

**URBAN EXPANSION AREA TASK FORCE
MEETING SUMMARY**

South Dade Regional Library
10750 SW 211 Street, Cutler Bay, FL 33189
October 30, 2017

Task Force Members Present

Member	Representing	
Kerri Barsh	Rock mining representative	Present
Ashley McElheny	Florida East Coast Chapter of Associated Builders & Contractors	Present
Erin Clancy	Tropical Audubon Society	Present
William Delgado	Latin American Business Association	Present
Enid Washington Demps	Community Council 15	Present
Alex Diaz	Community Council 11	Present
Nick Diaz	The Property Owners' Representative for the Eastern UEA	Present
Dany Garcia	Sierra Club	Present *
Richard Gomez	Florida Home Builders Association	Absent
Steve Green	Tropical Fruit Growers of South Florida	Present
Richard Grosso	Nova Southeast Shepard Broad Law Center	Present
Mike Hatcher	Redland Citizens Association	Present *
Thomas Hawkins	1000 Friends of Florida	Absent
James Humble	Agricultural Practices Advisory Board	Present
Matt Johnson	Biscayne National Park	Absent
Robert Johnson	Everglades National Park	Present
Yesenia Fatima Lara	Community Council 14	Absent
Maria Lievano-Cruz	Builders Association of South Florida	Present
Bill Losner	Dade County Farm Bureau	Present *
Francisco Pines	The Property Owners' Representative for the Western UEA	Present
John Renne	Urban Land Institute – the SE FI/Caribbean Chapter	Absent
Laura Reynolds	Friends of the Everglades	Present
Barney Rutzke Jr.	Florida Nursery Growers & Landscape Association	Present
Paul Schwiep	Urban Environment League	Present
Erick Valderrama	Latin Builders Association	Present
Larry Ventura	Homestead Air Reserve Base	Absent
Vacant	Miccosukee Tribe of Florida	Absent

* Present after roll call

Board Member Delgado left at 2:30

Board Member Grosso left at 2:40

Board Member Alex Diaz left at 3:20

Board Member Washington Demps left at 3:45

Department of Regulatory and Economic Resources (RER) Planning Division Staff

Kimberly Brown, Supervisor of Long-Range Planning; Jerry Bell, Assistant Director for Planning; Noel Stillings, Senior Planner; Helen Brown, Principal Planner

Other Miami-Dade County and Government Staff

Wilbur Mayorga (Miami-Dade County RER-Division of Environmental Resource Management), Gwen Burzycki (Miami-Dade County RER-Division of Environmental Resource Management), Kimberley Taplin (US Army Corps of Engineers), Brenda Mills (South Florida Water Management District)

I. Attendance

Ms. Stillings called roll of the members, 17 Members of The Task Force were present. The meeting commenced at 1:05 pm.

II. Approval of October 16, 2017 Meeting Summary

Motion. Board Member Delgado made a motion to approve the October 16, 2017 meeting summary, with the corrections (stated by Ms. Brown for the typographical errors to “phytosanitary” on page 3 and “indicated” on page 14). Board member Alex Diaz seconded the motion. The motion passed unanimously as follows:

Kerri Barsh	Yes	James Humble	Yes
Ashley McElheny	Yes	Matt Johnson	Absent
Erin Clancy	Yes	Robert Johnson	Yes
William Delgado	Yes	Yesenia Fatima Lara	Absent
Enid Washington Demps	Yes	Maria Lievano-Cruz	Yes
Alex Diaz	Yes	Bill Losner	Absent
Nick Diaz	Yes	Francisco Pines	Yes
Dany Garcia	Absent	John Renne	Absent
Richard Gomez	Absent	Laura Reynolds	Yes
Steve Green	Yes	Barney Rutzke Jr.	Yes
Richard Grosso	Yes	Paul Schweip	Yes
Mike Hatcher	Absent	Erick Valderrama	Yes
Thomas Hawkins	Absent	Larry Ventura	Absent

III. Staff Coordinator’s Report

Ms. Brown reviewed the agenda for the day and indicated that Mr. MacVicar will be available to present at the next meeting on November 17th. As a follow-up to a request from Mr. Losner at the prior meeting, Ms. Brown reminded the Task Force that aerials for each of the UEAs were provided in the Briefing Book distributed at the first meeting.

