MacVicar asserted that the federal government’s action concerning agricultural lands was a property rights issue. Board member Grosso disagreed with Mr. MacVicar’s view, and Board member Humble agreed with Mr. MacVicar and reiterated the history of federal government actions concerning the East Everglades area. Board member Pines emphasized that those government actions were similar to what is occurring now with the Bird Drive Basin area, which he opined exists as a longstanding project although Indian land lies within the project footprint, which the SFWMD does not want to build. Discussion ensued as to the issue of property rights. Board Members Diaz and Pines stated that the UEA designation causes high level of concern for the property owners. Board member Grosso contended that there were multiple issues of public policy that included balancing Lake Belt mining, Everglades restoration and all other urban planning issues; agriculture could not be the final consideration.

In response to Board member Pines’ question, Mr. MacVicar maintained that the Bird Drive Basin project would never be built. Board member Reynolds questioned if there was ever a SFWMD resolution passed. Mr. MacVicar declared that he believed the project would not move forward without a local sponsor, which SFWMD did not want to sponsor. Mr. MacVicar surmised that there were numerous letters regarding that and Board member Pines stated that there were resolutions passed, which Board member Reynolds requested copies of. Board member Johnson called attention to the proposed canal conveyance project and stressed that the plan was to move more water in the L-31N canal; and that the proposed conveyance system would not bring water in from an outside area,
but instead to convey it. Board member Johnson related that the project was to provide more protection from routing more water to the C-111 canal. Board member Johnson added the decisions regarding projects take a long time to move forward and be implemented. In response to Board member Reynolds’ inquiry, Board member Johnson explained the details of lands in that area being surplused, with the help of the ten million dollars from the Department of Interior.

Board Member Nick Diaz inquired regarding Ms. Hagemann’s earlier presentation if she believed Hurricane Irma was a significant event, relating how news reports predicted a drastic storm surge which did not occur. Board member Diaz related how there was longtime farming operations happening in the eastern area, north of the Homestead Air Reserve Base, which never experienced more than inches of rain during storm events, even during Hurricane Andrew. Board member Diaz added that the area is well served by drainage features, such as the C-102 canal, Coconut Palm canal, and the Turkey Point canal. Ms. Hagemann explained how new storm predictions have to be performed within a tight timeframe without taking into consideration salinity control structures and other features affecting the movement of the storm surge. Board member Reynolds added that Hurricane Irma was broken up by the Everglades.

IX. Public Comment
Mr. Bell opened the public comment period. He indicated that the only public speaker had left and closed the public comment period.

X. Task Force Discussion
Discussion ensued regarding the protocol for Task Force meetings. Mr. Bell stressed that he was willing to hear suggestions for improvements to future meetings. Board member Johnson suggested that Board members wishing to speak should move and place their nameplates vertically, for Staff to see who is in queue, so Staff can call on Board members in order. Board member Barsh acknowledged that while fellow Board member Gomez had departed, his previous suggestions regarding protocol for future meetings should be revisited. Board member Renne suggested that for future speakers if they could give their recommendation in regard to the Board’s mandate for the UEAs. Board member Green agreed, stating that future speakers should provide background only sufficient to the Board’s task or what they believe the Board should consider. Board member Barsh disagreed, stating that many speakers from the public sector may not feel it is within their purview and may not be comfortable giving recommendations. Board member Green responded that those public sector speakers can still provide the Board with considerations. Board member Lara expressed her opinion that Board members disguised their comments as questions and imposed their viewpoints, which took up valuable time and detracted from the presentations.

Board member Reynolds requested past Staff recommendations for UEAs from the last Evaluation and Appraisal (EAR) report, contending that this Board’s task was to formulate similar recommendations. Board member Humble inquired as to what the current Staff recommendation was for the UEAs. Mr. Bell replied that Staff will provide the Board with the past recommendations, and will have recommendations at the end of the current EAR process. Mr. Bell added that a reason why this Board was convened was to come up with
recommendations regarding the UEA. Mr. Bell stated there would be three more of these input sessions, with a UEA survey sent out, before moving into the meetings to resolve the issues the Board was tasked with.

The meeting was adjourned at 4:41 pm.