DEPARTMENT OF ENERGY & ENVIRONMENT

2023
RESILIENCE FOCUS AREA STRATEGY

An equity-driven roadmap to achieve flood resilience in the District of Columbia.

flood.risk@dc.gov

ACKNOWLEDGMENTS

PROJECT TEAM

DEPARTMENT OF ENERGY & ENVIRONMENT

GOVERNMENT OF THE DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR

RESILIENCE FOCUS AREA STRATEGY

PROJECT BACKGROUND

Throughout its history, Washington, D.C. has experienced significant riverine, coastal, and interior floods that have negatively impacted residents, federal and local operations, assets, infrastructure, and buildings. With climate change the District expects this risk to become ever more frequent and potentially more destructive with time. As a result, flooding is one of the main hazards that city planners and policymakers must consider to ensure a more secure and resilient capital. However, with so many communities within floodplains, so many rivers and creeks, and an increased risk of flooding from extreme rain events, how can the District government prioritize its investments in resilient infrastructure?

WHAT ARE RESILIENCE FOCUS AREAS?

The District's 2021 Comprehensive Plan broke the 500-year floodplain into 10 study areas called Resilience Focus Areas (RFAs). The RFA boundaries have since been revised to include 15 planning areas.

STRATEGY PRIMER

The Resilience Focus Area Strategy was born out of the District's need to be strategic in its flood resilience work and the need to prioritize the most vulnerable and valuable areas of the city. For these reasons, through a rigorous data-driven, equity-centered analytical process, the Strategy prioritizes areas of intervention by putting people and vulnerable populations at the center, then the critical infrastructure that is needed for a speedy recovery, and, finally, the District's ability to implement change. For these reasons, the Strategy prioritizes areas under local jurisdiction (non-federal) with vulnerable populations. The steps to achieving this Strategy include analyzing existing conditions to identify areas that are most vulnerable to flood hazards, developing a prioritization framework to quantitatively rank the RFAs in order of priority, and using the framework to strategize where to prioritize flood resilience projects.

INTENDED AUDIENCE

The Strategy's primary audience are the District's Department of Energy and Environment (DOEE) staff and floodplain managers within its "flood team", policymakers, city planners and hazard mitigation staff so that the District government can prioritize and coordinate planning, infrastructure funding and design across multiple agencies. Since the Strategy is aimed at assisting the District with prioritizing flood adaptation work that will protect residents and local infrastructure, federal agencies are only a secondary audience for this report as areas under federal jurisdiction are assumed to be a priority for the federal government to protect. Further analysis, beyond what is contained in this strategy, will be required for each RFA.

THREE-STEP PROCESS:

1 EXISTING CONDITIONS ANALYSIS

Delineate RFA boundaries to analyze existing conditions related to people, assets, and actionability within each RFA.

2 PLANNING PRIORITIZATION

Build prioritization framework to summarize existing conditions.

3 IMPLEMENTATION STRATEGY

Use the framework results to prioritize planning and flood resilience projects.

RESILIENCE FOCUS AREA STRATEGY
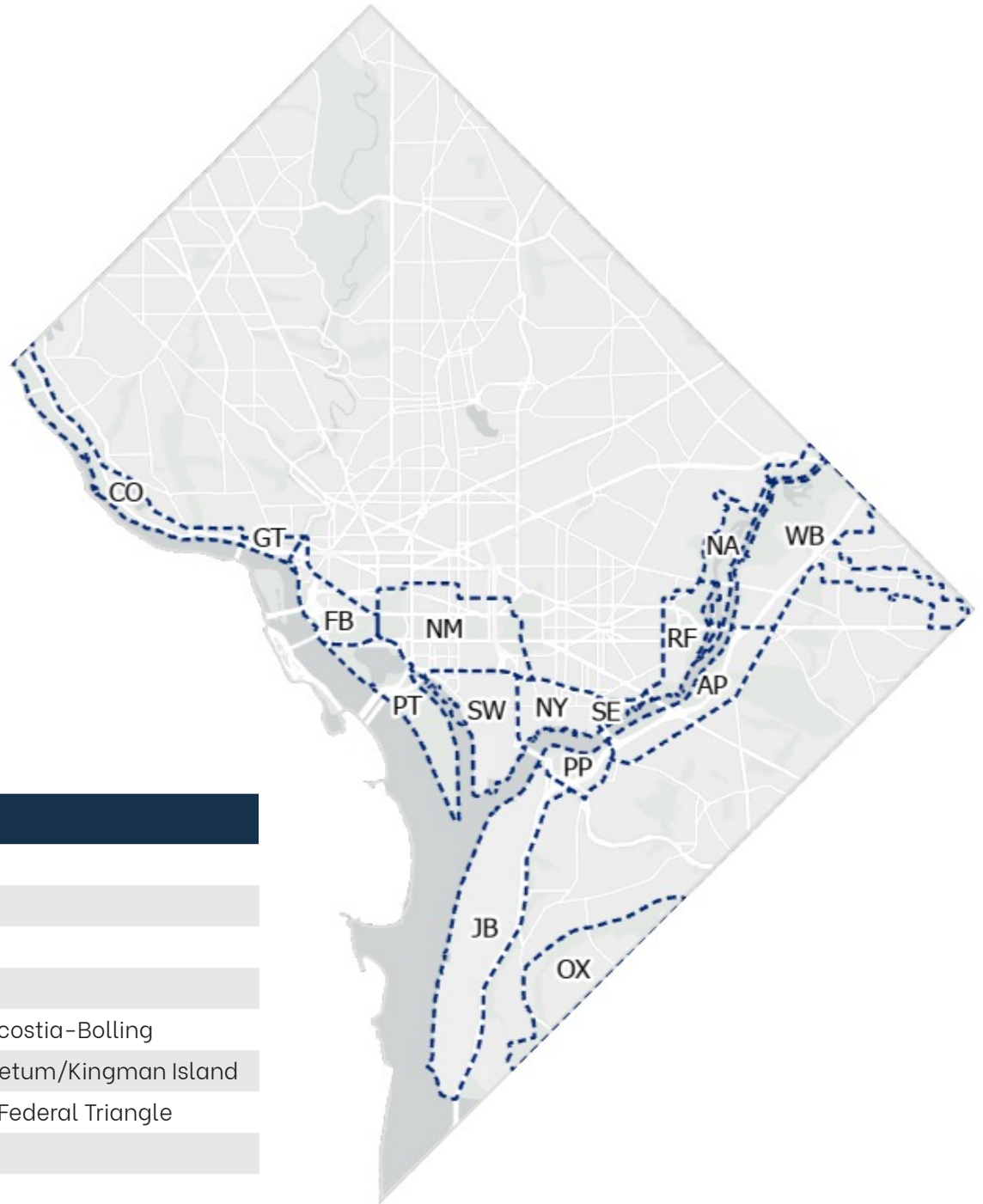
ABBR	RFA Name
AP	Anacostia Park
CO	C&O Canal
FB	Foggy Bottom
GT	Georgetown
JB	Joint Base Anacostia-Bolling
NA	National Arboretum/Kingman Island
NM	National Mall/Federal Triangle
NY	Navy Yard
OX	Oxon Run
PP	Poplar Point
PT	Potomac Park
RF	RFK Stadium
SE	SE Blvd
SW	SW/Buzzard Point
WB	Kenilworth Park/Watts Branch

RESILIENCE FOCUS AREA STRATEGY RESULTS

The Strategy resulted in the development of a prioritization framework that scored each RFA based on the existing conditions analysis, including inputs for population, equity, flood potential and damages, critical and community assets, and actionability. The framework and resulting prioritization of RFAs is displayed below.

PRIORITIZATION FRAMEWORK

The RFA prioritization framework consists of a total of 100 points, broken down into three categories: Vulnerable People, Vulnerable Assets, and Actionability. Points are further broken down into subcategories.

Vulnerable People — 45 Total points
- CDC SVI
- Equity Emphasis Area Tool
- CRA
- Assets
  → Equity 30
- Total Population
- Population Density
  → Population 15

Vulnerable Assets — 45 Total points
- Bluespots
- 100- & 500-yr Flood Zones
- 2070 Tidal Inundation
- Building Footprint
- Right-of-Way
  → Flood Potential & Damages 25
- Critical & Community Assets
  → Critical & Community Assets 20

Actionability — 10 Total points
- Land Ownership
- Space Availability
  → Action-ability 10

OVERALL RESULTS

The overall RFA rankings in order of total score are shown in the table below. Total score is the sum of points within the Vulnerable People, Vulnerable Assets, and Actionability categories. The map shows the highest scoring, or highest priority, RFAs in darker colors.

Rank	RFA Name	Score (Max = 100)
1	SW/Buzzard Point	66.26
2	Kenilworth Park/Watts Branch	65.72
3	Oxon Run	65.57
4	National Mall/Federal Triangle	50.53
5	Joint Base Anacostia-Bolling	42.22
6	Navy Yard	37.48
7	Anacostia Park	35.38
8	Poplar Point	31.05
9	RFK Stadium	30.38
10	Foggy Bottom	20.42
11	Georgetown	19.58
12	SE Blvd	18.30
13	National Arboretum/Kingman Island	16.94
14	C&O Canal	14.64
15	Potomac Park	7.01

Legend
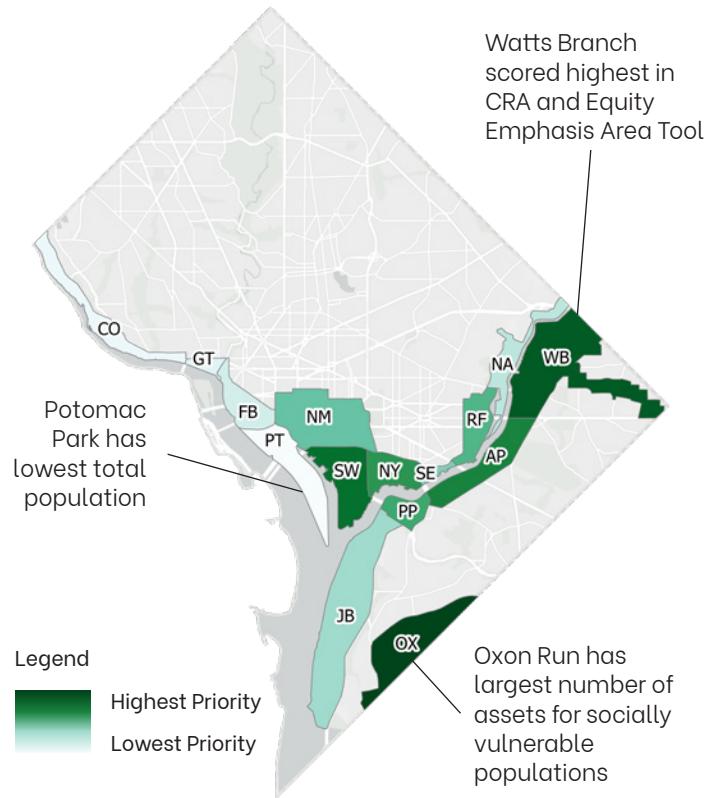- Highest Priority
- Lowest Priority
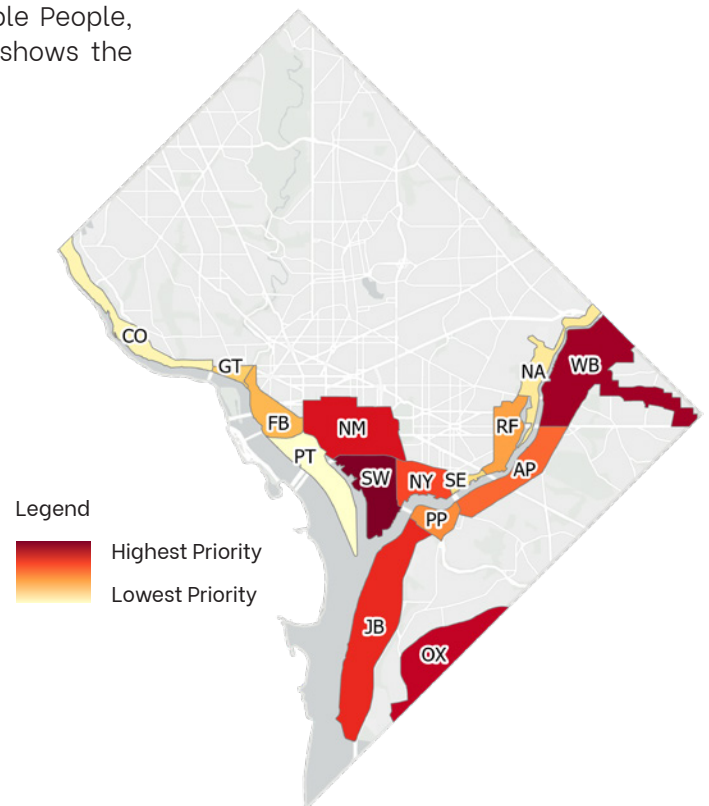
VULNERABLE PEOPLE

The RFA rankings within the Vulnerable People scoring category, ranked in order of total category score, are shown in the table below. The map shows the highest scoring RFAs in darker colors.

Rank	RFA Name	Score (Max = 45)
1	Oxon Run	41.78
2	Kenilworth Park/Watts Branch	36.53
3	SW/Buzzard Point	33.80
4	Navy Yard	29.17
5	Anacostia Park	20.77
6	RFK Stadium	19.20
7	Joint Base Anacostia-Bolling	19.07
8	SE Blvd	16.82
9	Poplar Point	16.80
10	National Arboretum/Kingman Island	14.92
11	National Mall/Federal Triangle	14.46
12	Foggy Bottom	10.35
13	Georgetown	8.35
14	C&O Canal	8.15
15	Potomac Park	3.60

Watts Branch scored highest in CRA and Equity Emphasis Area Tool

Potomac Park has lowest total population

Oxon Run has largest number of assets for socially vulnerable populations

Legend
Highest Priority
Lowest Priority

DATA SOURCES

The Vulnerable People scoring category consists of the following data sources:

CENTER FOR DISEASE CONTROL'S SOCIAL VULNERABILITY INDEX

The CDC SVI uses U.S. Census data to determine the social vulnerability of every census tract and ranks each one on 16 social factors, including poverty, lack of vehicle access, etc.
Methodology: Weighted area average. Higher index = higher score. Scores interpolated between 0-1.

EQUITY EMPHASIS AREA (EEA) TOOL

The EEA Tool was developed by the Metropolitan Washington Council of Governments (COG). EEAs are 364 of the region's more than 1,300 census tracts with high concentrations of low-income individuals and/or traditionally disadvantaged racial and ethnic population groups.
Methodology: Weighted area average. Higher index = higher score. Score ranges set manually.

COMMUNITY RISK ASSESSMENT (CRA)

The CRA is developed by the District Homeland Security and Emergency Management Agency. The CRA used age, race, disability, and economic demographics at the Ward-level to determine the social and population vulnerability of each Ward based on a handful of hazard scenarios.
Methodology: Weighted area average. Higher index = higher score. Score ranges set manually.

ASSETS FOR SOCIALLY VULNERABLE PEOPLE

The count of childcare centers, senior living facilities, and affordable housing units available through OpenData. DC.gov were totaled to assess areas where vulnerable populations likely live.
Methodology: Number of assets. Higher count = higher score. Score ranges set manually.

TOTAL POPULATION / POPULATION DENSITY

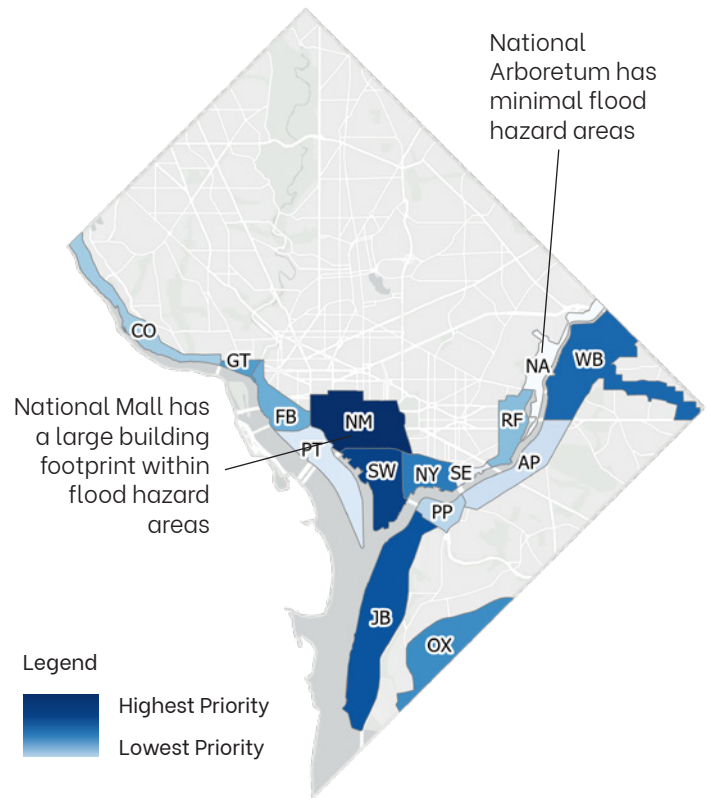U.S. Census population data was used to determine the total population and population density within each RFA.
Methodology: Weighted area average / Density. Higher number= higher score. Scores interpolated between min/max / Ranges set manually.

VULNERABLE ASSETS

The RFA rankings within the Vulnerable Assets scoring category, ranked in order of total category score, are shown in the table below. The map shows the highest scoring RFAs in darker colors.

Rank	RFA Name	Score (Max = 45)
1	National Mall/Federal Triangle	33.10
2	SW/Buzzard Point	29.04
3	Joint Base Anacostia–Bolling	24.29
4	Kenilworth Park/Watts Branch	22.21
5	Navy Yard	14.80
6	Oxon Run	14.74
7	Georgetown	11.14
8	Foggy Bottom	9.95
9	RFK Stadium	8.59
10	C&O Canal	6.29
11	Poplar Point	4.14
12	Anacostia Park	4.08
13	Potomac Park	3.37
14	SE Blvd	0.78
15	National Arboretum/Kingman Island	0.02

National Arboretum has minimal flood hazard areas

National Mall has a large building footprint within flood hazard areas

Legend

Highest Priority

Lowest Priority

DATA SOURCES

The Vulnerable Assets scoring category consists of the following data sources:

BLUESPOTS

Identified using an ArcGIS tool developed by the Danish Road Institute as a screening method for assessing flood risk. Bluespots identify surface depressions where rainfall collects without a means of conveyance.
Methodology: Total area. Larger area = higher score.

FEMA 100- AND 500-YEAR FLOOD HAZARD AREAS

The Federal Emergency Management Agency (FEMA) produces Flood Insurance Rate Maps and identifies Special Flood Hazard Areas as part of the National Flood Insurance Program.
Methodology: Total area. Larger area = higher score.

2070 TIDAL INUNDATION

Projected 2070 tidal inundation levels were determined adding NOAA's intermediate high sea level rise projections to the mean higher-high water (MHHW) level for the DC area.
Methodology: Total area. Larger area = higher score.

BUILDING FOOTPRINT AND RIGHT-OF-WAY (ROW) AREAS

Using ArcGIS, building footprint and ROW areas were overlaid on top of each flood hazard. The 'intersect' tool was used to find the total building and ROW areas that overlapped with flood hazards.
Methodology: Total area. Larger area = higher score. Score ranges set manually.

CRITICAL AND COMMUNITY ASSETS

The count of critical and community assets available through OpenData.DC.gov were totaled within each RFA including asset categories of emergency services, energy, transportation, educational, etc.
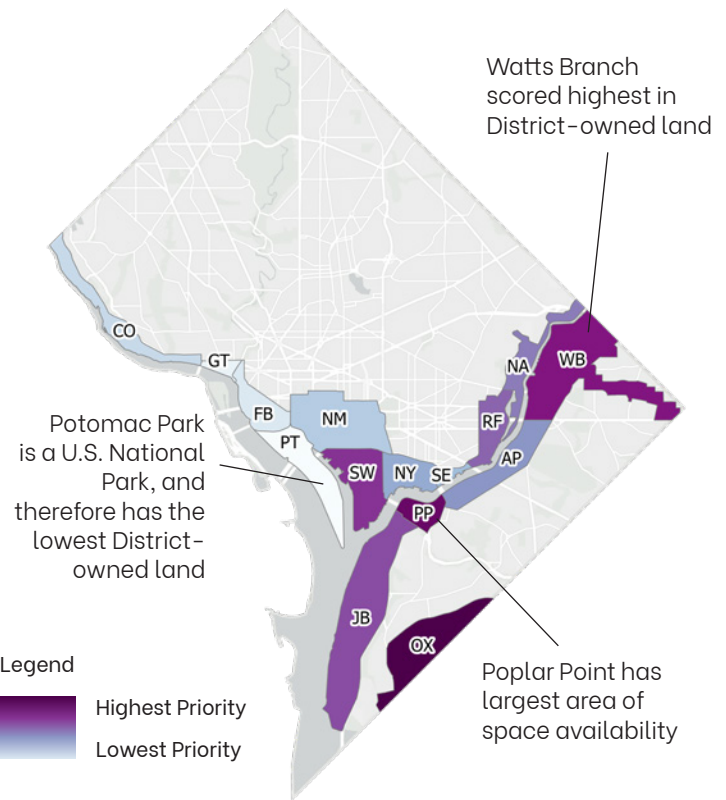**Methodology:** Larger number = higher score. Score ranges set manually.

