



- (1) Adopt the attached resolution to support the FY 2021 Virginia Community Flood Preparedness Fund (CFPF) grant application totaling \$516,500; and
- (2) Authorize the City Manager to enter into any agreements that may be required to receive these funds should the requested allocation be approved.

**BACKGROUND:** The Virginia Community Flood Preparedness Fund (CFPF), managed by the Virginia Department of Conservation and Recreation (DCR) was established to provide support for regions and localities across Virginia to reduce the impacts of flooding, including flooding driven by climate change. The Fund will prioritize projects that are in concert with local, state, and federal floodplain management standards, local resilience plans, and the Virginia Coastal Resilience Master Plan. The Fund will empower communities to complete vulnerability assessments and develop and implement action-oriented approaches to bolster flood preparedness and resilience.

Solicitations for funding will be extended multiple times each fiscal year, with money coming from the auction of carbon allowances through the Regional Greenhouse Gas Initiative (RGGI). The City was successful in the first round and received an award for the September 3, 2021 solicitation. This second solicitation of FY 2021 is due November 5, 2021 and there is another solicitation anticipated in the January/February 2022 timeframe. Projects must be completed no later than 36 months from the date of an executed agreement.

**DISCUSSION:** The City has been experiencing widespread urban flooding due to the recent increase in high intensity precipitation events associated with climate change and the City's inherent low-lying nature. The City's 2016 City of Alexandria Storm Sewer Capacity Analysis (CASSCA) provided a model of potential storm sewer system areas that may experience capacity issues which could be mitigated through projects focusing on a mix of conveyance, storage, and/or green infrastructure. In addition to the identification of potential problems in the CASSCA study, service requests received through Alex311 during large storm events, and subsequent field investigations have identified segments and junctions of the storm sewer system which could be improved to better convey storm flows and help reduce flooding. These large, complex capital flooding and capacity projects address systemic issues and take longer to deliver, typically three to five years each once funding comes available.

Staff is working on design procurement for the top three priority projects: 1) Commonwealth Avenue and East Glebe Road, 2) Ashby Street and East Glebe, and 3) Hooffs Run Culvert / Timber Branch Bypass. The fourth priority large capacity project is located at Edison Street and Dale Street in the Arlandria-Chirilagua planning area of the Four Mile Run watershed and is fully funded in FY 2026 as shown in the FY 2022 to FY 2031 Stormwater Management Utility Ten-Year plan.

Staff and the consulting team have followed the earlier Neighborhood Engagement meetings with investigations in those neighborhoods to identify potential spot projects. These investigations in the Edison Street and Dale Street area have identified an early phase of the large capacity project that can be implemented sooner to accelerate mitigation of flooding associated with high intensity storm events near the intersection of Edison and Dale Streets. The preliminary project scope proposes conveying surface runoff from larger storms by installing a new channel, upsizing an existing pipe and adding a check valve in the storm sewer at the end of Edison Street cul-de-sac. A "check valve" is intended to prevent stormwater backflow from a pipe. The project would also create a new surface water channel to better convey stormwater runoff near the east end of Dale Street, and add a new storm sewer pipe and inlets along West Reed Ave. The project proposed for this grant has

been scoped to provide accelerated flooding mitigation as an early phase of the larger Edison Street and Dale Street capacity project that is the #4 prioritized project in the approved FY 2022 to FY 2031 CIP.

**FISCAL IMPACT:** The CFPF is a new grant funding program that will make multiple (quarterly) solicitations during the fiscal year and which require matching funds be available at the time of application. The CFPF application cost share, if approved by DCR, would cover 50% of the total estimated project cost. The total project cost is \$1.033 million with 50% of the funding (or \$516,500) being requested from the Fund and 50% or \$516,500 being the cost share funded by the City through the FY 2022 CIP Stormwater Sewer Capacity Projects program. The net effect or savings from the grant funds will be used to offset planning for another stormwater project after consultation with the Stormwater Ad Hoc Advisory Group.

If Council approves this project, Transportation and Environmental Services (T&ES) staff will work with Project Implementation (DPI) staff to submit initial application materials by the state's November 5, 2021 deadline. If Council does not approve this project, or directs staff to submit another project, this project could be wholly funded out of the City's Storm Sewer Capacity Projects program in FY 2026.

**ATTACHMENT:** Resolution

**STAFF:**

Emily A. Baker, Deputy City Manager

Yon Lambert, Director, Transportation and Environmental Services (T&ES)

Morgan Routt, Director, OMB

Terry Suehr, Director, Project Implementation

William J. Skrabak, Deputy Director, T&ES, Infrastructure and Environmental Quality

Jesse E. Maines, Division Chief, T&ES, Stormwater Management

Arthur Wicks, Capital Improvement Program Manager, OMB

Tarrence Moorer, Division Chief, T&ES, SMS