

COUNTY OF KANE

ENVIRONMENTAL AND BUILDING MANAGEMENT

Timothy Harbaugh, P.E., DEE, Director



County Government Center

719 Batavia Avenue
Geneva, IL 60134

www.co.kane.il.us

Environmental Management: (630) 208-5118

FAX: (630) 208-5137

Building Management: (630) 444-1068

FAX: (630) 587-1688

Date: 8/14/08

TO: Kane County Stormwater Administrators
Kane County Village / City Engineers

FROM: Tim Harbaugh, P.E., DEE, Director

RE: Requirement to Adopt Revisions to the Kane County Stormwater Ordinance

The Federal Emergency Management Agency (FEMA), together with the Illinois Department of Natural Resources, are completing the Map Modernization, "Map-Mod" initiative in Kane County, part of FEMA's nationwide update of Flood Insurance Rate Maps (FIRMs). As part of the Map-Mod process, FEMA completes a detailed review of County Stormwater Ordinances for deficiencies and other required revisions to ensure all Stormwater Ordinances meet the minimum requirements of the National Flood Insurance Program (NFIP).

FEMA, IDNR, and others deem necessary the attached revisions (also available at <http://www.co.kane.il.us/kcstorm/>) to the Kane County Stormwater Ordinance to comply with the NFIP and other state regulations (letter from FEMA also attached). Therefore, ***every certified municipality is being asked to adopt these revisions to remain active in the NFIP.*** Failure to adopt these revisions by the required date could result in FEMA dropping the community from the NFIP. If a community is dropped from the NFIP, every existing flood insurance policy in the community could be cancelled, no new flood insurance policies would be written, some federal or state loans could be called due, and the municipality would not be eligible for certain types of federal disaster relief.

FEMA's due date to adopt these revisions is the date when the new maps will become effective. That date has not yet been determined. **I respectfully request every certified municipality to adopt these revisions by December 1, 2008**, and send an executed copy of the adoption resolution to me for submittal to FEMA.

If you have any questions on these revisions to the Kane County Stormwater Ordinance, please contact me. For questions related to the Map Modernization process in Kane County, see <http://www.co.kane.il.us/kcstorm/DFIRMS.asp>, or contact Karen Kosky at 630-406-8477 / koskykaren@co.kane.il.us.

cc: Karen McConnaughay
Stormwater Management Committee
Phil Bus
Qualified Engineer Review Specialists (without attachments)
Qualified Wetland Review Specialists (without attachments)
Karen Kosky

STATE OF ILLINOIS

COUNTY OF KANE

ORDINANCE NO. _____

AMENDING THE KANE COUNTY STORMWATER MANAGEMENT ORDINANCE

WHEREAS, pursuant to 55 ILCS 5/5-1062, the Kane County Board adopted Res. No. 97-07 establishing the Kane County Stormwater Management Committee, for the purpose of preparing a comprehensive countywide stormwater management plan and stormwater management ordinance (the "Ordinance"); and

WHEREAS, the Ordinance was adopted by the County Board by the passage of Ordinance No. 00-312 on November 14, 2000; and

WHEREAS, additional flood insurance and floodplain related, and other amendments to the Ordinance are necessary;

NOW, THEREFORE, BE IT ORDAINED by the Chairman and the Kane County Board that the Kane County Stormwater Ordinance, as amended, is hereby further amended as follows:

1. Section 104 is amended as follows:

§ 104. Definitions

In this ordinance -

(31) ***development*** means any man-made change to the land and includes -

(G) the installation of a manufactured home on a site, the preparation of a site for a manufactured home, or the ~~installation~~ placement of a recreational vehicle on a site for more than 180 days;

(39) ***existing manufactured home park*** means a development for the placement of manufactured homes for which, at a minimum, the installation of utilities, the construction of streets, and either the final site grading or the pouring of concrete pads was completed before the effective date;

(40) ***expansion of existing manufactured home park*** means the installation of utilities, or the construction of streets, or final site grading, or pouring of concrete pads in connection with the development of additional lots within an existing manufactured home park;

(41) ***farmed wetlands*** means wetlands that have been identified as farmed wetlands ~~by NRCS in a Certified Wetland Determination~~ in accordance with the National Food Security

