

Working Towards Equity in the Elizabeth River Watershed

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Deputy Director – Restoration

Virginia Municipal League Annual Meeting

October 4, 2021



The Elizabeth River Project

Mission: Restore the Elizabeth River to the highest practical level of environmental quality through government, business, & community partnerships.

- 2,000 citizen members
- 136 River Star facilities
- Over 5,000 River Star Homes
- Government projects with US Navy, NOAA, US Army Corps of Engineers, US EPA, VA DEQ, VA DCR, Norfolk, Portsmouth, Virginia Beach, & Chesapeake.



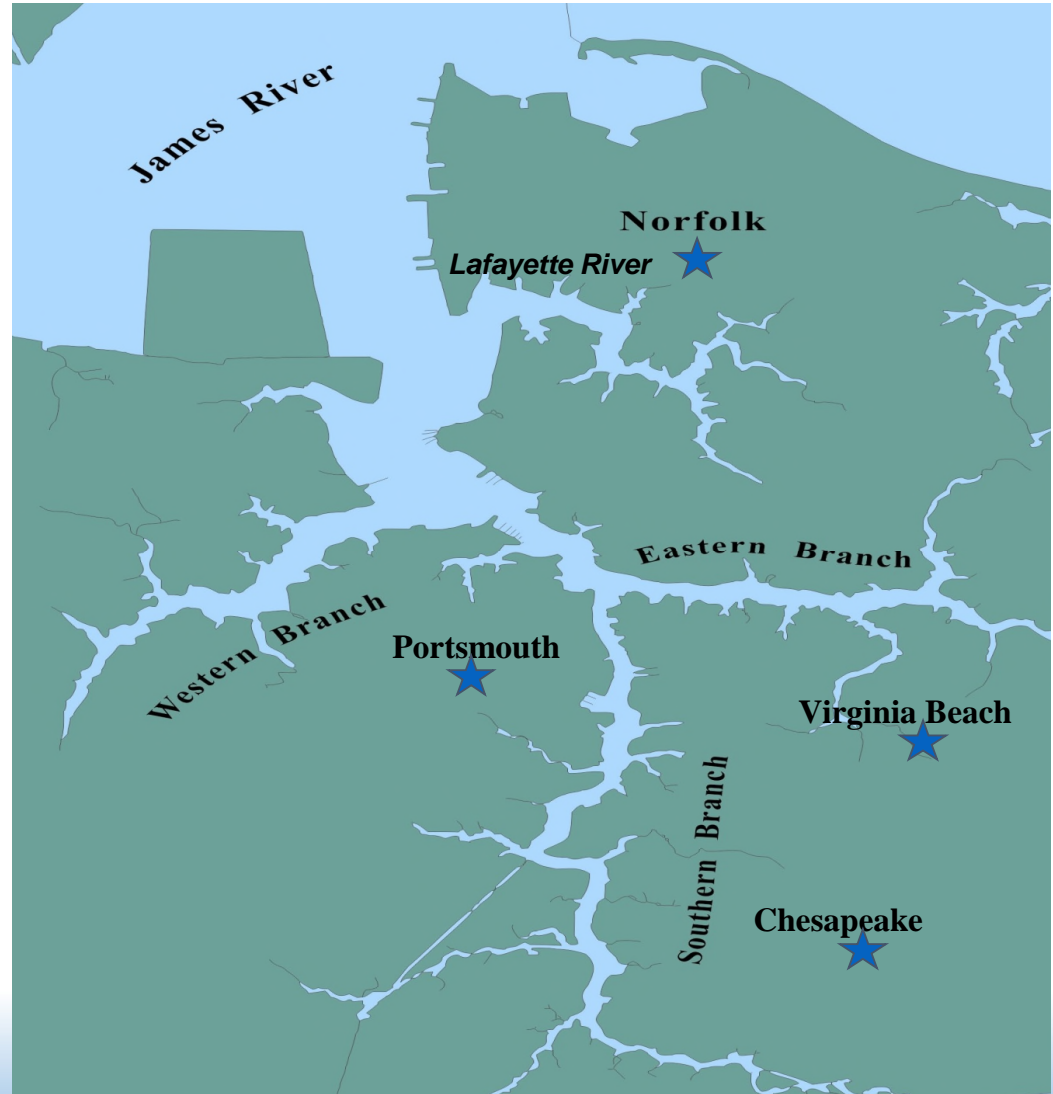
The Start:

4 citizens around a kitchen table, 1991



Elizabeth River Watershed

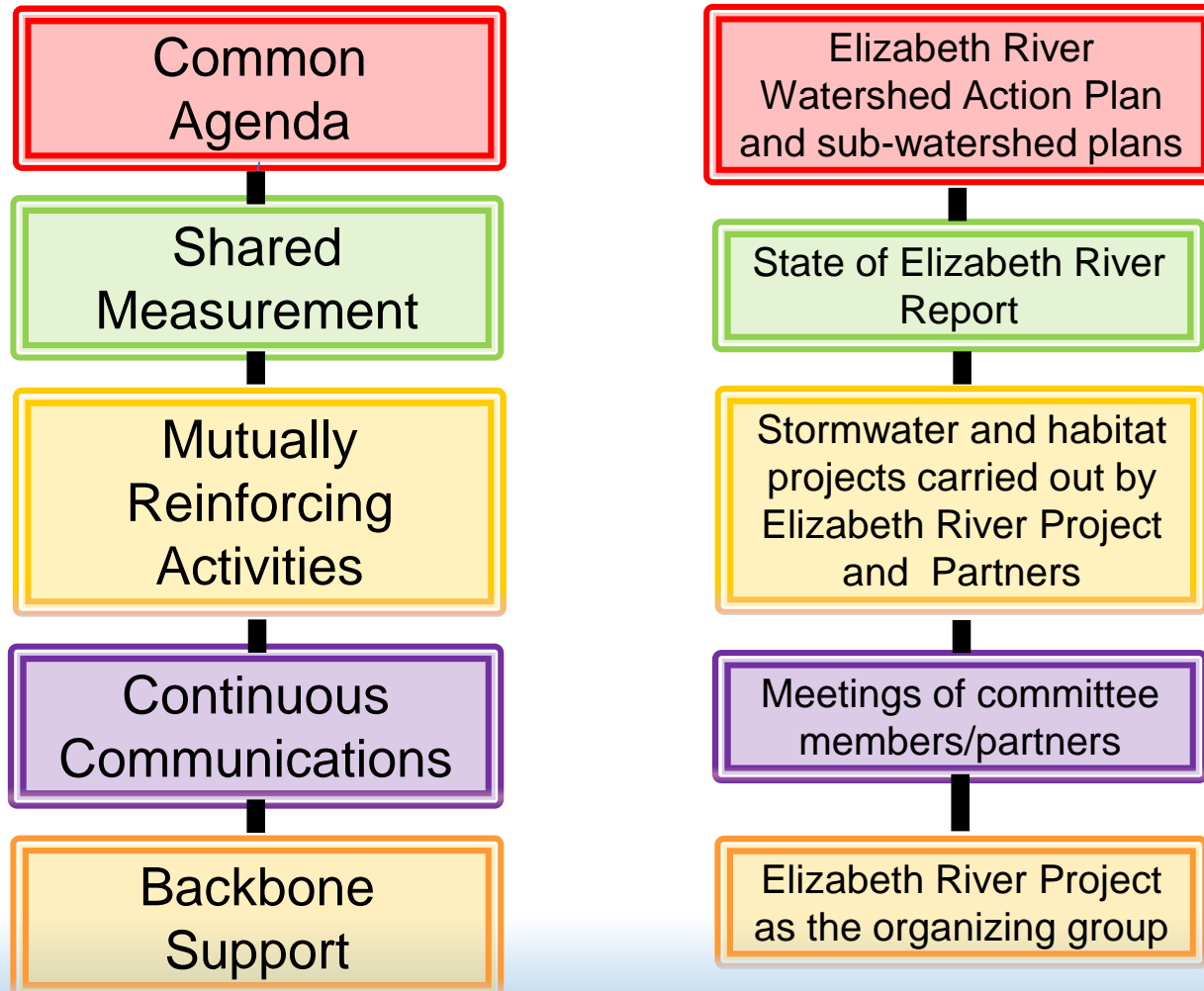
- 200 sq. mile watershed
- 4 Cities
- Great Dismal Swamp freshwater source
- Trapped Estuary



Action Plan for Restoring Elizabeth

- **Action:** The goo must go!
- **Action:** Restore resilient shores
- **Action:** Restore clean water
- **Action:** Achieve sustainable development & redevelopment
- **Action:** Create a river revolution

Elizabeth River Project Has Been Practicing Collective Impact For 23 Years



State of the Elizabeth River

Scorecard 2014



November 17, 2014

Scientific data compiled & analyzed by:
Elizabeth River State of the River Steering Committee 2014.
Convened by Virginia Department of Environmental Quality and The Elizabeth River Project



Summarized and interpreted for the public by:



Twentieth Anniversary Watershed Action Plan for the Elizabeth River | January 28, 2016

