

Summary of the Task Force Sponsored Public Engagement Workshop for Biscayne Bay Southeastern Everglades Ecosystem Restoration (BSEER)

November 17, 2020

1. Welcome and Introductions

Adam Gelber called the workshop to order at 9:00AM noting the Task Force directed the Working Group to host the BBSEER workshop at its October meeting. The BBSEER study is focused on formulating a plan to restore parts of the south Florida ecosystem in freshwater wetlands of the Southern Glades and Model Lands, the coastal wetlands and subtidal areas, including mangrove and seagrass areas, of Biscayne Bay, Biscayne National Park, Manatee Bay, Card Sound and Barnes Sound. He recognized leadership from Interior as well as TF member, Ronnie Bergeron, who are on the call.

James Erskine, as Chair of the WG, facilitated the workshop which was webcast live using the ZOOM platform and recorded. The presenters along with a panel of agency staff were available for the discussion portions of the agenda.

2. Workshop Procedures, Ground Rules, Next Steps

Carrie Beeler reviewed the workshop format which is intended to provide technical information to the public and facilitate two-way dialogue between the public and staff. Two opportunities to provide public comment and for discussion will be made available. The Task Force will formally transmit the results of the workshop to the USACE and the SFWMD.

3. Public Comment

Ken Ammon said he had major concerns with two components of the project management plan (PMP), one is the assumption that the water collected on the east side of the WCA will be collected and prioritized for ENP. This is the only PMP developed for restoration of Biscayne Bay and the model lands and as such, it seems extremely premature to prioritize water to ENP prior to providing restoration benefits for Biscayne Bay. The Yellow Book identified appropriate CERP components and alternative D-13R was approved by Congress. This project is meant to restore Biscayne Bay and it appears the PMP is prioritizing ENP.

Cara Capp (NPCA) thanked the Task Force for hosting this workshop. NPCA's priority for BBSEER is to deliver the maximum ecosystem benefits for both Everglades National Park and Biscayne National Park and the surrounding waters in the greater Everglades ecosystem. The USACE has undertaken a significant task by combining several CERP projects together and the goal must be to deliver on all the ecosystem benefits for each project outlined in the Yellow Book. They need more water for Biscayne, more water for Florida Bay and better timing and distribution of water throughout the entire southeastern ecosystem. At the recent PDT charette, the USACE referenced that there is more water available for Biscayne than at the time the BBCW Phase 1 was authorized yet NPCA has yet to see the documents showing where that water is coming from. As the PDT moves forward, NPCA would like to see that the suite of

alternatives developed include strong environmental alternatives such as backfilling the lower C-111 and see how BBSEER fits in with other projects in the region.

Caroline McLaughlin (BBRRCT) thanked the WG for hosting this workshop. The BBRRCT was established by the WG to coordinate and inform activities dedicated to restoring the Biscayne Bay ecosystem. It is the formal entity responsible for advising the WG on matters related to the restoration of Biscayne Bay and has long supported the advancement of BBCW. In order to achieve the full suite of project benefits as envisioned in CERP, both Phase 1 and 2 must be fully constructed and operated. She thanked everyone involved in the planning of BBSEER which includes BBCW and asked that this planning process include the priorities for BBCW Phase 2. The BBRRCT will continue to remain engaged and available to help in this process.

Tom Van Lent (Everglades Foundation) commended the TF for holding this workshop which will allow for much more public comment. Two of the CERP components (BBCW and C-111) that have been selected for BBSEER are straightforward but the other four are confusing. For example, BBCW and Biscayne Bay in general need water but the source of water for that reservoir are not included. This leads to not having a clear understanding of what kind of outcome the USACE wants for this process. The scoping has led to a lot of confusion and they need to make sure they have the right components that provide for a stand-alone project. Hopes USACE will take a close look at how the project is scoped.

Irela Bague (Biscayne Bay Regional Restoration Coordination Team (BBRRCT) member and the Greater Miami Chamber of Commerce) thanked the TF for hosting this public workshop on this important project for Miami Dade County and Biscayne National Park. This project is important to rehydrating Biscayne Bay. Currently the Biscayne Bay watershed is in a state of emergency and they need to look for ways to bring water to the southeastern part of the system. This is the only project that will benefit Biscayne Bay and there are many projects for ENP. This should be viewed as a southern glades approach. As they continue this process it is important to communicate with the local governments, many of which were not even aware that this project had been kicked off.

