Community/Company	Section #9-	Subsection/Definition	Comment	Responses:
St. Charles	General		Several sections of the ordinance point to the Technical Manual for guidance. These include Category I BMPs for which pre-determined details and simple calculations were discussed as being available. Critical elements of the Technical Manual should be available at the time of Ordinance adoption.	This was discussed with the Technical Advisory committee. References to the Technical Manual in the Ordinance were revised to direct Applicants and Certified Communities to the Technical Manual for guidance only. There will be no requirements in the Technical Manual.
Huntley	General		Any proposal to adopt the revisions to the ordinance is premature without the Technical Manual as part of the adoption. There are too many questions as to how aspects of the "revised" ordinance will work without technical guidance which the text of the ordinance mandates.	This was discussed with the Technical Advisory committee. References to the Technical Manual in the Ordinance were revised to direct Applicants and Certified Communities to the Technical Manual for guidance only. There will be no requirements in the Technical Manual.
Huntley	General		The proposed timeframe is too quick to allow for municipalities to fully review the text, draft necessary amendments, prepare exempt development list and then adopt all of the above prior to the deadline imposed by the County.	The Communities were required to adopt the 2002 Ordinance by reference in order to become a certified community. Several Communities still require their corporate authorities to approve the it. For most it will automatically become effective as of June 1st. For those that require formal adoption a three month period has been added into the language to allow that. For Communities that have adopted more restrictive requirements, those requirements will remain in place and may be revised after the June 1st date. Other than the impervious area credit the ordinance has not changed significantly since the 75% draft provided November 2, 2018.
Huntley	General		The revisions to the ordinance, including, but not limited to the structure/formatting of the document, is in direct conflict with Ordinance Revision Goal #3: “Streamline permit process and organization of Ordinance to make the document more user friendly.” The numbering of the document, the formatting, terminology, tables, etc. are likely to be overwhelming to the average resident/business owner/developer in Kane County. One of the provisions discussed is to have the resident handle small design elements on their own (WITH THE HELP OF THE TECHNICAL MANUAL) and this ordinance will not be helpful in the slightest. Also, there are many cross-references within the text of the ordinance that direct the reader to sections that do not exist, or reference passages that are not in the text.	A thorough review of the cross references will be completed for the final document. We are aware that there are some cross sections that point to the wrong location as the document was still being modified and section numbers may have changed during those revisions. Please provide the cross sections references you are referring to so that we may locate any errors.
FEMA	5	A & B	For purposes of administering the ordinance’s thorough cumulative substantial damage and substantial improvement requirements, which even extend so far as to include routine maintenance costs, some enlargement upon the language used in 9-5B might be appropriate. The broad language of 9-5A, that the entire chapter does not apply to development which has been substantially completed before January 1, 2002, could be used to argue that improvements that are less than a substantial improvement do not require permitting that would allow (if nothing else) for an accounting of the cost of improvements against the market value of the structure prior to start of construction. Repairs, remodeling, or routine maintenance might arguably not fall within the concept of “replacement” or “enlargement” of a nonconformity.	The Ordinance has been revised to exclude Structures in the Floodplain.
IDNR-OWR	29		The NFIP requires that “permanent construction” must begin on permits issued for work in the floodplain within 180 days for a new Building or Substantial Improvement. The permit needs to be reviewed in the event there have been changes to the BFE or your regulations since the permit was issued. The two definitions that address this in the NFIP regulations are “New construction” and “Start of construction”, which can be found in 44 CFR 59.1. Essentially, this requirement applies to permits for the construction of insurable buildings. A portion of the “start of construction” definition is provided below. Nore “permanent construction” does not include earthwork, construction of roads or utilities. Paraphrasing, new construction means buildings for which the start of construction was on or after the effective date of a floodplain management regulation adopted by the community and includes any subsequent improvements to such buildings. The start of construction “means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a 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. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For substantial improvement, the actual start means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.”	Section 9-29 of the Ordinance has been revised to include this requirement.

FEMA	29		Marilyn included this comment but I will attempt to clarify what must be required. The NFIP minimum standard is for new construction and substantial improvements to be required to meet building protection standards by elevation (or for non-residential structures, optionally by dry-floodproofing) based on the regulations (including the FIRM and FIS) in effect at the *start of construction.* All of these terms (new construction, substantial improvement, and start of construction) are defined and the definitions work together in such a way that if one obtains a permit to construct a building and then any floodplain management regulation (including the flood zone and/or BFE) subsequently changes, the “actual start of construction” must occur within 180 days after date the permit is issued or else the construction must comply with the NEW regulation that took effect after the permit date. In simpler terms, you can’t get a permit right before the rules change and then sit on it for more than 180 days before starting work and then claim you can continue to be bound only by the old rules. Since Section 9-29 extends permits to the end of the third year following the date of issuance, this could create serious problems, though in probably isolated circumstances. The number of chances for problems increases each time there is a LOMR or PMR issued, not just when ordinance requirements are revised. Many community ordinances simply rely on the NFIP definitions of “new construction” and “substantial improvement” along with “start of construction,” and then use “new construction” and “substantial improvement” whenever the ordinance text states requirements for building protection. (Such as “new construction and substantial improvement of residential buildings shall have the lowest floor, including basement, elevated to the Flood Protection Elevation”). The same effect can be achieved by other means, but it may be more complicated.	This has been revised per OWR's comments.