PARADISE FOUND



PARADISE CREEK RESTORATION PLAN

August 1, 2005

Prepared by
#Elizabeth River Project
Team Paradise

Rediscover the Treasure Money Point Revitalization



A 10-Year Plan



Money Point Revitalization Task Force



October 2006



EASTERN BRANCH ENVIRONMENTAL RESTORATION STRATEGY

Prepared by the Eastern Branch Environmental Restoration Strategy Committee
Convened by the Elizabeth River Project



FINAL ADOPTED BY BOARD - NOVEMBER 17, 2014



The Plan for Restoring the Lafayette River

Strategies for Community-Wide Action

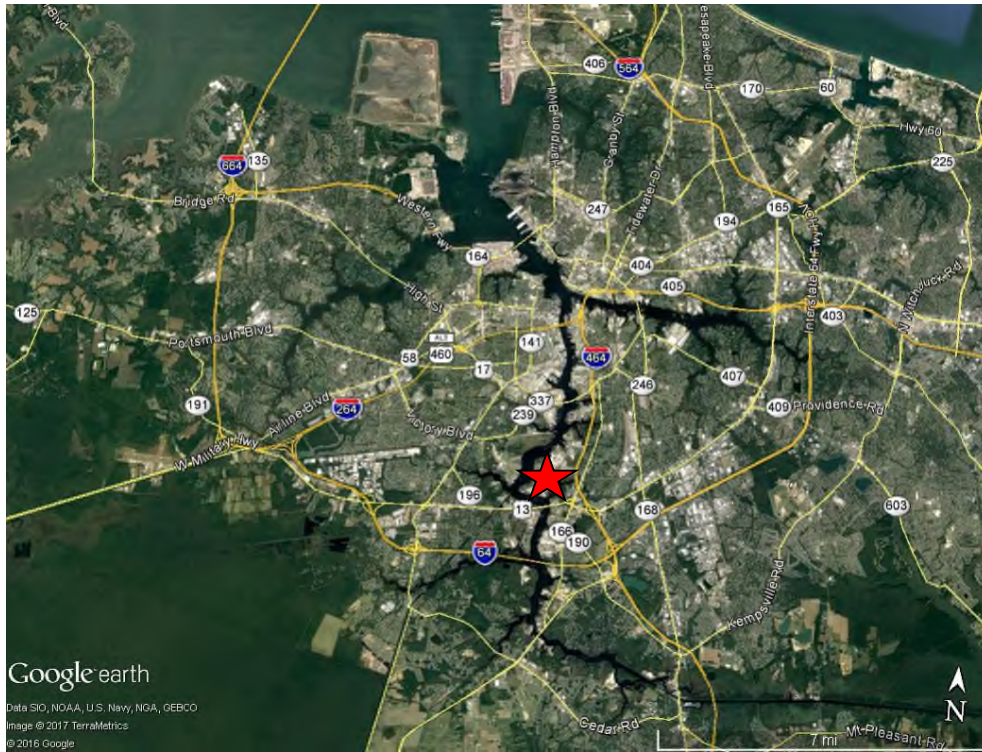
April 27, 2011

EXECUTIVE SUMMARY

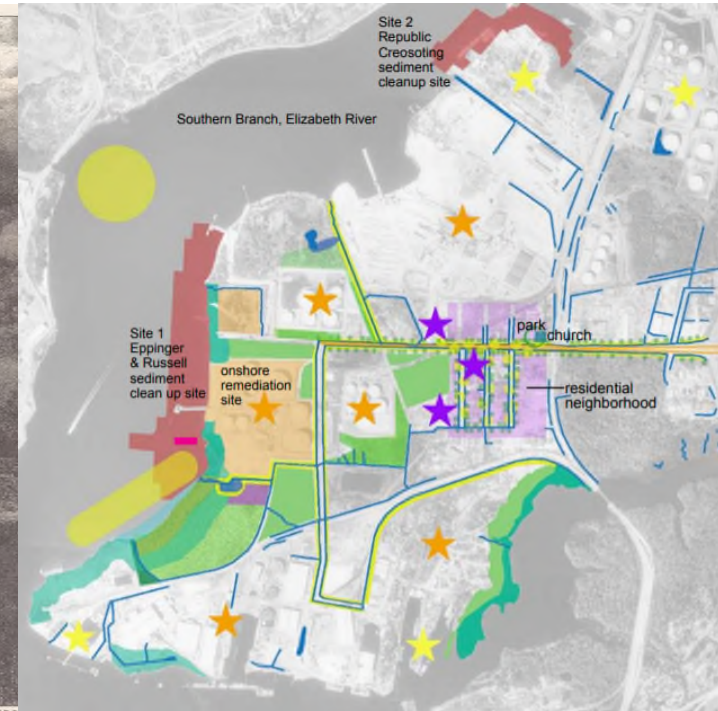
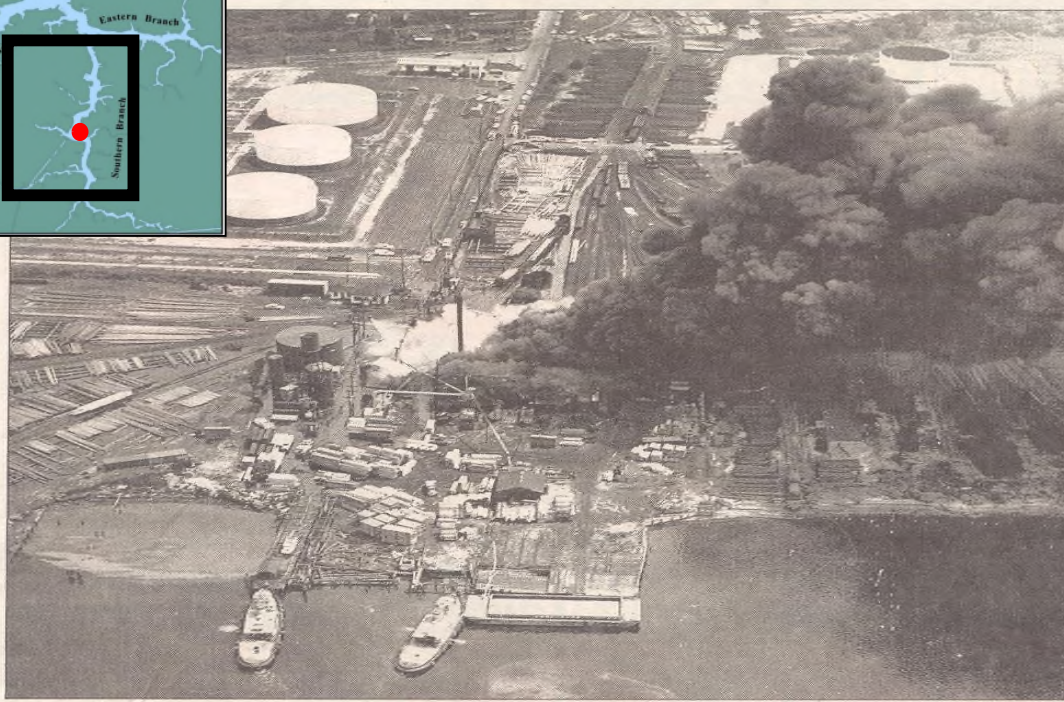
Prepared by the Lafayette River Restoration Committee
Convened by the Elizabeth River Project
and the Gloucester Bay Watershed Association



Money Point Restoration Elizabeth River



Money Point: "The Goo Must Go"



- ✦ Former Norfolk Creosote and Eppinger and Russell wood treatment site (1800s – 1979)
- ✦ Legacy pollution: 25 acres of PAH in river bottom up to 10,000 ppm created biological dead zone
- ✦ Adjacent to South Norfolk/Portlock community in Chesapeake, VA
- ✦ A community inspired landscape restoration plan was developed

Money Point: "The Goo Must Go"



- ✈ "Collective Impact" model partnerships:
 - ✈ Community stakeholders: First Baptist Church Money Point
 - ✈ Government: EPA Region III, City of Chesapeake
 - ✈ Industry: CITGO Petroleum, Hess Corp., Lafarge North America Cement, Kinder Morgan, SIMS Metal Management, Colonial Pipeline, McLean Contracting, Southern Aggregates
 - ✈ Non-profits: Elizabeth River Project, Living River Trust
- ✈ 39 million pounds of goo gone!
- ✈ 26 species of fish at site (only 4 species prior to remediation)
- ✈ Levels of cancer in fish dropped from 40% to 6%