ACTIONABILITY

The RFA rankings within the Actionability scoring category, ranked in order of total category score, are shown in the table below. The map shows the highest scoring RFAs in darker colors.

Rank	RFA Name	Score (Max = 10)
1	Oxon Run	9.06
2	Poplar Point	7.71
3	Kenilworth Park/Watts Branch	6.98
4	SW/Buzzard Point	3.42
5	Joint Base Anacostia-Bolling	3.02
6	RFK Stadium	2.73
7	National Arboretum/Kingman Island	2.45
8	Anacostia Park	2.13
9	Navy Yard	1.91
10	SE Blvd	0.72
11	National Mall/Federal Triangle	0.61
12	C&O Canal	0.20
13	Foggy Bottom	0.11
14	Georgetown	0.10
15	Potomac Park	0.03

Watts Branch scored highest in District-owned land

Potomac Park is a U.S. National Park, and therefore has the lowest District-owned land

Poplar Point has largest area of space availability

Legend

Highest Priority

Lowest Priority

DATA SOURCES

The Actionability scoring category consists of the following data sources:

LAND OWNERSHIP

To identify land ownership, the total area of District owned land from OpenData.DC.gov was summed within each RFA.
Methodology: Total area. Larger area = higher score. Scores interpolated between min/max.

SPACE AVAILABILITY

To identify open spaces, the total area of District owned parks and recreational areas from OpenData.DC.gov were summed within each RFA.
Methodology: Total area. Larger area = higher score. Scores interpolated between min/max.

IMPLEMENTATION

Future Updates and Prioritization:

This Resilience Focus Areas Strategy is meant to be the first version of a living document that is routinely revised to capture advances in science, updates in demographic data, new developments and changes in land uses, and the implementation of resilience measures that might change areas' exposure to flood risk. Future updates should follow the US Census decennial release as well as new flood data. The District is currently embarking on a multi-year Integrated Flood Model (IFM) project to map and model interior flooding in addition to coastal and riverine flooding in the District. Once complete, the IFM will be able to generate mapped scenarios of current and projected future flooding conditions throughout the District looking at climate change, sea level rise, and impacts of back-to-back storms. As a final phase of the project, floodshed management plans will be developed, to target neighborhood-level measures that can be taken to reduce flood risk. These plans will be exploring nature-based solutions and projects that will create multiple benefits for impacted communities and District residents. The IFM will produce the most comprehensive picture of flood risk in the District and its results should be used to update the Resilience Focus Area Strategy.

Next Steps for Resilience Planning:

The RFA Strategy is principally meant to guide the work of DOEE's "Flood Team" and, in general, the District's flood resilience planning and investments in the future. Thanks to the Strategy's analysis, the District will have a roadmap to flood resilience that prioritizes areas with the highest risk of flooding and areas with the most population in need.

DOEE's Flood Team has already started work in some of the top ranked RFAs. Currently, in the top ranked RFA, DOEE is completing the SW & Buzzard Point Flood Resilience Strategy. The District has local and FEMA construction funding to build the first few pilot projects for the Strategy, including the redesign of Lansburgh Park and portions of King Greenleaf Park into blue-green infrastructure floodable parks.

In the second ranked RFA, Kenilworth Park/Watts Branch, DOEE has completed several flood risk studies, including the Watts Branch Flood Risk Management Study conducted in partnership with the DC Silver Jackets. Most recently, the District has received FEMA funding to identify mitigation measures to effectively reduce flood risk.

In the third ranked RFA, Oxon Run, the District is undertaking a stream restoration and sewer rehabilitation project that will mitigate flooding and improve environmental quality along Oxon Run.

In high risk RFAs with mostly federal ownership, like the National Mall/Federal Triangle and Joint Base Anacostia-Bolling RFAs, the District is supporting federal partners with flood resilience through workshops and support for funding requests.

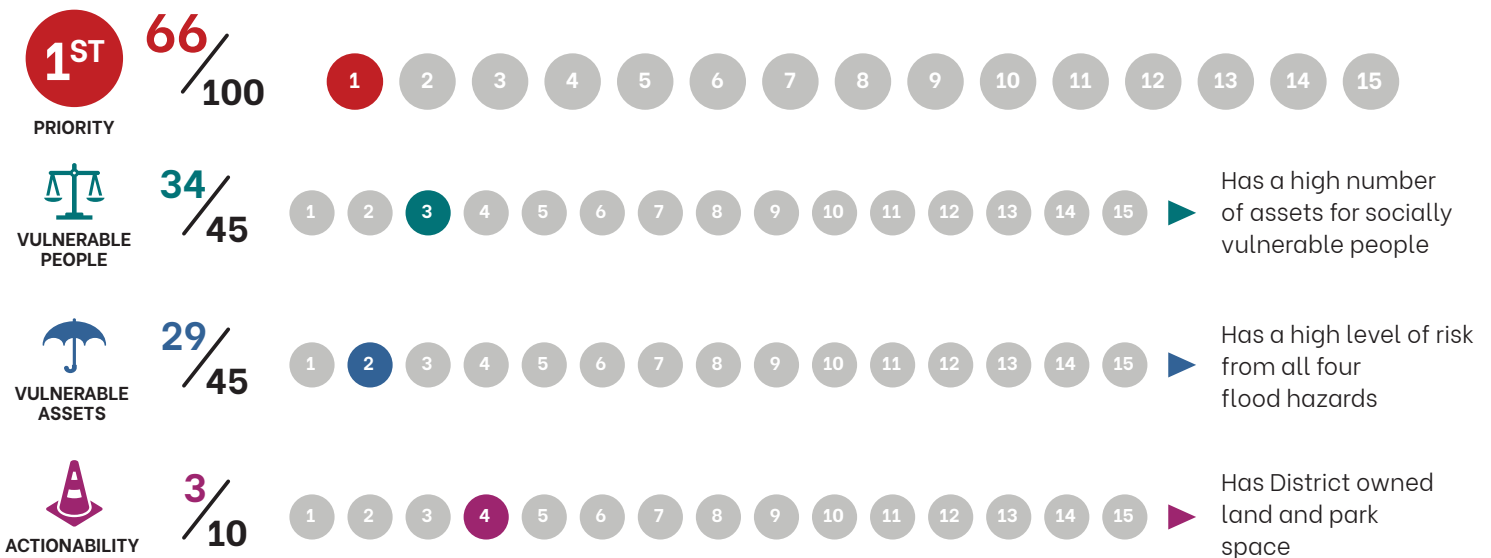# RANK #1: SW/BUZZARD POINT

RFA DESCRIPTION

The SW/Buzzard Point (SW) RFA is comprised of four main areas in Ward 6: Southwest, The Wharf, Buzzard Point, and Fort McNair. The RFA is bounded by I Street SE on the north, South Capitol Street SW on the east, and the Potomac and Anacostia Rivers, which converge at the southern end of the RFA. This RFA contains historically overburdened communities and a high number of critical community assets. SW has very high flood risk from riverine (100- and 500-year) and tidal inundation flooding. In addition, there are several large areas that are susceptible to interior flooding. In October 2021, the District experienced heavy rainfall paired with tidal and coastal flooding which heavily impacted low-lying areas throughout the Southwest neighborhood. There are several ongoing resilience initiatives, including the SW-Buzzard Point Flood Resilience Strategy, and the District has secured $18 million in FEMA funding to implement interior flood mitigation.

RESILIENCE FOCUS AREAS
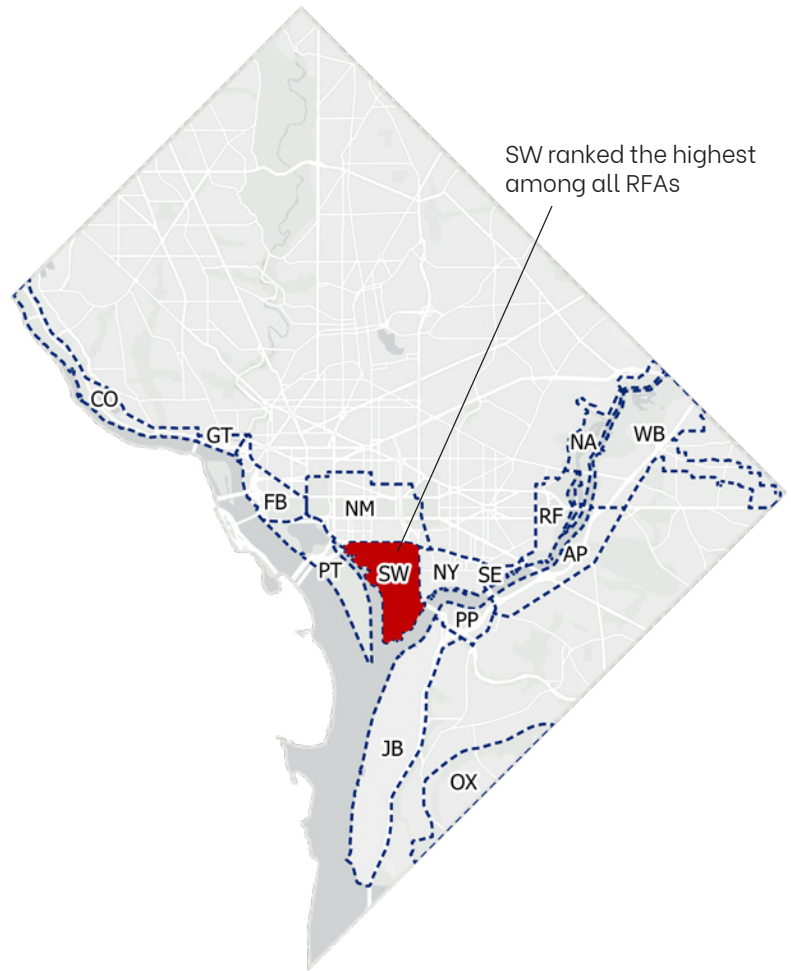
SW ranked the highest among all RFAs

SCORE SUMMARY - RANKING

The RFA's overall rank and rank within each scoring category is shown below along with the corresponding score.

PRIORITY — **1ST** — **66**/100

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

VULNERABLE PEOPLE — **34**/45

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 ▶ Has a high number of assets for socially vulnerable people

VULNERABLE ASSETS — **29**/45

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 ▶ Has a high level of risk from all four flood hazards

ACTIONABILITY — **3**/10

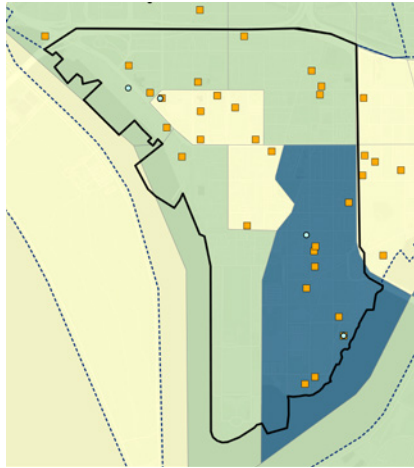1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 ▶ Has District owned land and park space

RANK #1: SW/BUZZARD POINT

VULNERABLE PEOPLE

This RFA has a **moderate** average social vulnerability index score of **0.60** out of 1.

There are a **high number** of assets for socially vulnerable people, including childcare centers and affordable housing buildings.

CDC SOCIAL VULNERABILITY INDEX

- ⬜ Data Unavailable
- 🟨 0.25 | Lowest Vulnerability
- 🟩 0.2501 – 0.5
- 🟦 0.501 – 0.75
- 🟦 0.7501 – 1 | Highest Vulnerability

ASSETS FOR SOCIALLY VULNERABLE PEOPLE

- ◯ Childcare Centers
- 🟧 Affordable Housing
- ▲ Nursing Homes

VULNERABLE ASSETS

Large areas of flood hazards cover this RFA. Bluespots cover **24%** of the RFA, the 100-year floodplain covers **32%**, the 500-year floodplain covers **87%**, and tidal inundation areas cover **10%**.

Buildings within this RFA are generally **newer** with an average year built of **1970**.
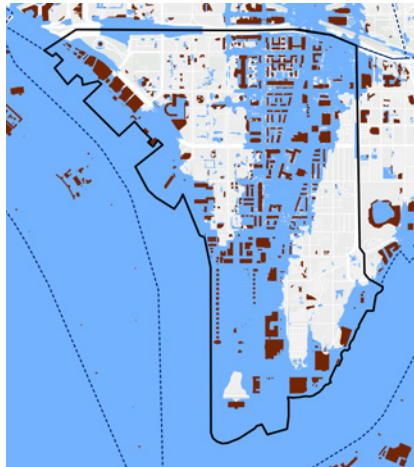
FLOODING HAZARDS

- 🟦 Combined Flood Hazard Extents (includes FEMA 100- and 500-year floodplains, bluespot, and tidal inundation)

VULNERABLE PROPERTY

- 🟫 Buildings that Intersect with Flood Risk Areas

ACTIONABILITY

The District owns **much of** the land within this RFA (**30%**), while **33%** is federally owned.

Some District-owned parks and recreational areas are present in this RFA, covering **6%** of the total RFA area.
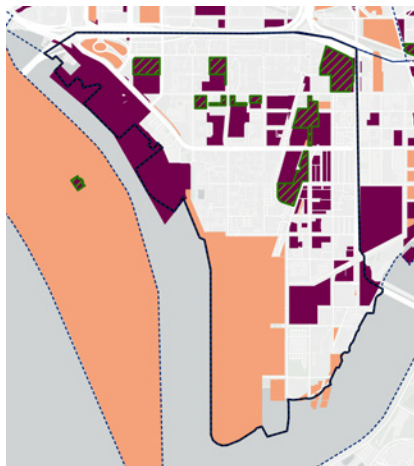
SPACE AVAILABILITY

- ▨ Parks and Recreation Areas

OWNERSHIP

- 🟪 District Owned Land
- 🟧 Federal Owned Land

RANK #2: KENILWORTH PARK/WATTS BRANCH
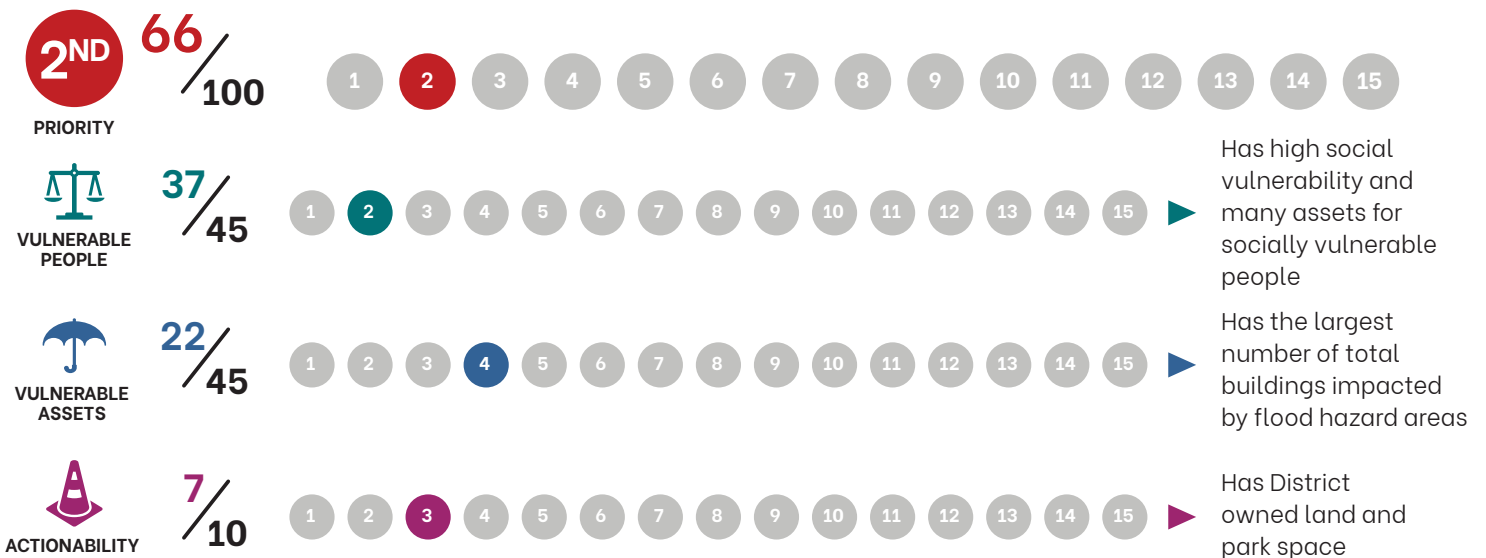
RFA DESCRIPTION

The Kenilworth Park/Watts Branch (WB) RFA loosely follows the floodplain of the Watts Branch tributary as it flows from the Maryland-DC border to the Anacostia River. As Watts Branch flows beneath Kenilworth Ave NE, the RFA broadens to include several areas of interior flood risk and the Anacostia River floodplain. The area contains Anacostia Park and several large historically overburdened communities including Kenilworth, Deanwood, and River Terrace. The Kenilworth Park/Watts Branch RFA has very high flood risk due to interior, riverine (both 100- and 500-year events), and tidal inundation flooding. The area has experienced frequent flash flood events, including the 2020 heavy rainfall event. Watts Branch was identified as a resilience planning priority area in the 2016 Climate Ready DC report. This area has undergone several flood risk studies, including the Watts Branch Flood Risk Management Study conducted by the DC Silver Jackets, and the District has received FEMA funding to identify a network of flood resilience measures to effectively reduce flood risk.

RESILIENCE FOCUS AREAS
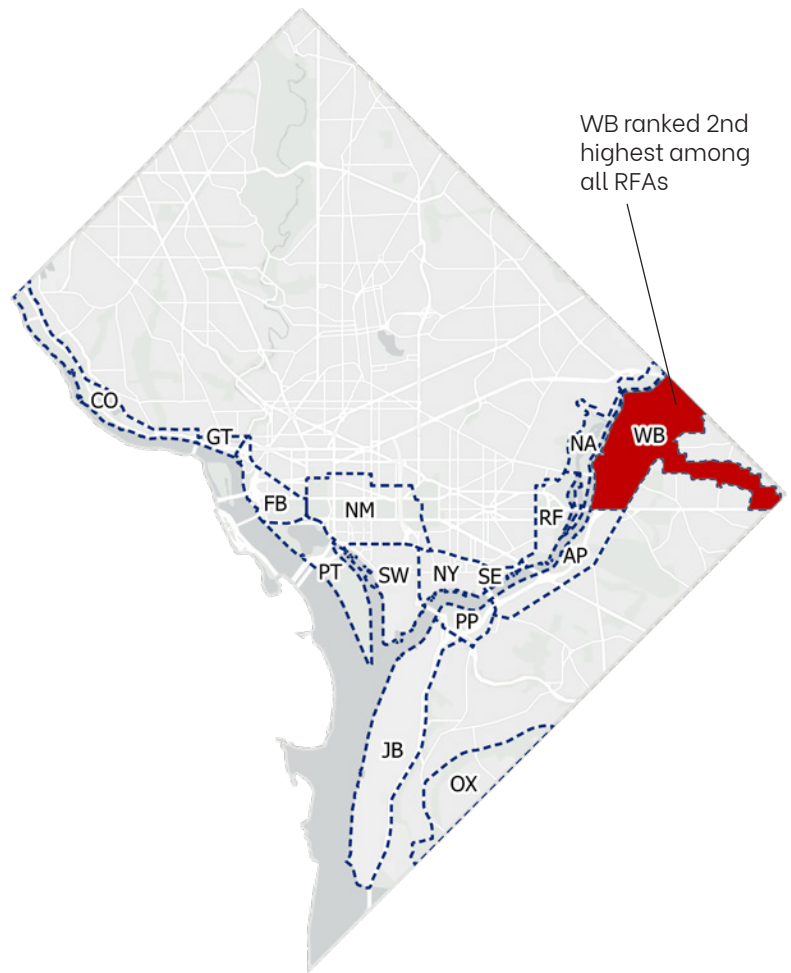
WB ranked 2nd highest among all RFAs

SCORE SUMMARY - RANKING

The RFA's overall rank and rank within each scoring category is shown below along with the corresponding score.

2ND **PRIORITY** — **66**/100
1 **2** 3 4 5 6 7 8 9 10 11 12 13 14 15

VULNERABLE PEOPLE — **37**/45
1 **2** 3 4 5 6 7 8 9 10 11 12 13 14 15 ▶ Has high social vulnerability and many assets for socially vulnerable people

VULNERABLE ASSETS — **22**/45
1 2 3 **4** 5 6 7 8 9 10 11 12 13 14 15 ▶ Has the largest number of total buildings impacted by flood hazard areas

ACTIONABILITY — **7**/10
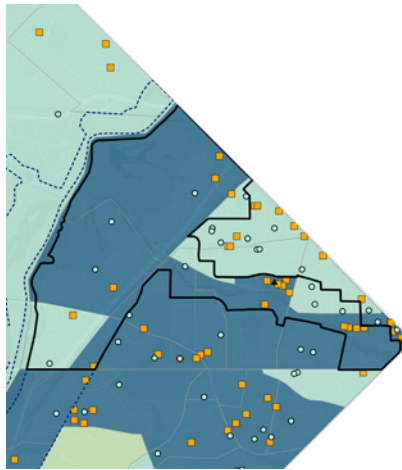1 2 **3** 4 5 6 7 8 9 10 11 12 13 14 15 ▶ Has District owned land and park space

RANK #2: KENILWORTH PARK/WATTS BRANCH

VULNERABLE PEOPLE

This RFA has a **high** average social vulnerability index score of **0.87** out of 1.

