

MEMORANDUM

To: Municipal Engineers Group

From: David P. Gorman, PE, Village of Lombard

Re: Regulatory Buffer Minimum Width – Proposed Amendment

Date: October 22, 2012

The DuPage Mayors and Managers Conference (DMMC) and the DuPage River Salt Creek Workgroup (DRSCW) are requesting that the Municipal Engineers Group provide a recommendation to amend the minimum width of regulatory buffers in the Countywide Storm Water and Flood Plain Ordinance. I am submitting this memo on the behalf of both of these groups.

Proposed Amendment Regarding Minimum Buffer Width in Mapped Flood Plains:

Prior to the Ordinance Update in April 2012, riparian buffers were the same width as the mapped flood plains unless otherwise allowed through the variance process. There was an expressed desire to introduce some flexibility into the ordinance update, hence, a provision was inserted to allow an Administrator or the Director to reduce the width. The DMMC and the DRSCW are both supportive of incorporating some flexibility but the current minimum width in a mapped flood plain of fifteen feet from the Ordinary High Water Mark (OHWM) was set arbitrarily. As will be explained further below, this decision has multi-million dollar implications for public entities. Hence, the DMMC and DRSCW have remained concerned about this issue and assert the need for an amendment.

Regulatory Background:

Under Federal law, the State of Illinois must carry out regular appraisals of waterways with the purpose of determining compliance with the goals of the Clean Water Act. These appraisals have found that all of assessed waterways in DuPage County are not in compliance with the aquatic life designated use. In other words, they are failing to support a healthy number and diversity of fish and insects. These observations, and accompanying analyses, are used to guide the NPDES permit updates for area Publicly Owned Treatment Works (POTWs) and will likely be used increasingly for NPDES II (a.k.a. MS4; Municipal Separate Storm Sewer System) permits. Continued failure to meet the aquatic life use goal will lead to increased and more costly permit requirements public agencies.

Buffer Width Studies:

Peer-reviewed studies on the health of aquatic life have found that its integrity is explained by a complex interplay of water quality, physical habitat and flow regime. Analyses carried out by the

DRSCW and the State of Illinois (the Integrated Report) have found that the *lack of adequate riparian buffers is one of the principle limiting factors to achieving the aquatic life goal in area rivers.* These analyses suggest that it is impossible to reach the aquatic life goal without addressing the shortcomings in local habitat, and that an investment in habitat is a more cost-effective return on investment than further reductions in pollutant loading. Riparian buffers are one of the five most important habitat features. Furthermore, the analyses suggest that a buffer width of roughly 100 feet is absolutely necessary to create conditions for meeting the aquatic life goal, as measured by Index of Biotic Integrity scores.

Public Cost Implications:

Further loss of buffer in mapped flood plains, especially within one hundred feet of the OHWM will increase costs for Clean Water Act compliance for all stakeholders – especially POTWs and local governments. One such pollutant standard that is increasingly being tightened in NPDES permits is phosphorus. Based on recent costs around the country, it is estimated that the present value costs to retrofit wastewater treatment plants in the three watersheds of the West Branch DuPage River, East Branch DuPage River, and Salt Creek is between \$160M and \$300M. Thus far, DRSCW's data collection, analyses and projects have been well received by the IEPA and USEPA and instrumental to a ground breaking relationship with these agencies that may postpone further chemical pollutant reductions limits for some time while local governments implement specific projects that hold more promise for success at lower costs. The reason that the DMMC and DRSCW feel so strongly for the need to prevent a further loss of buffer, especially within the critical 100-ft riparian area, is that a lack of watershed-wide protection for this buffer will likely increase pressure from regulatory agencies to implement other cost-prohibitive measures that do little to reach compliance with the Clean Water Act.

The current exclusion of impervious and grass areas is proposed to remain unchanged, as is stated in Section 15-92.B.2, in order to facilitate construction in those areas.

It should be noted that the variance process is always available should a permit applicant believe they have a unique case that warrants an exception.

Recommendation:

For the reasons stated above, the DMMC and DRSCW jointly recommend the following underlined amendment to Section 15-92.B.1.c. Along with other minor corrections and clarifications, Article XII would read in its entirety as attached.

ARTICLE XII. BUFFERS

15-92. Identification of Buffers

15-92.A Buffer areas for wetlands shall extend from the edge of the delineated wetland. Buffer for those portions of a non-wetland waters of DuPage shall extend from the ordinary high water mark (OHWM):

15-92.A.1 A property may contain a buffer area that originates from another property.

15-92.A.2 Buffer widths for wetland shall be as follows:

15-92.A.2.a. One hundred (100) feet for critical wetlands, except as noted in Section 15-92.B.2.

15-92.A.2.b. Fifty (50) feet for regulatory wetlands, except as noted in Section 15-92.B.2.