FEMA	32	A.12	FEMA is not responsible for vertical control. In the distant past in some areas, the monuments used by FEMA contractors were shown on flood maps and in some cases monuments might have been set by FEMA contractors, but these monuments are NOT maintained by FEMA or FEMA contractors and so if they are not maintained by anyone else then they are probably not reliable any longer.	FEMA has been removed from this section and NAVD 88 benchmarks have been included in their place.
South Elgin	81	B	Table and Note 2: These items state that Stormwater Mitigation BMPs are required for development and redevelopments under 5,000 square feet where known flooding or drainage issues are in the immediate vicinity of the project..." It appears this requirement is intended to be discretionary for these small projects at the judgment of the Administrator. Perhaps adding the phrase "Required at the discretion of the Administrator" at the beginning of the footnote would clarify the requirement.	The ordinance has been revised to include this language for more clarity.
Aurora	81	B	Tables 9-81 and 9-107 impose detention storage and BMPs for development that hydrologically disturbs more than 3 acres. Since detention storage and BMPs in the revised Ordinance are otherwise required on the basis of new impervious area created, this requirement seems out of place and unnecessary. Based on the definition of hydrologically disturbed area, this would require detention storage and BMPs for a project that demolishes 3 acres of impervious surfaces.	Section 81.B.3.a exempts developments that remove and replace three acres of impervious area. A note depicting this exemption has been provided under the table to eliminate confusion.
Aurora	81	B	Tables 9-81 and 9-107 both use the term “AASHTO max. width”. Please replace that term with 1.5 acre/mile or define the term in Section 9-452.	AASHTO maximum width varies and may be found in those requirements. The AASHTO acronym has been added and defined as the current edition. Defining a width or acre/mile may change if this manual changes, so it is not desirable to define a width or rate.
Huntley	81	B	A Detention trigger that is based on Impervious Area instead of zoning classifications - By eliminating the detention trigger for residential subdivisions of 2 or more homes on 3 or more acres, it will eliminate any stormwater management for new subdivisions that meet certain criteria. This is contrary to the original intent of any stormwater management plan or ordinance. Some smaller non-residential sites may need to provide detention, but those are likely to have been accounted for in regional stormwater management plans.	Detention would be required under this scenario in most instances. The only time it would not is if the lots were subdivided along an existing road and a new road wasn't needed and each home (3, on 3 acres) including the driveway, patio, accessory structures, etc. were under 8,333 square feet. New homes on large lots often exceed this. Additionally, if the 25,000 threshold wasn't exceeded the 5,000 SF threshold for BMPs would be and would be required under this scenario. Potential downstream flooding issues would still need to be addressed per 9-81.B.1. For subdivisions that do not exceed the 25,000 SF threshold when they were developed, but the individual lot owner increases the impervious area at a future date on their lot causing the entire subdivision to exceed the 25,000 SF threshold, that owner would not be required to provide detention for the entire subdivision. They would however need to provide BMPs for their New Impervious Area.
Huntley	81	B	A 100% credit for removal of existing Impervious Area (current Ordinance has no credit) - 100% or 50% credit not listed in current text of ordinance; regardless, this allows for redevelopment with no additional stormwater benefits to be provided: if an existing site is razed, it can be constructed without detention. Also, a time-limit should be established to keep developers from clearing sites and then building without detention after an extended period of time without oversight by the Community. If the concept of “Net New Impervious Area” is to be used, it should be limited to modifications to existing developments that will retain the land use. For example, if a school site wishes to reconstruct the site by swapping a parking lot and a building, and the NET impervious area is less than or equal to the original impervious area, no detention would be required. Conversely, if a school site was to be changed to an office/retail/industrial development, this would be considered new development and any impervious area would require detention.	The removal of impervious area credit was desired to encourage redevelopment of existing vacant developments and helps prevent development of green sites. These are already impervious and may or may not have existing detention. In most instances additional BMPs will be required for these redevelopment projects which will provide stormwater quantity and quality beyond what is currently present. Additionally, a time limit has been included in the definition of Net New Impervious. Potential downstream flooding issues would still need to be addressed per 9-81.B.1.