There are **many** assets for socially vulnerable people, including childcare centers, affordable housing buildings, and nursing homes.

CDC SOCIAL VULNERABILITY INDEX

- Data Unavailable
- 0.25 | Lowest Vulnerability
- 0.2501 – 0.5
- 0.501 – 0.75
- 0.7501 – 1 | Highest Vulnerability

ASSETS FOR SOCIALLY VULNERABLE PEOPLE

- Childcare Centers
- Affordable Housing
- Nursing Homes

VULNERABLE ASSETS

Large areas of flood hazards cover this RFA. Bluespots cover **15%** of the RFA, the 100-year floodplain covers **31%**, the 500-year floodplain covers **37%**, and tidal inundation areas cover **8%**.

Buildings within this RFA are generally older with an average year built of **1965**.
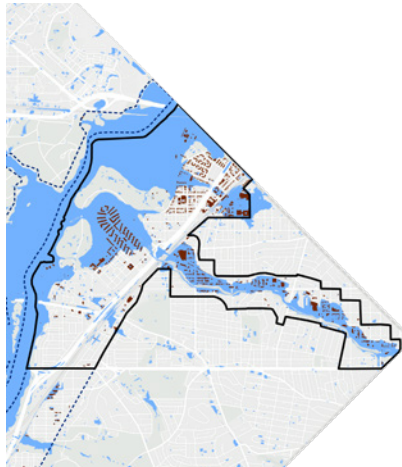
FLOODING HAZARDS

- Combined Flood Hazard Extents (includes FEMA 100- and 500-year floodplains, bluespot, and tidal inundation)

VULNERABLE PROPERTY

- Buildings that Intersect with Flood Risk Areas

ACTIONABILITY

The District owns **a moderate amount** of the land within this RFA (**20%**), while **29%** is federally owned.

Some District-owned parks and recreational areas are present in this RFA, covering **4%** of the total RFA area.
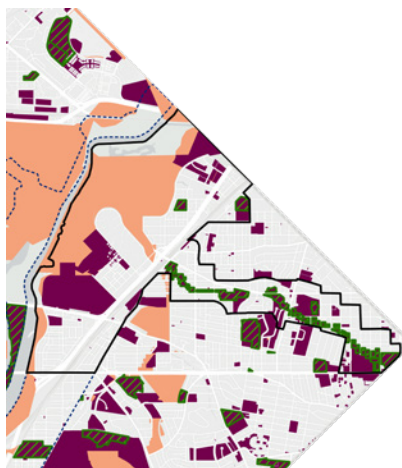
SPACE AVAILABILITY

- Parks and Recreation Areas

OWNERSHIP

- District Owned Land
- Federal Owned Land

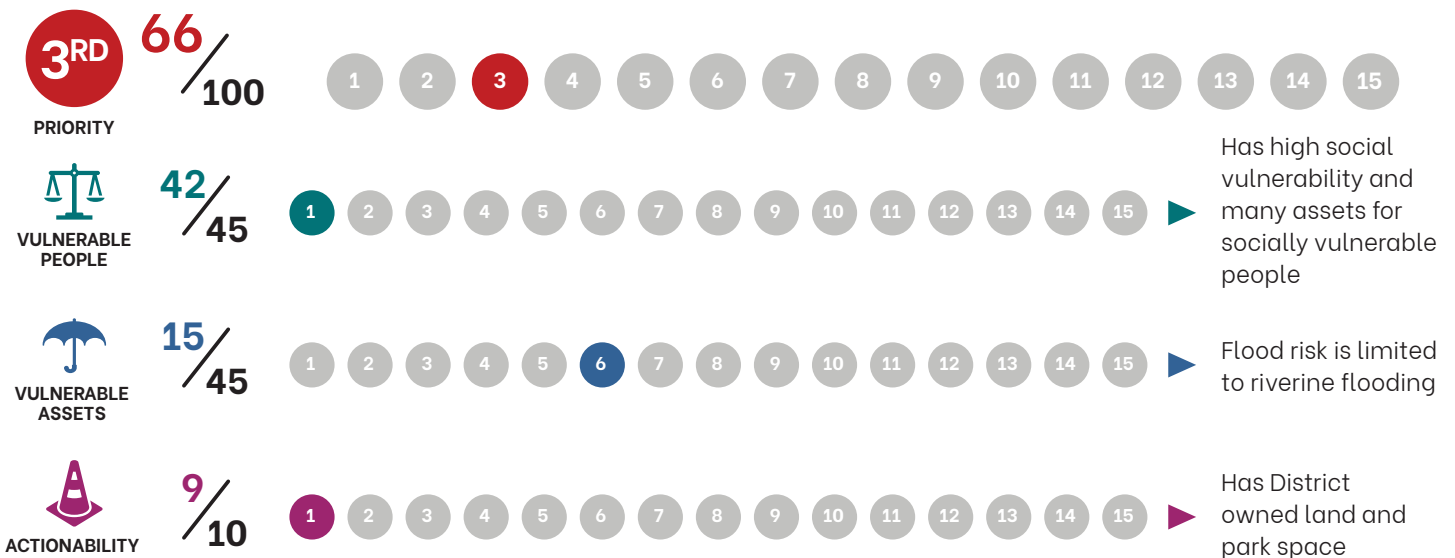# RANK #3: OXON RUN

RFA DESCRIPTION

The Oxon Run (OX) RFA is located in Ward 8 and bounded by South Capitol St SE, Mississippi Ave, and the DC-Maryland border. This RFA most notably includes Oxon Run which is a fifteen-mile-long tributary that flows from Prince George's County, MD into southeast DC. This RFA follows Oxon Run as the tributary enters and exits the District. The flood risk in this RFA is primarily riverine, and closely follows the 500-year floodplain of Oxon Run. The area is primarily residential and encompasses historically overburdened communities. The District is undertaking a stream restoration and sewer rehabilitation project that will mitigate flooding and improve environmental quality along Oxon Run.

RESILIENCE FOCUS AREAS
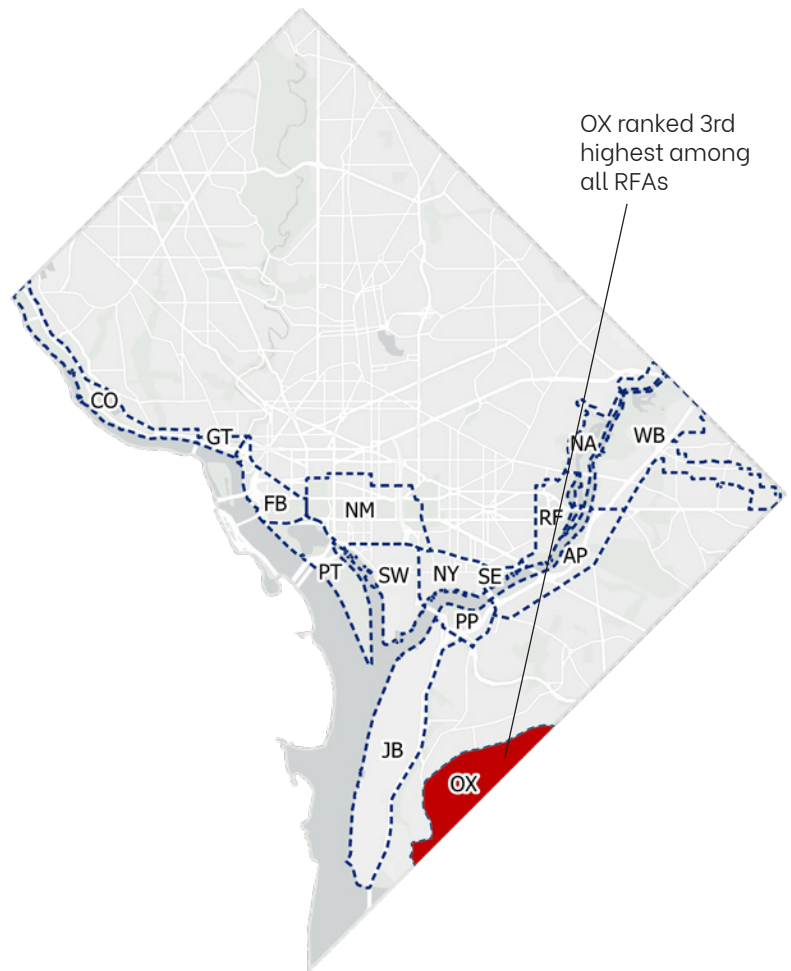
OX ranked 3rd highest among all RFAs

SCORE SUMMARY - RANKING

The RFA's overall rank and rank within each scoring category is shown below along with the corresponding score.

PRIORITY — **3RD** — **66**/100
1 2 **3** 4 5 6 7 8 9 10 11 12 13 14 15

VULNERABLE PEOPLE — **42**/45
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 ▶ Has high social vulnerability and many assets for socially vulnerable people

VULNERABLE ASSETS — **15**/45
1 2 3 4 5 **6** 7 8 9 10 11 12 13 14 15 ▶ Flood risk is limited to riverine flooding

ACTIONABILITY — **9**/10
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 ▶ Has District owned land and park space
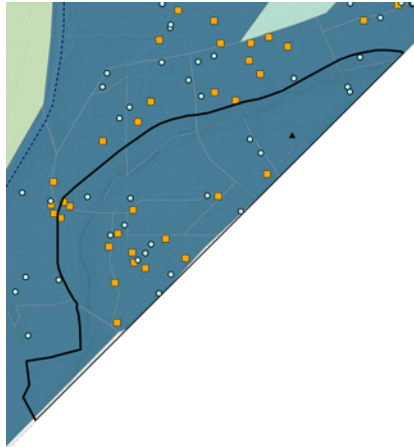
RANK #3: OXON RUN

VULNERABLE PEOPLE

This RFA has a **high** average social vulnerability index score of **0.86** out of 1.

There are a very **high number** of assets for socially vulnerable people, including childcare centers, affordable housing buildings, and nursing homes.

CDC SOCIAL VULNERABILITY INDEX

- Data Unavailable
- 0.25 | Lowest Vulnerability
- 0.2501 – 0.5
- 0.501 – 0.75
- 0.7501 – 1 | Highest Vulnerability

ASSETS FOR SOCIALLY VULNERABLE PEOPLE

- ◯ Childcare Centers
- ▢ Affordable Housing
- ▲ Nursing Homes

VULNERABLE ASSETS

Flood risk in this RFA is from riverine and interior flood hazards. Bluespots cover **3%** of the RFA, the 100-year floodplain covers **14%** and the 500-year floodplain covers **16%**.

Buildings within this RFA are generally **newer** with an average year built of **1979**.
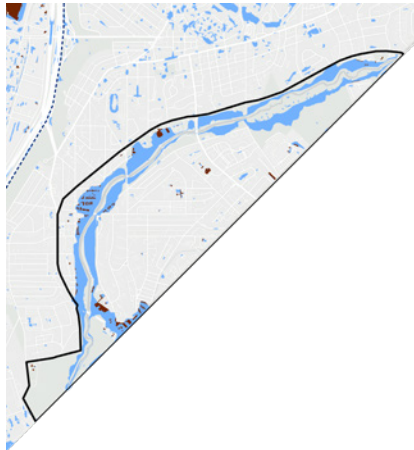
FLOODING HAZARDS

- Combined Flood Hazard Extents (includes FEMA 100- and 500-year floodplains, bluespot, and tidal inundation)

VULNERABLE PROPERTY

- Buildings that Intersect with Flood Risk Areas

ACTIONABILITY

The District owns **much of** the land within this RFA (**30%**), while **36%** is federally owned.

Some District-owned parks and recreational areas are present in this RFA, covering **17%** of the total RFA area.
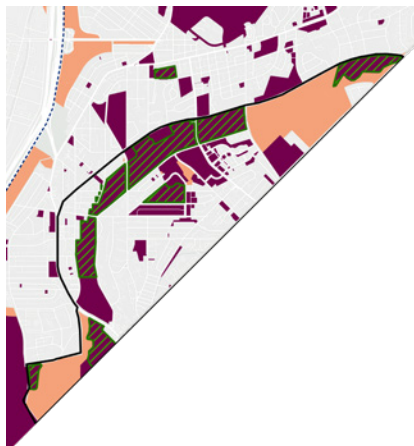
SPACE AVAILABILITY

- Parks and Recreation Areas

OWNERSHIP

- District Owned Land
- Federal Owned Land

RANK #4: NATIONAL MALL/FEDERAL TRIANGLE
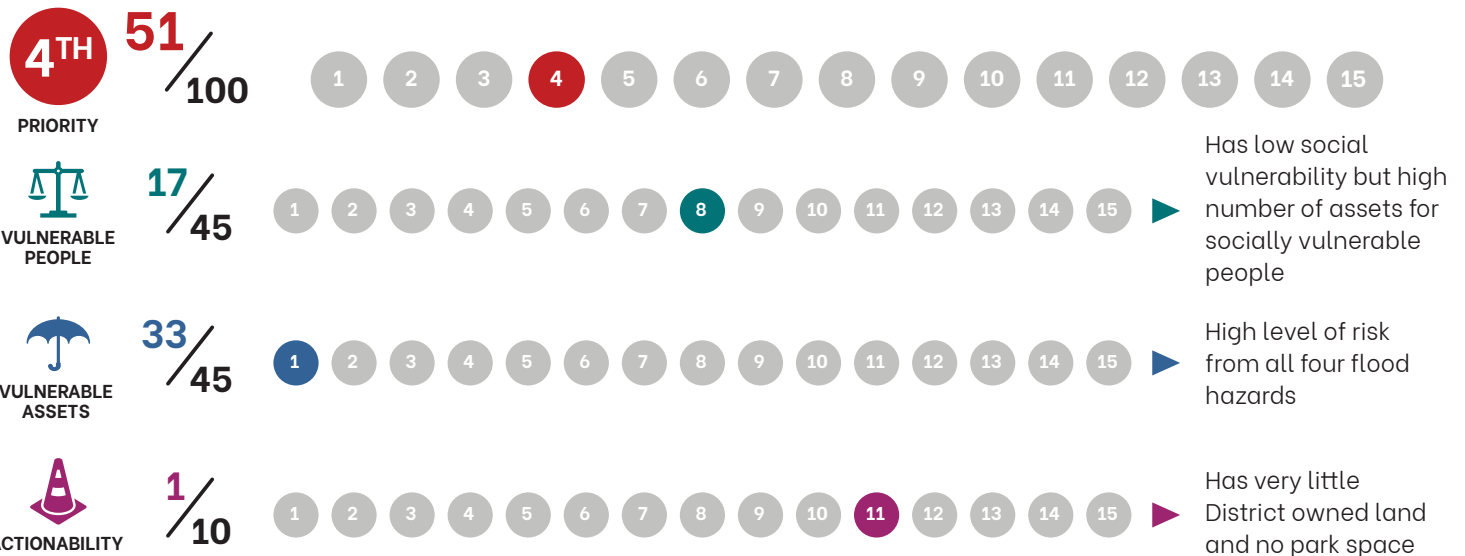
RFA DESCRIPTION

The National Mall/Federal Triangle (NM) RFA encompasses the mostly federal areas of Ward 2 including L'Enfant Plaza, the National Mall east of 17th Street NW, and Federal Triangle. All these areas are affected by the 500-year floodplain that carves a crescent from Tidal Basin south to Fort McNair in Buzzard Point, which is one of the lowest-lying areas of the District. As a result, the RFA is highly susceptible to riverine, tidal inundation, and interior flood risk. Federal Triangle was affected by a major interior flooding event in 2006 caused by two days of heavy rains that overwhelmed the stormwater and sewer system, and a smaller interior flooding event in 2019. Since the 2006 flooding event, the DC Silver Jackets have been mitigating flood risk through the creation of the 17th Street Levee, which protects much of the area from the 100-year riverine event, and have begun studies to develop a coordinated neighborhood-wide flood resilience strategy.

RESILIENCE FOCUS AREAS
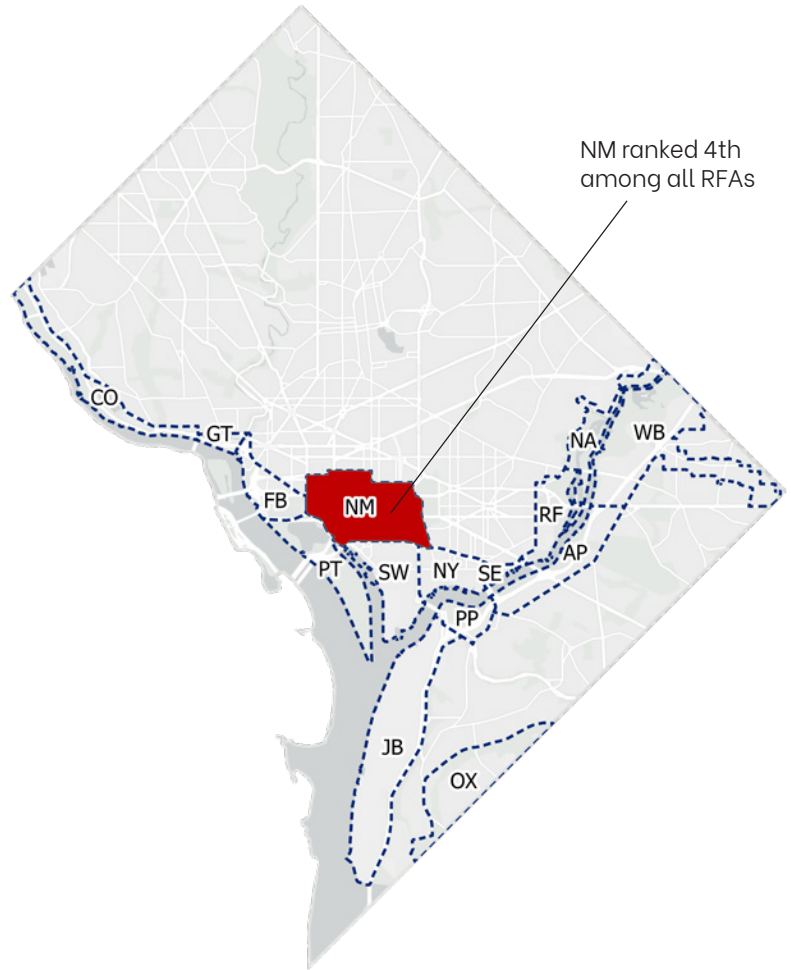
NM ranked 4th among all RFAs

SCORE SUMMARY - RANKING

The RFA's overall rank and rank within each scoring category is shown below along with the corresponding score.

4TH **51**/100
PRIORITY
1 2 3 **4** 5 6 7 8 9 10 11 12 13 14 15

17/45
VULNERABLE PEOPLE
1 2 3 4 5 6 7 **8** 9 10 11 12 13 14 15 ▶ Has low social vulnerability but high number of assets for socially vulnerable people

33/45
VULNERABLE ASSETS
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 ▶ High level of risk from all four flood hazards

1/10
ACTIONABILITY
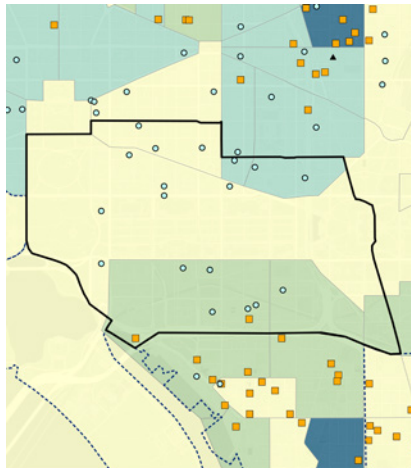1 2 3 4 5 6 7 8 9 10 **11** 12 13 14 15 ▶ Has very little District owned land and no park space

RANK #4: NATIONAL MALL/FEDERAL TRIANGLE

VULNERABLE PEOPLE

This RFA has a **low** average social vulnerability index score of **0.14** out of 1.

There are a **high number** of assets for socially vulnerable people. This RFA has the highest number of childcare centers of all the RFAs.

CDC SOCIAL VULNERABILITY INDEX

- ⬜ Data Unavailable
- 🟨 0.25 | Lowest Vulnerability
- 🟩 0.2501 – 0.5
- 🟦 0.501 – 0.75
- 🟦 0.7501 – 1 | Highest Vulnerability

ASSETS FOR SOCIALLY VULNERABLE PEOPLE

- ◯ Childcare Centers
- 🟧 Affordable Housing
- ▲ Nursing Homes

VULNERABLE ASSETS

Large areas of flood hazards cover this RFA. Bluespots cover **27%** of the RFA, the 100-year floodplain covers **22%**, the 500-year floodplain covers **32%**, and tidal inundation areas cover **3%**.

