

Palm Beach County Review and Evaluation of FEMA's Coastal Flood Risk Study Kick-Off Meeting | Summary

Attendees:	Jeremy McBryan (Palm Beach County) David Swigler (Baird & Associates) Gordon Thomson (Baird & Associates) via phone Onur Kurum (Baird & Associates) via phone Lynette Cardoch (Moffatt Nichol) via phone	Task Order:	1778-01
		Date:	January 24, 2020
		Time:	10:30am – 11:30am EST
		Location:	301 N. Olive Ave, 11 th Floor West Palm Beach, FL

Minutes

Agenda item: Project Overview

The County is looking for a technical review of FEMA's preliminary Coastal Flood Risk Study and Flood Insurance Rate Maps (FIRMs) issued December 20, 2019. The County wants to verify that the proposed coastal flood maps are accurate and incorporate appropriate data and methods. Baird's technical review will provide the County with information to decide whether to pursue an appeal (if any), but additional analysis/modeling, which is beyond the scope of the review, may be required to support an appeal.

Agenda item: Team & Coordination

- Palm Beach County (PBC): Jeremy McBryan will be the primary point of contact (POC) for PBC. Doug Wise will be a good resource during execution of the work as the PBC Floodplain Administrator. Deliverables and invoices to be submitted to Jeremy.
- Baird: David Swigler is the project manager and will be the POC for Baird. Onur Kurum will be the leading the technical evaluation of the modeling and mapping.
- Moffatt Nichol (MN): Lynette Cardoch will be the POC. MN will be reviewing FEMA's digital elevation model (DEM) development and comparing it to the County's 2016 Light Detection and Ranging (LiDAR) survey. MN will also be providing input throughout the review to leverage MN's FEMA experience outside the County.
- FEMA: BakerAECOM is FEMA's Mapping Partner. Communication amongst all members of the team is encouraged, but PBC should be included on emails and kept informed as the work progresses. PBC will facilitate establishing lines of communications.

Agenda item: Schedule

- February 2
 - Kick-off Meeting Summary (Task 1) to be provided to PBC
- February 4
 - Community Consultation (CCO) Meeting. PBC, Baird, and MN plan to attend.
 - Open House (OH) Meeting. Baird plans to attend.
 - Draft Work Plan (Task1) to be provided to PBC for review prior to finalizing.

- The remainder of the schedule will be coordinated closely with PBC and is subject to the anticipated start of FEMA's appeal period, receipt of data and reports from FEMA/AECOM, and stakeholder coordination.
- Baird will keep PBC informed of the progression of the work and manage the schedule to align deliverables with FEMA's appeal period and the scope of work. PBC will be provided the opportunity to review interim drafts of deliverables as appropriate prior to final submittal.

Agenda item: Task 2 – Topographic Elevation Data Evaluation

- PBC has received from AECOM several versions of the DEM that was reportedly used for the FEMA study. These versions have been provided to Baird. Baird noted that the DEM's did not include metadata so it was not clear on what was being provided. PBC was having the same issues and had been coordinating with BakerAECOM to resolve them. Baird will coordinate with PBC's Geographic Information System staff to confirm that the latest data had been received.
- PBC will provide Baird with the County's 2016 LiDAR data for comparison with FEMA's DEM for the Palm Beach County.
- PBC noted that there was unconfirmed speculation that FEMA had changed the DEM during the study (between the ADCIRC modeling and FIRM development). Baird and MN would keep this in mind in reviewing the various data sets.
- PBC may have access to stormwater, sanitary sewer, and other infrastructure surveys from other municipalities within the County. If so, this information would be provided as another method of verifying FEMA's DEM.
- PBC requested that the comparison between FEMA's DEM and the County's 2016 LiDAR consider individual parcels affected by elevation differences greater than a given threshold. For example, an analysis of the number of parcels affected within the County and within unincorporated areas would be helpful in determining the magnitude of the differences.

Agenda item: Task 3 – FEMA and Stakeholder Coordination

- Baird's scope includes attending 5 formal (2-hour) meetings.
- Baird and MN plan to attend FEMA's CCO meeting on February 4. Baird plans to attend FEMA's OH meeting the evening of February 4 as well.
- This leaves 3 more future meetings to be scheduled during execution of Baird's review. Meetings will be decided later, but may include meetings with County staff, other municipalities, and FEMA/BakerAECOM.

Agenda item: Task 4 – Review and Summarize Coastal Study Documents and Data

- FEMA's Coastal Study was updated to assess flood risk from 3 flooding sources particularly affected by storm surge. This included the Atlantic Ocean, Intracoastal Waterway, and Loxahatchee River.
- PBC was told that FEMA's update would consider how coastal and inland flooding sources interacted in order to access flood risk at the boundary of these processes. Baird explained that upon initial review of the documents it did not appear that FEMA's update reevaluated inland flooding sources, but Baird would keep this in mind during its review.
- Numerous reports and documents were generated by FEMA as part of the Coastal Study. This includes, but is not limited to, discovery reports, Flood Insurance Study (FIS) Reports, FIRMs, FEMA standards and technical references, and intermediate data submittal (IDS) reports.
- Baird plans to review various reports and digest them down into salient points that pertain to the technical findings that would be of interest to PBC in determining whether to pursue an appeal (if any).

Agenda item: Task 5 – Storm Surge, Wave Model and Flood Map Evaluation

- PBC had received from AECOM the base map layers shown in the FIRMs. PBC had provided this data to Baird. Baird had quickly looked at the file structure and it generally appeared complete but would not know until getting into the details.
- AECOM planned to provide FEMA's IDS reports to PBC, but the reports had not been received to date. The supporting data sets (7+ terabytes) had not been requested.
- The supporting data sets are critical to Baird's technical review of the modeling and flood mapping. Baird will coordinate with BakerAECOM to obtain the supporting data sets.
- The FIS report stated that the study included "professional engineering and mapping methodologies that were agreed upon by FEMA and Palm Beach County." Baird requested a copy of the methodologies that PBC agreed to. PBC stated that it was not aware of any formal document detailing the methodologies that were agreed to by PBC and that it was likely a generic statement in the report but would check internally.
- PBC requested that Baird's work include a review of the primary frontal dune and how it was defined. Baird will look at the dune elevation in the DEM in comparison to wave runup elevations and the defined erodible/non-erodible segments.
- Baird will be reviewing the data and methods used to develop the FIRMs. FEMA has guidelines for the mapping, but the mapping still requires judgement. Baird will evaluate and attempt to determine if there are any deficiencies in the development of the FIRMs.

Agenda item: Task 6 – Final Summary

- Baird will summarize the previous tasks and provide recommendations on items that may be of interest to PBC in pursuing further.
- If the review suggests that an appeal is warranted, Baird will provide insight on the additional strategies, analyses, modeling, and/or tasks that may be needed to support an appeal.