

Hazard Mitigation Plan

Status of High Priority Mitigation Actions to Address Flood Hazard

This memo serves as a progress report on the implementation of flood mitigation action items which are identified in the *2010 Prince George's County and City of Laurel Hazard Mitigation Plan*. The progress report was prepared by staff members of the Department of the Environment Sustainable Initiatives Division.

For credit under the Community Rating System, this report must be distributed to the media and be made available to the public. As part of the process for updating the County's hazard mitigation plan, the content of this report will be released to the press (i.e. papers) that covers Prince George's County. The County's hazard mitigation plan is expected to be updated during this fiscal year 2017 (FY'17.) Copies of this report and of the *2010 Prince George's County and City of Laurel Hazard Mitigation Plan* are available for review at the Prince George's County Department of the Environment, 1801 McCormick Drive, Largo, Maryland. A notice of its availability and a copy of the 2010 plan has been posted on the County website.

1. Background

The original *hazard mitigation plan* was prepared by a Mitigation Advisory Committee composed of staff representatives from the bi-county agencies of Maryland-National Capital Park & Planning Commission and the Washington Suburban Sanitary Commission and various County departments including: Department of the Environment (formerly Department of Environmental Resources); Department of Homeland Security and Office of Emergency Management; Department of Public Works & Transportation, Department of Housing & Community Development and Office of Central Services. The City of Laurel participated as a separate incorporated municipality. Representatives from the Maryland Emergency Management Agency, the Maryland Department of the Environment and the Maryland Department of Natural Resources were notified of the meetings. Other federal agencies were notified and invited to attend too.

The 2005 Hazard Mitigation Plan (Plan) was drafted by this Mitigation Advisory Committee during a series of meetings held in 2004 through 2005. It includes a detailed problem statement which identified flood hazard and risks throughout the County and City of Laurel as well as other hazards. Some of the worst flooding has occurred around Laurel, but other waterways have also risen out of their banks and flooded homes and businesses. Although aggressive programs to

identify flood hazards, guide development to other areas and to undertake projects to reduce exposure have been in place for more than 20 years, approximately 3,700 older buildings are at some risk of flooding. A review of past events and the number and distribution of people and property that are exposed to hazards led to identifying hazards that warranted further consideration. Such hazards include winter storms, high winds, severe storms, drought, and unstable soils. Wild land fire (brush & forest), though considered a lesser risk due to the County's fire suppression capabilities, could affect some areas of the County as well.

The 2005 plan set the stage for Prince George's County, the City of Laurel and the other incorporated municipalities to continue to address long-term disaster resistance through identification of actions that will, over time, continue to reduce the exposure of people and property to natural hazards. The Plan essentially:

- Provided overviews of the hazards that threaten the area
- Characterized the people and property that are exposed to some risk due to those hazards
- Outlined the planning process
- Described how natural hazards are recognized in the County's normal processes and functions
- Described the City of Laurel and its development review process with respect to natural hazards and
- Prioritized mitigation action items.

The final plan was presented and adopted at a public meeting of the County Council on April 26, 2005. The Laurel City Council adopted the Plan at a public meeting on March 28, 2005. Resolution CR-20-2005 dated April 12, 2005, adopted the Prince George's County and City of Laurel's *Hazard Mitigation Plan*. Resolution CR-34-2010 would later authorize the 2010 update to the 2005 plan.

An update to the 2005 plan was prepared in 2010. The updated plan was approved by Council Resolution CR-34-2010 on June 1, 2010. FEMA approved the 2010 Plan by letter dated February 8, 2012. Copies of the adopted plan are available for review at:

- Prince George's County Department of the Environment at 1801 McCormick Drive in Largo;
- Maryland-National Capital Park & Planning Information Counter at 14741 Governor Oden Bowie Drive in Upper Marlboro; and
- Laurel City Hall at 8103 Sandy Spring Road in Laurel.

A copy of the plan is also available online at <http://www.princegeorgescountymd.gov/363/Flood-Management> .

The 2005 plan was updated to reflect the completion of certain actions and to modify or add other actions. Appendix C of the 2010 plan provides a status report on actions which were identified in the 2005 plan. The updated plan has 10 action items of which 6 action items are flood related.

DoE, in partnership with the County's OHS, has started the process of updating the 2010 Plan. These agencies are in the process of securing consultant services to assist with this effort. Staff anticipates that all updates will be completed in Fiscal Year 2017.

2. Legislative Action

Resolution CR-20-2005, dated April 12, 2005, adopted the *Prince George's County and City of Laurel Hazard Mitigation Plan*. Resolution CR-34-2010, adopted the 2010 update to that plan on June 1, 2010. The last section of the second resolution instructs that the Prince George's County Department of Environmental Resources (DER) (now Department of the Environment) is designated to coordinate with other offices and entities and shall periodically report on the activities, accomplishments, and progress, and shall prepare a progress report as required by the Maryland Emergency Management Agency.

