

City of Alexandria, Virginia



Community Rating System (CRS)

Activity 510
Floodplain Management Plan (FMP)

Annual Report

2017 - 2018 Recertification Cycle

I. Background

As part of the City's participation in the Community Rating System (CRS) program administered by the National Flood Insurance Program (NFIP), the City of Alexandria adopted by Council Resolution No. 2780 the Northern Virginia Hazard Mitigation Plan (NVHMP) Update dated June 13, 2017. In so doing, the City of Alexandria receives the following direct benefits:

- CRS credit under Activity 510 Floodplain Management Plan (FPM).

Currently, the NVHMP revision for 2017 is available for public viewing and comment at <https://www.alexandriava.gov/fire/info/default.aspx?id=49926>

In order to retain CRS credit for Activity 510 FPM, the City must prepare an annual progress report on the various activities Alexandria is performing as referenced in the Northern Virginia Hazard Mitigation Plan. This annual progress report is for the period August 1, 2017 through July 31, 2018.

In 2012 the City of Alexandria received a 5-year cycle visit on its CRS Program. During the cycle visit, CRS credit was approved for the following new activities:

- Activity 430 – STF, for staff certification as a Certified Floodplain Manager (CFM) and providing staff with education for same.
- Activity 510 – FPM, for adoption of the NVHMP.
- Activity 502 – RLAA, for conducting a repetitive loss area analysis and subsequent adoption.

CRS credit for these activities, as well as increased efforts in previously credited activities, resulted in a class change for Alexandria from a Class 7 to a Class 6. Policy holders in SFHA areas of Alexandria are now entitled to up to 20% discount on their flood insurance policy, up from the previous 15% discount at the former Class 7. The City's CRS Class 6 became effective October 1, 2013.

II. Annual Report Preparation, Distribution and Availability

This annual report is prepared by Brian Rahal, the City of Alexandria Transportation & Environmental Services Department Civil Engineer IV/CRS Coordinator/Floodplain Manager. The annual report has been made available to the public on the City's website. A Copy of this report was also made available to the Commonwealth of Virginia's National Flood Insurance Program (NFIP) Coordinator's Office through electronic mail. The reader may obtain a copy of the annual report by electronic file download off the City of Alexandria web site, located here:

<http://www.alexandriava.gov/3516>

III. FMP Action Items

The NVHMP, Chapter 7 – Jurisdiction Executive Summaries, starting on page 7-3, lists the mitigation action plan activities for the 2017 update:

Mitigation Action #2006-6:

Support mitigation of priority flood-prone structures through promotion of acquisition/demolition, elevation, flood proofing, minor localized flood control projects, mitigation reconstruction and where feasible using FEMA HMA programs where appropriate.

Hazard

Flood & Wind/Severe Storm

Responsibility

City of Alexandria's Department of Transportation and Environmental Services.

Funding

The identified funding source for this mitigation action is FEMA's Unified Hazard Mitigation Assistance grant funding.

Status

The status of this mitigation action is ongoing. Promotion of mitigation is included as part of the City's annual outreach program associated with FEMA's Community Rating System (CRS) annual recertification.

Mitigation Action #2010-3:

Conduct annual outreach to each FEMA-listed repetitive loss and severe repetitive loss property owner, providing information on mitigation programs (grant assistance, mitigation measures, flood insurance information) that can assist them in reducing their flood risk.

Hazard

Flood & Wind/Severe Storm

Responsibility

City of Alexandria's Department of Transportation and Environmental Services.

Funding

The cost will be paid for from the City's operating budget through the Department of Transportation and Environmental Services.

Status

The status of this mitigation action is ongoing and is included as part of the City's annual outreach program associated with FEMA's Community Rating System (CRS) annual recertification.

Mitigation Action #2010-4:

Promote structural mitigation to assure redundancy of critical facilities, to include but not limited to roof structure improvement, to meet or exceed building code standards, upgrade of electrical panels to accept generators, etc.

Responsibility

The City's Department of General Services.

Funding

The cost will be paid for from the City's General Services, Public Buildings, General Government Facilities, Emergency Power Systems CIP. For Fiscal 2019-2028, the total funded for this CIP is \$1.6M.

Status

The City's Emergency Power Systems CIP is ongoing and provides for the systematic replacement, placement, and capital maintenance of emergency generators and emergency generator infrastructure at City facilities. This project supports public safety services by providing reliable electricity to facilities, equipment, and technologies to meet contemporary standards for constant service delivery. Design and engineering phases include: analyses of current emergency systems requirements; current and future facility use; coordination with emergency response planning; and appropriate technology solutions to include emergency generators, uninterrupted power supply (UPS), battery storage, micro grids, mobile generator interconnections, and emergency electrical system infrastructure.