South Elgin	81	B.3.a	The following wording may require clarification, 'Net New Impervious less than the Impervious Area being removed." Is the intent that the Net New Impervious is 0 or less or is the intent to allow some Net New Impervious as a result of redevelopment? For example, if a project removes 2 acres of impervious is the project allowed a Net New Impervious of 2 acres over existing conditions?	This exemption is provided to eliminate the need for detention for Redevelopments with Hydrologically Disturbed Areas greater than three acres. If a Redevelopment had five acres of existing impervious and removed all five and replaced it with three acres of impervious then they would still have to provided detention because they exceeded the greater than three acre Hydrologically Disturbed Area threshold. This exemption eliminates redevelopments that fall under that scenario. However, this example would still require BMPs for the New Impervious Area. Examples of this exemption will be provided in the Technical Manual.
St. Charles	81	B.3.a	“Redevelopment with a Net New Impervious Area less than the Impervious Area being removed will not be required to provide a Detention Storage Facility. The Redevelopment may still be required to provide a BMP to meet any other requirements of Table 9-81, such as Hydrologically Disturbed Area or total Impervious Area”. The language of Section 9-81.B.3.a is not consistent with the information in Table 9-81 and provides for confusion. Based on the definition of Hydrologically Disturbed Area, a redevelopment site that is reducing the amount of impervious would not be considered hydrologically disturbed since the runoff rates would be reduced. Is this correct? If so, why is Hydrologically Disturbed Area added to Section 9-81.B.3.a “Total” Imperious Area is not used in Table 9-81. Is this introducing a different standard for determining the threshold for BMP than what is used for determining the threshold for Detention?	The definition of HYDROLOGICALLY DISTURBED AREA is: An area of land surface cleared, grubbed, excavated, compacted or otherwise modified that changes stormwater Runoff volumes or rates. The site would still be considered Hydrologically Disturbed as the redevelopment would CHANGE the runoff volume and rates. Therefore this exemption was added to eliminate the need for those sites to provide detention as they would be reducing runoff volume and rates. See comment response to Aurora for further explanation. "Total" is included in Table 9-81 under Row 4: "Total Impervious Area > 50% Site area (for Sites < 1-acre)"
South Elgin	84	I	Requiring a minimum restrictor size and allowing the administrator to approve a smaller restrictor only when adverse impacts can be demonstrated (or a volume sensitive watershed is downstream) puts the Administrator in a defensive position if they want a restrictor less than four inches. Why not leave this up to communities to decide? We suggest the following language be added, "The Administrator may adopt a minimum restrictor policy so long as the policy does not have a minimum diameter greater than 4 inches."	The ordinance has been revised to include this language.
Huntley	85		Addition of Development to Fee in Lieu section (current Ordinance only allows Redevelopment or Mass Grading) - This section is not complete as intended. There is no listed of “limited circumstances prescribed” in the text of the ordinance. It merely states allows for fee-in-lieu to possibly be requested by a developer for a new development. The original ordinance allowed for fee-in-lieu to be an option offered ONLY by the Administrator for new development. A developer could only request it in cases of redevelopment. I believe that fee-in-lieu should only be used as a last resort as the value of the money collected diminishes when a public entity is obligated to spend the money on a project and is required to pay prevailing wages. A developer can get more value for the money if they factor their costs into the project.	The requirements for requesting allowance of a Fee-in-leu of detention is in Section 81.B.4. The Developer may request fee-in-lieu but the Administrator does not have to grant it.
St. Charles	107	C & D.1	The language of Section 9-107.C and D.1 (BMPs) is not consistent with the information in Table 9-107 and provides for confusion. Section language uses the term New Impervious Area while the table uses both New Impervious Area and Net New Impervious Area.	The threshold for Development is the New Impervious Area while the threshold for Redevelopment is the Net New Impervious Area. Regardless of the two thresholds the amount of volume to be provided is based upon the New Impervious Area. So, if a development has 5,000 SF of new impervious (threshold exceeded) and the total development is 10,000 SF the development must provide BMPs for the full 10,000 SF. This is the similar what is required in DuPage County. Examples of this will be provided in the Technical Manual.
South Elgin	107	E	Section 9-107 (E) on page 46: It appears there are two general categories of BMPs; infiltration based and storage based (pg. 165 Stormwater BMP definition identifies these). It would be helpful to clarify these two categories since subsequent subsections provide requirements specific to one or the other.	Sections 107.F, G & H are the only sections that call out infiltration based BMPs. This is for the purpose of protecting ground water or prohibiting them where soils are not conducive for infiltration. Category I BMPS are for small projects while Category II BMPS are for larger developments. Both of which could provide either an infiltration or storage based BMP.
South Elgin	107	E	This section states that the Applicant shall identify the pollutants of concern... Please define or further describe what is meant by "pollutants of concern". Does this refer to NPDES? Section 9-110 (A) (1) (a) also uses the term "pollutants of concern." There is no definition of "Pollutants of Concern," except that under the definition of Water Quality Treatment where pollutants of concern are identified. The definition within a definition creates confusion and ambiguity. More guidance on this is needed before it can be adequately regulated. Perhaps the regulation should be limited to the most common and / or significant pollutants in Kane County to simplify the ordinance but also to make it enforceable and effective.	This is referring to common pollutants associated with various types of development. For the purposes of this ordinance they are: Total Suspended Solids (TSS); metals and oils; and nutrients consisting of nitrogen and phosphorous. The term "Pollutants of Concern" has be separated from water quality treatment into its own definition to avoid confusion.