Act Manual (NFSAM) methodology and the United States Army Corps of Engineers - Chicago District methodology;

(47) ***FIRM*** or ***Flood Insurance Rate Map*** means the current version of a map published by FEMA on which FEMA has delineated both the special flood hazard areas and the risk premium zones applicable to a community, together with any amendments, additions, revisions or substitutions made thereto or therefor by FEMA at any time;

(48) ***FIS*** or ***Flood Insurance Study*** means ~~a study of flood discharges and flood profiles~~the current version of an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations (or an examination of flood-related erosion hazards) for a community adopted and published by FEMA, together with any amendments, additions, revisions or substitutions made thereto or therefor by FEMA at any time;

(50) ***floodplain violation*** means the failure of a structure or other development to be in compliance with the floodplain management regulations of this ordinance, including the failure to have the elevation certificate, other certificates, or other evidence of compliance required in Article 4 until such time as the required documentation is provided;

(61) ***hemimarsh*** means an isolated wetland dominated on the edges by tall emergent vegetation with an interior area of shallow open water;

(62) ***highest adjacent grade*** means the highest natural elevation of the ground surface next to the proposed walls of a structure prior to construction;

(59) ~~***hemimarsh*** means an isolated wetland dominated on the edges by tall emergent vegetation with an interior area of shallow open water;~~

(77) ***lowest floor*** means the lowest floor of the lowest enclosed area of a structure (including basement) but does not include an unfinished or flood resistant enclosure suitable solely for parking of vehicles, building access, or storage in an area other than a basement, provided, however, that such enclosure is not built so as to render the structure in violation of the applicable requirements of § 407.

(87) ***new construction*** means development;

(88) ***new manufactured home park*** means a development for the placement of manufactured homes for which the installation of utilities and the construction of streets, and either the final site grading or the pouring of concrete pads was completed before the effective date;

(110) ***recreational vehicle*** means a vehicle that is (a) built on a single chassis, (b) 400 ft.² or less when measured at the largest horizontal projection, (c) designed to be self-propelled or permanently towable by a light duty truck; and (d) designed primarily as temporary living

quarters for recreational camping, travel or seasonal use and not for use as a permanent dwelling;

(125) **SFHA or Special Flood Hazard Area** means ~~an area having~~ the land in the floodplain within a community that is subject to a 1% or greater chance of flooding in any given year and has special flood, mudslide or mudflow, or flood related erosion hazards and is shown on an FHBM or FIRM as Zone A, AO, A1-30, AE, A99, AH, VO, V1-30, VE, V, M or E;

(127) **start of construction** (for other than new construction or substantial improvements under the Coastal Barrier Resources Act (Pub. L. 97-348)) with respect to new construction means the date the building permit was issued, provided the first placement of a permanent improvement on the site (such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation), or the placement of a manufactured home on a foundation, occurs within 180 days; but does not include land preparation (such as clearing, grading and filling), nor the erection of temporary forms, nor the construction or installation of accessory structures such as garages or sheds not occupied as a dwelling unit and not part of the main structure; with respect to substantial improvements, start of construction means the first alteration of any wall, ceiling, floor or other structural part of a structure, whether or not the alteration affects the external dimensions of the structure;

(131) **substantial damage** means damage to a building from any cause whereby the cost of restoring the building to its original condition is 50% or more of its market value prior to the damage;

(132) **substantial improvement** means (a) an improvement made to a building structure the cost of which is greater than or equal to 50% or more of building's the structure's market value before the start of construction of the improvement; (b) the reconstruction or repair of a building structure, the cost of which is greater than 50% or equal to 50% more of the building's structure's market value before the start of construction of the reconstruction or repair; or (c) an addition to a building structure the cost of which is greater than 50% or equal to 50% more of the building's structure's market value before the start of construction of the addition, or any addition that increases the floor area by more than 20%; or (d) any work done to a structure that has suffered substantial damage; but not (i) any work done to a structure to correct existing violations of State or local health, sanitary or safety codes identified and determined by the local code enforcement official to be the minimum necessary to assure safe living conditions; or (ii) any work done to an historic structure;

2. Section 201 is amended as follows:

§ 201. General stormwater requirements

(b) Analysis and design of all stormwater facilities required for a development shall -

(3) ensure that the site is reasonably safe from flooding.