Laura Reynolds (Friends of Biscayne Bay) thanked the TF for hosting this public forum. They represent all the aquatic preserves that are in Biscayne Bay and it is important to remember that they are designated an “Outstanding Florida Waters” and there is an anti-degradation standard in terms of water quality. As they go forward with this project, she urged them to consider the 1982 standards as they deliver water to Biscayne Bay. In the northern part of Biscayne Bay, where the crisis is, there needs to be some consideration of different water deliveries and storage for water delivery in the dry season.

4. Overview of CERP and BBSEER

Brad Foster (USACE) noted the goal of CERP is to restore more water to the natural areas by reducing some of the flows that go out through the northern estuaries and the coastal canals. CERP had 68 components which were estimated to take 30+ years for implementation. The BBSEER current study area includes the natural lands in the Model Lands, Southern Glades, Biscayne Bay, Biscayne National Park and Everglades National Park’s eastern panhandle.

BBSEER looks at 6 of the 68 components to include: Biscayne Bay (BB) Coastal Wetlands (OPE); BB Coastal Canals (FFF); C-111N Canal Project (WW); South Miami Dade County Reuse (BBB); West Miami Dade Reuse (HHH) and the North Lake Belt (XX). He reviewed the four study objectives, project opportunities and constraints as well as other considerations for BBSEER.

5. Understanding the Water Management System, Water Movement and the Water Available in the Regional Water Budget

- a. Operations of C&SF Water Control Structures Discharging to Biscayne Bay - Matahel Ansar (SFWMD) focused his presentation on the coastal structures discharging to Biscayne Bay. There are a dozen coastal water control structures that discharge into Biscayne Bay that are part of the Lower East Coast Canals system of the C&SF project that was designed and built from 1954 to 1965 by the USACE and maintained by the SFWMD. Structures were designed to pass the design flood without exceeding upstream flood design stage, restrict downstream flood stages and discharge velocities to non-damaging levels, and prevent saltwater intrusion. The operations criteria and how it is implemented for the water control structures were reviewed.

Overview of the Central & Southern Florida (C&SF) Project - Luis Alejandro (USACE) reminded everyone of the multiple project purposes for the entire C&SF system. He reviewed the C&SF roles and responsibilities between the USACE and SFWMD. He also described the hydrologic basins and the Combined Operational Plan (COP), and the new Water Control Plan. He explained that COP primary purpose is to improve water deliveries to ENP. He also went through the South Dade Conveyance System.

- b. Overview and Current Understanding of the Water Available in the Regional Water Budget - Walter Wilcox (SFWMD) reviewed the pathway of water reaching Florida Bay and the C-111 Spreader Canal. The CERP vision was to keep Everglades water in the Everglades and improve coastal wetlands and nearshore sheet flows, store water and move from “North” Bay to “South” Bay and distribute water spatially and temporally. The project can also look at supplementing the regional water budget with reuse. He reviewed three hydrologic model runs for simulated mean wet and dry seasonal structure flows discharged into Biscayne Bay for 1965 – 2000. This performance measure from CERP planning shows that while CERP improves flow in “South” Bay, it still fell short of legacy targets. From a regional water budget perspective, initial reviews indicate that a similar water budget is available in the BBSEER effort relative to what was considered by CERP. CERP envisioned projects that would result in significant redistribution of water both spatially and temporally (increase flows in drier times) but did not achieve legacy targets for Biscayne Bay. BBSEER will need to examine the feasibility of CERP’s conceptual plan (e.g. use of reuse water, significant canal construction, etc.) and new information about system needs (ecology, vulnerability to sea level change, etc.).

