

City of Alexandria, Virginia



Community Rating System (CRS)

Activity 510 Floodplain Management Plan (FMP)

Annual Report

2021 - 2022 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://media.alexandriava.gov/docs-archives/fire/info/hazmit-final-draft-8.24.17.pdf>

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, 2020 through August 1, 2021.

In 2018 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 activity:

- **Activity 510 – Floodplain Management Planning:** Credit is provided for the adoption and implementation of the Northern Virginia Hazard Mitigation Plan adopted June 13, 2017. A progress report must be submitted on an annual basis. (50 points)

CRS credit for this activity, as well as efforts in previously credited activities, resulted in continuation of a Class 6 for Alexandria. Policy holders in SFHA areas of Alexandria may receive to up to 20% discount on their flood insurance policy. Certification of the results of the last cycle verification visit was dated February 12, 2021. The City's CRS re-verification of Class 6 becomes effective October 1, 2021. The next cycle verification will be in 2026.

II. Annual Report Preparation, Distribution and Availability

This annual report is prepared by Brian Rahal, P.E., a Civil Engineer IV, CRS Coordinator/Floodplain Manager at the City of Alexandria's Transportation & Environmental Services Department, Stormwater Management Division. 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 from 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, in the order listed in the adopted plan:

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.

Additional updates to this Mitigation Action are part of the city's implementation of Flood Action Alexandria program. Flood Action Alexandria is an initiative to address flooding issues that arise in our community. Minimizing flooding is a shared public-private responsibility, and the City is committed to working with its residents and businesses to mitigate the impacts of flooding and build community resiliency. More information can be found on the city's website at: <https://alexandriava.gov/floodaction>. All quarterly issues of the Flood Action Alexandria eNewsletter are attached to this report in an Appendix.

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, funded by the special revenue fund Stormwater Utility Fee.

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 2023-2032, the total funded for this CIP is \$5,451,300.

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 FEMA Region 3 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, funded by the special revenue fund Stormwater Utility Fee.

Status

The status of this mitigation action is ongoing. The total number of Repetitive Loss properties remains at eleven (11), as updated property claims data in the city has not been available from FEMA due to deployments of FEMA staff to manage multiple disasters in 2019 through 2021. Staff is coordinating with the FEMA Region 3 staff for access to the repetitive loss data. It is expected that the city's number of repetitive loss properties will more than double due to the reports of property damage due to flooding from the severe flash flooding events of July 8, 2019, July 23, 2020, September 10, 2020 and August 15, 2021.

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. Additional mitigation measures are included in the City's Waterfront Small Area Plan Implementation Capital Improvement Plan which includes a 10-year budget (FY2023-2032) of \$83,241,000. Construction of a portion of the improvements began in 2017 and were completed in 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 2022, City Council approved the FY2023-FY2032 Capital Improvement Program that included \$83,241,000 over the next 10-years to continue to fund this project.

Mitigation Action #2017-1:

Build permanent standalone Emergency Operations Center.

Responsibility

The City's Office 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 was completed in May 2019.

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 Office of Emergency Management.

Funding

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

Status

Currently, the Office of Emergency Management is actively recruiting subscribers to the City's eNews electronic emergency notification system and had a goal to reach 3,000 subscribers by the end of 2018. As of the writing of this report, current total Public Alert Opt-in subscribers is 29,498.

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, funded by the special revenue Stormwater Utility Fee.

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. Investigations are ongoing to determine the scope of the next needed sediment removal project tentatively scheduled for late early 2023.

V. New Projects/Action Items or Revised Recommendations

2020 – FLOOD ACTION ALEXANDRIA

In response to more frequent, intense climate-change-induced storm events, the City of Alexandria launched Flood Action Alexandria, a multipronged program to help address flooding issues in our community. The city is committed to working with residents and businesses to mitigate the impacts of flooding and build community resiliency. General information on the program is located on the city's website at: <https://alexandriava.gov/floodaction>.

Flood Action Alexandria has four main components:

1. Flooding in Alexandria
2. What the City is Doing
3. What You Can Do
4. Additional Resources

Each component of the program is intended to provide historical context and changes to the environment, updated information on new and ongoing city programs and projects, and provide informational resources for individual property owners seeking to learn more about protecting their own property from flood damage.

On May 4th, 2022, the Alexandria City Council adopted a (FY) 2023 General Fund

Operating Budget of \$839.2 million, which represents an increase of 8.9% over the current year. The City’s 10-year Proposed Capital Improvement Program (CIP) was also adopted. The Approved FY 2023 – 2032 Capital

Improvement Program (CIP) totals \$2.73 billion and is a \$63.5 million or 2.4% increase over last year’s CIP. Significant project expenses including increased investments in school facilities, maintenance of existing City assets and facilities, and continued substantial support of WMATA’s capital improvement program.

HIGHLIGHTS OF THE 10 YEAR PLAN

- Funding included for 100% of the Alexandria City Public Schools requested 10-year plan totaling \$497.8 million
- \$288.4 million to expand and accelerate flood mitigation and stormwater infrastructure
- \$203.3 million to fund the City’s Capital Facility Maintenance Programs and other major renovations (i.e., City Hall)
- \$105.0 million for DASH Bus Fleet Replacement
- \$83.2 million for the Waterfront Plan and to construct flood mitigation infrastructure
- \$66.2 million to implement the Transit Corridor “C” – West End Transitway
- WMATA capital funding totaling \$181.8 million

On January 26, 2021, Alexandria City Council approved a resolution to establish an Ad Hoc Stormwater Utility and Flood Mitigation Advisory Group in support of the City’s flood mitigation efforts and implementation of the stormwater utility. The Advisory Group will review and advise in regard to flood mitigation activities, monitor and measure progress of the City’s proposed flood mitigation efforts, serve as a general body for receipt and dissemination of information for the City’s flood mitigation implementation efforts, and review and provide recommendations on proposed Stormwater Utility operating and capital budgets.

The Advisory Group meets on an ad hoc basis for an initial duration of one year. The first meeting was on June 10, 2021. The second meeting is scheduled for August 12, 2021.

There are four attachments in the Appendix to this report that are broadcast to the city’s eNews subscribers that brings to the community updates on Flood Action Alexandria activities. These updates occur regularly on a quarterly basis.

End of Report