South Elgin	107	I	It would be helpful for the ordinance to provide guidance on evapotranspiration rates for Kane County.	Based upon the Illinois Water and Climate Summary (IWCS) the Potential Average Daily Evapotranspiration Rate in 2018 was 0.1 in/day for St. Charles. The Illinois Water and Climate Summary (IWCS) is a monthly publication issued by the WARM Program of ISWS on water and atmospheric data collected by several operational data networks during the prior month. The IWCS calculates potential evapotranspiration using the Food and Agricultural Organization (FAO) of the United Nations Penman-Monteith equation as outlined in FAO Irrigation and Drainage Paper No. 56 “Crop Evapotranspiration” by RG Allen, LS Pereira, D Raes, and M Smith. Recarga uses a Regional Average Evapotranspiration as 0.13 in/day. One could go through the exercise of determining this themselves. However I think either of these would be sufficient. This has been added to 9-107.I.

Huntley	107		New Best Management Practice section with Category I BMP trigger requirements at 5,000 sq. ft of New Impervious (current Ordinance does not require BMPs until detention is triggered) - The requirements for Category I BMPs will create burdensome regulatory requirements for small developments. a. The TECHNICAL MANUAL is required for clarity, without it, there will be no consistency in enforcement. Therefore, the approval of the revised ordinance should be delayed until the Technical Manual is completed. b. Small projects will be required to spend additional money on engineering, surveying, legal fees and maintenance. All of these small retention facilities require easements and legal documents, "Declaration of Restriction and Covenant" c. The current ordinance DOES require BMPs to be implemented on every project. (See Six Planning Principles and 202(j)). However, an example of an industry standard definition of BMP (BEST Management Practice) is "Methods or techniques found to be the most effective and practical means in achieving an objective (such as preventing or minimizing pollution) while making the optimum use of the firm's resources." The narrow definition in the ordinance excludes many opportunities to get the best fit of any project as opposed to just a "Category I" or "Category II" BMP. It is partially this lack of distinction and partially the elimination of site-specific applications that makes this part of the ordinance difficult to interpret WITHOUT a clear definition and multiple examples. Also, one BMP that has been eliminated from the ordinance is non-structural such as "EDUCATION." This would allow a community to require that a developer put in place signage, produce documentation, etc. to emphasize protecting the waterways and water resources. d. The use of "Category I & II BMPs" is putting too narrow a definition in the ordinance on the use of other BMPs where one of these infiltration methods may not be applicable.	a. Category I BMPs require storage of 1" over the new impervious area. A table will be provided in the Ordinance that shows 0-25,000 SF and the total amount of storage required to provide the homeowner guidance. Additionally, another table can be included to show the area needed for a rain garden or infiltration BMP w/ 36% void space if desired. b. Small projects will not be required to spend more money on engineering or legal fees. Simple tables may be used to determine the volume and sizing of these BMPs. An easement will not be required over Category I BMPs, only a Declaration of Restriction and Covenant, which is a simple form that a property owner may fill out and record. Long term maintenance is required, but annual reporting is not. c. The planning principles in the current ordinance will remain, see Section 9-82.C. However, as previously noted by other TAC members, principles are difficult to enforce and the revised BMP sections provide additional teeth to enforce these principles. If additional BMPs, such as education, is desired by a community the community has the opportunity to be more restrictive and require signage adjacent to BMPs. Section 202 in the current ordinance is Application for Variance. Please clarify which section you are referring to. d. Infiltration based BMPs are not the only BMPs allowed. In the definition, example practices include: A. Infiltration-based BMPs such as infiltration trenches or dry wells, Permeable Pavements, native vegetated rain gardens or bioswales with quantifiable storage, and other BMPs, upon approval by the Administrator; and B. Storage-based BMPs such as native vegetated Detention Storage Facilities; native vegetated swales with quantifiable storage behind check dams; and other BMPs, upon approval by the Administrator. This allows the applicant to pick and choose from a suite of BMPs, or propose others that are not identified on this list, that may work best on their site.
Huntley	108		Watershed Benefit Measures for large open parcels as an option in lieu of traditional Detention - Watershed Benefit Measures may not necessarily provide stormwater volume benefits as the decision of which methods to use could be arbitrary and vary from one community to the next. Additional clarification of when this option may be applied needs to be included in the ordinance. If left as an option for traditional developments, it may be abused, or, at the very least, is unquantifiable.	Watershed Benefit Measures are allowed in lieu of detention on parcels where the new impervious area is greater than 25,000 and less than 1% of the site area. Essentially this is 25,000 on a 57.3 acre site. They are allowed along roadway and trail projects where traditional detention is often difficult to achieve. They are also allowed for greater than 3 acre hydrologically disturbed areas. This is intended for open space type developments (e.g. golf course re-grading), as most traditional development projects will have impervious area associated with the improvements. Under all scenarios this is allowed at the discretion of the Administrator. Given the makeup of the Communities it is likely that this will only occur in the western portions of Kane County for developments with large land holdings, like Park District, the Forest preserve District and Agricultural Developments.