c. Hydrology of Natural Areas

- Model Lands - Craig Grossenbacher (Miami Dade County DERM) provided a description of the Model Lands Basin, which is surrounded by levees and roads, and the ways that water drains out of this basin. According to the CERP PDT, Model Lands Basin has been over drained by the L-31E canal and S-20 water control structure, with water levels occasionally dropping below sea level. Over drainage needs to be stopped to restore both wetland stage and hydroperiod. CERP authorized a change in S-20 operations to increase trigger stages in order to reduce over drainage in the Model Lands. There is already evidence that this operations change has the potential to improve both wetland stage and hydroperiod. The agencies agree that moving water out of the Model Lands through FPL's mitigation bank culverts to the tidal wetlands is preferable to drainage via the S-20 water control structure. The S-20 operations change is expected to make additional water available for release through the FPL culverts.
- South Dade Conditions: Southern Glades and Eastern Panhandle - Tibebe Dessalegne (SFWMD) reviewed the features in south Dade that included the detention areas, pumps and canals. He noted that available storage is the biggest issue. He provided an overview of the south Dade conditions to include: water management in the L-31N/C-111 canals; rainfall contributing areas; volumes of rainfall; inflow and outflow through canal reaches and effect on stage; and operations of the S-18C and S-197 structures to include recent performance and COP.
- Biscayne National Park - Melody Hunt (NPS) reviewed the annual rainfall data for south Florida adding that they have more than 120 years of rainfall record. This is valuable given that rainfall is highly variable in south Florida. The quantity, quality, timing and distribution of freshwater inflow is altered. The system has reduced wetlands and available storage, compressed natural areas and reduced connectivity between bay and coast near canals, reduced water table, saltwater intrusion and vaand high salinity. Historically this area was an estuarine ecosystem with a full range of salinity. Freshwater surface and groundwater throughout most of the year supported a wide range of flora and fauna. She reviewed the current conditions which are largely marine. The ecology in the Biscayne Bay, including species composition and life cycles in both the nearshore and the reef, has been affected. BBSEER is a very important project for Biscayne Bay and BNP and all the nearshore and coastal areas of BNP fall within the project boundaries.
- Eastern Panhandle of Everglades National Park - Melody Hunt (NPS) reviewed the freshwater inflow, direct rainfall and managed overland flow in the Eastern panhandle of ENP which falls within the south western area of the BBSEER project. The habitats and features are inflow dependent from the C-111 managed system. The Eastern Panhandle is an important area to south Florida ecosystem restoration and constitutes a major pathway for freshwater to reach coastal bays. New projects and operating plan do not use current or future sea level rise. The white zone has not expanded in the panhandle as much as the Model Lands indicating the freshwater does make a difference. The key is to keep the transition slow, ensure the landscape does not go hypersaline.

- Model Lands and Saltwater Intrusion – Scott Burns (FP&L) noted he is the working on the restoration and remediation of the Turkey Point cooling canal system. As owner of approximately 25,000 acres, FP&L has a major role in the Model Lands. In addition to power generation, FP&L is restoring and preserving over 15,000 acres of fresh and marine wetlands including the Everglades Mitigation Bank. It is the largest source of hydrologic, water quality and ecologic data in the Model Lands region. FP&L maintains the most extensive groundwater, surface water and ecological monitoring network in the region, collecting over 4.5 million data values per year. The physiography of the Model Lands basin makes it vulnerable to coastal flooding and saltwater intrusion. While the rate of inland saltwater interface movement is currently declining, it could change as sea level continues to rise at a rapid rate. Vulnerability to coastal saltwater intrusion is increasing and the effects of sea level rise are more apparent closer to the coastline. Frequency and duration of sea water encroachment into L-31E canal is increasing as bay stage increases.
- Biscayne Bay Aquatic Preserves - Laura Eldredge (FDEP) *note no power point. She noted the two aquatic preserves are almost 69,000 acres and were enacted by the Florida Legislature in 1974 and 1975. They are the two highest protected preserves in the entire state which makes them unique in their designation due to more stringent environmental protections. The primary intent of the aquatic preserves is to restore back to historic conditions and continue to preserve within that historic state. She reviewed the preserves' boundaries, hydrology and discharges.

- d. **Discussion & Interactive Q&A via Chat Box** (please refer to the transcript for the Q&A's) Carrie Beeler and Eva Velez moderated this session. The chat will be posted by OERI as part of the meeting materials so that any remaining questions can be answered by the USACE and the SFWMD.