3. Section 404 is amended as follows:

§ 404. Floodplain, regulatory floodplain, BFE and regulatory floodway locations

(a) The BFE shall be delineated on the site topography to establish the regulatory floodplain area limits for regulation under this ordinance. Regulatory floodplains shall be delineated on the site map from the current FEMA FIRM, FBFM or LOMR and include those areas of the SFHA which are not regulatory floodplains. The current version of the maps adopted and published by FEMA for regulation under the NFIP together with any amendments, additions, revisions or substitutions thereto or therefor adopted and published by FEMA at any time in the future are hereby referred to, adopted, and made part hereof as if fully set out in this ordinance. A list of the current regulatory maps for the County to be consulted is maintained by the Director. ~~All amendments or revisions to any FIRM or FBFM, any IDNR-OWR or FEMA-approved revision to the BFE, and any IDNR-OWR or FEMA approved FIS made or adopted after the date of this ordinance are hereby referred to, adopted and declared to be part of this ordinance as though fully set forth, it being the specific intention of the Kane County Board by the adoption of this ordinance to adopt by reference each and every such amendment or revision concurrently with its adoption by IDNR-OWR or FEMA.~~

(b)

(7) When none of the above apply but the proposed development consists of more than 50 lots or more than 5 acres, a study acceptable to the Administrator shall be provided for determination of a site-specific BFE.

(c)

(2) General criteria for analysis of flood elevations in the regulatory floodway are as follows:

(D) If the development will result in a change in the location of the regulatory floodway or a change in the BFE, the applicant shall submit the information required for the issuance of a CLOMR to IDNR/OWR and FEMA. A public notice inviting public comment on the proposed change in the BFE or location of the regulatory floodway will be ~~issued~~ published by IDNR/OWR or its designee before a CLOMR is issued. All communities adjacent to a watercourse alteration or revocation shall be notified of the proposed development. Filling, grading, dredging or excavating may take place upon issuance of a conditional approval from IDNR/OWR and the Administrator, provided that no encroachment increases the Base Flood Level ~~Elevation~~ more than 1/10 of 1 foot. No further development activities shall take place in the existing or proposed floodplain until a LOMR is issued by FEMA unless such activities meet all the requirements of §§ 403 through 413 of this ordinance. The Director shall be copied on all related correspondence.

4. Section 407 is amended as follows:

§ 407. Building protection standards

This section applies to all buildings located in the regulatory floodplain. However, most new and replacement buildings are not appropriate uses of the regulatory floodway.

(a) The lowest floor including basements of all new residential structures, substantially improved structures and additions shall be elevated at least to the FPE. An attached garage for a structure must be elevated at least six inches above the BFE.

(3) Fully enclosed areas in new construction and substantial improvements that are subject to flooding and are used solely for parking of vehicles, building access or storage in an area other than a basement shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing the entry and exit of flood waters. Designs shall be certified by a registered professional engineer or have a minimum of two openings having a total net area of not less than 1 in.² for every square-foot of enclosed area subject to flooding with the bottom of all openings no higher than 1 foot above grade. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic entry and exit of flood waters.

(c) Manufactured homes and recreational vehicles to be installed on a site for more than 180 days placed outside a manufactured home park or on a site in an existing manufactured home park in which a manufactured home has suffered substantial damage as a result of a flood shall be at or above the FPE and shall be anchored to resist flotation, collapse or lateral movement in accordance with the Illinois Manufactured Home Tie-Down Code (77 Ill. Adm. Code 870 (1999), as amended.) Manufactured homes placed or substantially improved in an existing manufactured home park shall be elevated so that the chassis is supported by reinforced piers no less than 36 inches in height above grade and securely anchored. Recreational vehicles to be installed on a site for more than 180 days, unless fully licensed and highway ready, shall be at or above the FPE and shall be anchored to resist flotation, collapse or lateral movement. In accordance with the Illinois Manufactured Home Tie-Down Code (77 Ill. Adm. Code 870 (1999), as amended).

(f) All new construction and substantial improvements shall employ anchoring to prevent flotation, collapse or lateral movement of the structure, use flood resistant materials, and be constructed by methods and practices that minimize flood damages.