Buildings within this RFA are generally **newer** with an average year built of **1978**.
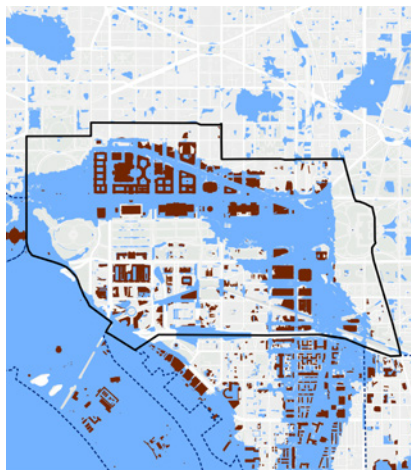
FLOODING HAZARDS

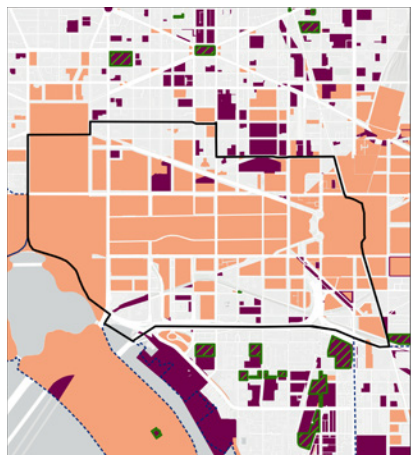- 🟦 Combined Flood Hazard Extents (includes FEMA 100- and 500-year floodplains, bluespot, and tidal inundation)

VULNERABLE PROPERTY

- 🟫 Buildings that Intersect with Flood Risk Areas

ACTIONABILITY

The District owns **a small amount** of the land within this RFA (**4%**), while **49%** is federally owned.

SPACE AVAILABILITY

- ▨ Parks and Recreation Areas

OWNERSHIP

- 🟪 District Owned Land
- 🟧 Federal Owned Land

RANK #5: JOINT BASE ANACOSTIA-BOLLING
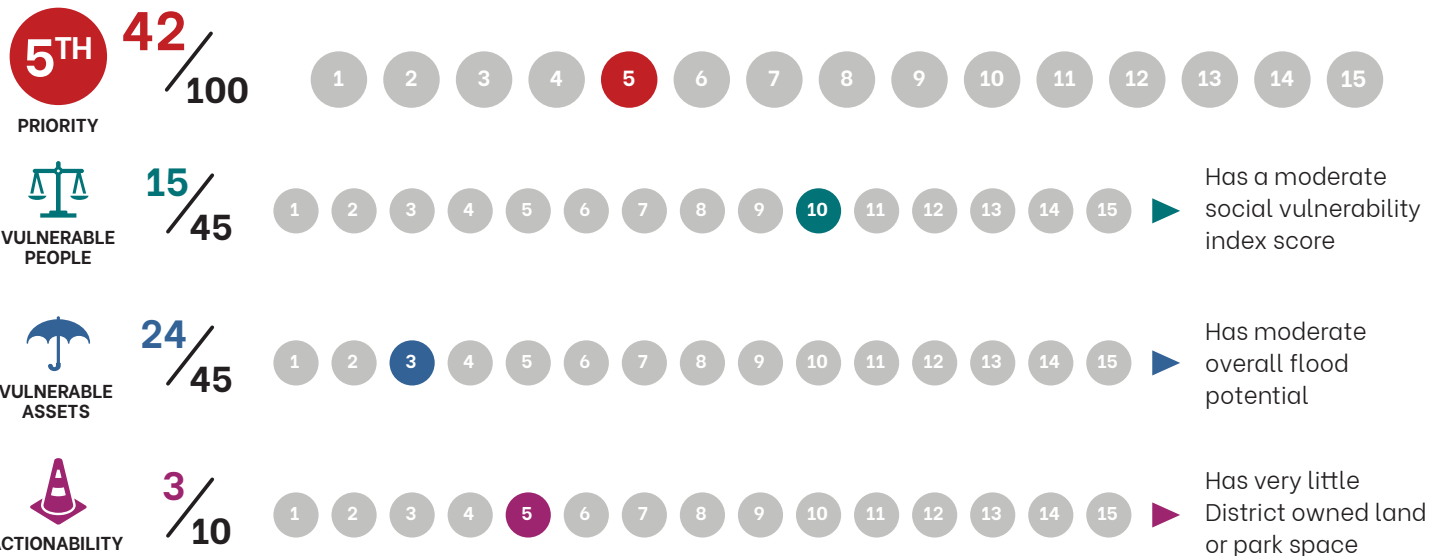
RFA DESCRIPTION

The Joint Base Anacostia-Bolling (JB) RFA is primarily composed of Joint Base Anacostia-Bolling (JBAB) and DC Water and Sewer Authority's Blue Plains Advanced Wastewater Treatment Plant (AWTP). JBAB is a 1,018-acre military base and is situated on the east bank of the Potomac River, adjacent to I-295. The Blue Plains AWTP is located just south of JBAB and treats nearly 300 million gallons of wastewater per day from DC and surrounding Maryland and Virginia counties. This RFA has high riverine (100- and 500-year) and tidal inundation flood risk, placing JBAB and the Blue Plains AWTP at significant risk of flooding. DC Water is in the process of constructing a floodwall around the facility, and similar mitigation measures are being considered at JBAB.

RESILIENCE FOCUS AREAS
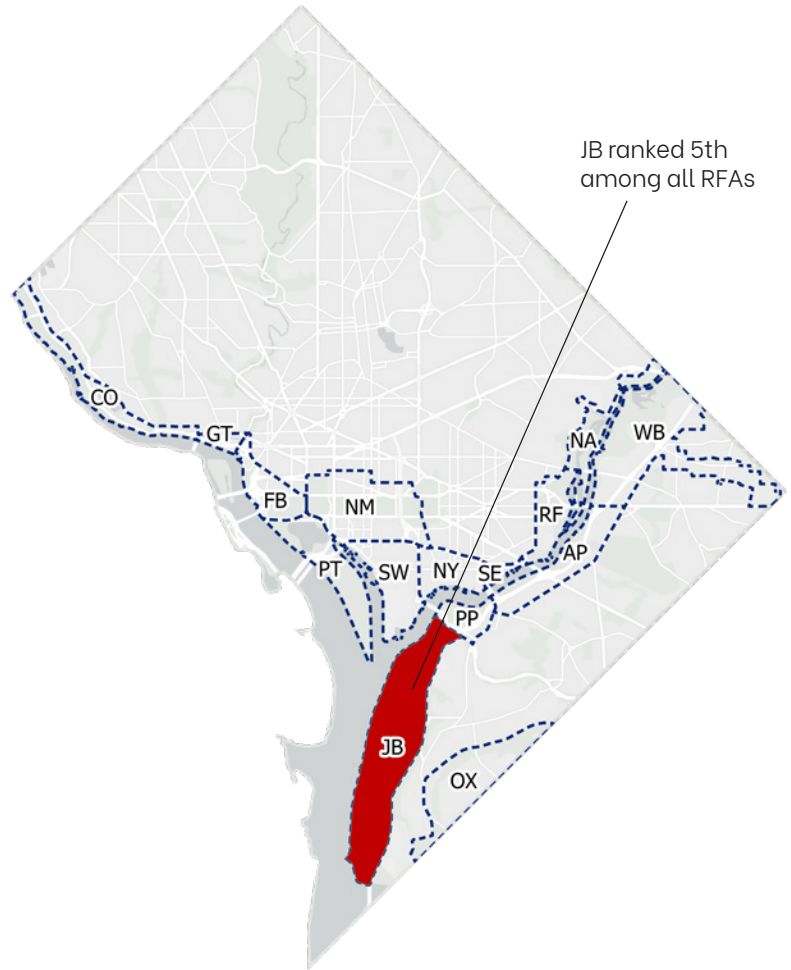
JB ranked 5th among all RFAs

SCORE SUMMARY - RANKING

The RFA's overall rank and rank within each scoring category is shown below along with the corresponding score.

5TH — **42**/100
PRIORITY
① ② ③ ④ **⑤** ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮

15/45
VULNERABLE PEOPLE
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ **⑩** ⑪ ⑫ ⑬ ⑭ ⑮ ▶ Has a moderate social vulnerability index score

24/45
VULNERABLE ASSETS
① ② **③** ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ▶ Has moderate overall flood potential

3/10
ACTIONABILITY
① ② ③ ④ **⑤** ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ▶ Has very little District owned land or park space
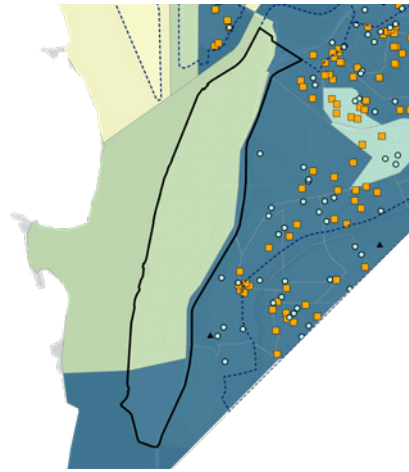
RANK #5: JOINT BASE ANACOSTIA-BOLLING

VULNERABLE PEOPLE

This RFA has a **moderate** average social vulnerability index score of **0.44** out of 1.

According to open source data, there are **no** childcare centers, affordable housing buildings, or nursing homes in this RFA.

CDC SOCIAL VULNERABILITY INDEX

- Data Unavailable
- 0.25 | Lowest Vulnerability
- 0.2501 – 0.5
- 0.501 – 0.75
- 0.7501 – 1 | Highest Vulnerability

ASSETS FOR SOCIALLY VULNERABLE PEOPLE

- Childcare Centers
- Affordable Housing
- Nursing Homes

VULNERABLE ASSETS

Large areas of flood hazards cover this RFA. Bluespots cover **21%** of the RFA, the 100-year floodplain covers **28%**, the 500-year floodplain covers **42%**, and tidal inundation areas cover **11%**.

Buildings within this RFA are generally **newer** with an average year built of **1981**.
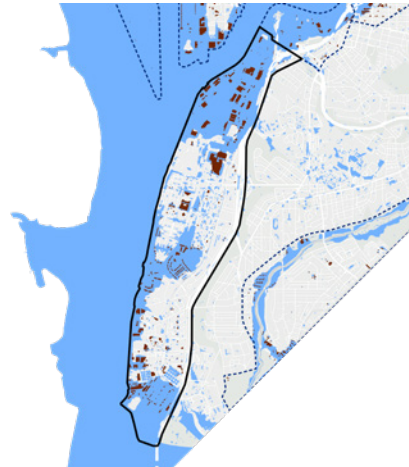
FLOODING HAZARDS

- Combined Flood Hazard Extents (includes FEMA 100- and 500-year floodplains, bluespot, and tidal inundation)
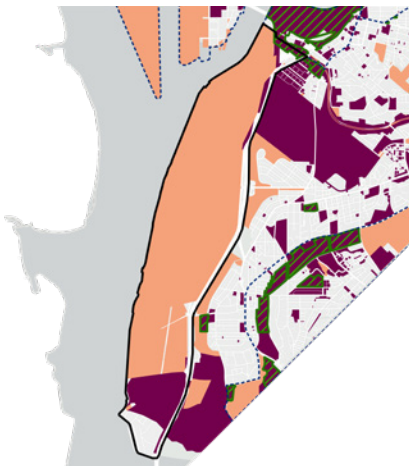
VULNERABLE PROPERTY

- Buildings that Intersect with Flood Risk Areas

ACTIONABILITY

The District owns **a small amount** of the land within this RFA (**10%**), while **78%** is federally owned.

Some District-owned parks and recreational areas are present in this RFA, covering **1%** of the total RFA area.

SPACE AVAILABILITY

- Parks and Recreation Areas

OWNERSHIP

- District Owned Land
- Federal Owned Land

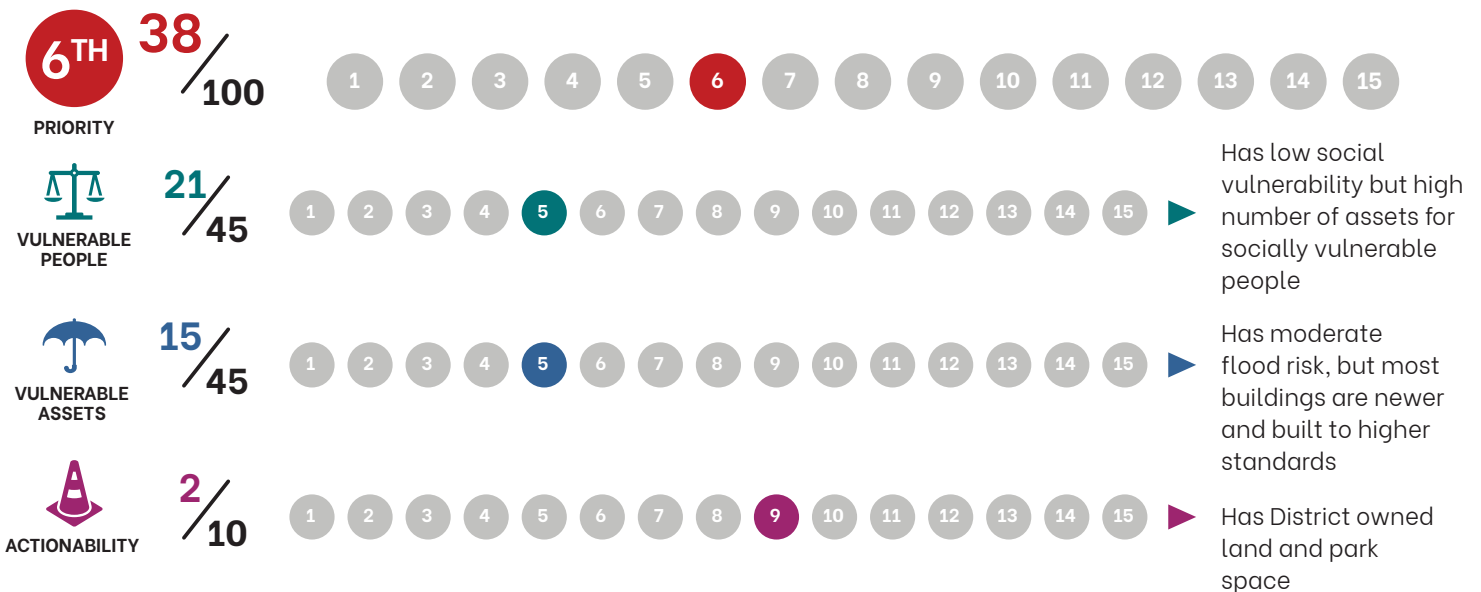# RANK #6: NAVY YARD

RFA DESCRIPTION

The Navy Yard (NY) RFA is located in Ward 8 on the west side of the Anacostia River. The RFA is defined by South Capitol Street SE, I-695, and 11th St SE. The area is rapidly developing into a large mixed-use and commercial area. As a result, most of the buildings are constructed to newer construction codes and are less vulnerable to flooding. In addition to large residential apartments and commercial buildings, Nationals Park and the Washington Navy Yard are included in this RFA. The Navy Yard RFA has significant riverine (100- and 500-year) and tidal inundation flooding due to its location along the Anacostia River. There are several areas throughout the RFA that are low-lying and also have significant interior flood risk.

RESILIENCE FOCUS AREAS
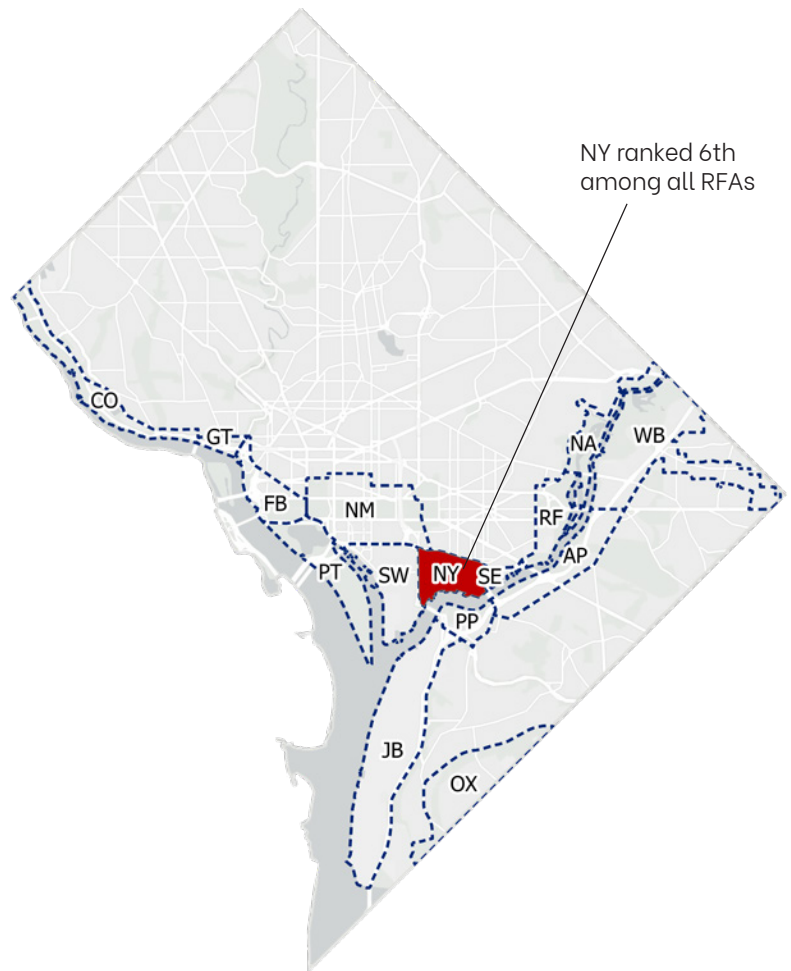
NY ranked 6th among all RFAs

SCORE SUMMARY - RANKING

The RFA's overall rank and rank within each scoring category is shown below along with the corresponding score.

6TH **PRIORITY** — **38**/**100**
1 2 3 4 5 **6** 7 8 9 10 11 12 13 14 15

VULNERABLE PEOPLE — **21**/**45**
1 2 3 4 **5** 6 7 8 9 10 11 12 13 14 15 ▶ Has low social vulnerability but high number of assets for socially vulnerable people

VULNERABLE ASSETS — **15**/**45**
1 2 3 4 **5** 6 7 8 9 10 11 12 13 14 15 ▶ Has moderate flood risk, but most buildings are newer and built to higher standards

ACTIONABILITY — **2**/**10**
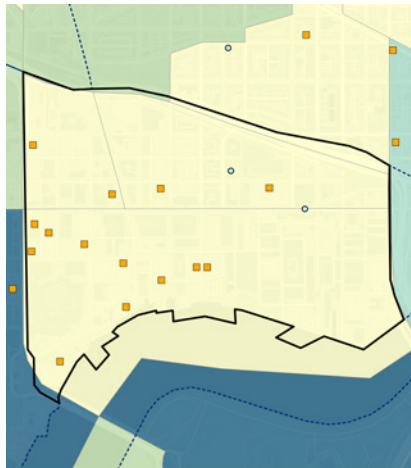1 2 3 4 5 6 7 8 **9** 10 11 12 13 14 15 ▶ Has District owned land and park space

RANK #6: NAVY YARD

VULNERABLE PEOPLE

This RFA has a **low** average social vulnerability index score of **0.1** out of 1.

There are a **high number** of assets for socially vulnerable people, including childcare centers and affordable housing buildings.

CDC SOCIAL VULNERABILITY INDEX

- Data Unavailable
- 0.25 | Lowest Vulnerability
- 0.2501 – 0.5
- 0.501 – 0.75
- 0.7501 – 1 | Highest Vulnerability

ASSETS FOR SOCIALLY VULNERABLE PEOPLE

- ◯ Childcare Centers
- ▢ Affordable Housing
- ▲ Nursing Homes

VULNERABLE ASSETS

Large areas of flood hazards cover this RFA. Bluespots cover **10%** of the RFA, the 100-year floodplain covers **18%**, the 500-year floodplain covers **35%**, and tidal inundation areas cover **4%**.

Buildings within this RFA are generally **newer** with an average year built of **2005**.
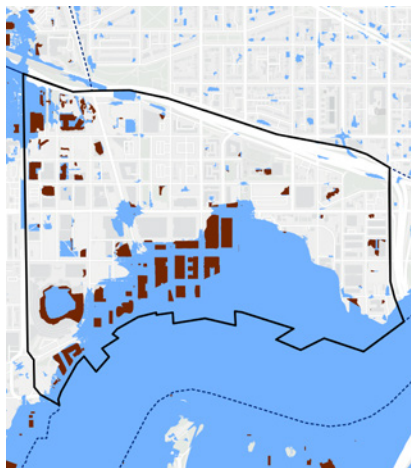
FLOODING HAZARDS

- Combined Flood Hazard Extents (includes FEMA 100- and 500-year floodplains, bluespot, and tidal inundation)

VULNERABLE PROPERTY

- Buildings that Intersect with Flood Risk Areas

ACTIONABILITY

The District owns **a moderate amount** of the land within this RFA (**23%**), while **16%** is federally owned.

Some District-owned parks and recreational areas are present in this RFA, covering **6%** of the total RFA area.