South Elgin	110	A.2.b.4	Calculations are required for Category II BMPs. Sample calculations or description of methods would be helpful for both applicants and Administrators.	The calculations for Category II BMPs can be the same as Category I or have the option of using continuous simulation if the developer desires to utilize that method. The engineer can use various programs to size BMPs using this method. However, similar examples to what were provided in the BMP example TAC discussion will be provided in the TM to clarify.
FEMA	136	B.5	I agree with Marilyn's comment on this subsection. This standard is generally not consistent with state regulations, and it is not always consistent with NFIP minimum standards which could apply as somewhat ambiguously stated in 9-136B.8. How would 9-136B.8. apply to a situation when (as written) 9-136B.5. seems to be an allowable option for any "nonriverine regulatory floodplain"?	This language has been removed.
IDNR-OWR	136	B.5	The Illinois model ordinance does not allow for this option. We recommend removing this language and requiring the BFE to be established through an analysis.	This language has been removed.
FEMA	136	D.4	The CLOMR is required as an NFIP minimum standard if the change is any increase to the BFE. In that situation, the CLOMR must be issued by FEMA before the activity can be allowed, not "upon issuance of a conditional approval from IDNR-OWR and the [local] Administrator, provided that no encroachment increases the [BFE] by more than 1/10 of one foot." If there is ANY increase to the BFE, the CLOMR must be issued by FEMA before the encroachment can be allowed. Then, regardless of whether any further development is desired or will be allowed, the community must ensure that a LOMR based on as-built conditions is obtained, not just applied for.	The language has been adjusted to reflect this.

IDNR-OWR	136	D.5	The list does not match the list in the state model ordinance, provided below. Please compare and add any additional activities where no delegation is allowed. Note 410.7 is covered under 136 D. 4. Ensure that construction authorization has been granted by IDNR/OWR, for all development projects subject to Sections 700.0 and 800.0 of this Ordinance, unless enforcement responsibility has been delegated to the (*insert City, Village). However, the following review approvals are not delegated to the (*insert City, Village) and shall require review or permits from IDNR/OWR:410.3 An engineer's determination that an existing bridge or culvert crossing is not a source of flood damage and the analysis indicating the proposed flood profile, per Section 702.3.5; 410.4 An engineer's determination that a proposed bridge affected by backwater from a downstream receiving stream may be built with a smaller opening, per Section 702.3.4; 410.5 Alternative transition sections and hydraulically equivalent compensatory storage as indicated in Section 702.3 (702.3.1, 702.3.2, 702.3.8); 410.6 Permits for construction and other activities in public bodies of water pursuant to 17 Ill Admin Code 3708; 410.7 Any changes in the mapped floodway or published flood profiles. 410.8 Base flood elevation determinations where none now exist. 410.1 Permits for Exempt Organizations, as defined in Section 300; 410.2 IDNR/OWR projects, dams and all other state, federal or local unit of government projects, including projects of the (*insert City, Village), except for those projects meeting the requirements of Section 702.1;	The language has been revised to include these requirements.
IDNR-OWR	137	B	Add: The Administrator shall also notify adjacent communities in writing 30 days prior to the issuance of a permit for the alteration or relocation of the watercourse. You have a similar statement in Section 9-143 C., but it should be in this location of the Chapter as it applies to all riverine floodplains.	This language has been moved from 143.C to 137.B.
IDNR-OWR	137	C	Add details regarding compliance with FEMA Technical Bulletin 10-01 to ensure any structure built after a LOMR-F is reasonably safe from flooding. The state model ordinance has language that can be used. The model ordinance states that “In order to demonstrate that the proposed structure is reasonably safe from flooding, the applicant shall submit a detailed engineering analysis of the proposed fill and foundation wall. The engineered basement study shall be completed in accordance with the latest edition of FEMA Technical Bulletin 10-01, with the analysis of the fill being prepared by an Illinois Licensed P.E.”.	This language has been added to 9-137.C.
FEMA	137	C	A LOMR is based upon existing (or as-built) conditions. If a proposed development “would” change conditions, then FEMA can issue a CLOMR in response to an application. What is the desired effect of this section? To ensure that a LOMR is obtained after filling and grading and other site preparations are completed but before buildings are permitted?	The language has bee revised from LOMR to CLOMR.
