

Delivering Leading-Edge Solutions

SFWMD C-8 AND C-9 WATERSHEDS FLOOD PROTECTION LEVEL OF SERVICE ADAPTATION PLANNING AND MITIGATION PROJECTS STUDY

Date: April 18, 2022

Time: 2:30 PM - 3:30 PM

Subject: Bi-Weekly Meeting Minutes (Meeting #22)

Attendees Highlighted:

- Hongying Zhao, SFWMD
- Ana Carolina Maran, SFWMD
- Nicole Cortez, SFWMD
- Akin Owosina, SFWMD
- Ann Springston, SFWMD
- Lichun Zhang, SFWMD
- Matahel Ansar, **SFWMD**
- Larry Brion, SFWMD
- Carol Ballard, **SFWMD**
- Ruben Arteaga, SFWMD
- Sashi Nair, **SFWMD**
- Francisco Pena Guerra, **SFWMD**
- Shahana Mona, SFWMD
- Vijay Mishra, SFWMD

- Irela Bague, Miami Dade
- Marina Blanco-Pape, Miami Dade
- Alberto Pisani, Miami Dade
- Gregory Mount, Broward
- Kevin Hart, SBDD
- Susan Bodmann, Broward
- Jennifer Jurado, Broward
- Rajendra Sishodia, Broward
- Virginia Walsh, WASD
- Omar Abdelrahman, RER
- Pamala Sweeney, RER
- Katherine Hageman, RER
- Valentina Caccia, RER
- Michael Zygnerski, Broward
- Karina Cordero, RER
- Christian Kamrath, RER

- Michael DelCharco, Taylor Engineering
- Angela Schedel, Taylor Engineering
- Pat Lawson, Taylor Engineering
- Joseph Wilder, Taylor Engineering
- Stephanie Massey, Taylor Engineering
- Lynette Cardoch, Moffatt & Nichol
- Peter Sahwell, Nova Consulting
- John Loper, Anclote Consulting
- David Key, **ESP Florida**
- Nathan Slaughter, ESP Florida
- Sarah Hamm, Moffatt & Nichol
- Elton Smith, Taylor Engineering

Notes:

- 1. Meeting Kickoff
 - Roll Call
- 2. Presentation: M2A Preliminary Results
 - Presented results last meeting 1500 cfs pump and improving downstream structure
- 3. Scenario M2B Discussion
 - Goal is 25-vr level of service with SLR2
 - Model development discussion larger pump and raising berms
 - Looking at what happens if we raise the berms looked at existing conditions and see that the high water levels in the canal cause flooding near canal.
 - i. Adding elevations to the berms then causes ponding since the rainfall cannot drain into the canal easily. Had to create new branches and added 1-way culverts. The timing changes causes some flooding near the banks.









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- ii. Looked at difference between 100-yr SLR2 values. Red colors will lowering the flooding, blues were higher elevations. There are still some areas that show flooding.
 - HZ maybe you could do some deep well injection at those location that are showing residual flooding.
- iii. We will compare to current conditions
- iv. Joe ran M2A and raised embankments. So, not really an M2B run, yet. Just looking at performance. This is 100-yr comparison using a 1,500 cfs pump.
 - This step allowed us to make sure that the modeling approach was correct we checked it with M2A before just putting in larger pump for M2B.
- v. Next will be M2B run with 25-yr and SLR2. M2B has larger pump than M2A. We'll be happy to get back to current conditions.
- vi. Katherine Hagerman has there been any calculations about acreage of those low-lying areas? Are these developed lands or parks? Yes, we'll look at that. In fact, Task 3 will look at that with flood damage assessment.
- vii. For M2B, Joe said probably looking at 2,000 cfs pump. Would you want odd pump sizes? Well, Diesel pumps are 500 cfs but District does use electric 100 cfs pumps.

viii.

4. Overview of Task 3 – Flood Damage Assessment

- Slide overview of concept
- Katherine (Katy) could we use the USACE cost estimating tools so they can match with what the USACE is doing? Especially for floodproofing.
- Carolina sent the database from USACE for the backbay study. We need to compare the curves they are using with our curves.

5. Additional action Items from Previous Meeting

- Schedule update
- Mitigation Project Cost Development
 - i. Carolina sent a USACE database for cost generation







