## **GG107-14**

402.3

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### Revise as follows:

**402.3 Surface water protection**. Where this section is indicated to be applicable in Table 302.1, buildings and building site improvements shall not be located over, or located within, a buffer buffer as established by the jurisdiction, around or adjacent to oceans, lakes, rivers, streams and other bodies of water that support or could support fish, recreation or industrial use. The width of the buffer shall be not less than the minimum buffer width shown in Table 402.3 or otherwise established by the jurisdiction. The buffer buffer shall be measured from the ordinary high-water mark of the body of water.

## **Exceptions:**

- 1. Buildings and associated site improvements specifically related to the use of the water including, but not limited to, piers, docks, fish hatcheries, and habitat restoration facilities, shall be permitted where the impacts of the construction and location adjacent to or over the water on the habitat is mitigated.
- 2. Buildings and associated site improvements shall be permitted where a wetlands permit has been issued under a national wetlands permitting program or otherwise issued by the authority having jurisdiction.

# TABLE 402.3(1) SURFACE WATER BUFFER WIDTHS\*

Surface water area (Acres)	Stream or river width (Feet)	Minimum buffer width (Feet)
<u>&lt; 5</u>	< 15	50
5 to 30	15 to 40	<u>75</u>
<u>&gt; 30</u>	<u>&gt; 40</u>	<u>100</u>

\*For surface waters with surrounding slopes equal to or greater than 10 percent but less than 15 percent, an additional 10 feet of buffer shall be added. For surface waters with surrounding slopes equal to or greater than 15 percent but less than 20 percent, an additional 15 feet shall be added. For areas with surrounding slopes equal to or greater than 20 percent, an additional 30 feet shall be added.

**Reason:** "Buffer" is defined in Chapter 2, but is not italicized in Chapter 4, so we recommend that this editorial correction be made. A comma is added to improve the flow of the first sentence.

Section 402.3 requires that, should this section be required by the jurisdiction, buildings and site improvements stay outside of a buffer area. The width (distance) of the buffer is left to be determined by the jurisdiction, which some jurisdictions might find burdensome. The effective default for the buffer distance is therefore zero, which is at odds with the intent of the section. This proposal presents a set of buffer distances that would serve as the default set of distances should the jurisdiction not be prepared to set the distances, or serves as guidance for a jurisdiction in its decision-making.

The distances provided in this table are based on scientific studies of the contributions of various- sized buffers to the protection of surface water areas and associated wildlife habitat, as well as on studies of the approaches to setting buffer distances adopted in ordinances.

The proposed table calls for increased distances for waterways located next to slopes of 10% as higher, as slopes are prone to increased erosion and runoff, both of which can damage water quality through increased loading of sediment and various pollutants. This reduces the ability of the water body to effectively filter pollutants and hurts its ecological productivity.

### Bibliography:

DeLuca, W. V., C. E. Studds, and P. P. Marra. 2004. "The Influence of Land Use on the Integrity of Marsh Bird Communities of the Chesapeake Bay." *Wetlands* 24: 837-847.

Dillaha, T.A., R.B. Reneau, S. Mostaghimi, and D. Lee. 1989. "Vegetative Filter Strips for Agricultural Nonpoint Source Pollution Control." *Transactions of the ASAE* 32:513-519.

Dillaha, T. A., J. H. Sherrard, D. Lee, S. Mostaghimi, and V.O. Shanholtz. 1988. Evaluation of Vegetative Filter Strips as a Best Management Practice for Feed Lots." *Journal of the Water Pollution Control Federation* 60(7):1231-1238.

Environmental Law Institute. 2003. Conservation Thresholds for Land Use Planners. Washington DC. Federal

Interagency Floodplain Management Task Force (FIFMTF). 1996. *Protecting Floodplain Resources: A Guidebook for Communities*. Federal Emergency Management Agency (FEMA 2268/June 1996).

Fischer, R. A. 2000. "Width of riparian zones for birds." *Ecosystem Management and Restoration Research Program Technical Notes Collection*, U.S. Army Engineer Research and Development Center, Vicksburg, Mississippi. <a href="www.wes.army.mil/el/emrrp">www.wes.army.mil/el/emrrp</a>.

Houlahan, J.E. and C.S. Findlay. 2003. "The Effects of Adjacent Land Use on Wetland Amphibian Species Richness and Community Composition. "Canadian Journal of Fisheries and Aquatic Sciences 60:1078-1094.

Kuusemets, V. and U. Mander 1999. "Ecotechnological Measures to Control Nutrient Losses from Catchments." Water Science and Technology 40(10): 195-202.

Cost Impact: Will not increase the cost of construction.

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