IV. Scheduled Presentation: Environmental CDMP Policies

Ms. Brown provided a presentation on CDMP policies relevant to environmental considerations including:

- The requirements of Policy LU-8G and CON-7J as it relates to the Everglades Buffer Area and Comprehensive Everglades Restoration Plan (CERP). Ms. Brown presented maps showing CERP boundaries (pink-hatched) and Everglades Buffer Area (green) in relation to the UEAs. In response to a question from Board Member Pines, Ms. Brown indicated

that the southern boundary of the Bird Drive CERP Project, as shown on the map, is approximately SW 64th Street.

- The CDMP text and requirements of Policy LU-8G as it relates to wellfield protection. Ms. Brown presented maps showing the boundaries of the wellfield protection areas as it relates to the UEAs.
- Policies CON-9A and CON-9B as it relates to protection of habitat for threatened and endangered species.
- Overview of the County's Severable Use Rights Program. Ms. Brown indicated that the Planning Division recently issued a report that recommended strengthening the requirements of CDMP Policy LU-8H(c) to require participation for non-residential applications and to define the extent of participation that is required.

V. Scheduled Presentation: Comprehensive Everglades Restoration Plan and East Coast Buffer Area

Brenda Mills, Principal Scientist, Everglades Policy and Coordination Division, South Florida Water Management District, provided an overview of CERP and the East Coast Buffer including:

- The Central and South Florida Project changed water flow in South Florida by channelizing water flow and segregated the water conservation areas. We are trying to move toward a more flowing system with more water reaching our natural areas including the quantity, quality and timing of the water.
- The "Restudy", initiated in the 1990s, resulted in the creation of the Comprehensive Everglades Restoration Plan. SFWMD is implementing the authorized CERP projects in coordination with the United States Army Corps of Engineers (USACE). The projects include wetlands to improve the quality of water, seepage management, and removing barriers to flow.
- The CERP framework was authorized by Congress in 2000. In response to a question from Mr. Pines, Ms. Mills clarified that the first (2007) and second (2014) generations of CERP plans were a continuation of the 2000 authorization and provided additional detail. The Planning Implementation Report is the document that Congress reviews when deciding whether to move forward with implementation.
- Ms. Mills showed a map of completed CERP projects. Ms. Mills provided an overview of the Pennsuco regional mitigation bank and C-4 detention basin. In response to a question from Board Member Barsh, Ms. Mills confirmed that the Pennsuco mitigation bank is a willing seller program. USACE is implementing the C-111 project in South Dade. Ms. Mills reviewed Phase I and Phase II of the Biscayne Bay Coastal Wetlands project. Phase II planning will be starting in a couple of years. Board Member Reynolds asked whether funding, \$1.5 million, has been allocated for Phase II planning. Ms. Mills was not aware of whether funding has been finalized.
- Ms. Mills provided an overview of the Bird Drive Recharge CERP project, indicating that it was intended to be an above-ground detention basin. Reevaluation of the project identified deficiencies in the original design which lead to a decision by SFWMD to modify the project and acquisition boundary. Discussion ensued regarding the modified boundary for the Bird Drive CERP project. It was decided that the boundary shown in Ms. Brown's presentation reflects the modified boundary. Board Member Pines asked for clarification on how the project boundaries changed. Ms. Mills replied that it is no longer planned to be an above-ground detention area for long-term storage, it is now planned to be more of a conveyance

feature and enhance aquifer recharge. The acquisition area was reduced by about one-third. Discussion ensued regarding ownership patterns in the Bird Drive Basin, particularly tribal lands. Ms. Mills indicated that there is no planned funding at this time for acquisition in the Bird Drive area.