(g) Where base flood elevation data are used within Zone A on the community's FHBM or FIRM, a record of the following shall be obtained and maintained by the Administrator:

(1) The elevation of the lowest floor (including basement) of all new structures and substantially improved structures; and

(2) The elevation to which the structure was floodproofed (if the structure has been floodproofed in accordance with §§ 407(a)(2), 407(b) and 407(f).)

(h) In FEMA Zones AO and AH drainage paths shall be provided around structures on slopes to guide water around and away from proposed structures.

5. Section 412 is amended as follows:

§ 412. Riverine Floodplain

These standards apply to riverine regulatory floodplains without a regulatory floodway. The applicant shall obtain approval from IDNR/OWR for all development, any portion of which is located within the regulatory floodplain (without a delineated regulatory floodway) with a tributary drainage area of 640 acres or more.

(c) If a development will alter or relocate a watercourse the applicant shall notify adjacent communities.

6. Section 413 is amended as follows:

§ 413. Bridge and culvert standards

These standards are for the construction, reconstruction, or modification of new construction of bridges, culvert crossings and roadway approaches located in the regulatory floodplain.

7. Section 414 is amended as follows:

§ 414. Requirements for wetland delineation

(a) Before any development in or near Waters of the U.S., or in or near isolated wetlands or farmed wetlands, a written report identifying and evaluating the boundaries, location, limits, area and quality of all onsite wetlands shall be submitted. The presence and limits of wetland areas shall be determined by a wetland delineation conducted in accordance with the 1987 Corps of Engineers Wetland Delineation Manual. Wetland delineations under this section shall be valid for three years. ~~The presence of farmed wetlands shall be determined by NRCS.~~

~~(b) Before any development on agricultural land, in addition to the onsite delineation required under the previous paragraph, a Certified Wetland Determination shall be obtained from NRCS.~~

8. Section 418 is amended as follows:

§ 418. Buffer requirements

The requirements of this section are not applicable to redevelopment projects on sites adjacent to the main channel of the Fox River. The requirements of this section are also not applicable to isolated wetlands or Waters of the U.S. that, in either case, are below the threshold size limitations for mitigation requirements under the COE § 404 permit program (currently, less than 0.2510 acres).

(a)

(3)

(B)

(ii) For all non-linear water bodies or ~~Waters of the U.S. designated as ADID or~~ wetlands with an FQI greater than 16, a minimum buffer width must be established in accordance with Table 418(a)(3)(B)(ii).

(iii) For ~~non-ADID~~ wetlands with an FQI of 7 to 16 a minimum buffer width must be established in accordance with Table 418(a)(3)(B)(iii).

(iv) For ~~non-ADID~~ wetlands with an FQI of less than 7 a minimum buffer width must be established in accordance with Table 418(a)(3)(B)(iv).

(b) Buffers shall be replanted or reseeded using appropriate predominately native deep-rooted vegetation, appropriately managed and maintained ~~following disturbance~~.

(e) If a buffer area is disturbed by permitted activities during construction, the buffer strip shall be stabilized in accordance with ~~§300~~ subsection (b) of this section.

9. Tables 418(a)(3)(B)(ii), 418(a)(3)(B)(iii) and 418(a)(3)(B)(iv) are amended as follows:

BUFFER WIDTH CALCULATION TABLES

Table 418(a)(3)(B)(ii) – High Quality Wetlands – FQI > 16

BUFFER RATIO	WETLAND AREA (Acres)	BUFFER AREA (Acres)	BUFFER WIDTH (Feet)
0.5	<u>0.10</u>	<u>0.050</u>	<u>15.0</u>
<u>0.5</u>	<u>0.25</u>	0.125	15.0
0.5	<u>0.50</u>	<u>0.250</u>	20.0
0.5	0.75	0.375	25.0
0.5	<u>1.00</u>	<u>0.500</u>	30.0
0.5	1.25	0.625	30.0
0.5	<u>1.50</u>	<u>0.750</u>	35.0
0.5	1.75	0.875	35.0
0.5	<u>2.00</u>	<u>1.000</u>	40.0
0.5	2.25	1.125	40.0
0.5	<u>2.50</u>	<u>1.250</u>	45.0
0.5	2.75	1.375	45.0
0.5	<u>3.00</u>	<u>1.500</u>	50.0
0.5	3.25	1.625	50.0
0.5	<u>3.50</u>	<u>1.750</u>	50.0
0.5	3.75	1.875	50.0
0.5	<u>4.00</u>	<u>2.000</u>	50.0
0.5	4.25	2.125	50.0
0.5	<u>4.50</u>	<u>2.250</u>	50.0
0.5	4.75	2.375	50.0
0.5	<u>5.00</u> or more	<u>2.500</u>	50.0