SPACE AVAILABILITY

- Parks and Recreation Areas

OWNERSHIP

- District Owned Land
- Federal Owned Land

RANK #7: ANACOSTIA PARK
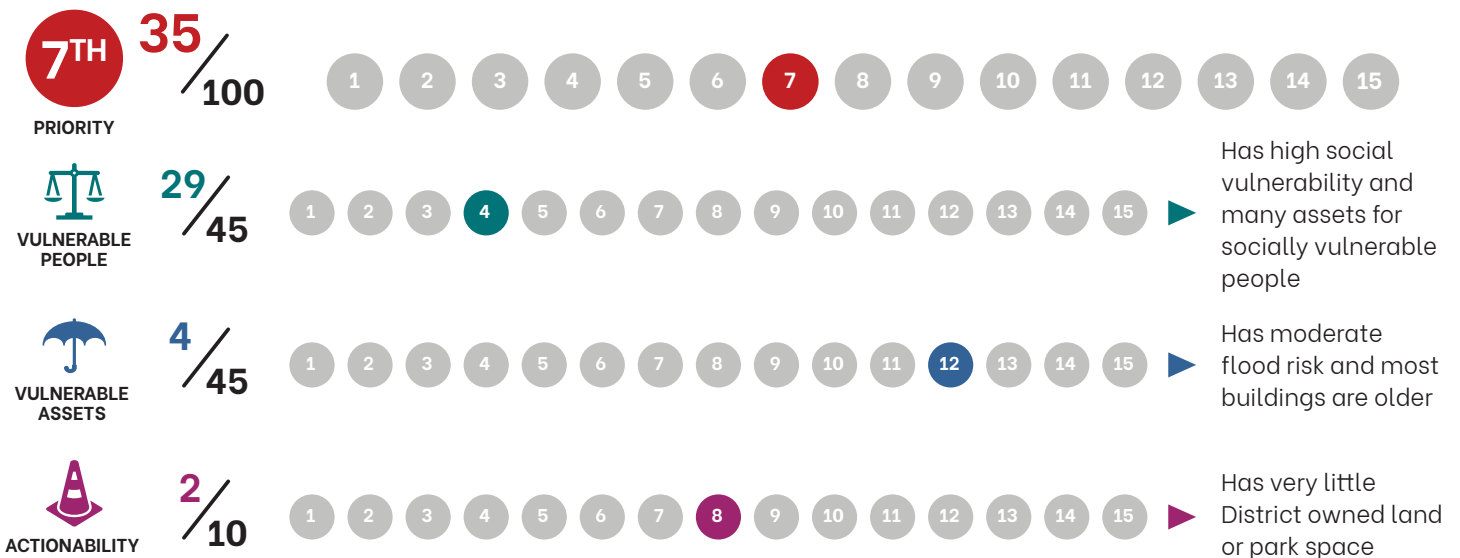
RFA DESCRIPTION

The Anacostia Park (AP) RFA spans Wards 7 and 8 along the east side of the Anacostia River. The RFA contains the area west of Minnesota Ave SE from 11th St SE to the south to E Capitol St SE to the north. This RFA includes portions of Anacostia Park as well as several residential neighborhoods. The Anacostia Park RFA has significant riverine (100- and 500-year) and tidal inundation flooding due to its location along the Anacostia River. There are several areas throughout the RFA that also have significant interior flood risk. Most of the open space in this RFA is part of the federally owned Anacostia Park.

RESILIENCE FOCUS AREAS
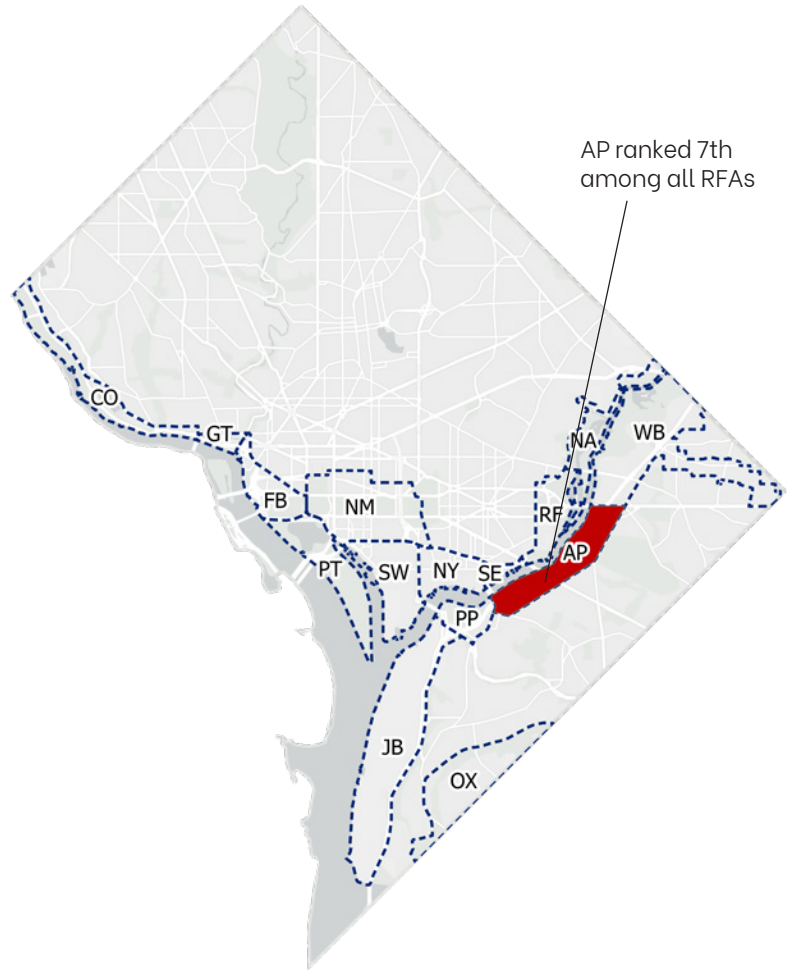
AP ranked 7th among all RFAs

SCORE SUMMARY - RANKING

The RFA's overall rank and rank within each scoring category is shown below along with the corresponding score.

7TH — **35**/**100**
PRIORITY

1 2 3 4 5 6 **7** 8 9 10 11 12 13 14 15

29/**45**
VULNERABLE PEOPLE

1 2 3 **4** 5 6 7 8 9 10 11 12 13 14 15 ▶ Has high social vulnerability and many assets for socially vulnerable people

4/**45**
VULNERABLE ASSETS

1 2 3 4 5 6 7 8 9 10 11 **12** 13 14 15 ▶ Has moderate flood risk and most buildings are older

2/**10**
ACTIONABILITY

1 2 3 4 5 6 7 **8** 9 10 11 12 13 14 15 ▶ Has very little District owned land or park space
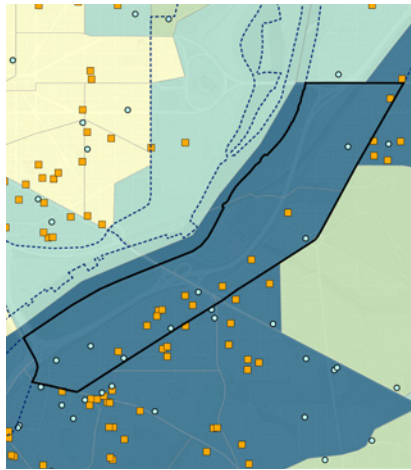
RANK #7: ANACOSTIA PARK

VULNERABLE PEOPLE

This RFA has a **high** average social vulnerability index score of **0.86** out of 1.

There are a **high number** of assets for socially vulnerable people, including childcare centers and affordable housing buildings.

CDC SOCIAL VULNERABILITY INDEX

- Data Unavailable
- 0.25 | Lowest Vulnerability
- 0.2501 – 0.5
- 0.501 – 0.75
- 0.7501 – 1 | Highest Vulnerability

ASSETS FOR SOCIALLY VULNERABLE PEOPLE

- Childcare Centers
- Affordable Housing
- Nursing Homes

VULNERABLE ASSETS

Large areas of flood hazards cover this RFA. Bluespots cover **11%** of the RFA, the 100-year floodplain covers **18%**, the 500-year floodplain covers **28%**, and tidal inundation areas cover **2%**.

Buildings within this RFA are generally **older** with an average year built of **1964**.
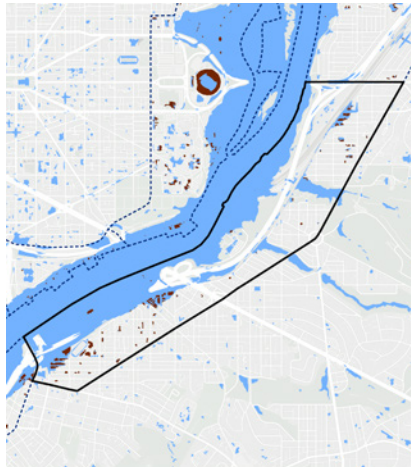
FLOODING HAZARDS

- Combined Flood Hazard Extents (includes FEMA 100- and 500-year floodplains, bluespot, and tidal inundation)
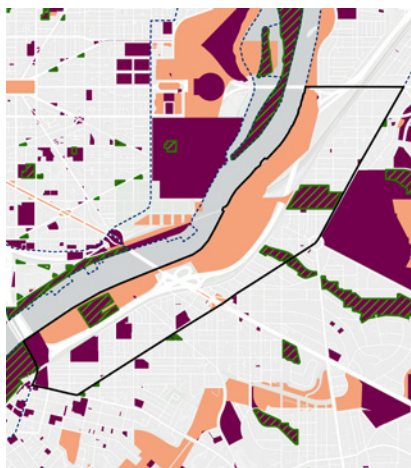
VULNERABLE PROPERTY

- Buildings that Intersect with Flood Risk Areas

ACTIONABILITY

The District owns **a small amount** of the land within this RFA (**11%**), while **32%** is federally owned.

Some District-owned parks and recreational areas are present in this RFA, covering **6%** of the total RFA area.

SPACE AVAILABILITY

- Parks and Recreation Areas

OWNERSHIP

- District Owned Land
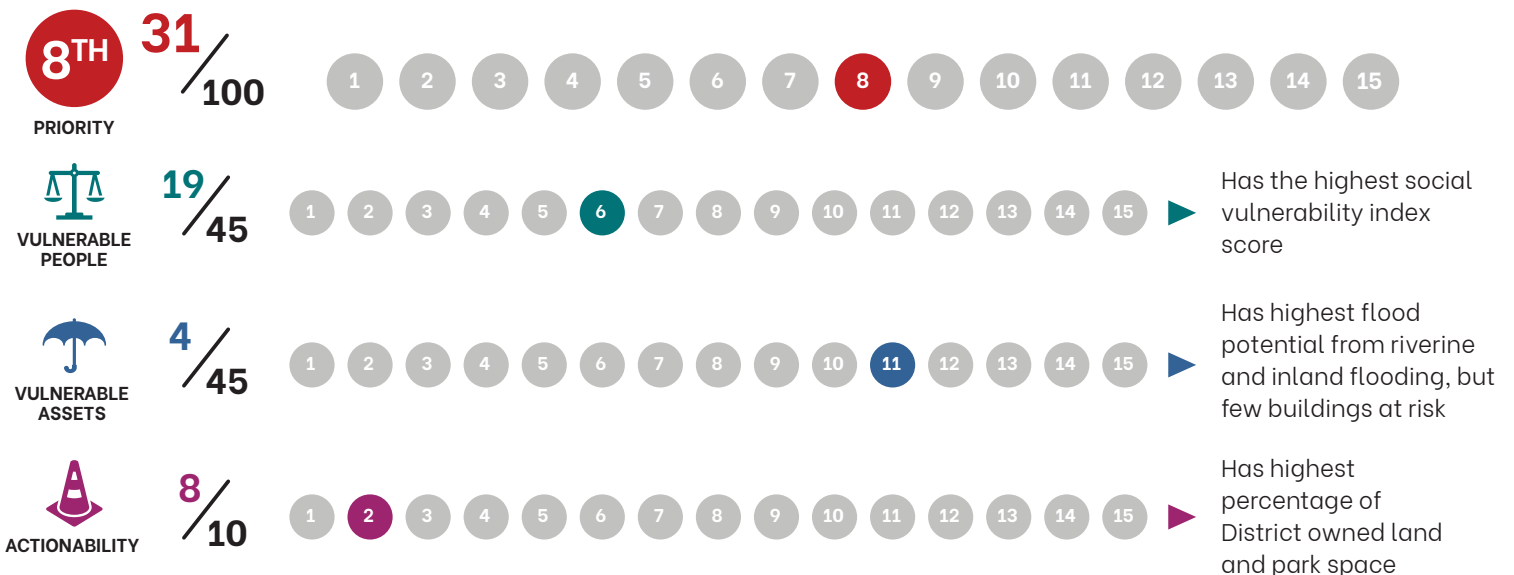- Federal Owned Land

RANK #8: POPLAR POINT

RFA DESCRIPTION

The Polar Point (PP) RFA is located in Ward 8 and is bounded by Suitland Parkway SE, Martin Luther King Jr. Ave SE, and the Anacostia River. The RFA is primarily comprised of open space (Anacostia Park). I-295 runs through the RFA and the Anacostia Metro Station is located in the southern corner of the RFA. The area has significant riverine (both 100- and 500-year events), tidal inundation, and interior flood risk, but the majority of the flood risk is in areas of open space. Poplar Point is home to a large proportion of the wetlands existing in the District. Most of the federally owned land within the Poplar Point RFA is slated to be transferred to the District for redevelopment and for the creation of a 70-acre park in the future.

RESILIENCE FOCUS AREAS
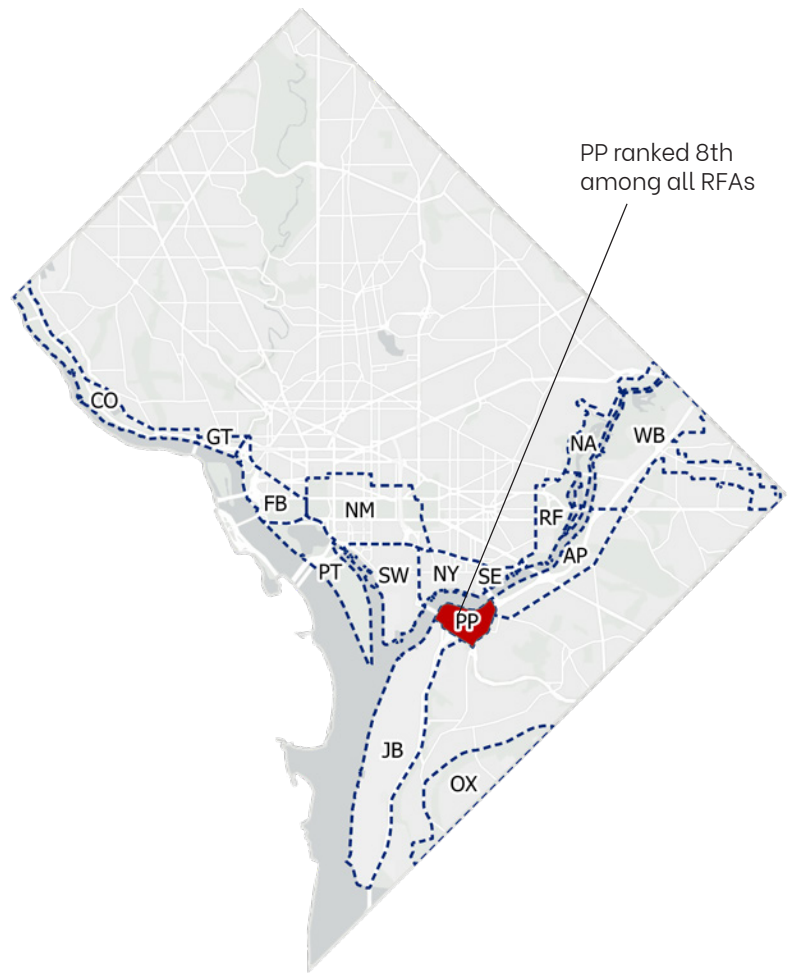
PP ranked 8th among all RFAs

SCORE SUMMARY - RANKING

The RFA's overall rank and rank within each scoring category is shown below along with the corresponding score.

8TH | **31**/100
PRIORITY
1 2 3 4 5 6 7 **8** 9 10 11 12 13 14 15

19/45
VULNERABLE PEOPLE
1 2 3 4 5 **6** 7 8 9 10 11 12 13 14 15 ▶ Has the highest social vulnerability index score

4/45
VULNERABLE ASSETS
1 2 3 4 5 6 7 8 9 10 **11** 12 13 14 15 ▶ Has highest flood potential from riverine and inland flooding, but few buildings at risk

8/10
ACTIONABILITY
1 **2** 3 4 5 6 7 8 9 10 11 12 13 14 15 ▶ Has highest percentage of District owned land and park space
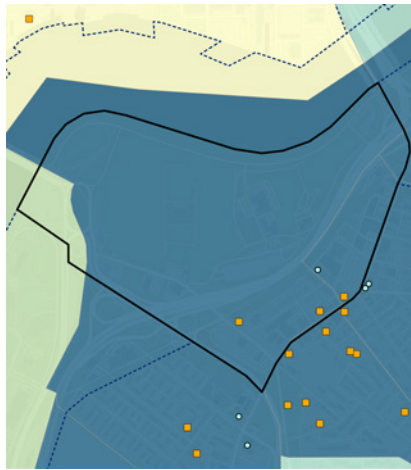
RANK #8: POPLAR POINT

VULNERABLE PEOPLE

This RFA has a **very high** average social vulnerability index score of **0.95** out of 1.

There are **few** assets for socially vulnerable people, including childcare centers and affordable housing buildings.

CDC SOCIAL VULNERABILITY INDEX

- Data Unavailable
- 0.25 | Lowest Vulnerability
- 0.2501 – 0.5
- 0.501 – 0.75
- 0.7501 – 1 | Highest Vulnerability

ASSETS FOR SOCIALLY VULNERABLE PEOPLE

- Childcare Centers
- Affordable Housing
- Nursing Homes

VULNERABLE ASSETS

Large areas of flood hazards cover this RFA. Bluespots cover **29%** of the RFA, the 100-year floodplain covers **45%**, the 500-year floodplain covers **61%**, and tidal inundation areas cover **5%**.

Buildings within this RFA are generally **newer** with an average year built of **1971**.
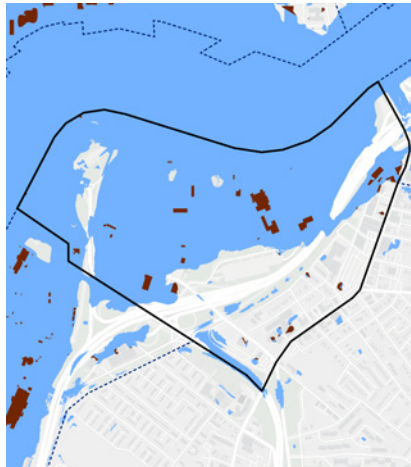
FLOODING HAZARDS

- Combined Flood Hazard Extents (includes FEMA 100- and 500-year floodplains, bluespot, and tidal inundation)

VULNERABLE PROPERTY

- Buildings that Intersect with Flood Risk Areas

ACTIONABILITY

The District owns **much of** the land within this RFA. Most of the federally owned land is slated to be transferred to the District in future years.

Many District-owned parks and recreational areas are present in this RFA, covering **66%** of the total RFA area.

SPACE AVAILABILITY

- Parks and Recreation Areas

OWNERSHIP

- District Owned Land
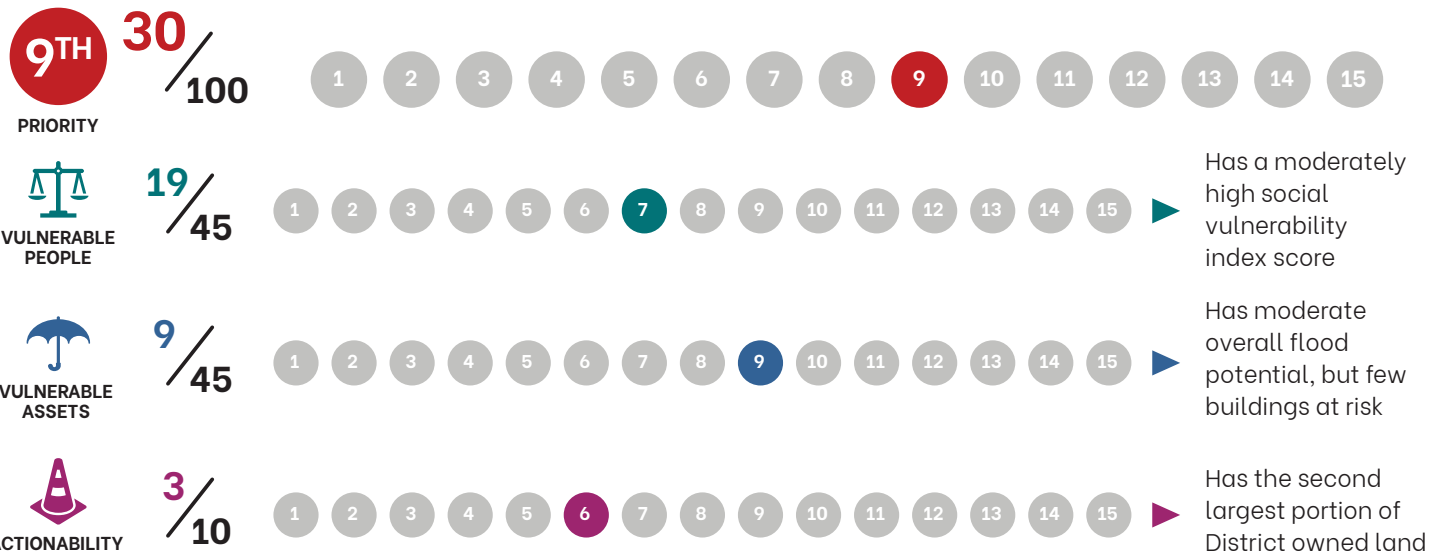- Federal Owned Land

RANK #9: RFK STADIUM

RFA DESCRIPTION

The RFK Stadium (RF) RFA is located on the west side of the Anacostia River and includes the area east of 19th St NE and south of Benning Road NW. The area contains RFK Stadium, healthcare-related facilities, portions of Anacostia Park, and residential neighborhoods such as East Kingman Park. The RFK Stadium RFA is likely to experience interior, riverine (both 100- and 500-year events), and tidal inundation flooding. The areas at risk for flooding are mostly centralized in the northeast quadrant of the RFA.

