



**Delaware River Basin Commission**

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October 15, 2009

Honorable Commissioners  
Delaware River Basin Commission  
25 State Police Drive  
P.O. Box 7360  
West Trenton, NJ 08628-0360

**Re: DRBC Flood Advisory Committee Recommendations on  
Floodplain Regulations in the Basin**

Dear Commissioners:

I am pleased to present to you a report by the DRBC Flood Advisory Committee that catalogs floodplain regulations in the Basin and presents twelve (12) consensus recommendations for more effective floodplain regulations in the Delaware River Basin.

In July 2007, the Delaware River Basin Interstate Flood Mitigation Task Force issued a report identifying six priority management areas and a total of 45 consensus recommendations for a more proactive, sustainable, and systematic approach to flood damage reduction in the basin. One of the six priority management areas identified by the Task Force was floodplain regulations.

In November 2008, at the request of New Jersey and Pennsylvania commissioners, the Flood Advisory Committee of the DRBC formed the Floodplain Regulations Evaluation Subcommittee to address Recommendation 1 of the Floodplain Regulation section of the Interstate Task Mitigation Task Force Report.

The Floodplain Regulation Evaluation Subcommittee (FRES) was composed of twenty (20) representatives who represented the interests of the basin states, federal government, environment, citizens, builders, agriculture, commerce, floodplain mapping and local officials. The Subcommittee presented its report to the Flood Advisory Committee (FAC) in May 2009. Following deliberation and some modification, the FAC now presents its recommendations for more effective floodplain regulations to the Commission. These recommendations will be presented during the morning conference session of the Commission meeting scheduled for October 22, 2009.

Appendix I of the report presents a summary table of FAC recommendations and regulations currently in place; among which are the National Flood Insurance Program (NFIP) minimum regulations, DRBC Floodplain Regulations and basin state regulations. In most cases, the FAC is proposing that in order to be more effective, floodplain regulations need to be applied

on a watershed basis and not adhere to state jurisdictional boundaries. This letter summarizes the recommendations that emerged from this process.

**A. Regulatory Floodplain Definition:**

- a. The regulatory floodplain for waterways in the Delaware River Basin should be greater than the 1% annual chance floodplain.
- b. Unmapped waterways of the Basin need a mechanism for identifying the regulatory floodplain.

**B. Floodway Definition:**

The floodway in the Delaware River Basin should be defined by a 0.2 foot rise standard for main stem Delaware River and all other streams and rivers within the basin.

**C. Development/Fill in the Flood Fringe:**

Protect the flood fringe in a naturally vegetated state and limit development including, but not limited to, structures, infrastructure, impervious surfaces, fill, grading and removal of vegetation.

**D. Development/Fill in the Floodway:**

New development in floodways should be prohibited.

**E. Stream/Riparian Corridors and Vegetation Disturbance:**

Incorporate the buffer concept as part of a comprehensive floodplain management program to protect communities from flood damage.

**F. Adopted building code:**

Continue the adoption of International Codes issued by the International Code Council.

**G. Standards for the Lowest Habitable Floor of Structures (Freeboard):**

All new substantially improved residential, institutional and commercial structures within the Delaware River Basin should be constructed two (2) feet above 1% annual chance base flood elevation within the flood fringe.

**H. Enclosed Areas below Flood Elevation:**

- a. Deed restriction should be required for enclosures.
- b. Structural requirement: If the enclosure below the flood elevation is greater than 6 feet in height measured from floor to floor, at least 25 percent of the surface area of the outer wall of enclosures should be left permanently open.

**I. Substantial Damage/Improvement to Structures:**

- a. Cumulative Substantial Damage Declaration
- b. Tracking of Cumulative Substantial Damage/Improvements

**J. Dams and Flood Damage Risk:**

- a. Increase monitoring of dams. Dams with a clear and present danger of failure should be removed.
- b. States should increase funding and assistance to small dam owners for evaluation and removal.

- c. Hydraulic studies in the vicinity of high and medium hazard dams should be revisited to evaluate the change in flood hazard areas.
- d. An emergency action plan that includes inundation maps for flood hazard areas should be created for all dams, and used as a basis for emergency planning.
- e. Before a dam is removed, hydraulics must be revisited to evaluate the adequacy of downstream drainage structures, and the accuracy of upstream floodplain maps.
- f. Require the evaluation of downstream flooding impacts as part of the permit application process for dam decommissioning or dam repair which increases spillway capacity.

**K. Bridge/Culvert Construction or Reconstruction and Flood Damage Risk:**

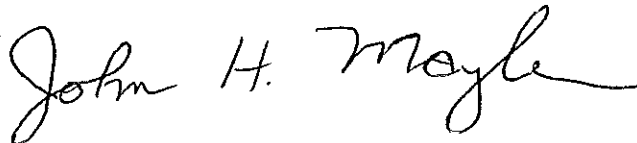
- a. Design new bridges and culverts to ensure that flooding to existing buildings or facilities is not exacerbated upstream or downstream. Design should be based on the results of updated flood models using recent climate data that incorporates changing precipitation trends.
- b. Maps should be updated for new crossings.

**L. Stormwater Regulations - New and Redevelopment:**

The goal of stormwater design within the Delaware River Basin should mimic pre-development hydrology at a minimum.

The Flood Advisory Committee appreciates the opportunity to advance a recommendation of the Interstate Flood Mitigation Task Force and is looking forward to discussing these recommendations with you.

Sincerely,



John H. Moyle, P.E.  
DRBC Flood Advisory Committee Chair  
NJDEP Bureau of Dam Safety and Flood Control

Enclosures

c: Flood Advisory Committee