- Ms. Mills provided a history of the East Coast Buffer Area, indicating that it was created as a result of efforts by the Audubon Society and other non-governmental agencies. It serves as a buffer between Everglades National Park, the Water Conservation Areas and the urban areas. Ms. Mills indicated that there is no East Coast Buffer project on the books of SFWMD. There is acquisition related to the East Coast Buffer because it dates back to this precursor concept. SFWMD has other projects that implement similar concepts and allow for managing seepage more effectively. Board Member Humble indicated that a Committee was formed several years ago and provided recommendations related to the East Coast Buffer.
- Kimberley Taplin, P.E., with the United States Army Corps of Engineers provided supplementary information on CERP. She indicated that the CERP plan authorized by Congress conditionally authorized 10 of the original 68 projects and indicated that no additional authorization would be needed if the cost did not go up. All project costs have exceeded original estimation so they all have needed to go back to Congress. She indicated that additional water will be needed for the next phase of the Biscayne Bay Coastal Wetlands and C-111 spreader canal so that is potentially an area where the Bird Drive area may be needed, to get additional water to those projects.

Task Force Discussion: Board Member Pines asked whether the 2000 CERP authorization identified specific parcels for potential acquisition and inquired about the timeline for acquisition once a parcel is identified for acquisition. Ms. Mills indicated that the CERP authorization included generalized maps but specific acquisition maps were fine-tuned later. She further indicated that acquisition follows the process consistent with state law. Discussion ensued between Board Member Humble and Ms. Brown regarding allowable uses on properties located in a CERP boundary. Ms. Brown indicated that areas in private ownership still retain rights to certain uses depending on the land use. Board Member Pines added that the SFWMD sent a letter to the County in the 1990s that asked for cooperation on CERP implementation. Board Member Humble indicated that, to his knowledge, Congress has never passed a bill related to an Everglades buffer. In response to a question from Board Member Green, Ms. Mills stated that there is no specific benchmark time for “restoration”, instead the goal of the program is to restore certain characteristics back to the ecosystem.

Board Member Reynolds indicated that the East Coast Buffer was created due to the short hydroperiod wetlands and trying to support endangered wildlife habitats. She further stated that the National Audubon Society was involved in the creation of that designation and still thinks it is critical for protection of endangered species.

Board Member Grosso inquired about the flood protection benefits of CERP projects to all of Miami-Dade County and asked whether there are reports showing the economic benefits of CERP. Ms. Mills responded that the flood protection benefits are countywide and that the Project Implementation Reports outline environmental benefits but do not quantify economic benefits. In response to Board Member Schwiep, Ms. Mills confirmed

that properties within the CERP footprints are on the SFWMD acquisition plan although actual prioritization of acquisition may vary depending on funding. In response to a question from Board Member Lievano Cruz, Ms. Mills stated that the CERP framework was authorized by Congress but the individual components need to go back to Congress. She further indicated that the Bird Drive project has not gone back to Congress and is not in the short-term priorities of the SFWMD. Board Member Grosso asked whether land speculation drives up the cost of CERP project. Ms. Mills confirmed that it is influenced by market forces. Board Member Reynolds asked Ms. Mills whether SFWMD has plans to surplus any of the land in the Bird Drive Basin. Ms. Mills replied that, to the best of her knowledge, land on the eastern side was added to the surplus list when the boundaries of the project were amended. Board Member Reynolds asked Ms. Mills to provide any additional information that may be available on changes to the Bird Drive CERP project.

VI. Scheduled Presentation: Everglades Restoration and Fostering Compatibility Between the Built and Natural System

Robert Johnson, Director, South Florida Natural Resources Center, provided a presentation on Everglades Restoration including:

- Maps depicting the topography using LIDAR elevation data and type of soils in Miami-Dade County. Maps detailed the high ground, encompassing the Atlantic Coastal Ridge, and the location of the transverse Glades where the canals were carved out. The soil maps depicted the dark grayish color are soils associated with the Atlantic Coastal Ridge, the highest ground, with other areas historically flooded either permanently or seasonally.
- Maps showing historic hydrology changes, contrasting 1959 and 1994 water depth through the southern Everglades region. Historically, the Pennsuco wetlands were long hydroperiod marsh, but are now better suited to short hydroperiod marsh because the water table in that area is much lower.
- A map of the eastern protective levee that runs along the entire length of the Everglades starting at the L-8 levee (near Lake Okeechobee). He indicated that there are some areas where development is located on the west side of the protective levee.
- Mr. Johnson indicated that the East Coast Buffer area was drawn based on soil type and duration of flooding and aligns with the footprint of the “Everglades Peat Area”.
- Some changes have occurred that have affected hydrology on the southern end of the system including compartmentalization of the Water Conservation Areas. In addition, flood control measures for the urban area have affected water level in the Everglades. The permeable aquifer makes it difficult to restore water flows on the west and continue to protect the east.
- The amount of water flow that went across Tamiami Trail from pre-drainage to today is estimated at about 40% of this historic flow.
- The 1952 levees established were depicted in red lines on the maps, and originally stopped south of Tamiami Trail but were later extended in the 1960s down to the tide.
- Status of the Modified Water Deliveries Project:
 - Part of the Tamiami Trail bridge completed
 - work to begin on the next section of the Tamiami Trail bridge
 - completed the Eight-and-a-half square mile area mitigation construction
 - completed the East Everglades Land Acquisition
 - Completed the WCA-3A, DNP, SDCS Water Control Plan
- Future CERP projects occurring throughout the state

- Historic changes in coastal groundwater levels in Miami-Dade County from 1940 to 1994, with some places in southern Miami-Dade County experiencing two and three feet lower groundwater levels.
- Management of invasive exotic fish species in Everglades National Park. The number of introduced exotic species, from the blue tipalia and walking catfish in the 1980s, has sharply increased with introduction of water management changes made from 2000 on.
- Map showing the exotic plant distribution in Everglades National Park, with the points of entry coming via the eastern developed areas.
- Establishment of the Everglades and Dry Tortugas Biosphere Reserve in 1976, during the same time the County's Urban Development Boundary (UEB) was established.

Task Force Discussion: *In response to questions from Board Member Barsh and Losner, Mr. Johnson showed the path of the water flow through Everglades National Park (ENP) and explained how the ground and surface water flowed to the lowest elevation. Board member Schwiep asked if any of the CERP projects would need to be contracted or expanded, based on any water table changes, climate change or sea level rise issues. Mr. Johnson detailed how the original CERP project for the Bird Drive Basin was to be a four-square mile reservoir with seepage barriers to hold water levels up to twelve feet, but the water seeped out as that area could not accommodate higher water levels. Mr. Johnson described how that project changed from a storage reservoir to a proposed conveyance feature utilizing a canal east of Krome Avenue to route water from north to south and direct it back to the Everglades further down. Mr. Johnson added that the proposed canal conveyance feature involves a land exchange with other public lands. Board member Pines asked if the boundaries of the conveyance canal were between SW 8 Street and SW 64 Street. Mr. Johnson explained that he would look up the presentation on the proposed canal which was made in 2014 by the South Florida Water Management District (SFWMD) to their Governing Board. Mr. Johnson explained that while the proposed canal was not in the final design phase, it did reach far south enough to reach the bottom of the West Wellfield, as one of the reasons for the canal is to route water to recharge that wellfield. Mr. Johnson added that the proposed canal envisioned as a substitute project to replace the benefits of two projects, namely the Bird Drive recharge area and the Everglades National Park (ENP) Seepage Management project. In response to Mr. Pines' request, Mr. Johnson replied that he would provide copies of those projects. Board member Green asked how the proposed canal would deliver the water back to the Shark River Slough, and Mr. Johnson responded that it would be done through the Water Conservation Area-3B by use of the pump station S-356 at the intersection of SW 8 Street and the L-31N canal. Mr. Green inquired if any of the pump stations had not been utilized. Mr. Johnson responded that while the pump stations may have different timing, all are currently being utilized.*

Board member Grosso stated that CERP is reviewed by the National Academy of Sciences (NAS), and asked what their latest assessment was. Mr. Johnson responded that the NAS wanted projects to be on a faster timeline, and to make it clear to landowners when the lands will be needed. Mr. Johnson added that the pace of the project timing was due to project restoration costs increasing and that all of the CERP projects required funding appropriations. Board member Grosso asked if development and roadways affected the viability of CERP projects, such as the proposed SR 836 Southwest

Extension project. Mr. Johnson responded that changing conditions required project designs to undergo substantial changes or “work arounds” such as the modifications to the originally-envisioned Bird Drive Basin reservoir. Mr. Johnson stated that while the scheduled separate input session on transportation could address the proposed SR 836 Southwest Extension project, it was located in the CERP project area which was identified by the County as a special area management plan in the 1980s, as wetlands to be restored.