RESILIENCE FOCUS AREAS
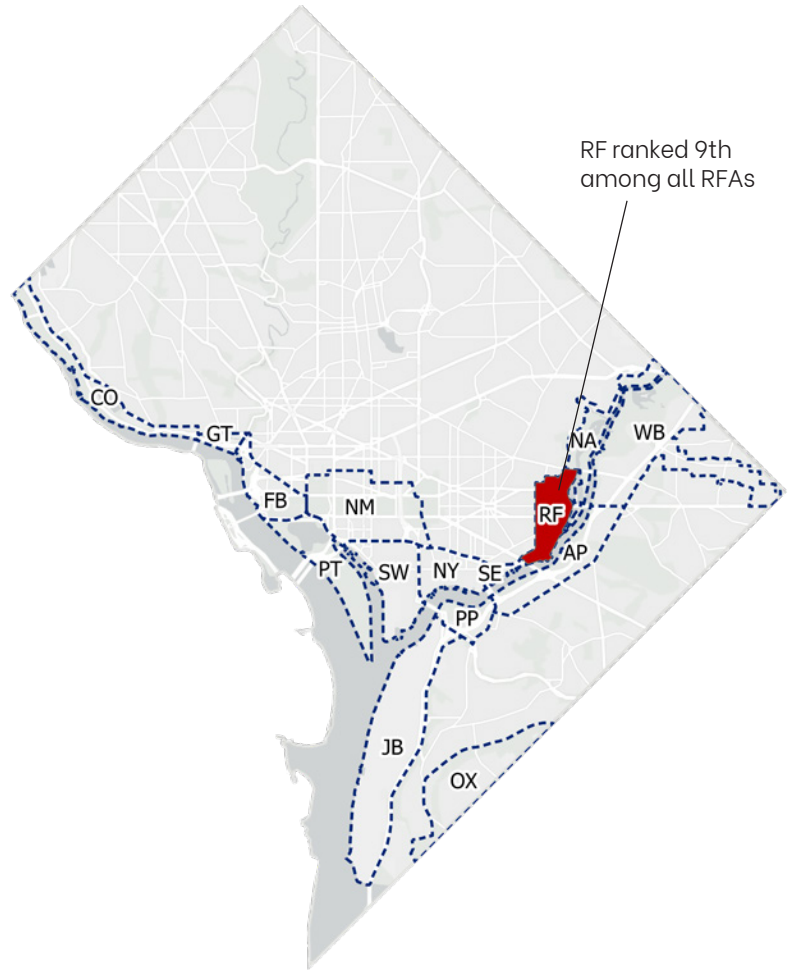
RF ranked 9th among all RFAs

SCORE SUMMARY - RANKING

The RFA's overall rank and rank within each scoring category is shown below along with the corresponding score.

9TH — **30**/100 — **PRIORITY**

1 2 3 4 5 6 7 8 **9** 10 11 12 13 14 15

19/45 — **VULNERABLE PEOPLE**

1 2 3 4 5 6 **7** 8 9 10 11 12 13 14 15 ▶ Has a moderately high social vulnerability index score

9/45 — **VULNERABLE ASSETS**

1 2 3 4 5 6 7 8 **9** 10 11 12 13 14 15 ▶ Has moderate overall flood potential, but few buildings at risk

3/10 — **ACTIONABILITY**

1 2 3 4 5 **6** 7 8 9 10 11 12 13 14 15 ▶ Has the second largest portion of District owned land
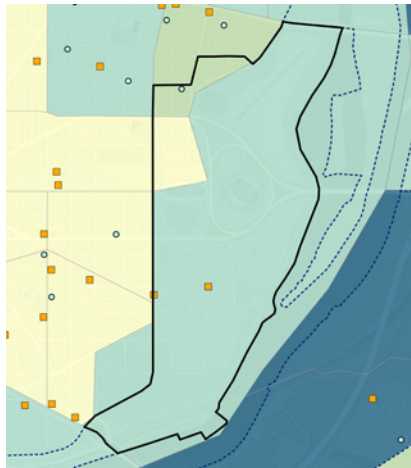
RANK #9: RFK STADIUM

VULNERABLE PEOPLE

This RFA has a **moderate** average social vulnerability index score of **0.61** out of 1.

There are **very few** assets for socially vulnerable people.

CDC SOCIAL VULNERABILITY INDEX

- ⬜ Data Unavailable
- 🟨 0.25 | Lowest Vulnerability
- 🟩 0.2501 – 0.5
- 🟦 0.501 – 0.75
- 🟦 0.7501 – 1 | Highest Vulnerability

ASSETS FOR SOCIALLY VULNERABLE PEOPLE

- ⭕ Childcare Centers
- 🟧 Affordable Housing
- ▲ Nursing Homes

VULNERABLE ASSETS

Large areas of flood hazards cover this RFA. Bluespots cover **12%** of the RFA, the 100-year floodplain covers **32%**, the 500-year floodplain covers **37%**, and tidal inundation areas cover **3%**.

Buildings within this RFA are generally **older** with an average year built of **1962**.
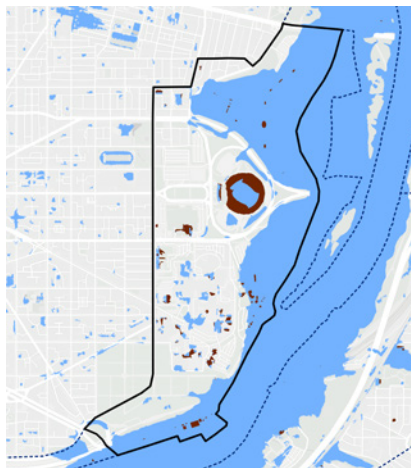
FLOODING HAZARDS

- 🟦 Combined Flood Hazard Extents (includes FEMA 100- and 500-year floodplains, bluespot, and tidal inundation)
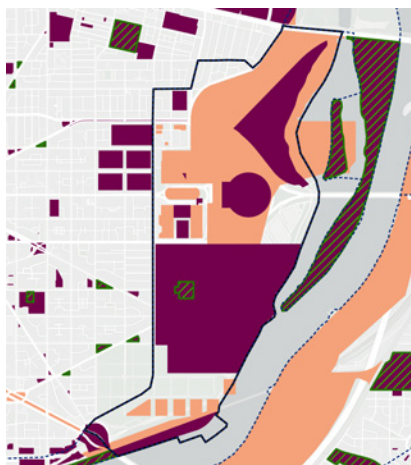
VULNERABLE PROPERTY

- 🟫 Buildings that Intersect with Flood Risk Areas

ACTIONABILITY

The District owns **much of** the land within this RFA (**43%**), while **40%** is federally owned.

Some District-owned parks and recreational areas are present in this RFA, covering **1%** of the total RFA area.

SPACE AVAILABILITY

- ▨ Parks and Recreation Areas

OWNERSHIP

- 🟪 District Owned Land
- 🟧 Federal Owned Land

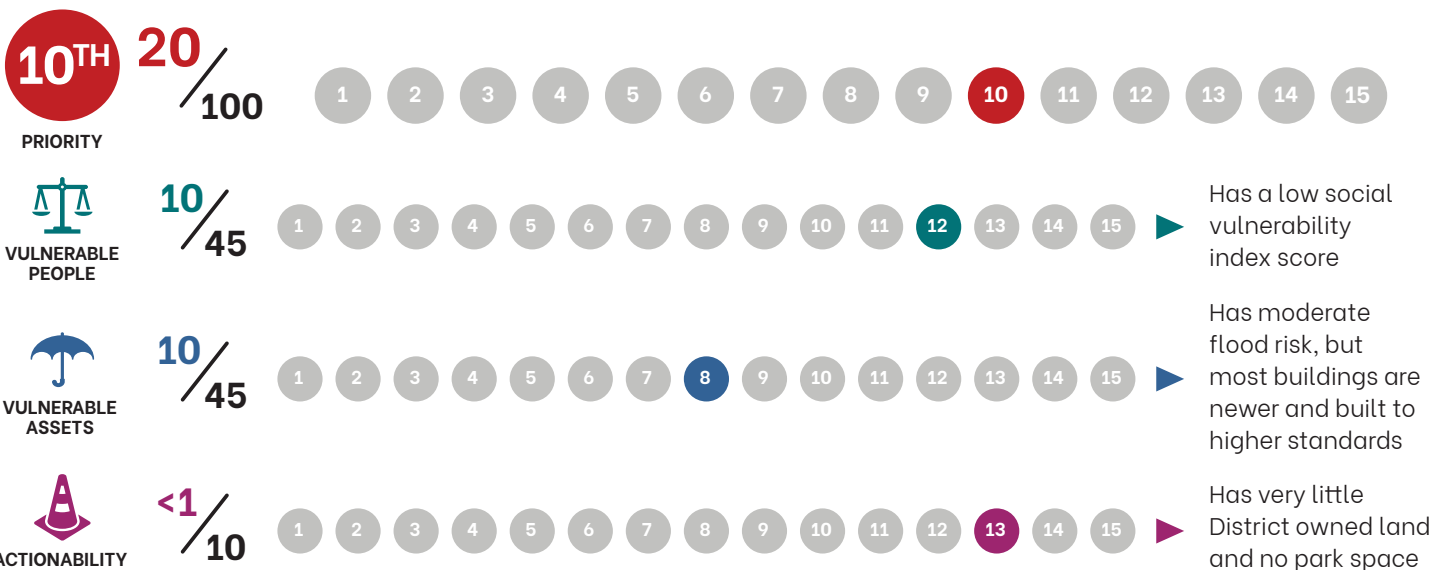# RANK #10: FOGGY BOTTOM

RFA DESCRIPTION

The Foggy Bottom (FB) RFA is located in Ward 2 and includes the area south of Virginia Ave NW extending to the edge of the Potomac and Independence Ave SW. Rock Creek is the dividing line between the Foggy Bottom RFA and the Georgetown RFA. This RFA encompasses a significant portion of the National Mall from the Lincoln Memorial to the WWII Memorial (17th St SW/NW). Within these bounds, there are several important structures and federal buildings such as the John F. Kennedy Center for the Performing Arts and U.S. Department of State buildings. Due to the topography of the Foggy Bottom RFA and its proximity to the Potomac River, this RFA is highly susceptible to interior, riverine (both 100 and 500-year events), and tidal inundation flooding. Most of the riverine and tidal inundation flood risk in this RFA is located on the National Mall and open spaces along the Potomac River.

RESILIENCE FOCUS AREAS
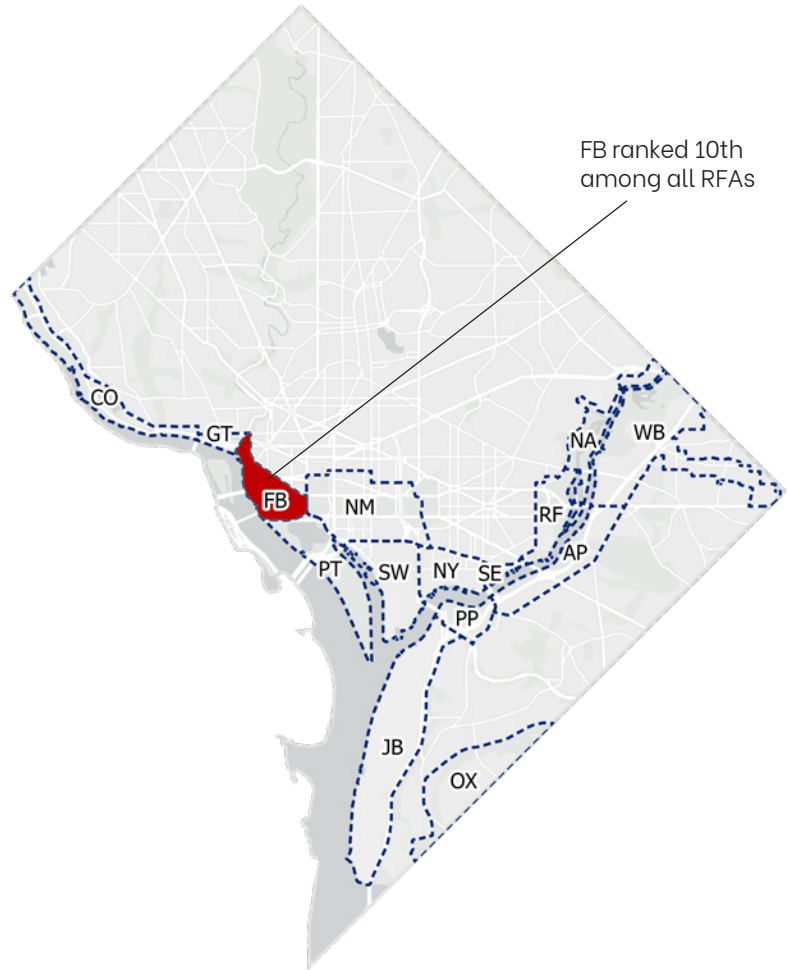
FB ranked 10th among all RFAs

SCORE SUMMARY - RANKING

The RFA's overall rank and rank within each scoring category is shown below along with the corresponding score.

10TH **PRIORITY** — **20**/100

1 2 3 4 5 6 7 8 9 **10** 11 12 13 14 15

VULNERABLE PEOPLE — **10**/45

1 2 3 4 5 6 7 8 9 10 11 **12** 13 14 15 ▶ Has a low social vulnerability index score

VULNERABLE ASSETS — **10**/45

1 2 3 4 5 6 7 **8** 9 10 11 12 13 14 15 ▶ Has moderate flood risk, but most buildings are newer and built to higher standards

ACTIONABILITY — **<1**/10

1 2 3 4 5 6 7 8 9 10 11 12 **13** 14 15 ▶ Has very little District owned land and no park space
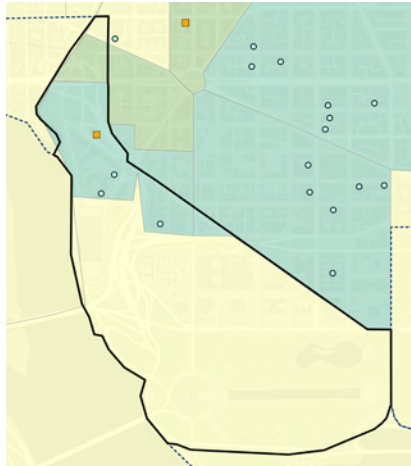
RANK #10: FOGGY BOTTOM

VULNERABLE PEOPLE

This RFA has a **low** average social vulnerability index score of **0.10** out of 1.

There are **very few** assets for socially vulnerable people.

CDC SOCIAL VULNERABILITY INDEX

⬜ (gray)	Data Unavailable
⬜ (yellow)	0.25 │ Lowest Vulnerability
🟩	0.2501 – 0.5
🟦	0.501 – 0.75
🟦	0.7501 – 1 │ Highest Vulnerability

ASSETS FOR SOCIALLY VULNERABLE PEOPLE

- ◯ Childcare Centers
- 🟧 Affordable Housing
- ▲ Nursing Homes

VULNERABLE ASSETS

Large areas of flood hazards cover this RFA. Bluespots cover **19%** of the RFA, the 100-year floodplain covers **28%**, the 500-year floodplain covers **43%**, and tidal inundation areas cover **2%**.

Buildings within this RFA are generally **newer** with an average year built of **1989**.

FLOODING HAZARDS

- 🟦 Combined Flood Hazard Extents (includes FEMA 100- and 500-year floodplains, bluespot, and tidal inundation)

VULNERABLE PROPERTY

- 🟫 Buildings that Intersect with Flood Risk Areas

ACTIONABILITY

The District owns **a small amount** of the land within this RFA (**3%**), while **73%** is federally owned.

SPACE AVAILABILITY

- ▨ Parks and Recreation Areas

OWNERSHIP

- 🟪 District Owned Land
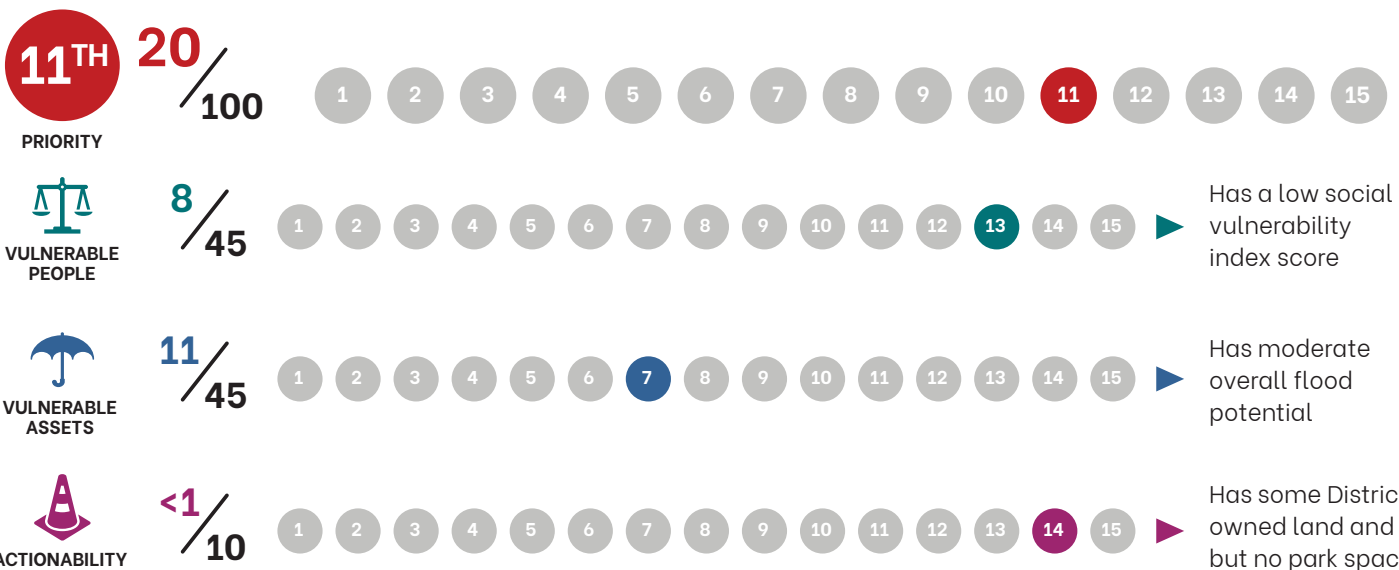- 🟧 Federal Owned Land

RANK #11: GEORGETOWN

RFA DESCRIPTION

The Georgetown (GT) RFA is the area south of M Street NW and is bounded by the Francis Scott Key Bridge to the west and Rock Creek to the east. The C&O Canal and the Georgetown Waterfront are within the RFA. Georgetown is highly susceptible to both 100- and 500-year riverine flooding. Several areas of this RFA are also influenced by tidal inundation and interior flooding. The Georgetown Waterfront has experienced several instances of severe flooding due to heavy rain in conjunction with tidal inundation both in April 2011 and then again in October 2021. There are floodwalls in place along the Georgetown Waterfront to protect businesses, though extreme damages can occur if the floodwalls are not functioning properly.

RESILIENCE FOCUS AREAS
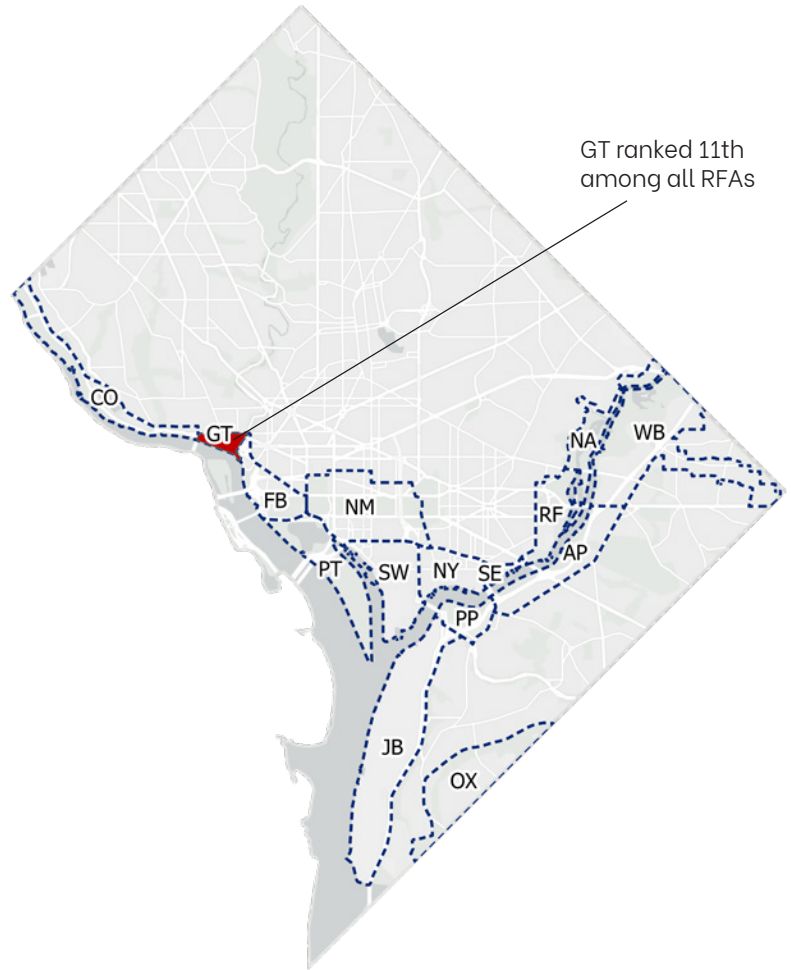
GT ranked 11th among all RFAs

SCORE SUMMARY - RANKING

The RFA's overall rank and rank within each scoring category is shown below along with the corresponding score.