FEMA	137		Please add a section or subsection (perhaps a subsection of 9-137) that requires the following NFIP minimum standards, which are either missing or not applied in all circumstances: 1. All new construction and substantial improvements must be adequately anchored to prevent flotation, collapse, or lateral movement of the building resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. 2. All new construction and substantial improvements must be constructed with materials resistant to flood damage. 3. All new construction and substantial improvements must be constructed by methods and practices that minimize flood damage. 4. All new construction and substantial improvements must be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding. 5. If a subdivision proposal or other similar new development is in a floodprone area, all public utilities and facilities, such as sewer, gas, electrical, and water systems must be located and constructed to minimize or eliminate flood damage.” (44 C.F.R. 60.3(a)(3) and 44 C.F.R. 60.3(a)(4)	These requirements have been added to this section.

FEMA	138	D	This standard sounds like a good idea, but how does it apply to existing critical facilities? The effect might be more or less restrictive than desired, considering the phrasing used in 9-5B regarding nonconformities.	The language has been revised to state "New" instead of "All."
IDNR-OWR	138		Please review the state model ordinance Public Health requirements and amend this section as necessary: 901.0 Public Health and Other Standards 901.1 No developments in the floodplain shall include locating or storing chemicals, explosives, buoyant materials, animal wastes, fertilizers, flammable liquids, pollutants, or other hazardous or toxic materials below the flood protection elevation (FPE) unless such materials are stored in a floodproofed and anchored storage tank and certified by a P.E. or floodproofed building constructed according to the requirements of Section 1003 of this ordinance. 901.2 Public utilities and facilities such as sewer, gas and electric shall be located and constructed to minimize or eliminate flood damage. 901.3 Public sanitary sewer systems and water supply systems shall be located and constructed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters. 901.4 New and replacement water supply systems, wells, sanitary sewer lines and on-site waste disposal systems may be permitted providing all manholes or other above ground openings located below the FPE are watertight. 901.5 All other activities, defined as development, such as pools, fences, filling, paving, etc., shall be designed so as not to alter flood flows or increase potential flood damages. 901.6 In floodplain Zones AO and AH drainage paths shall be provided around structures on sloped ground to guide water away from the structures.	These requirements have been added.
FEMA	138		Several NFIP minimum standards are missing from this section. Marilyn mentioned this in her comments as well.	These have been added per IDNR-OWR's comments.
Aurora	139	A	Table 9-139.A establishes a lowest floor elevation of 3 feet above the base flood elevation for buildings along the Fox River. This requirement makes sense for new buildings, but many existing buildings that are being substantially improved cannot realistically raise their lowest floor. The current Ordinance allows substantially improved buildings to have dry floodproofed non-residential areas below the flood protection elevation. The revised Ordinance should continue to allow that, or it will significantly diminish the redevelopment potential for downtown buildings along the Fox River.	The language has been revised to continue to allow substantially improved buildings to have dry floodproofed non-residential areas below the flood protection elevation.

IDNR-OWR	139	C	Consider removing the second sentence. Illinois has eliminated this from our model ordinance as it could be less restrictive than elevating to the FPE. Additionally, the federal regulations require you to know if there is a history of a substantial damaged structure in the park. So, if you keep this sentence you have to include a statement that this is not allowed if the existing manufactured home park has suffered substantial flood damages. The entire federal code reads (44 CFR 60.3(c)(6)): (12) Require that manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision within Zones A–1–30, AH, and AE on the community's FIRM that are not subject to the provisions of paragraph (c)(6) of this section be elevated so that either (i) The lowest floor of the manufactured home is at or above the base flood elevation, or (ii) The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist floatation, collapse, and lateral movement. (6) Require that manufactured homes that are placed or substantially improved within Zones A1–30, AH, and AE on the community's FIRM on sites (i) Outside of a manufactured home park or subdivision, (ii) In a new manufactured home park or subdivision, (iii) In an expansion to an existing manufactured home park or subdivision, or (iv) In an existing manufactured home park or subdivision on which a manufactured home has incurred ''substantial damage'' as the result of a flood, be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to or above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist floatation collapse and lateral movement.	This change has been made, the second sentence has been removed.
IDNR-OWR	139	C	Please correct your references to Illinois' tie down regulations to read "in accordance with the Illinois Mobile Home Tie-Down Act issued pursuant to 77 Ill. Adm. Code § 870)." The Mobile Home Tie Down Act is in the Illinois Compiled Statutes. 77 Illinois Admin. Code was written pursuant to that act.	The language has been revised to reflect this.
IDNR-OWR	139	C	Capitalize Adm. Code when referencing the Illinois. Administrative Code.	These corrections have been made.
FEMA	139	C	Section does not include a definition of the term "fully licensed and highway ready." The definition could be explained within the text of the section or defined in the appendix. The NFIP minimum is as follows: "A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions." You may be more specific or restrictive as you choose.	This definition has been added.
IDNR-OWR	139	D	Please edit to define the elevation requirements for the HVAC system. The first paragraph appears to conflict with number 4.	The language has been revised to remove "and HVAC" from the first paragraph.
FEMA	139	D	Section needs to be made consistent with the state model. For example, the materials need to be flood resistant, not water resistant. Why would heating equipment be needed or allowed in a building below the Flood Protection Elevation this is not used for habitation and is used only for storage of vehicles or tools?	The language has been revised to remove "and HVAC" from the first paragraph.
