

City of Alexandria, Virginia



Community Rating System (CRS)

Activity 510 Floodplain Management Plan (FMP)

Annual Report

2022 - 2023 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).

The City of Alexandria recently adopted a revised Northern Virginia Hazard Mitigation Plan (NVHMP) in coordination with 21 Northern Virginia communities. Alexandria City Council adopted the NVHMP base plan and the Alexandria Annex on June 13, 2023. The signed resolution and the adopted plan documents are available on the city's website at: <https://alexandria.legistar.com/LegislationDetail.aspx?ID=6250173&GUID=DD2B143F-014C-47AE-BD2E-3273B67B331B>

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 (2022). This annual progress report is for the period August 1, 2022, through July 31, 2023.

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 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 2024.

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, Annex 2: City of Alexandria Section 8 Mitigation Actions begin on page 28 begin the adopted actions and are below, in the order listed in the adopted plan:

Mitigation Action #2006-1:

Adopt revised FIRM(s).

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 city's next adoption action will be in coordination with FEMA's last map change for Alexandria's FIRMs. FEMA published the Letter of Final Determination (LFD) finalizing the preliminary FIRMs on July 11, 2023.

The city will adopt the new maps by ordinance revision on or before for the new maps become effective on January 11, 2024.

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 for this reporting period 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 2024-2033, the total funded for this CIP is \$5,867,860.

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 has increased to (35). Updated property claims data in the city was received from FEMA in May 2023. As expected, 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 there was an increase of 24 Repetitive Loss properties since 2018.

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 the Progressive Design-Build contract is funded by the Community Development CIP fund.

Status

The status of this mitigation action is ongoing. The city is currently in procurement of a Progressive Design-Build contract and is scheduled to have a contract in place in the first quarter of Fiscal Year 2024. The city intends to make improvements to the waterfront area and protect to elevation 6.0' (NAVD88) between Duke St and Queen St including lower King Street, Union Street and The Strand. Additional mitigation measures are included in the City's Waterfront Small Area Plan Implementation Capital Improvement Plan which includes a 10-year budget (FY2024-2033) of \$48,200,000, with a total of \$108,563,000 appropriated for the project. 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 the Progressive Design-Build contract is funded by the Community Development CIP fund.

Status

The status of this mitigation action is ongoing. The city is currently in procurement of a Progressive Design-Build contract and is scheduled to have a contract in place in the first quarter of Fiscal Year 2024. The city intends to make improvements to the waterfront area and protect to elevation 6.0' (NAVD88) between Duke St and Queen St including lower King Street, Union Street and The Strand. Additional mitigation measures are included in the City's Waterfront Small Area Plan Implementation Capital Improvement Plan which includes a 10-year budget (FY2024-2033) of \$48,200,000, with a total of \$108,563,000 appropriated for the project. Construction of a portion of the improvements began in 2017 and were completed in March 2019.

Mitigation Action #2016-1:

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 #2016-2:

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 #2016-2:

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 #2016-3:

Four Mile Run stream restoration.

Responsibility

The City’s Department of Transportation and Environmental Services.

Funding

The cost for this project was funded by the Community Development CIP fund and partially funded by a grant from the EPA.

Status

The project was completed in November 2018.

Mitigation Action #2016-5:

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 this project is provided by the Stream & Channel Maintenance CIP funded by the special revenue fund Stormwater Utility Fee.

Status

The removal of sediment is scheduled for implementation in Fiscal Year 2024.

Mitigation Action #2022-2

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 3rd, 2023, the Alexandria City Council adopted a (FY) 2024 General Fund Operating Budget of \$884.3 million, which represents an increase of \$45.1M over the current year. The City's 10-year Proposed Capital Improvement Program (CIP) was also adopted. The Approved FY 2024 – 2033 CIP totals \$2.41B, including

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 reviews and advises regarding flood mitigation activities, monitors and measures progress of the City's proposed flood mitigation efforts, serves as a general body for receipt and dissemination of information for the City's flood mitigation implementation efforts, and reviews and provides recommendations on proposed Stormwater Utility operating and capital budgets.

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.

Responsibility

The City's Department of Transportation and Environmental Services and the Department of Project Implementation.

Funding

The cost for this project is provided by the Transportation and Environmental Services Department Stormwater Management Division operational funding and the Stormwater Management CIP provided by the special revenue fund Stormwater Utility Fee.

Status

The project is ongoing and funded through the next 10-year Capital Improvement Program.

Mitigation Action #2022-3:

Public rain gauge portal for residents and businesses to use in monitoring rain events in near real-time.

Responsibility

The City's Department of Transportation and Environmental Services.

Funding

The cost for this project is provided by the Transportation and Environmental Services Department Stormwater Management Division operational funding provided by the special revenue fund Stormwater Utility Fee.

Status

The portal has been live since October 2021 and has been in continuous operation since.

Mitigation Action #2022-4:

E Glebe & Commonwealth & Ashby Storm Sewer Capacity Project.

Responsibility

The City's Department of Transportation and Environmental Services and the Department of Project Implementation.

Funding

The cost for this project is provided by the Stormwater Management CIP funded by the special revenue fund Stormwater Utility Fee.

Status

Currently under contract and in design. Schedule is provided on the city's public project dashboard located here:

<https://alexgis.maps.arcgis.com/apps/dashboards/00d8ebd88e664afabca6496ca82adf1d>

Mitigation Action #2022-5:

Hooffs Run Timber Branch Bypass project.

Responsibility

The City's Department of Transportation and Environmental Services and the Department of Project Implementation.

Funding

The cost for this project is provided by the Stormwater Management CIP funded by the special revenue fund Stormwater Utility Fee.

Status

Currently under contract and in design. Schedule is provided on the city's public project dashboard located here:

<https://alexgis.maps.arcgis.com/apps/dashboards/00d8ebd88e664afabca6496ca82adf1d>

Mitigation Action #2022-6:

Hume Ave Inlets & Check Valve project.

Responsibility

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

Funding

The cost for this project is provided by the Stormwater Management CIP funded by the special revenue fund Stormwater Utility Fee. Was initially identified for ARPA funding and was fully funded by Stormwater Management Spot Improvement CIP.

Status

Project was completed February 2022.

Mitigation Action #2022-7:

Hume Ave Storm Sewer Bypass project.

Responsibility

The City's Department of Transportation and Environmental Services and the Department of Project Implementation.

Funding

The cost for this project is provided by the Stormwater Management CIP funded by the special revenue fund Stormwater Utility Fee. Partially funded by ARPA.

Status

Currently under contract and in design. Schedule is provided on the city's public project dashboard located here:

<https://alexgis.maps.arcgis.com/apps/dashboards/00d8ebd88e664afabca6496ca82adf1d>

Mitigation Action #2022-8:

Mt Vernon Ave cul de sac Storm Sewer Improvements.

Responsibility

The City's Department of Transportation and Environmental Services and the Department of Project Implementation.

Funding

The cost for this project is provided by the Stormwater Management CIP funded by the special revenue fund Stormwater Utility Fee. Partially funded by ARPA.

Status

Currently under contract and in design. Schedule is provided on the city's public project dashboard located here:

<https://alexgis.maps.arcgis.com/apps/dashboards/00d8ebd88e664afabca6496ca82adf1d>