11TH **20**/100
PRIORITY
1 2 3 4 5 6 7 8 9 10 **11** 12 13 14 15

8/45
VULNERABLE PEOPLE
1 2 3 4 5 6 7 8 9 10 11 12 **13** 14 15 ► Has a low social vulnerability index score

11/45
VULNERABLE ASSETS
1 2 3 4 5 6 **7** 8 9 10 11 12 13 14 15 ► Has moderate overall flood potential

<1/10
ACTIONABILITY
1 2 3 4 5 6 7 8 9 10 11 12 13 **14** 15 ► Has some District owned land and but no park space
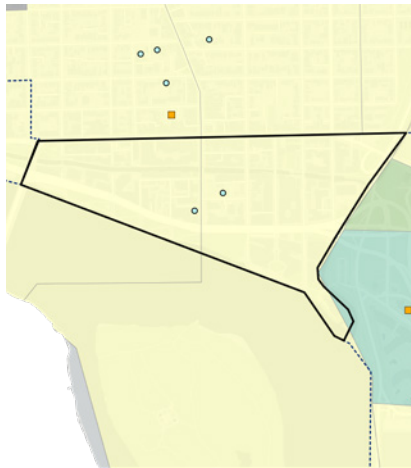
RANK #11: GEORGETOWN

VULNERABLE PEOPLE

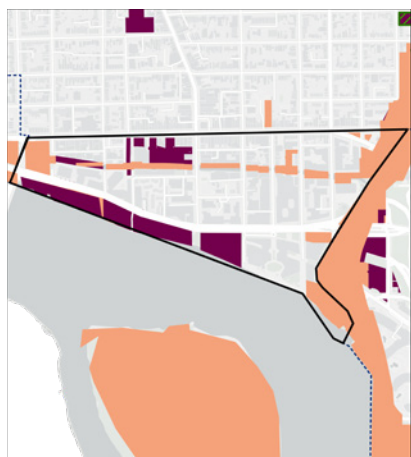This RFA has a **low** average social vulnerability index score of **0.16** out of 1.

There are **very few** assets for socially vulnerable people.

VULNERABLE ASSETS

Large areas of flood hazards cover this RFA. Bluespots cover **9%** of the RFA, the 100-year floodplain covers **39%**, the 500-year floodplain covers **46%**, and tidal inundation areas cover **5%**.

Buildings within this RFA are generally **newer** with an average year built of **1986**.
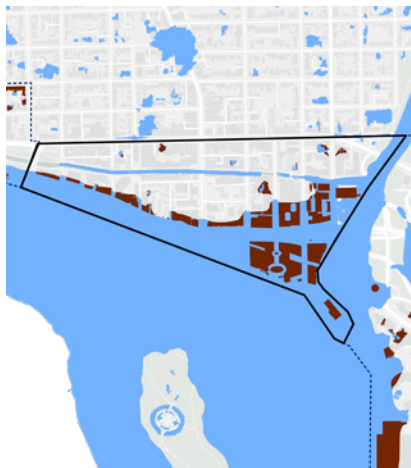
ACTIONABILITY

The District owns **a small amount** of the land within this RFA (**12%**), while **25%** is federally owned.
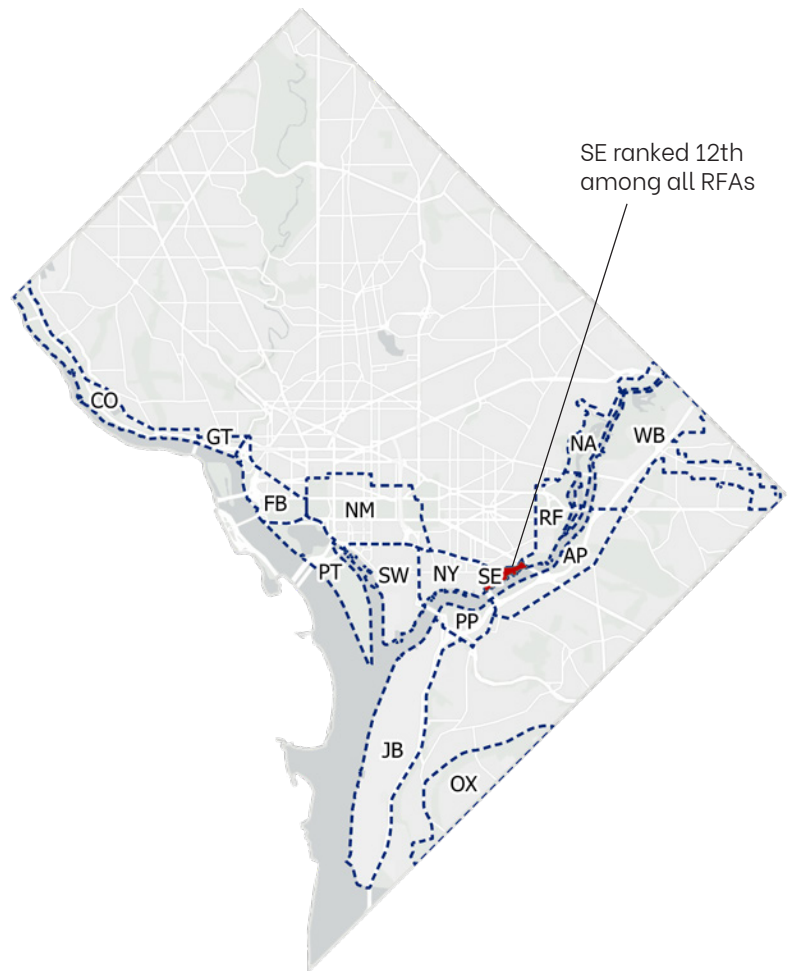
RANK #12: SE BLVD
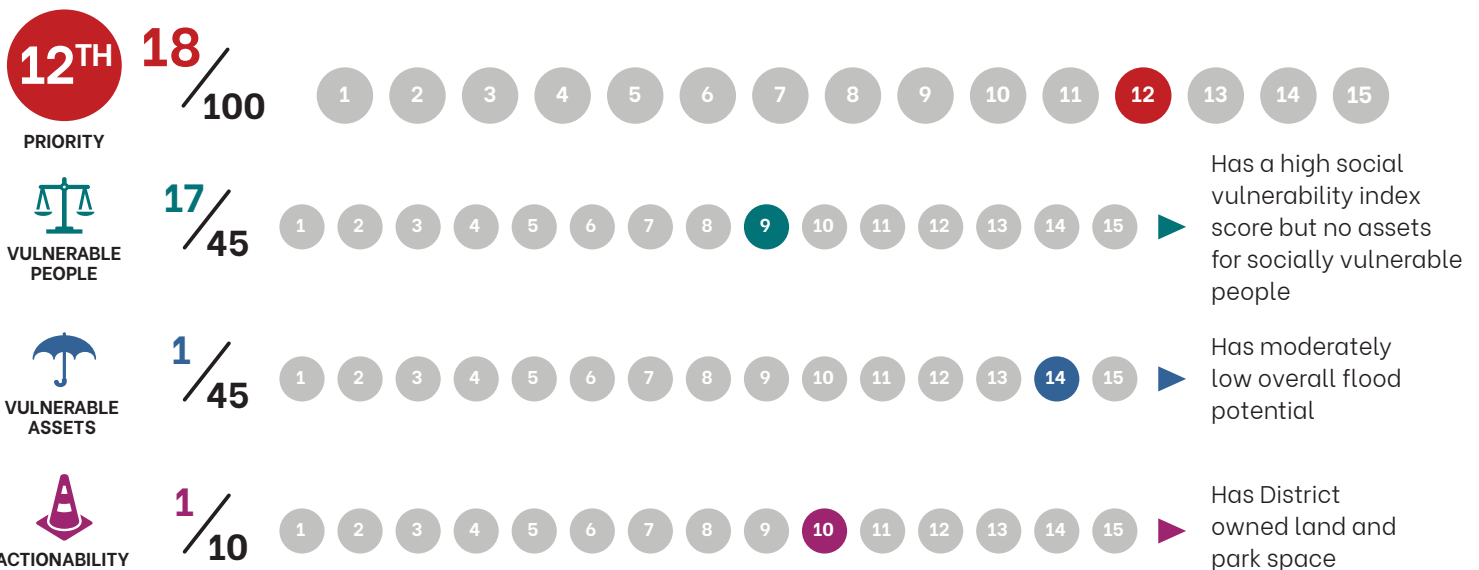
RFA DESCRIPTION

The SE Boulevard (SE) RFA is a small RFA bounded by 11th Street SE, Southeast Blvd SE, and Pennsylvania Ave SE. The RFA contains Maritime Plaza, which is a 12-acre riverfront site that currently has two office buildings. There are also several boat and yacht clubs along the Anacostia River that are within the 100-year floodplain. SE Boulevard has slightly lower flood risk than the other RFAs, with a small portion of this RFA located within the 100-year floodplain.

RESILIENCE FOCUS AREAS

SE ranked 12th among all RFAs

SCORE SUMMARY - RANKING

The RFA's overall rank and rank within each scoring category is shown below along with the corresponding score.

12TH **18**/100 — **PRIORITY**

1 2 3 4 5 6 7 8 9 10 11 **12** 13 14 15

17/45 — **VULNERABLE PEOPLE**

1 2 3 4 5 6 7 8 **9** 10 11 12 13 14 15 ▶ Has a high social vulnerability index score but no assets for socially vulnerable people

1/45 — **VULNERABLE ASSETS**

1 2 3 4 5 6 7 8 9 10 11 12 13 **14** 15 ▶ Has moderately low overall flood potential

1/10 — **ACTIONABILITY**

1 2 3 4 5 6 7 8 9 **10** 11 12 13 14 15 ▶ Has District owned land and park space
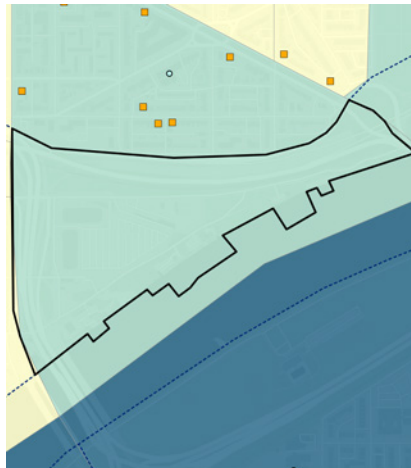
RANK #12: SE BLVD

VULNERABLE PEOPLE

This RFA has a **high** average social vulnerability index score of **0.71** out of 1.

There are **no** childcare centers, affordable housing buildings, or nursing homes in this RFA.

CDC SOCIAL VULNERABILITY INDEX

- Data Unavailable
- 0.25 | Lowest Vulnerability
- 0.2501 – 0.5
- 0.501 – 0.75
- 0.7501 – 1 | Highest Vulnerability

ASSETS FOR SOCIALLY VULNERABLE PEOPLE

- ○ Childcare Centers
- ■ Affordable Housing
- ▲ Nursing Homes

VULNERABLE ASSETS

Large areas of flood hazards cover this RFA. Bluespots cover **10%** of the RFA, the 100-year floodplain covers **24%**, the 500-year floodplain covers **27%**, and tidal inundation areas cover **10%**.

There are very few buildings within this RFA, and they are generally **newer** with an average year built of **1983**.
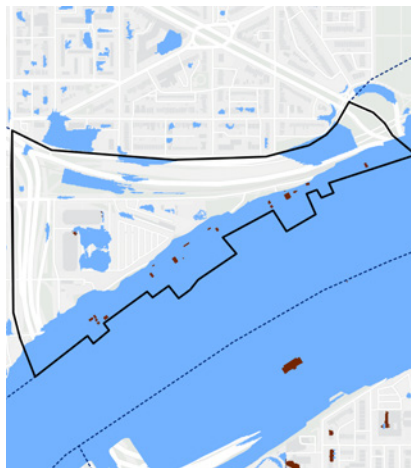
FLOODING HAZARDS

- Combined Flood Hazard Extents (includes FEMA 100- and 500-year floodplains, bluespot, and tidal inundation)

VULNERABLE PROPERTY

- Buildings that Intersect with Flood Risk Areas

ACTIONABILITY

The District owns **a moderate amount** of the land within this RFA (**24%**), while **2%** is federally owned.

Some District-owned parks and recreational areas are present in this RFA, covering **18%** of the total RFA area.

SPACE AVAILABILITY

- Parks and Recreation Areas

OWNERSHIP

- District Owned Land
- Federal Owned Land

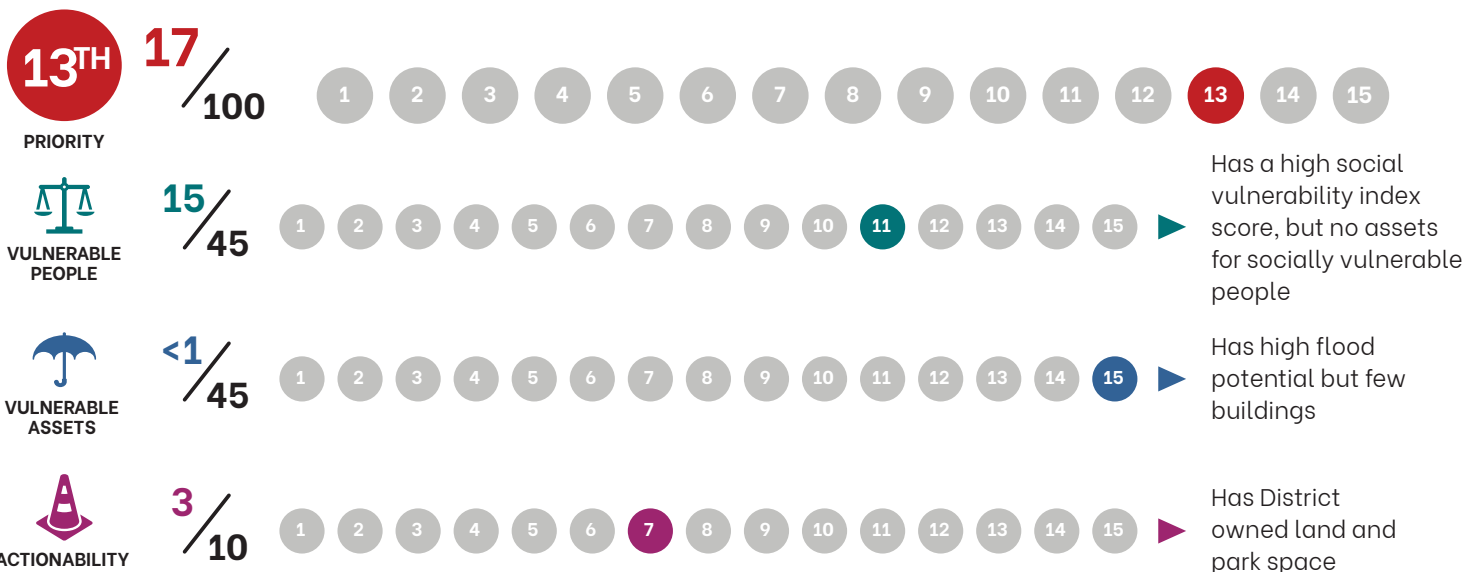# RANK #13: NATIONAL ARBORETUM/KINGMAN ISLAND

RFA DESCRIPTION

The National Arboretum/Kingman Island (NA) RFA is located in Ward 5 and closely follows the FEMA 100-year floodplain boundary along the western bank of the Anacostia River. The RFA contains a large portion of Anacostia Park, a small portion of the National Arboretum, and Kingman and Heritage Islands. The entirety of this RFA is located within the 100- or 500-year floodplains and has high flood risk due to tidal inundation. This area is likely to experience flooding from the Anacostia River as well as the Hickey Run tributary. This area is less susceptible to interior flooding compared to other RFAs.

RESILIENCE FOCUS AREAS
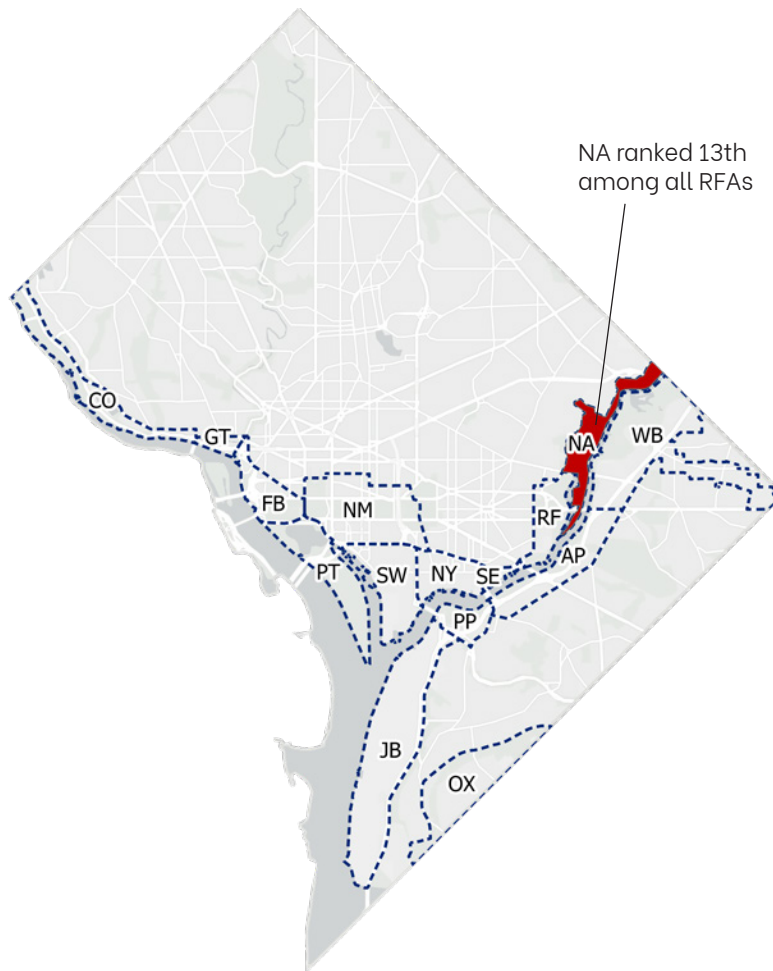
NA ranked 13th among all RFAs

SCORE SUMMARY - RANKING

The RFA's overall rank and rank within each scoring category is shown below along with the corresponding score.

13TH PRIORITY — **17**/100

1 2 3 4 5 6 7 8 9 10 11 12 **13** 14 15

VULNERABLE PEOPLE — **15**/45

1 2 3 4 5 6 7 8 9 10 **11** 12 13 14 15 ▶ Has a high social vulnerability index score, but no assets for socially vulnerable people

VULNERABLE ASSETS — **<1**/45

1 2 3 4 5 6 7 8 9 10 11 12 13 14 **15** ▶ Has high flood potential but few buildings

ACTIONABILITY — **3**/10

1 2 3 4 5 6 **7** 8 9 10 11 12 13 14 15 ▶ Has District owned land and park space
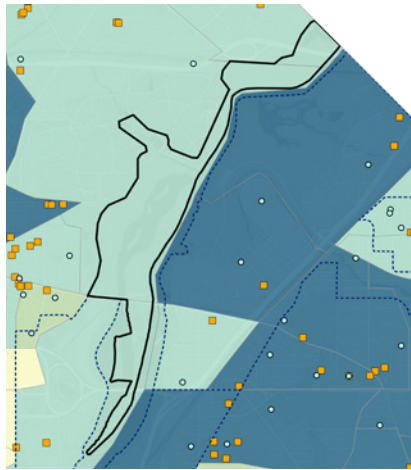
RANK #13: NATIONAL ARBORETUM/KINGMAN ISLAND

VULNERABLE PEOPLE

This RFA has a **high** average social vulnerability index score of **0.71** out of 1.

There are **no** childcare centers, affordable housing buildings, or nursing homes in this RFA.

CDC SOCIAL VULNERABILITY INDEX

- Data Unavailable
- 0.25 | Lowest Vulnerability
- 0.2501 – 0.5
- 0.501 – 0.75
- 0.7501 – 1 | Highest Vulnerability

**ASSETS FOR SOCIALLY VULNERABLE PEOPLE**

- ○ Childcare Centers
- ■ Affordable Housing
- ▲ Nursing Homes

VULNERABLE ASSETS

Flood risk in this RFA is primarily riverine and coastal. Bluespots cover **5%** of the RFA, the 100-year floodplain covers **72%**, the 500-year floodplain covers **79%**, and tidal inundation areas cover **25%**.