Mitigation Action #2010-5:

Review locality's compliance with the National Flood Insurance Program with an annual review of the Floodplain Ordinances and any newly permitted activities in the 100-year floodplain. Additionally, conduct annual review of repetitive loss and severe repetitive loss property list requested of VDEM to ensure accuracy. Review will include verification of the geographic location of each repetitive loss property and determination if that property has been mitigated and by what means. Provide corrections if needed by filing form FEMA AW-501.

Responsibility

The City's Department of Transportation and Environmental Services.

Funding

The cost for repetitive loss property outreach will be paid for from the City's operating budget through the Department of Transportation and Environmental Services.

Status

The status of this mitigation action is ongoing. This action item is also part of the Repetitive Loss Area Analysis adopted in 2012 and the subsequent annual progress report. As of May 27, 2015, one repetitive loss property at 1 King Street was made City property as part of a land swap deal with the Old Dominion Boat Club. City ownership of 1 King Street effectively removed that property from the repetitive loss list. Also in 2015, a severe thunderstorm flooded a portion of Taylor Run, causing the flooding of a property for the second time in 10-years, adding one property to the City's Repetitive Loss list. The total number of Repetitive Loss properties remains at eleven (11).

Mitigation Action #2010-7:

Re-grade section of lower King Street, Union Street and The Strand to improve drainage and minimize flooding.

Responsibility

The City's Department of Project Implementation.

Funding

The cost for a feasibility study and preliminary design is funded by Department of Transportation and Environmental Services CIP funding.

Status

The status of this mitigation action is ongoing. The City engaged in a preliminary design and feasibility study for re-grading sections of lower King Street, Union Street and The Strand. It was determined by this study that raising these streets was feasible only to mitigate minor nuisance flooding caused by tidal fluctuations in the Potomac River. Further study and implementation of recommended nuisance flooding mitigation is now part of the Waterfront Plan Implementation project currently under way. In the Spring of 2014, the Department of Transportation and Environmental Services installed a new elastomeric tide valve in the 36" outfall storm sewer pipe to block the intermittent tidal fluctuations from inundating the intersection at King Street and Strand Street. The tide valve now mitigates all nuisance flooding in this intersection for tides and tidal anomalies up to approximately elevation 3.2'. Additional mitigation measures are included in the City's Waterfront Small Area Plan Implementation Capital Improvement Plan which includes a 10-year budget (FY2019-2018) of \$55.9M. Construction of a portion of the improvements began in 2017 and are scheduled to be complete by

March 2019.

Mitigation Action #2010-8:

Construct an elevated walkway along Potomac riverfront to elevation 6.0 feet (NAVD88) to mitigate nuisance flooding.

Responsibility

The City's Department of Project Implementation, Department of Recreation, Parks and Cultural Activities, and developer contributions will be responsible for the ultimate implementation of the Waterfront Small Area Plan; which includes the elevated walkway, or other mitigation measures, to control the inundation of low lying areas below elevation 6.0'. Implementation of all construction projects in the City are now the responsibility of the Department of Project Implementation. Community Development Capital Improvement Project (CIP) is the funding source.

Funding

The cost for design and construction of the mitigation is funded by Community Development CIP funding.

Status

The status of this mitigation action is ongoing. Further study and implementation of recommended nuisance flooding mitigation is now part of the Waterfront Small Area Plan Implementation project currently under way. For more information, see the Waterfront Small Area Plan Implementation's project website at:

<http://www.alexandriava.gov/Waterfront>

In May 2018, City Council approved the FY2019-FY2028 Capital Improvement Program that included \$55.9M over the next 10-years to continue to fund this project.

The construction of the Interim King Street Park project is under way and is expected to be complete by March 2019.

V. New Projects/Action Items or Revised Recommendations

Mitigation Action #2017-1:

Build permanent standalone Emergency Operations Center.

Responsibility

The City's Department of Emergency Management.

Funding

The cost for building a permanent Emergency Operations Center (EOC) will be paid for from the City's CIP budget through the Department of Emergency Management.

Status

The project is entering Phase 2 of construction.

Mitigation Action #2017-2:

Identify and exploit the most effective tools for communications with the public during emergencies, including leveraging emerging technologies.

Responsibility

The City's Department of Emergency Management.

Funding

The cost for this action will be paid for from the City's operating budget through the Department of Emergency Management.

Status

Currently, the Office of Emergency Management is actively recruiting subscribers to the City's eNews electronic emergency notification system and has a goal to reach 3,000 total subscribers by the end of 2018.

Mitigation Action #2017-5:

Excavate sediment from channel bed of Cameron Run - I495 bridge to upstream, as needed.

Responsibility

The City's Department of Transportation and Environmental Services.

Funding

The cost for performing the excavation of accumulated sediment is funded through the Stream and Channel Maintenance Stormwater Management CIP.

Status

The City removed approximately 5,800-yds of accumulated sediment from the channel of Cameron Run between the I-495 Beltway Bridge and Weir #1 in 2017. Construction began in June 2017 and completed in December 2017. The City continues to monitor ongoing sediment deposition in the area previously excavated

and will remove sediment when deemed appropriate, typically every 5-years.