15-92.B Buffer for non-wetland waters of DuPage shall be a minimum width of fifteen (15) feet and a maximum width matching the regulatory flood plain. Width shall be determined as follows for the following situations:

15-92.B.1.a. Where there is no regulatory flood plain study, and the drainage area is over one hundred (100) acres, then the required site specific BFE study in Section 15-80 will define a 100-yr flood elevation for the site and that elevation shall be used to set the buffer width, except as noted in Section 15-92.B.2.

15-92.B.1.b. Waters of DuPage which have a drainage area of less than one hundred (100) acres and no flood study has been performed will have a buffer of fifteen (15) feet from the OHWM, except as noted in Section 15-92.B.2.

15-92.B.1.c. For purposes of regulation under this Ordinance, the applicant may choose to accept the 100-year flood plain limit as the buffer, or he may submit documentation addressing the buffer functions and request the Administrator's or Director's concurrence that a narrower buffer limit between the 100-year flood plain and fifteen (15) one hundred (100) feet from OHWM is appropriate should be allowed by the Administrator in a Complete Waiver Community or the Director, in accordance with 15-94.B.

15-92.B.2 Buffer does not include impervious non-vegetated surfaces, permanent structures or buildings. In addition, non-wetland waters of DuPage County buffer does not include maintained lawn or associated maintained landscape plantings within the limits of the 100 year flood plain that are more than fifty (50) feet from the limits of the waters.

15-93. RESERVED.

15-94. Development Affecting a Buffer

15-94.A Vegetative Maintenance within buffer may be allowed through issuance of a Letter of Permission under the following conditions:

15-94.A.1 A written description of the development goals, objectives, and management plan must be provided for approval to the Director, or Administrator in a Waiver Community. As long as the development does not require Stormwater Management Certification for any other aspect of the development, the Director or Administrator of a Waiver Community may issue a Letter of Permission to allow the maintenance activity.

15-94.A.2 The maintenance activity will result in an enhancement of buffer functions in accordance with 15-94.C.

15-94.A.23 Maintained lawn or landscape planting beds have limited buffer function and may be replaced in kind.

15-94.B Development of buffer, or a reduction in width, function, or the removal of native vegetation, shall not occur without mitigation.

15-94.B.1 Mitigation for buffer impact does not require one for one replacement of the area impacted. Replacement of impacted function takes precedent over replacement of area.

15-94.B.2 Impacts to buffers shall consider the effectiveness of the natural functions and mitigate those functions to the extent practicable.

15-94.C Buffer mitigation design shall incorporate native, non-invasive species and be designed to duplicate or improve the hydrologic and biologic function of the original buffer unless documentation is provided to support establishment of alternative communities. When native plantings are required as part of a mitigation development, the plantings shall be native to Northeastern Illinois as defined by *Plants of the Chicago Region*.

15-94.D Buffer mitigation shall meet certification requirements, associated performance standards, and shall undergo a maintenance and monitoring period, as required in the Stormwater Management Certification. Performance Standards are found in Appendix B. Applicants may choose to use the Performance Standards found in Appendix B, or the Applicant may prepare and submit individualized site specific standards for review and approval.

15-94.D.1 Upon inspection, if the buffer mitigation meets certification requirements and performance standards during or at the end of the monitoring period, the Director, or Administrator in a Complete Waiver Community, shall issue regulatory signoff.

15-94.D.2 If the buffer mitigation area is not considered a success within the approved monitoring period, additional measures shall be required to bring the site into compliance.

15-94.E Development affecting a wetland buffer shall be initiated only after a mitigation plan has been approved and adequate securities are provided as specified in Article VI of this Ordinance.

15-94.F Mitigation is considered separate from other development components, and requires a performance security be established in accordance with Article VI for the completion of the mitigation development.

15-94.G The certification holder shall provide annual monitoring reports documenting progress towards meeting the approved performance standards. The Director or Administrator may require the certification holder to undertake remedial action to bring the area into compliance with the mitigation plan. The monitoring reports shall include relevant data and observations taken during the growing season and shall be submitted no later than January 31st of the following year until performance standards are met and accepted.

15-94.H If property ownership is changed during the management and monitoring period, the applicant shall provide formal written notification to the Director or Administrator. The notification shall contain complete contact information including certification number(s), owner(s) names(s), street address(es), phone number(s) (office, fax, mobile), email address(es), etc. The certification holder must notify the future owners(s) of their obligations regarding certification conditions and maintenance and monitoring requirements for the subject development as they relate to the Stormwater Management Certification and to submit written confirmation from the receiving party accepting these responsibilities.

15-94.I Features of a naturalized stormwater management system, such as stormwater structures, infiltration trenches, vegetated swales, filter strips, site runoff storage ponds, and compensatory storage areas, may be within the buffer area, provided the system is set back to a minimum of fifty percent (50%) of the required buffer width and the buffer functions, if impacted, are mitigated.

15-94.J Access through buffer areas shall be allowed, when necessary, for maintenance purposes.

15-95. RESERVED

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