

# STORMWATER MANAGEMENT

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www.dupageco.org/swm

Watershed Management

Water Quality

Floodplain Mapping

Regulatory Services

Flood Operations & Maintenance

### TECHNICAL GUIDANCE MEMORANDUM

DATE:

September 5, 2017

TO:

Municipal Engineers Group

Municipal Engineers Discussion Group

Clayton Heffter, Permitting Manager, Stormwater Management

FROM:

Anthony J. Charlton, P.E., Director, Stormwater Management

RE:

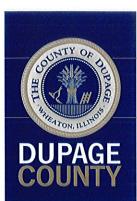
Use of newly released revised preliminary flood plain study and maps

On June 1, 2017, the Federal Emergency Management Agency (FEMA) released revised preliminary Flood Insurance Rate Map (FIRM) panels and a revised preliminary Flood Insurance Study (FIS) for all communities within DuPage County. Incorporated into the preliminary FIRM/FIS are twenty four (24) watershed studies developed under the direction of Stormwater Management.

The DuPage County Countywide Stormwater and Flood Plain Ordinance (Stormwater Ordinance) establishes criteria for determining which flood plain elevations are to be used in regulating new construction when new studies and maps are released. These criteria were incorporated into the Stormwater Ordinance in order to stay compliant with federal, state, and local development standards when new flood plain information is released. The use of best available information is necessary to make new construction reasonably safe from the risk of flooding and to ensure that new construction is compliant with regulations so that any damage or disaster assistance is available if it becomes necessary after a flood emergency. Non-compliant construction may be barred from such assistance.

The attached Technical Guidance explains the criteria for using the new flood plain maps and study for regulating new construction. Following Stormwater Ordinance requirements, a public notice was published in the Daily Herald on September 1, 2017 informing the general public that the higher of the elevations as well as the wider floodway location established by the current effective FIRM panels and FIS and the revised preliminary FIRM/FIS shall be used for the purpose of regulating new construction no later than September 8, 2017. Please contact me if you have any questions.





## STORMWATER MANAGEMENT

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September 4, 2017

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The current DuPage County Countywide Stormwater and Flood Plain Ordinance (CSFPO) effective April 23, 2013, establishes criteria for enforcing base flood elevations (BFEs) created by hydrologic and hydraulic analysis. On June 1, 2017, the Federal Emergency Management Agency (FEMA) released revised preliminary Flood Insurance Rate Map (FIRM) panels and a revised preliminary Flood Insurance Study (FIS) for all communities within DuPage County. The revised preliminary FIRM/FIS will supersede the preliminary FIRM/FIS released June 3, 2015. Incorporated into the revised preliminary FIRM/FIS are minor changes made in accordance with a 30-day public comment period held for the preliminary FIRM/FIS from July 29, 2015 to August 27, 2015, as well as the twenty four (24) watershed studies utilizing Full Equation Modeling (FEQ) in conjunction with peak-to-volume statistical analysis (PVSTATS). Pursuant to Article X of the CSFPO, it is necessary to establish guidance regarding the use of new base flood elevations for determining the flood protection elevation (FPE) for regulating new construction, and where appropriate, for compensatory storage.

#### Background Information:

In regard to establishing the FPE, Section 15-80.A of the CSFPO contains the following criteria:

- 15-80.A The BFE for purposes of establishing the low opening on New Construction of Buildings shall be taken from the higher of BFEs established by the current regulatory profile, or elevations established and published by the Director which meet the following conditions:
  - 15-80.A.1 The Director certifies that adequate review and quality control has been performed on the hydrologic/hydraulic modeling, and BFEs have been established using acceptable methodology; and
  - 15-80.A.2 The Director notifies an affected Community within the studied reach and makes available to that Community working input files for the hydrologic/hydraulic model; and
  - 15-80.A.3 The Director publishes notice that the model will be used for the purpose of regulating new Building construction.



Technical Guidance Memorandum - Utilization of Revised Preliminary FIRM and FIS for Purposes of Regulating New Building Construction
September 4, 2017
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#### Guidance:

The process leading up to the release of the revised preliminary FIRM panels and revised preliminary FIS on June 1, 2017 included direct communication between DuPage County Stormwater Management and each of the communities within the jurisdiction of the CSFPO to review and discuss the initial draft maps and provide preliminary feedback. A comprehensive review and subsequent approval was obtained from the Illinois Department of Natural Resources, Office of Water Resources (IDNR-OWR). The preliminary FIRM panels and preliminary FIS were completed by Illinois State Water Survey (ISWS) in conjunction with FEMA. The preliminary FIRM/FIS was released on June 3, 2015. A 30day public comment period was completed for the preliminary FIRM/FIS on August 27, 2015. The comments received during the initial public comment period were analyzed in detail by all cooperating agencies involved, and changes were made where appropriate to the preliminary FIRM/FIS. It is therefore the interpretation of DuPage County Stormwater Management that all the necessary steps have been taken to satisfy the conditions of Sections 15-80.A.1 and A.2 of the CSFPO. Therefore, by notice of this technical guidance memorandum and in accordance with 15-80.A.3, the higher of the elevations established by the current effective FIRM panels and FIS, and the revised preliminary FIRM/FIS, is considered regulatory as the BFE for new construction flood protection. The higher BFE will continue to be used for determining the FPE for new building construction until a Letter of Final Determination (LFD) is received from FEMA for the revised preliminary FIRM and FIS, and all the information is subsequently adopted for regulatory purposes in DuPage County. Additionally, the higher of the elevations as well as the wider floodway location established by the current effective FIRM panels and FIS and the revised preliminary FIRM/FIS shall be used for the purpose of regulating new construction. The Director of Stormwater Management published notice in the Daily Herald on September 1, 2017 that the higher of the BFEs and the wider floodway location shall be used for the purpose of regulating new construction no later than September 8, 2017.

The revised preliminary FIRM and FIS are available on the ISWS website at www.illinoisfloodmaps.org or directly on the FEMA site at http://www.fema.gov/viewyour-communitys-preliminary-flood-hazard-data-0. If accessing the FEMA website directly, select the "preliminary flood data search tool", then complete the drop down menu choices (Illinois, DuPage County, Get Preliminary FEMA Map Products). The current 30day comment period commenced with two open house meetings scheduled July 27, 2017. Community officials met with representatives from the ISWS, FEMA, IDNR, and DuPage County Stormwater Management from 1:30 to 3:30 pm. The same representatives were available to the general public from 4 to 8 pm to answer questions about the revised preliminary maps and data. A short presentation by the Illinois State Water Survey (ISWS), FEMA, and DuPage County Stormwater Management was given as part of the community officials' open house, and all flood plain map panels were on display for viewing. Additional information regarding how the revised preliminary FIRM/FIS should be applied and adopted may be found in FEMA Bulletin 1-98 in addition to the CSFPO. Requests to obtain working input files for any of the FEQ/PVSTATS models incorporated into the preliminary FIRM/FIS may be made directly with DuPage County Stormwater Management, as well as any requests to obtain FEQ and/or PVSTATS elevations not incorporated into the FEMA revised preliminary FIRM/FIS for consideration as best available information.