Alternative Water Supply Sources, Reuse and Resilience – Virginia Walsh, Miami Dade Water and Sewer Department (WASD) provided an overview of Miami-Dade's WASD system; a summary of the south Dade Water Reclamation Project; a summary of County-FPL Reuse Agreement; and the current available reuse for BBSEER. All the wellfields and water treatment plants are to the west and were designed that way to be west of the saltwater intrusion line. The South District Wastewater Treatment Plant would be the plant that could provide reuse for BBSEER. Aquifer recharge challenges in Miami Dade County include regulatory and economic, geographic position between two ecologically sensitive national parks, unique connectivity between the Biscayne aquifer and the surrounding water resources and requires significant higher level of treatment. In the past they have had to meet Outstanding Florida Waters – Antidegradation Standards which has made reuse for Miami Dade County extremely expensive.

- e. Local Flood Control System – Alberto Pisani (Miami Dade Division of Environmental Resources Management (DERM) reviewed current and ongoing studies the county has undertaken to inform their short-term and long-term flood protection planning for Miami-

Dade. They are updating the Miami-Dade Water Control Map which establishes guidelines and requirements for designing water control facilities and the Miami-Dade County Flood criteria which sets the minimum finished grade elevation of developed sites, secondary canals, and crown and/or grade of roadways.

6. **Strategy for Incorporation of Future Sea Level Change Climate Change: Future Without and Sea Level Rise** - Jason Engle (USACE) and Carolina Maran (SFWMD) highlighted the other studies that are ongoing within the same footprint as BBSEER, to include: Miami-Dade CSRM 'Back-Bay'; South Atlantic Coastal; and the Southeast Florida Climate Compact – 2019 Unified Sea Level Rise Projection. These studies have provided consistent findings: future sea level change is uncertain; infrastructure resiliency must be elevated across a range of sea level change scenarios; and region is highly vulnerable to sea level change. BBSEER will build upon these studies.
7. **Discussion & Interactive Q&A via Chat Box** (please refer to the transcript for Q&A's) - Eva Velez moderated this session.

8. Public Comment

Irela Bague (Biscayne Bay Regional Restoration Coordination Team (BBRRCT) member and the Greater Miami Chamber of Commerce) – thanked the TF for hosting this very information workshop and the stakeholders for getting educated as the project moves forward. Biscayne Bay is an essential part of Miami Dade County's economy and a large part of their prosperity comes from property values, trade, tourism, and fishing, all of which depends on a healthy bay ecosystem. Miami-Dade County has been a critical partner for this CERP project including providing significant funding towards land acquisition. BBSEER is the only project that will help restore and re-hydrate Biscayne Bay and Biscayne National Park. It is going to be essential to include combinations of project features to capture and distribute excess water. It is also important to consider water re-use and canal enhancements that would be helpful to increase water availability and conveyance to Biscayne Bay.

Joan Lawrence (Miami-Dade County resident) thanked everyone involved in this workshop which has been extremely informative. She is encouraged to see that they are looking at some creative ways to use re-use. She has long hoped they would figure this out so that it would be less expensive for any one entity. BBCW is the only project to directly benefit Biscayne Bay and Biscayne National Park. The bay is a major economic driver for Miami Dade County. She has long heard that additional freshwater will retard both sea-level rise and saltwater intrusion. She will be looking forward to seeing the analysis on supplemental water for the bay.

Laura Reynolds (Town of Cutler Bay) noted her town serves on the PDT and they are very excited to see benefits from BBSEER. They are most excited with the recreation component and they are working to acquire the 9 acres adjacent to the area purchased by the SFWMD in 2010.

It would be the perfect place to and asked for the opportunity to present some of those ideas at some future point.

9. Closing Comments and Adjourn

Adam Gelber thanked everyone for participating adding that Biscayne National Park means a lot to a lot of different people. All the information from the workshop will be posted on the Everglades.gov website. James Erskine also thanked the staff from the various agencies, the public and OERI for all the work behind the scenes.

Workshop adjourned at 2:08PM