3. A review of the Plan's action items:

Of the 10 action items found in Chapter 8 of the *2010 Hazard Mitigation Plan Update*, only 6 of the 10 items are flood-related high priority mitigation actions. A review of these 6 items, which are organized by actions, is provided below.

Action A. Partner with FEMA/MDE to Update Flood Hazard Mapping; Use Updated Mapping for Risk Reduction. The County's partnership with FEMA and MDE to revise FEMA Flood Insurance Rate Maps was initiated under a Cooperative Technical Partnership agreement executed in 1999. The revised flood studies have been completed and approved by FEMA. The delineation of the flood elevations and floodplain boundaries is underway; the preliminary FIRM (showing proposed revisions), will be published in 2010 (the anticipated effective date may be 2010 or 2011). ***Status (2016):*** *The revised flood studies have been completed and approved by FEMA. FEMA issued the preliminary Flood Insurance Study and Flood Insurance Rate Map on September 30, 2010. FEMA revised the September 30th preliminary FIS and FIRM and issued revised preliminary FIS and FIRM on February 22, 2013, January 16, 2015 and January 29, 2016. The new FIS and FIRM became effective September 16, 2016.*

- **County Action A-1. Public Information.** Use the revised flood maps to refine DER's mailing list for public information efforts to owners of property determined to be impacted by flood hazards. ***Status (2016):*** *No action - Annually, DoE mails letters to residents occupying flood prone structures to inform them about flood hazards.*

recommend precautionary measures and advise on how to protect their property from flood damage. DoE's mailing list of flood prone properties will be updated to include additional properties which fall inside special flood hazard areas as shown on the recently adopted FIRM dated September 16, 2016.

- **County Action A-2. At-Risk Buildings.** Use the revised flood maps to refresh details on at-risk buildings, such as predicted depths of water for different frequency flood events. Status (2016): The new FIS and FIRM recently became effective on September 16, 2016 .Work on this action is progress.
- **County Action A-3. Private Nonprofit Buildings.** Search the updated list of flood-prone properties to determine if any are owned by private nonprofit organizations (see Action C). Status (2016): The new FIS and FIRM recently became effective on September 16, 2016. Staff may now proceed with addressing this action item.
- **Laurel Action A-4. Continue to Pursue Flood Map Revision.** Use the revised flood maps to encourage property owners to purchase flood insurance and take steps to mitigate against future flood damage. Status (2016): City of Laurel reports separately.

Action C. Conduct Flood Audits of Selected Buildings. Using the most recent flood hazard maps and studies, the public buildings that have been identified as being “in” the floodplain can be examined in more detail to determine the degree of risk. Examinations, or audits, identify potential damage to buildings and contents, and evaluate whether feasible changes would be cost-effective in order to protect against future flood damage. Audits can be offered to private nonprofit organizations if their buildings are identified as being located in mapped flood hazard areas. Although few owners of privately-owned nonresidential buildings accepted the County’s offer to perform flood proofing audits, interest may change over time. The limitations on federal disaster assistance for flood damaged public and private nonprofit buildings that are not insured for flood damage should be taken into consideration by risk managers of such facilities. Status (2016): Action completed.

The County obtained grant funds to support this action in 2008. Using the existing flood data to identify buildings predicted to have flood depths of more than 3 feet for the future condition, 100-year flood, more than 80 non-residential property owners were contacted and offered free flood audits. Owners of 14 properties responded, including a church. A number of public buildings in the County have been identified for audit, including 13 buildings and structures and the two schools that were identified in the 2005 Plan as having some degree of flood risk. The City of Laurel requested inclusion of the building recently acquired for the police station. In 2010, all of above flood audits had been completed and a Summary Report of Floodproofing Audits was completed in March, 2011. The report has been added to the Hazard Mitigation Plan as Appendix B.

- **County Action. Flood Audits.** Conduct flood audits of +16 public buildings (County, The M-NCPPC, and City of Laurel) and 14 non-residential buildings of owners who accept an offer for the audit. Additional audits may be conducted if more owners express interest. See Section 5.5.1 and Appendix B for the final

report of audits conducted in Spring 2010. *Status (2016): See above. Also, the County completed a repetitive loss area analysis in 2015 and conducted audits of residential structures as part of this analysis.*

Action D. Anacostia Levee Improvements. A County study and subsequent work by the U.S. Army Corps of Engineers determined that in some places, the tops of the levees along the Lower Anacostia River are lower than required by current standards. Three areas could be affected by levee overtopping; together, more than 2,100 structures are in these vulnerable areas. **County Action:** Work with the Corps of Engineers to pursue funding to implement the levee improvement work. *Status (2016): The levee improvement work has been completed for the Brentwood, Edmonston-Bladensburg and Riverdale-Hyattsville levee systems. FEMA has accredited these improved levee systems. The County continues to make progress towards accreditation of the Allison Street Flood Protection System [levee]. This project is at 100% design and the project has been awarded. The anticipated start date of the construction is October 2016.*

Action E. Expansion of Flood Warning Notifications.