Board member Reynolds asked how much water is lost from some of these unrealized projects, and how much water is needed to deliver through ENP to keep up with sea level rise. Mr. Johnson answered that based on modeling flow estimates, on average 800,000 to 900,000 acre feet is lost along the northern boundary of Shark River Slough and that approximately two-thirds of the water put into ENP drains out to the east, or is lost in evaporation. Mr. Johnson stated that was why the seepage management projects become so important, and commended the SFWMD for looking into doing these seepage management features. Mr. Johnson explained that while the estimates for sea level rise constantly change based on new information, their latest estimate show that it will take an additional 300,000 acre feet added to push back against about a foot of sea level rise. Mr. Johnson explained that as salt water rises into the freshwater wetlands, the salinity comes up and kills the freshwater plants and makes the peat soils collapse. Mr. Johnson added that process does not require full seawater but just enough seawater pushing against the freshwater. Mr. Johnson stressed the importance of delivering more water south on an expedited basis.

Board member Barsh asked Mr. Johnson to discuss the location and details of the L-31N seepage barrier project. Mr. Johnson replied the project is a five-mile north-south seepage barrier along the L-31N canal, with a 35-foot deep trench filled with concrete and bentonite which creates an impermeable barrier to the flow from the west to the east. Mr. Johnson added the L-31N project resulted in substantial benefit with a 25 percent reduction in seepage out of the area, and the project was funded by the Miami Dade Limestone Products Association as part of mitigation for their projects.

Board member Losner questioned that if higher water levels were wanted in ENP and to create a head against the saltwater, would the L-31 canals and pumps be enough 30 years in the future to prevent flooding on the eastern side. Mr. Johnson responded that more features would need to be added over time, as water levels are expected to be higher due to sea level rise. Mr. Losner inquired if ENP had changed its attitude toward seepage barriers or curtain walls. Mr. Johnson responded that he was not aware of those projects not working, but that they needed to be carefully placed as to not block groundwater flow to the wellfields.

Board member Grosso observed that all Florida counties contain areas where urban uses are discouraged to prevent suburban sprawl and save infrastructure monies, and that if there was no ENP there would still be other reasons under state law and in the CDMP to discourage suburban development in that area. Board member Grosso opined that the CDMP Land Use language regarding CERP projects should be changed from “shall be avoided” to “shall not be considered”.

VI. **Scheduled Presentation: Miami-Dade County Wellfield Protection Ordinance**

Wilbur Mayorga, P.E., Chief, Miami-Dade County Division of Environmental Resources Management (DERM), provided a presentation on the County's Wellfield Protection Ordinance, including:

- Regulatory basis for Wellfield Protection is based on:
 - The federal Safe Drinking Water Act (SDWA) of 1974 and subsequent amendments
 - States are authorized to apply to the U.S. Environmental Protection Agency (EPA) for authority to implement the SDWA within their own jurisdictions, and states can establish and enforce their own drinking water standards provided the state standards are as stringent as the EPA standards.
 - Local Governments – based on Florida's Wellhead Protection Program can expand on the states' wellfield protection rules by implementing their own strategies for protecting drinking water wells.
- Miami-Dade County's Wellfield program uses EPA guidance and management strategies to implement wellfield protection.
- Before the establishment of Miami-Dade County's Wellfield Protection Program in 1981, DERM's records showed existence of several wellfields, based on Fortran program and handwritten calculations of different drawdowns and withdrawal rates
- In 1981, Miami-Dade County established its Potable Water Supply Protection Ordinance, comprised of:
 - 41 wellfields
 - Wellfield Cone of Influence (COI) zones defined based on travel times
 - Five protection zones: 100 feet, 10, 30, 100 and 210 day travel times
 - Land use regulations established for areas in the cone of influence.
- 1985 to 2006 were adoption of ordinances finalizing the Northwest Wellfield protection zones, West Wellfield Interim Protection Areas, and 5 year day travel time.
- Miami-Dade County's Wellfield Protection management tools encompass:
 - Land use and zoning controls to prohibit incompatible uses within Wellfield Protection Areas
 - Prohibits within certain distances of production wells activities and/or industries with potential to cause contamination
 - Groundwater monitoring for early detection of threats to the water supply wells.
- Map showing location of Miami-Dade County's Wellfield Protection Areas
- Map showing the success of the Wellfield Protection program, showing that there were more contaminated sites per square mile outside the Wellfield Protection Areas than within the Wellfield Protection Areas, at an approximate six-to-one ratio.
- Miami-Dade County does not rely on a single wellfield--instead relies on the overall system to insure water supply capacity.
- From 2011 to 2014, DERM conducted four public workshops to update the North West Wellfield and the West Wellfield regulations, with groundwater modeling with the USGS.
- In 2015, Ordinance 15-25 revised the hazardous materials definition and prohibitions and:
 - Revised definition and accounts for the concentration, quantity and physical state of the material and allows for updates
 - Revised restrictions to allow for "de minimus quantities" and allow exemption for household and personal care products.

- Hazardous materials were revised to:
 - Based on characteristics of a chemical, which if introduced to potable water supply well, will impair the portability of the water
 - Constitute a hazardous material if the chemical is present at concentrations which exceed the groundwater cleanup target level set forth in Section 24 of the Code.
- Diagrams depicting the previous and revised prohibition of hazardous material within the Wellfield Protection Area
- Importance of the North West Wellfield (NWWF) and the West Wellfield (WWF), in that they are the least urban and most westerly WPA, subject to more stringent land use restrictions, and are critical to the County's long term sustainable drinking water supply.
- The proposed revisions to the NWWF and WWF boundaries were not implemented in 2015 by the Board of County Commissioners (BCC), who requested DERM in Ordinance 15-25 to:
 - Conduct further scientific investigation and studies
 - Return to the BCC within 24 months with results
 - The proposed pump age rate for the West Wellfield Protection Area – shall not exceed 40 million gallons per day (gpd).
- Wellfield Technical Work Group established:
 - Consisting of 8 members selected from stakeholder groups
 - Had eight meetings between March 2016-June 2017
 - Conducted scientific evaluation of the stakeholder concerns with respect to USGS report, to evaluate the NWWF and WWF boundaries
 - Provided consensus recommendations addressing all the original stakeholder concerns relating to USGS model and report.
 - Recommended additional modeling to address travel time through rock quarry lakes
 - Report being finalized, will be submitted to BCC
 - Upon BCC approval, DERM will implement the recommendations.

Task Force Discussion: Board member Green inquired if the earlier modeling DERM performed with Fortran program measured or estimated travel times. Mr. Mayorga responded that the travel times were estimated, based on rigorous calibration procedures, with dye trace studies utilized to conduct a conservative but reasonable validation of the travel time. Board member Green inquired if the changes in water table and flow were accounted for in the groundwater modeling. Mr. Mayorga explained that their updated groundwater modeling included the new information related to elements such as groundwater flow, surface water and canal boundaries. Board member Losner stated that some areas of the aquifer were more porous than others, and asked how this was accounted for in the modeling. Mr. Mayorga explained that the USGS model had assumed some areas had higher flows and within certain depths, and utilized the Monte Carlo analysis to account for the range of variabilities. Board member Losner stated that he was on the original West Wellfield Committee but it was later determined that the West Wellfield affected ENP. Mr. Mayorga explained that there was no seepage barrier at the time of the original committee and the agreements with the ENP, SFWMD and others allowed for the ability to increase the allocations if the data showed there was no detrimental impacts to ENP. Mr. Mayorga stressed that the County relies on the entire water supply system and

not on an individual wellfield to insure the drinking water supply. Board member Reynolds inquired as to the membership and study findings of the Wellfield Task Force, and Mr. Mayorga stated that he provided the Recommendations to the UEA TF coordinator Ms. Brown. Board Member Reynolds asked for a summary of the recommendations. Mr. Mayorga indicated that there was consensus on most issues such as installed capacity, drawdown, wellfield boundaries. The recommendation related to the impact of lakes on pollutant travel times will take the most time and require extensive modeling. Mr. Mayorga indicated that the recommendations of the Wellfield Task Force will be going to the Board of County Commissioners in the coming weeks.