Buffer Ratio = % of total wetland area
 Wetland Area = Total on and offsite area of the wetland = (%*Acres)
 Buffer Area = Area of the buffer = (%*Acres)
 Buffer Width = $[\text{Area} * 43560] / 4 / [\text{Sqrt} (\text{Acres} * 43560)]$

Table 418(a)(3)(B)(iii) – Medium Quality Wetlands — $FQI \geq 7 < FQI < 16$

BUFFER RATIO	WETLAND AREA (Acres)	BUFFER AREA (Acres)	BUFFER WIDTH (Feet)
0.4	0.10	0.04	15.0
0.4	0.25	0.10	15.0
0.4	0.50	0.20	15.0
0.4	0.75	0.30	20.0
0.4	1.00	0.40	25.0
0.4	1.25	0.50	25.0
0.4	1.50	0.60	30.0
0.4	1.75	0.70	30.0
0.4	2.00	0.80	30.0
0.4	2.25	0.90	35.0
0.4	2.50	1.00	35.0
0.4	2.75	1.10	35.0
0.4	3.00	1.20	40.0
0.4	3.25	1.30	40.0
0.4	3.50	1.40	40.0
0.4	3.75	1.50	45.0
0.4	4.00	1.60	45.0
0.4	4.25	1.70	45.0
0.4	4.50	1.80	45.0
0.4	4.75	1.90	50.0
0.4	5.00 or more	2.00	50.0

Buffer Ratio = % of total wetland area
 Wetland Area = Total on and offsite area of the wetland = (%*Acres)
 Buffer Area = Area of the buffer = (%*Acres)
 Buffer Width = $[Area * 43560] / 4 / [\text{Sqrt} (Acres * 43560)]$

Table 418(a)(3)(B)(iv) – Low Quality Wetlands – FQI < 7

BUFFER RATIO	WETLAND AREA (Acres)	BUFFER AREA (Acres)	BUFFER WIDTH (Feet)
0.3	<u>0.10</u>	<u>0.030</u>	<u>15.0</u>
<u>0.3</u>	<u>0.25</u>	0.075	15.0
0.3	<u>0.50</u>	<u>0.150</u>	15.0
0.3	0.75	0.225	15.0
0.3	<u>1.00</u>	<u>0.300</u>	20.0
0.3	1.25	0.375	20.0
0.3	<u>1.50</u>	<u>0.450</u>	20.0
0.3	1.75	0.525	25.0
0.3	<u>2.00</u>	<u>0.600</u>	25.0
0.3	2.25	0.675	25.0
0.3	<u>2.50</u>	<u>0.750</u>	25.0
0.3	2.75	0.825	30.0
0.3	<u>3.00</u>	<u>0.900</u>	30.0
0.3	3.25	0.975	30.0
0.3	<u>3.50</u>	<u>1.050</u>	30.0
0.3	3.75	1.125	35.0
0.3	<u>4.00</u>	<u>1.200</u>	35.0
0.3	4.25	1.275	35.0
0.3	<u>4.50</u>	<u>1.350</u>	35.0
0.3	4.75	1.425	35.0
0.3	<u>5.00</u> or more	<u>1.500</u>	35.0

Buffer Ratio = % of total wetland area

Wetland Area = Total on and offsite area of the wetland = (%*Acres)

Buffer Area = Area of the buffer = (%*Acres)

Buffer Width = $[\text{Area} * 43560] / 4 / [\text{Sqrt} (\text{Acres} * 43560)]$

10. Section 504 is amended as follows:

§ 504. Plan set submittal

(b) General Plan View Drawing:

(10) existing Waters of the U.S. including wetlands, ~~a certified wetland determination obtained from NRCS if the development occurs on agricultural land~~ farmed wetlands and aquatic resources identified in ADID, and required buffers;

11. Section 702 is amended as follows:

§ 702. Offenses

(a) Any person who violates, disobeys, omits, neglects, ~~refuses to comply with~~, or resists the enforcement of any provision of this ordinance (***ordinance violation***), or any requirement or condition in any permit issued pursuant to this ordinance (***permit violation***), or any requirement or condition contained in Article 4 (***floodplain violation***), and, in the case of a permit violation or a floodplain violation, fails to correct such violation, omission or neglect, or cease such disobedience, refusal or resistance after notice and reinspection as provided below, shall be guilty of an offense under this ordinance.

12. Section 1000 is amended as follows:

§ 1000. Responsibility for administration

(c) Each community shall remain solely responsible for its standing in the National Flood Insurance Program, including—

(2) the notification of the Director, FEMA, IDNR-OWR, COE, NRCS, the Soil and Water Conservation District, the United States Fish and Wildlife Service, the Illinois Environmental Protection Agency, and the United States Environmental Protection Agency of any proposed amendment to this ordinance; and

(3) The adoption pursuant to §404(a) of the most current version of the maps adopted and published by FEMA for regulation under the NFIP and the automatic adoption of any amendments, additions, revisions or substitutions thereto or therefor.

13. Section 1002 is amended as follows:

§ 1002. Duties of Administrator

The Administrator shall -

(o) ensure that all wetland impacts have been mitigated; and

(p) maintain records of the lowest floor and floodproofing elevations for new construction and substantial improvements where BFE data are used in FEMA Zone A.

14. Section 1102 is amended as follows:

§ 1102. Filing and contents of petition for certification

A petition for certification shall be filed with the Director. The petition need not be on any particular form but, at a minimum, shall set forth and be accompanied by -

(a) the agreement of the corporate authorities of the community to adopt, if certified, this ordinance by reference, including in such ordinance of adoption language expressing the intent of the corporate authorities of the community to automatically adopt by reference all amendments to this ordinance adopted by the County at any time in the future, and specifically to automatically adopt by reference the most current version of the maps adopted and published by FEMA for regulation under the NFIP;

15. The caption of Article 13 is amended as follows:

ARTICLE 13 – FEE-IN-LIEU OF SITE RUNOFF STORAGE AND/OR WETLAND MITIGATION

16. Section 1503 is amended as follows:

§ 1503. Mitigation requirements

(i)The applicant may propose an alternative mitigation plan combining wetland creation, purchase of credits from a wetland mitigation bank, payment of a fee-in-lieu of wetland mitigation, and/or enhancing existing wetlands either onsite or offsite. The ~~Director (or~~ Administrator in a community certified to administer Article 15), shall notify the Director of the proposal of an alternate mitigation plan and the Director shall determine if athe proposed alternative mitigation plan meets the requirements of this section and his or her decision shall be final.

Passed by the Kane County Board on _____, 2007.

John H. Cunningham
Clerk, County Board
Kane County, Illinois

Karen McConnaughay
Chairman, County Board
Kane County, Illinois

Vote:

Yes _____

No _____

Voice _____

Abstentions _____



FEMA

December 17, 2007

Tim Harbaugh, P.E., DEE
Director of Environmental and
Building Management
719 Batavia Ave
Geneva, Illinois 60134

Dear Mr. Harbaugh:

We have received a copy of the proposed changes to Kane County's Stormwater Management Ordinance. If the Ordinance is adopted as proposed, it will meet the National Flood Insurance Program (NFIP) minimum requirements. Once this office receives a certified copy of the Ordinance, a cursory review will be done to verify that the proposed changes have been made. If the adopted Ordinance is as proposed, a letter will be sent to the County Board Chairman notifying him that the Ordinance has been approved and the County will continue to participate in the NFIP.

If you or any member of your staff experiences difficulties interpreting or enforcing its floodplain regulations or has questions on the NFIP in general, feel free to contact Michael Bryant at (312) 408-5334.

Sincerely,

Terry Reuss Fell (Ms.), Chief
Hazard Identification and
Risk Assessment Branch

C.C. John Lentz, IDNR