FEMA	139		I suggest that you clarify whether you mean to allow basements below the Flood Protection Elevation if areas subject to regulation are filled. If so, you need to require the fill AND THE BUILDING to be "reasonably safe from flooding" in accordance with Technical Bulleting 10-01, and I'd suggest adding language to this section to accomplish that. Alternatively, you could clarify that you don't mean to allow it by altering this section to make it clear that despite the fill, the lowest floor, including basement, of new construction must be elevated to the Flood Protection Elevation even after fill has been placed and a LOMR-F obtained (or not obtained). Please reconcile 9-139A.2.g. with 9-139A.3. Is storage allowed in enclosed areas below the Flood Protection Elevation or not? Is the use of lawfully existing enclosed areas below the FPE for storage considered a nonconformity within the meaning of 9-5B (i.e. not to be replaced or enlarged)? Does putting more stuff in the existing storage area count as an enlargement of the nonconformity? The vague cross-reference "as described above" in Section 9-139B. seems to be ineffective. "Above" in exactly which subsections (of which section of which chapter)? The attempt to apply the limited 36"-above-grade elevation exception for manufactured homes in Section 9-139C does not clearly work out to apply the NFIP minimum standard, which is found in the text that Marilyn reproduced. The exception can only be allowed on existing sites in existing manufactured home parks in which a manufactured home has not ever suffered substantial damage from a flood. It cannot apply in a new manufactured home park, on new sites in an existing park that is undergoing expansion, outside of a manufactured home park, or on any site in a manufactured home park in which a manufactured home has suffered substantial damage from a flood. In the NFIP minimum standard this is partly accomplished by several definitions of the terms "new manufactured home park," "existing manufactured home park," "expansion to an existing manufactured home park," and "manufactured home park." These requirements are found in 44 CFR 60.3(c)(6) and 44 CFR 60.3(c)(12), and the definitions are in 44 CFR 59.1. Alternatively, as Marilyn hinted, it is not exactly wise to allow the 36" exception at all, so instead of making the distinction in the first place, the ordinance could simply require all placement of manufactured homes and all substantial improvement of manufactured homes to be elevated to the required Flood Protection Elevation on a permanent foundation and adequately anchored to resist flotation, collapse, and lateral movement.	This has been added to Footnote #3 of Table 9-139.A.
FEMA	140	C	There appears to be some sort of typographical error in this subsection.	This section has been revised to correct the typographical error.
Aurora	141	A.3	In your March 1, 2019 letter, you stated that compensatory storage ratio required for public roadway projects had been modified to 1:1; however, this modification appears to be missing from Section 9-141.A.3.	The language has been revised to include public roadway projects.

South Elgin	142	A.12 & 13	The Village is concerned that the language proposed these two subsections, regarding allowing existing damaged structured to be rebuilt in the Floodway, as written conflict with each other and IDNR standards. In summary, Item 12 states that the repair, replacement or reconstruction of damaged buildings/structures in the floodway may occur with exceptions. Those exceptions that would not allow the repair, replacement and reconstruction being if the building/structure is substantially damaged or improved and none of the outside building dimensions are increased and such improvements are not substantial improvements. However, Item 13 allows buildings/structures substantially damaged to be repaired, replaced, and reconstructed under certain circumstances. It is our understanding that Item 12 as stated reflects IDNR requirement, while Item 13 relaxes IDNR requirements and counters the purposes of the Ordinance regulations outlined in Section 9-3.	9-142.13 has been revised to indicate this is for substantially damaged or improved structures. IDNR allows substantially damaged structures to be rebuilt in the floodway as long as they meet the build protection standards.
South Elgin	142	A.13.d	This section states that the construction of a new Building shall begin within two (2) years of the demolition date. If Kane County chooses to maintain this subsection as proposed, the Village questions whether 2 years allows enough time. Many insurance claims can drag on for a significant amount of time coupled with the extensive engineering review that may be required in order to obtain permits, 2 years may not be enough time for some property owners. We suggest 3 years from a demolition may be more appropriate.	Paul Osman from IDNR-OWR provided the 2 year time constraint as that is their policy.
IDNR-OWR	142	D.4	Consider changing last sentence to read: A permit or letter indicating a permit is not required must be obtained from IDNR/OWR for such structures. All dams and impoundment structures, as defined Appendix E, shall meet the permitting requirements of 17 Ill. Adm. Code Part 3702 (Construction and Maintenance of Dams).	The language has been revised to include this requirement.
IDNR-OWR	144	E	Capitalize Adm. Code when referencing the Illinois. Administrative Code.	These corrections have been made.