Board Member Pines asked whether the USGS study concluded that the County is pumping too much water out of the wellfields. Mr. Mayorga indicated that it did not. In response to a question from Board Member Pines, Mr. Mayorga indicated that the USGS model uses 25 MGD, which is the capacity of the structures that have been installed. However, there is additional conveyance capacity way beyond that which was installed by Miami Dade WASD. The significant changes from the original west wellfield to the 2011 through 2014 workshops are: the movement of saltwater intrusion, the need for the county to prepare contingency plans to ensure where drinking water will come from, and evaluation of the entire wellfield system. The system must be flexible enough to account for changes in rainfall during different seasons. The County needs to plan for the short term as well as the long term water needs. Current pumpage at the west wellfield is between 10 and 15 MGD, however, we have the capacity to increase it to 25 MGD. We have further capabilities to increase it up to 40 MGD following coordination with SFWMD and ENP. Board Member Pines asked what pumpage the west wellfield cones of influence are based on. Mr. Mayorga indicated that it is based on design installed maximum capacity of 140 MGD. The USGS modeled the cones of influence based on 25 MGD. Mr. Mayorga explained that the outer boundary is based on drawdown and is different than the travel time contours. The travel time contours of the Northwest Wellfield are likely to change in a significant way as a result of the new modeling. In response to a follow-up question by Board Member Pines, Mr. Mayorga indicated that uses that are considered to be compatible with the wellfields are outlined in the Code. Mr. Mayorga indicated that the maps in the USGS report may change based on the updated analysis considering the influence of the lakes.

In response to the a question from Board Member Schwiep, Ms. Brown clarified that the maps shown in the presentation indicate the currently-adopted wellfield protection boundaries and not the revised boundaries based on updated modeling. Mr. Mayorga added that it will be a multi-year effort to go through the peer-reviewed effort to update the wellfield boundaries. One of the key improvements with the new groundwater model is taking into consideration the hydraulic barriers such as the Snapper Creek Canal extension, NW 25th Street canal, etc. Our directive was very clear; we were required to conduct additional scientific studies and provide technical recommendations, and now we are in the process of providing those recommendations to the elected officials. When approved, we will move forward with the next phase which will be new modelling

Board Member Barsh indicated that rockmining land in the Northwest wellfield will be donated to the County and will serve as buffers to the wellfield. Board Member Pines

inquired as to why the west wellfield doesn't have a broad outer boundary similar to the northwest wellfield. Mr. Mayorga indicated that it due to the seepage barrier located west of the west wellfield. Analysis will determine the amount of pumping that can occur at the west wellfield, considering the seepage barrier, without affecting ENP. Board Member Pines inquired about changes in the west wellfield under the new modeling. Mr. Mayorga indicated that there will be little changes to the west and south, the most significant changes will be on the north. He reemphasized that this is all subject to further review based on the recommendations of the Wellfield Task Force. Board Member Reynolds asked whether the Task Force should be using the map of the currently-adopted wellfield protection areas. Mr. Mayorga indicated that the currently-adopted map is the only one that can legally be relied upon.