There are very few buildings within this RFA, and they are generally **newer** with an average year built of **1975**.
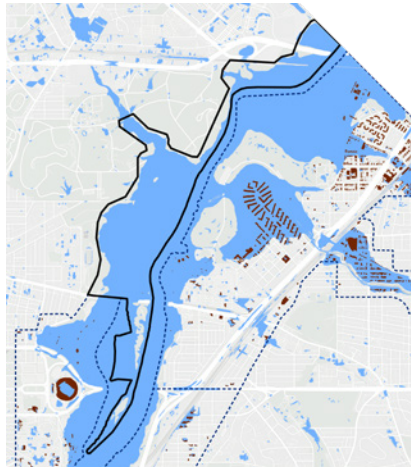
FLOODING HAZARDS

- Combined Flood Hazard Extents (includes FEMA 100- and 500-year floodplains, bluespot, and tidal inundation)
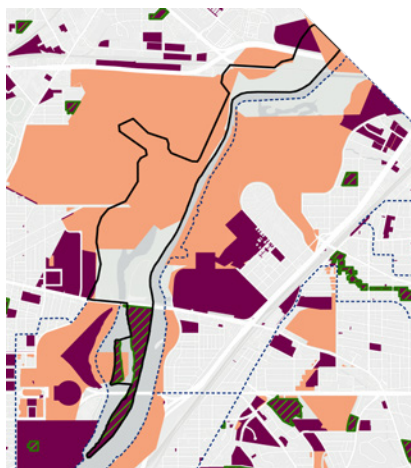
VULNERABLE PROPERTY

- Buildings that Intersect with Flood Risk Areas

ACTIONABILITY

The District owns **a small amount** of the land within this RFA (**14%**), while **51%** is federally owned.

Some District-owned parks and recreational areas are present in this RFA, covering **12%** of the total RFA area.

SPACE AVAILABILITY

- Parks and Recreation Areas

OWNERSHIP

- District Owned Land
- Federal Owned Land
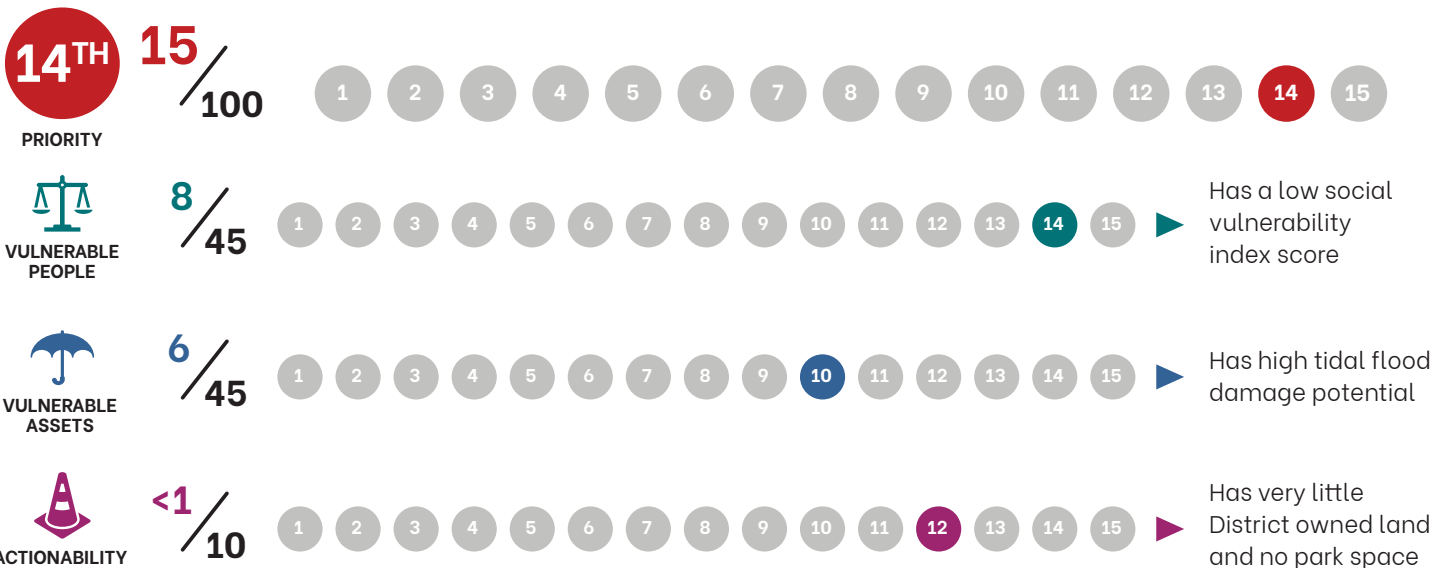
RANK #14: C&O CANAL

RFA DESCRIPTION

The C&O Canal (CO) RFA includes the Chesapeake & Ohio Canal that stretches 184.5 miles from Georgetown to Cumberland, MD. The CO RFA includes the portion of the canal that runs along the Potomac from the Georgetown Waterfront to the DC-Maryland border. There is a walking towpath that visitors can walk, run, or bike along that is adjacent to the canal. Also located within the CO RFA is the Georgetown Reservoir that ties into the Washington aqueduct system. This portion of the C&O Canal has elevated flood risk due to 100-year riverine flooding from the Potomac River. In addition, there are several areas that are susceptible to interior flooding and tidal inundation.

RESILIENCE FOCUS AREAS
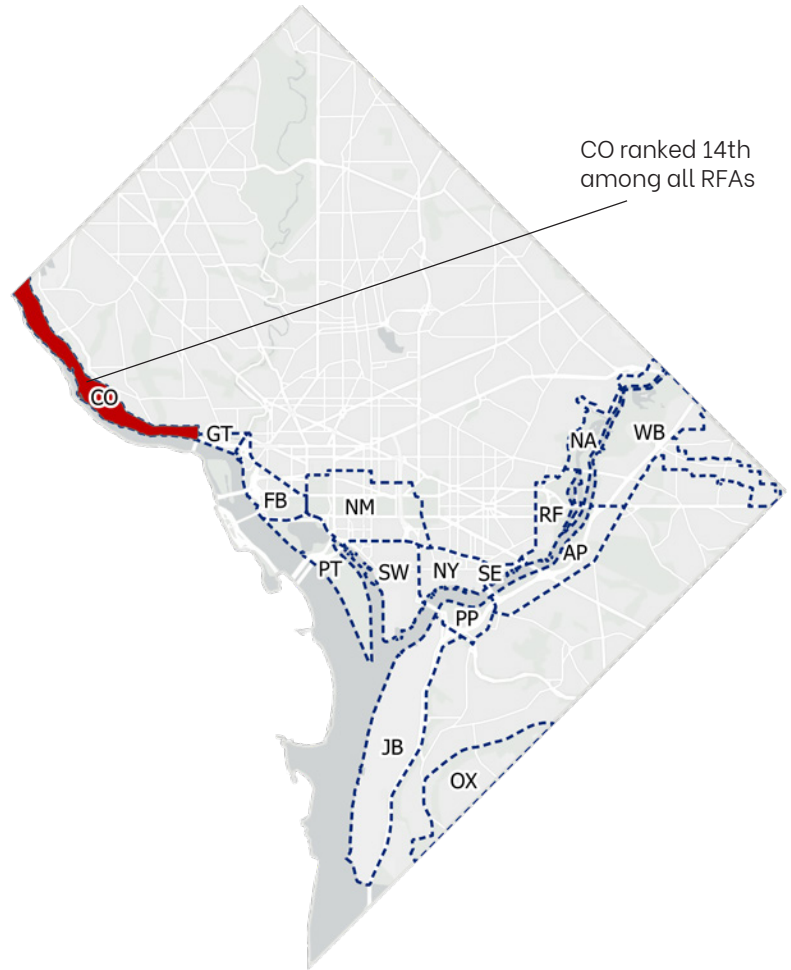
CO ranked 14th among all RFAs

SCORE SUMMARY - RANKING

The RFA's overall rank and rank within each scoring category is shown below along with the corresponding score.

14TH PRIORITY — **15**/100
1 2 3 4 5 6 7 8 9 10 11 12 13 **14** 15

VULNERABLE PEOPLE — **8**/45
1 2 3 4 5 6 7 8 9 10 11 12 13 **14** 15 ▶ Has a low social vulnerability index score

VULNERABLE ASSETS — **6**/45
1 2 3 4 5 6 7 8 9 **10** 11 12 13 14 15 ▶ Has high tidal flood damage potential

ACTIONABILITY — **<1**/10
1 2 3 4 5 6 7 8 9 10 11 **12** 13 14 15 ▶ Has very little District owned land and no park space
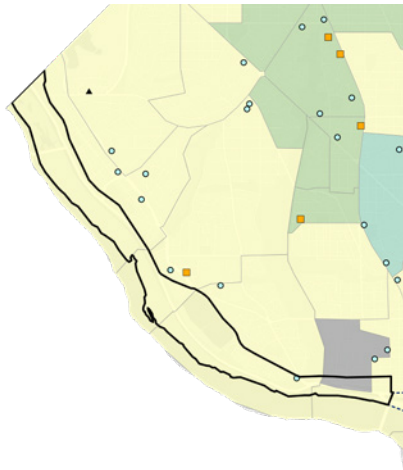
RANK #14: C&O CANAL

VULNERABLE PEOPLE

This RFA has a **low** average social vulnerability index score of **0.10** out of 1.

There are **very few** assets for socially vulnerable people.

CDC SOCIAL VULNERABILITY INDEX

- Data Unavailable
- 0.25 | Lowest Vulnerability
- 0.2501 – 0.5
- 0.501 – 0.75
- 0.7501 – 1 | Highest Vulnerability

### ASSETS FOR SOCIALLY VULNERABLE PEOPLE

- ◯ Childcare Centers
- ▢ Affordable Housing
- ▲ Nursing Homes

VULNERABLE ASSETS

Large areas of flood hazards cover this RFA. Bluespots cover **13%** of the RFA, the 100-year floodplain covers **42%**, the 500-year floodplain covers **44%**, and tidal inundation areas cover **3%**.

Buildings within this RFA are generally **newer** with an average year built of **1988**.
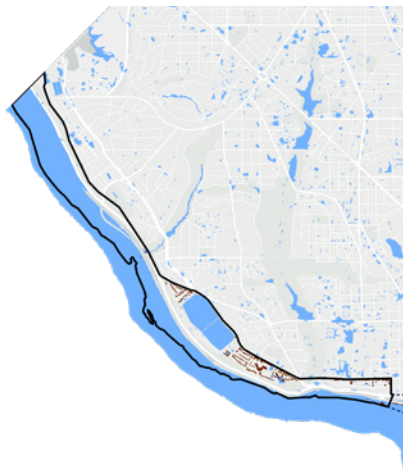
FLOODING HAZARDS

Combined Flood Hazard Extents (includes FEMA 100- and 500-year floodplains, bluespot, and tidal inundation)
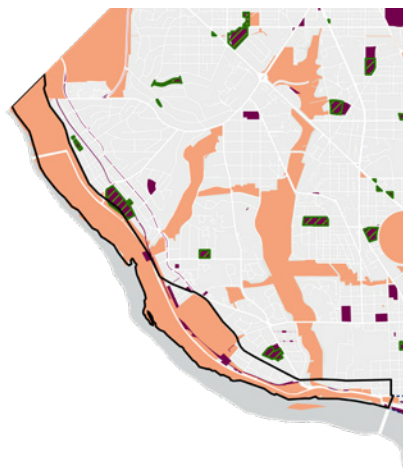
VULNERABLE PROPERTY

Buildings that Intersect with Flood Risk Areas

ACTIONABILITY

The District owns **a small amount** of the land within this RFA (**3%**), while **76%** is federally owned.

SPACE AVAILABILITY

Parks and Recreation Areas

OWNERSHIP

- District Owned Land
- Federal Owned Land
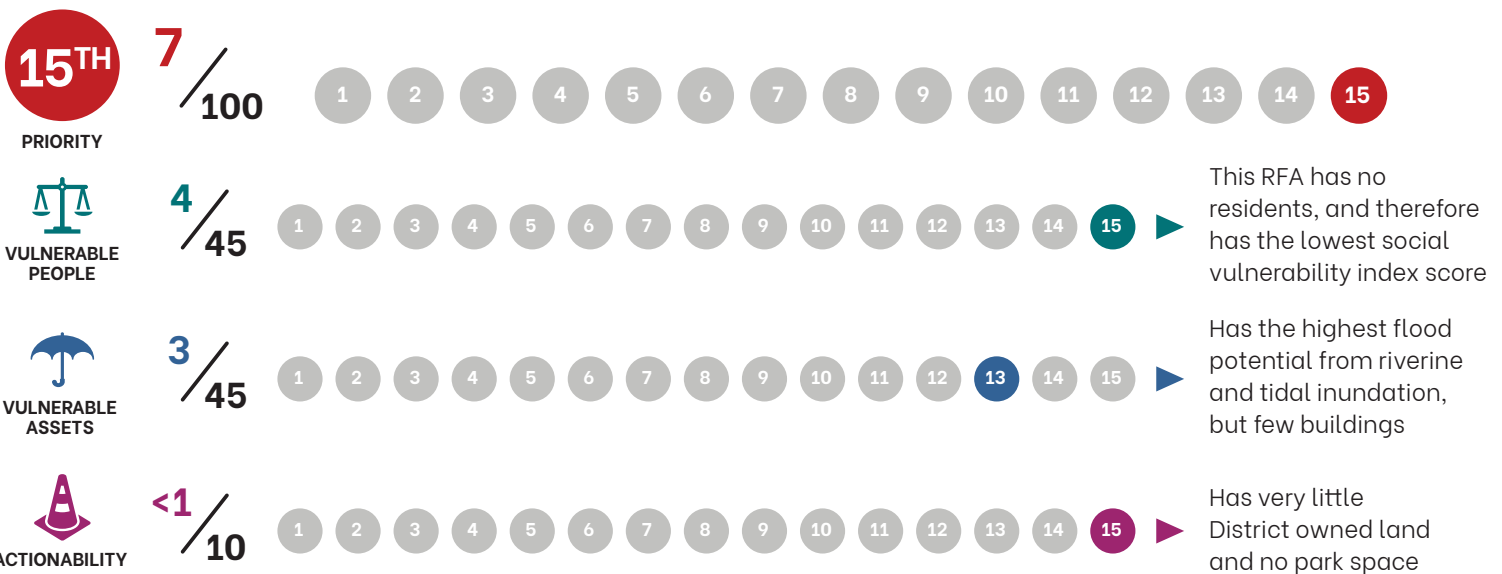
RANK #15: POTOMAC PARK

RFA DESCRIPTION

The Potomac Park (PT) RFA encapsulates the entire Tidal Basin which includes the Martin Luther King Jr., Thomas Jefferson, and the FDR Memorials connected by the Tidal Basin Loop Trail. This RFA also includes the Potomac Park peninsula that extends south from Tidal Basin into the Potomac River. This RFA is almost entirely comprised of federally owned land and contains mostly open space and federal monuments. The RFA is located completely within the 100-year floodplain and the entirety of the RFA is at risk of tidal inundation flooding. There are also several locations that are low-lying and are therefore highly susceptible to interior flooding. This area has seen repeated flood events, most recently in October 2021 when heavy rainfall and extreme tidal flooding caused the Tidal Basin to overflow and flood all surrounding walkways. The District has invested over $5 million in repairs to the Tidal Basin seawall and is beginning the planning process to implement addition flood resiliency measures. There are no residential buildings in this mostly federally owned park area.

RESILIENCE FOCUS AREAS
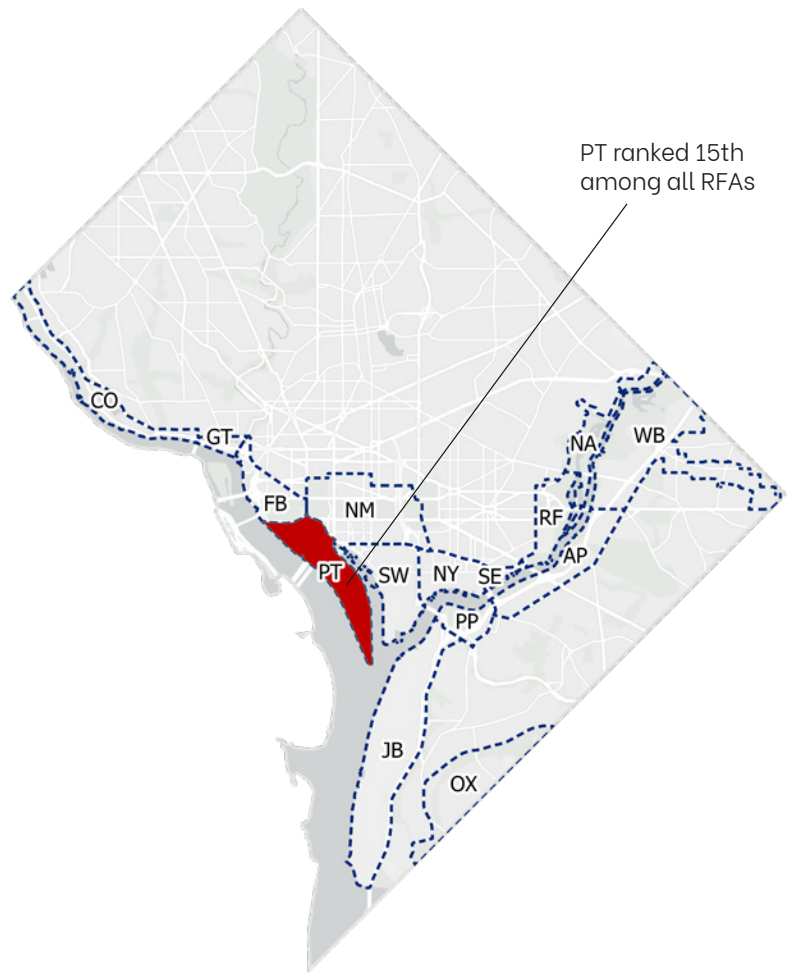
PT ranked 15th among all RFAs

SCORE SUMMARY - RANKING

The RFA's overall rank and rank within each scoring category is shown below along with the corresponding score.

15TH PRIORITY — 7/100

1 2 3 4 5 6 7 8 9 10 11 12 13 14 **15**

VULNERABLE PEOPLE — 4/45

1 2 3 4 5 6 7 8 9 10 11 12 13 14 **15** ▶ This RFA has no residents, and therefore has the lowest social vulnerability index score

VULNERABLE ASSETS — 3/45

1 2 3 4 5 6 7 8 9 10 11 12 **13** 14 15 ▶ Has the highest flood potential from riverine and tidal inundation, but few buildings

ACTIONABILITY — <1/10

1 2 3 4 5 6 7 8 9 10 11 12 13 14 **15** ▶ Has very little District owned land and no park space
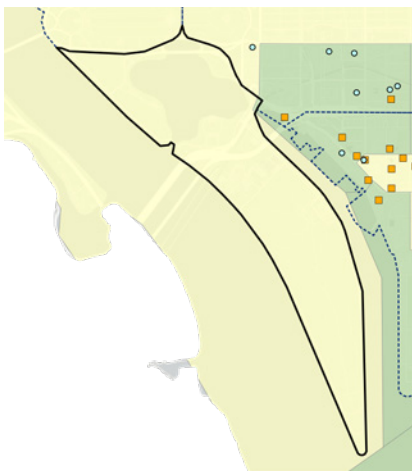
RANK #15: POTOMAC PARK

VULNERABLE PEOPLE

This RFA has the **lowest** average social vulnerability index score of **0.00** out of 1, due to there being no residents in this RFA.

There are **no** childcare centers, affordable housing buildings, or nursing homes in this RFA.

CDC SOCIAL VULNERABILITY INDEX

- Data Unavailable
- 0.25 | Lowest Vulnerability
- 0.2501 – 0.5
- 0.501 – 0.75
- 0.7501 – 1 | Highest Vulnerability

### ASSETS FOR SOCIALLY VULNERABLE PEOPLE

- ○ Childcare Centers
- ■ Affordable Housing
- ▲ Nursing Homes

VULNERABLE ASSETS

Large areas of flood hazards cover this RFA, with particularly high riverine and coastal risk. Bluespots cover **12%** of the RFA, the 100-year floodplain covers **89%**, the 500-year floodplain covers **99%**, and tidal inundation areas cover **30%**.

There are very few buildings within this RFA, and they are generally **older** with an average year built of **1900**.
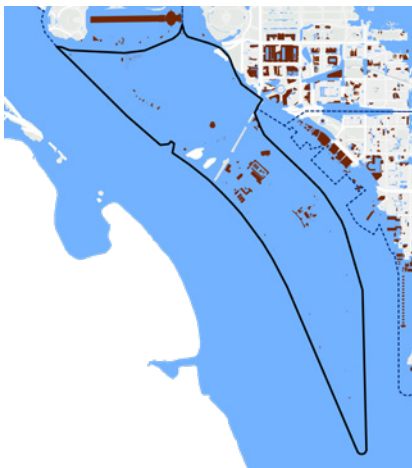
FLOODING HAZARDS

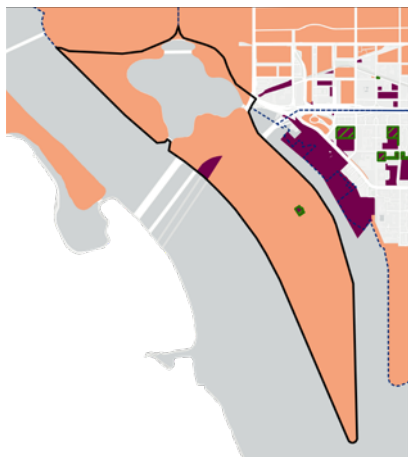- Combined Flood Hazard Extents (includes FEMA 100- and 500-year floodplains, bluespot, and tidal inundation)

VULNERABLE PROPERTY

- Buildings that Intersect with Flood Risk Areas

ACTIONABILITY

The District owns **a small amount** of the land within this RFA (**1%**), while **81%** is federally owned.

SPACE AVAILABILITY

- Parks and Recreation Areas

OWNERSHIP

- District Owned Land
- Federal Owned Land