Huntley	177		Clarification of Buffer definition and addition of requirements for reestablishing Buffers The entire basis of Article VII needs to be rethought regarding buffers: a. It starts with the compliance requirement if a buffer is disturbed which is contrary to the establishment of buffers. b. The requirement for a written report (aka Wetland Delineation) is necessary for "Development in or NEAR Linear Watercourses, Nonlinear waterbodies, or wetlands." What is the definition of "near"? 5 feet, 500 feet? Is it measured horizontally? Vertically? This needs clarification, or changed to reflect when there is a potential for impacts or the wetland area is to be incorporated into the development, platted as such and protected by buffer and easements. c. Buffers are to be established around existing wetlands or water bodies to provide additional protection as part of a new development. Buffers are to be defined by a width criteria and then protected by means of easements or other platting efforts. By claiming any vegetated area next to a stream, pond, etc. is a buffer, it could be considered a taking on existing, platted, DEVELOPED lots. Reasonable engineering review can ensure that sensitive water bodies are protected without the new definition of a buffer.	This was discussed at the TAC meetings and agreed upon previously.
IDNR-OWR	312	A	Also add a requirement to inspect all development projects before, during and after construction to assure proper elevation of the structure and to ensure compliance with the provisions of this Chapter.	The language has been revised to include this requirement.
IDNR-OWR	312	A.13	Add the tracking of substantial damage to the Administrator duties.	This is already in this section, however Substantial Damages have been added.
IDNR-OWR	312	A.3	More clearly state that if the development site is within a floodway or in a floodplain for which a detailed study has not been conducted and which drains more than one square mile, the permit shall be referred to a P.E. under the employ or contract of the Community for review to ensure that the development meets the provisions of this Chapter.	The language has been revised to include this requirement.
Huntley	374		Revised Engineer Review Specialist list that will only include Certified Community staff reviewing Permits and Firms/Individuals under contract with a Community for reviews There is no specific information provided as to how QERSs that are no longer employed by communities (either directly or by contract) are to be removed. There is no compelling reason to not allow any number of professional engineers to become certified; the fees generated will only increase with the number of QERS who apply. Furthermore, providing a copy of a contract may be a violation of privacy; consider allowing for a letter from the Stormwater Administrator of the Certified Community	The language has been revised to state a copy of the Contract, Letter or Resolution.
IDNR-OWR	452	Development	I am confused by the exclusion of repairs to existing buildings. FEMA's P-758 Substantial Improvement/Substantial damage Desk Reference does not exclude routine repairs. Section 9-140 addresses maintenance to existing buildings as well. I find this confusing.	The language has been revised to clarify buildings not located in the Floodplain.
IDNR-OWR	452	Development	NRCS conservation plans can include on-stream structures and bank stabilization projects. Consider only excluding NRCS conservation plan projects located outside of the Regulatory Floodplain.	The language has been revised to clarify not located in the Floodplain.
IDNR-OWR	452	FBFM	Consider removing from the Chapter entirely, the definition and any references throughout the Chapter as no Kane County community is still using these antiquated maps.	This definition has been removed.
South Elgin	452	Impervious Surface	The Village notes that the graveled surfaces and that, as proposed, gravel surfaces may be counted as pervious surface provided the aggregate gradation has a high porosity. We appreciate this modification, as it offers some clarification. In many cases, a graveled parking lot, for example, will not have a high porosity, and will therefore be considered impervious the definition of impervious surface has been modified to address surface. Further, we note that with the added definition of Net New Impervious Surface that in some cases no detention will be required on redevelopment sites that are currently mostly gravel As an example, an impervious gravel parking lot covering 50,000 square feet of a lot' will be redeveloped with a 6000 square foot building and 8000 square foot parking 1ot, and the remainder remaining gravel. The Net New Impervious Surface is -36,000, as calculated as follows: In the example above, per Table 9-81 on page 27 a detention storage facility is not required, but stormwater Mitigation/BMP is required in certain circumstances. Is this an intended consequence of the proposed regulations? Net New Impervious Surface = New Impervious Area - Existing Impervious Surface -36,000 = (6,000 + 8,000) - 50,000	Yes, this is the intended consequence and is to promote redevelopment.

Aurora	452	Watershed	In Section 9-452, the term “Watershed” is not in the correct place alphabetically.	This correction has been made.
Chris		General	Representative of an HOA whose lots were platted in 1947. There have been recent fires and residents have had to raise the homes in accordance with the Building Protection Standards. Additionally a home has had to be raised above the Building Protection Standards for replacing a roof. Legal Non-conforming buildings should be allowed.	The substantial damage and substantial improvement requirements are necessary to be in the NFIP. However, the cost of maintenance improvements (like replacing the roof) will be recorded cumulatively over a rolling, ten (10) year period, beginning on January 1, 2010. Improvements, such as additions, will be cumulative beginning on January 1, 2010.
Allan Broholm		General	The Ordinance focuses on new development and redevelopment and does not address existing flooding issues caused by previous developments. A previous development's basin empties to a ditch which floods his home. The ordinance should address these issues.	The Ordinance can only address new development and redevelopments. If there is a drainage complaint the issue can be investigated to determine if there has been a violation of the ordinance.