VI. Scheduled Presentation: Threatened and Endangered Species

Gwen Burzycki, Miami-Dade County RER-Division of Environmental Resource Management, provided a presentation on threatened and endangered species including:

- A map of the Wood Stork Core Foraging Areas, which cover the majority of the County, and represent the approximate range of the area around the nests where wood storks will forage. Wood storks are a federally-designated threatened species. If conditions are good for wood storks, then other bird species will benefit as well. Nesting success is critical for these species, so the water quality and food sources have to be very good. Wood storks prefer water levels of approximately seventeen centimeters.
- The US Fish and Wildlife Service (FWS) has been evaluating species for consideration under the Endangered Species Act, including plants and insects. Where appropriate, FWS tries to designate critical habitat for these species which is defined as land that has features essential to the conservation of the species. There is no designated habitat for the wood stork. Ms. Burzycki showed a map of designated habitat including the American Crocodile, Cape Sable Seaside Sparrow and, more recently, the Florida Leaf Wing Butterfly, and Bartram's Hairstreak, and Sand Flax.
- Urban Expansion Area 1 is mostly wetlands, and is within one or more wood stork core foraging areas; this area is also within the Florida Bonneted Bat Consultation Area. Discussion ensued regarding the location of the proposed Miami-Dade County wastewater treatment plant.
- Urban Expansion Area 2 is also within core foraging areas for wood storks. There are also Everglades Snail Kite nests near the L-31 N canal and Tamiami Trail which are endangered as well. The Snail Kite feeds on the Apple Snail, typically found on canal edges or seasonal wetlands. This Expansion Area has many wetlands as well as seasonal agriculture, so it floods during the wet season. It is also within the Florida Bonneted Bat Consultation Area which covers the majority of the County.
- A map of critical habitat in relation to the Policy 8-I Study Area. There is critical habitat, not within, but immediately adjacent to this area. There are also a couple of County-designated Natural Forest Communities inside the study area. It is also within the Wood Stork Core Foraging Area and Florida Bonneted Bat Consultation Area.
- Urban Expansion Area 3 is within the Wood Stork Core Foraging Area and Florida Bonneted Bat Consultation Area. Along the coast are seasonal farmlands which may be used by migratory shorebirds for feeding during the summer migration period.

- Urban Expansion Area 4 is not within a core foraging area for wood storks, but it is in the Bonneted Bat consultation area. A portion of the UEA is within the FWS Florida Panther Focus Area which were established by tracking radio-collared panthers.

VII. Public Comment

Ms. Brown opened the meeting for public comment.

Speaker: Pat Milone. Ms. Milone commented that the water issue couldn't be more complicated than it is in our County. Many states are battling in courts about river water being diverted unfairly. She cited environmental concerns associated with fracking, toxic water, sea-level rise, and saltwater intrusion. She mentioned the need to consider public health and the environment. The health of threatened and endangered species can be an indicator of human health. Plastics in the water pose a threat to sea life. Sewage leaks are fouling our beaches. Ms. Milone read a quote from Edward Abby – "Growth for the Sake of Growth is the ideology of the cancer cell"...

VIII. Set Dates for Future Task Force Meetings

Ms. Brown announced that the next meeting will be on November 17, 2017 at the West Dade Regional Library located at 9445 Coral Way, at 1:00 p.m. and will focus on sea level rise and rockmining considerations.

Motion. Board Member Reynolds made a motion to invite Hal Wanless to make a presentation to the next UEA Task Force meeting on sea level rise. Board member Clancy seconded the motion. The motion passed unanimously as follows:

Kerri Barsh	Yes	James Humble	Yes
Ashley McElheny	Yes	Matt Johnson	Absent
Erin Clancy	Yes	Robert Johnson	Yes
William Delgado	Absent	Yesenia Fatima Lara	Absent
Enid Washington Demps	Absent	Maria Lievano-Cruz	Yes
Alex Diaz	Absent	Bill Losner	Yes
Nick Diaz	Yes	Francisco Pines	Yes
Dany Garcia	Yes	John Renne	Absent
Richard Gomez	Absent	Laura Reynolds	Yes
Steve Green	Yes	Barney Rutzke Jr.	Yes
Richard Grosso	Absent	Paul Schweip	Yes
Mike Hatcher	Yes	Erick Valderrama	Yes
Thomas Hawkins	Absent	Larry Ventura	Absent

Task Force Discussion. Board Member Losner suggested that the next session include a speaker that does not believe in sea level rise. Board Member Barsh mentioned the importance of addressing blasting as a compatibility consideration in the rockmining session.

IX. Adjourn

Having no further business, the Board adjourned the meeting at 3:59 p.m.