- **County Action E-1.** Update the flood warning system notification lists used in the County's alert messaging system with the list of flood-prone properties based on revised flood maps. *Status (2016): The new FIS and FIRM recently became effective on September 16, 2016. Staff may now proceed with addressing this action item.*
- **Laurel Action E-2.** Provide new floodplain mapping to WSSC and update coordination and flood warning notification procedures. *Status (2016): City of Laurel reports separately.*

Action F. Hazardous Materials, Pollutants, and Flood Hazard Areas. The Fire/EMS Department maintains a database of the physical locations of certain hazardous materials and other land uses maybe identified through the National Pollutant Discharge Elimination System are known to be potential sources of waterborne pollution (e.g., gas stations). Although no flood-related pollution incidents have been reported in at least 10 years, it is known that some pollutant sources are located in mapped flood hazard areas (car recycler, gas stations, former Bowie landfill site). **County Action:** Using the revised Flood Maps, check locations of HazMat sites, NPDES sites, and other land uses; if found to be in flood hazard areas, communicate with owner/handler regarding risk and appropriate response and protection measures. *Status (2016): While the County sends annual mailings to occupants of flood prone structures to inform them that their structures are at risk for flooding and to provide advice on how to protect their persons and properties, guidance on how to reduce incidents of flood-related pollution has not been provided for occupants of properties where hazardous materials are handled or stored. The new FIS and FIRM recently became effective on September 16, 2016. An updated list of properties which are located in the FEMA flood hazard area may be generated using the September 16th mapping data. Staff will assess how best to communicate with the subject property owners about risk, appropriate response and protection measure to reduce chances for waterborne pollution.*

Action J. Coordinate the Building Code & Floodplain Ordinance. The County’s building code is based on the 2006 editions of the *International Building Code* and the *International Residential Code*. The 2006 I-Codes include flood provisions that, in part, satisfy the minimum requirements of the National Flood Insurance Program. A comparison of the code provisions and the County’s Floodplain Ordinance (Division 2 of Subtitle 4 Building) will identify inconsistencies that can be resolved (see “Reducing Flood Losses through the *International Code Series: Meeting the Requirements of the National Flood Insurance Program.*”) **County Action:** Review materials to be provided by the Maryland Department of the Environment to compare the flood-resistant provisions of the Maryland building code and the County’s Floodplain Ordinance and determine the best way to avoid conflicts.

Status (2016): The building code has been updated to cite the 2015 editions of International Building Code, International Residential Code for One- and Two-Family Dwellings, International Mechanical Code etc. Also, the County Council introduced Bill CB-38-2016 on June 7, 2016 for the purpose of amending the County’s Floodplain Ordinance to be consistent with the State of Maryland’s Model Floodplain Management Ordinance (May 2014), which meets the requirements of the National Flood Insurance Program (the “NFIP”). This bill was adopted September 13, 2016.

It has recently been discovered that the above referenced 2015 edition of building codes is not consistent with the floodplain ordinance. County staff has begun the process of reviewing the building code and identifying code language for revision.

4. Why any objectives were not reached or why implementation is behind schedule:

Of the 2010 *Update*’s 6 action items, 5 are ongoing or underway (Action A, D, E, F and J). Action C has been completed in 2011. Work on Actions A, D, E and F had been pending the adoption of the new FEMA county-wide Flood Insurance Study (FIS) and Flood Insurance Rate Map (FIRM). With the approval of the FIS and FIRM on September 16, 2016, updated flood hazard information may be used to address Actions A, E and F. With regard to Action J, the County’s floodplain ordinance was amended on September 13, 2016. The County’s building code must now be reviewed for consistency with the September 13th floodplain ordinance.

5. Recommendations

The following items are recommended based on the review of the *Hazard Mitigation Plan*:

1. The Prince George’s County staff should continue their job of implementing the *Plan*’s ongoing recommendations.
2. The County should continue the annual outreach programs including “June Flood Awareness Month” and mailings to the owners of properties determined to be impacted by flood hazards, and other mailings.

3. Update the material related to Flood Management in the Public Library; if possible, digital versions of them should also be provided for the library's website.
4. Update the County website to include a notice of availability of this progress report.
5. Complete updates to the 2010 plan starting in FY17.