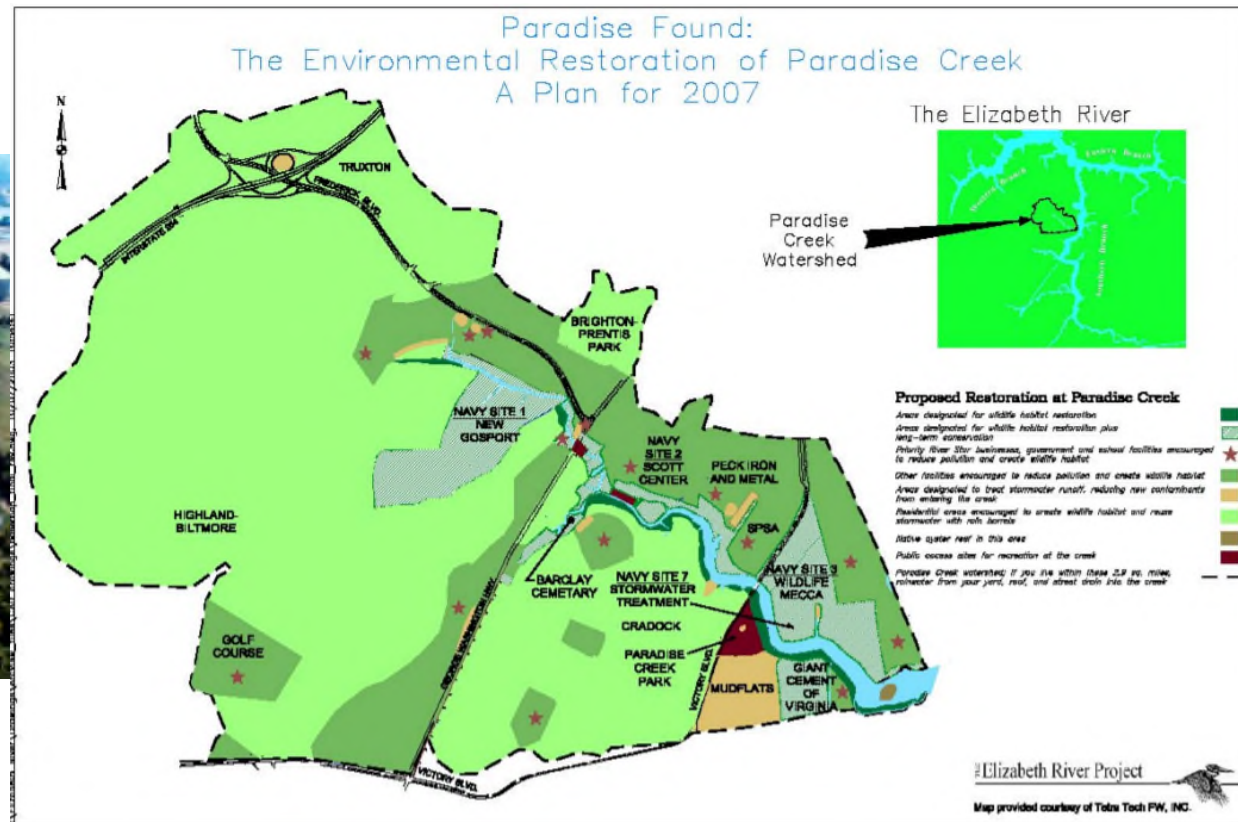








"Paradise Found" – Paradise Creek Restoration



✈ Located on Southern Branch adjacent to historic Cradock and Truxton communities

✈ Site of Norfolk Naval Shipyard & many other industrial sites with legacy pollution and superfund sites in Portsmouth, VA



"Paradise Found" – Paradise Creek Restoration



- ✿ Community plan convened by ERP in 2003 to clean up Paradise Creek
- ✿ Included guiding principle of environmental justice: "no action should place an unequal burden of pollution on low income or minority populations"

KEY PROJECT PARTNERS

Brighton/Prentis Park Civic League
City of Portsmouth
Cradock Business Owners Association
Cradock Civic League
Cradock Middle School
Cradock Pride Youth
Giant Cement of Virginia
Helping Hands of Cradock
National Oceanic and Atmospheric Administration
Norfolk Naval Shipyard
Old Dominion University

Peck Land Co.
Portsmouth Clean Community Commission
Pull-A-Part
Steve and Peggy Rahimpour
SPSA – Waste to Energy Plant
US Army Corps of Engineers
US Environmental Protection Agency
US Navy
Virginia Department of Conservation and Recreation
Virginia Institute of Marine Science
Virginia Marine Resources Commission

"Paradise Found" – Paradise Creek Restoration



- 🐦 Paradise Creek Nature Park opened in 2017 in heart of industrial corridor as part of the plan's vision to create public access to engage community going into the future
- 🐦 40 acres of riparian forest and wetlands with 2 miles of trails
- 🐦 Largest wetland restoration open to the public in the state of Virginia, formerly filled with dredge spoils in 1950s
- 🐦 Added to Virginia Bird & Wildlife Trail in 2019 with over 161 unique bird species identified

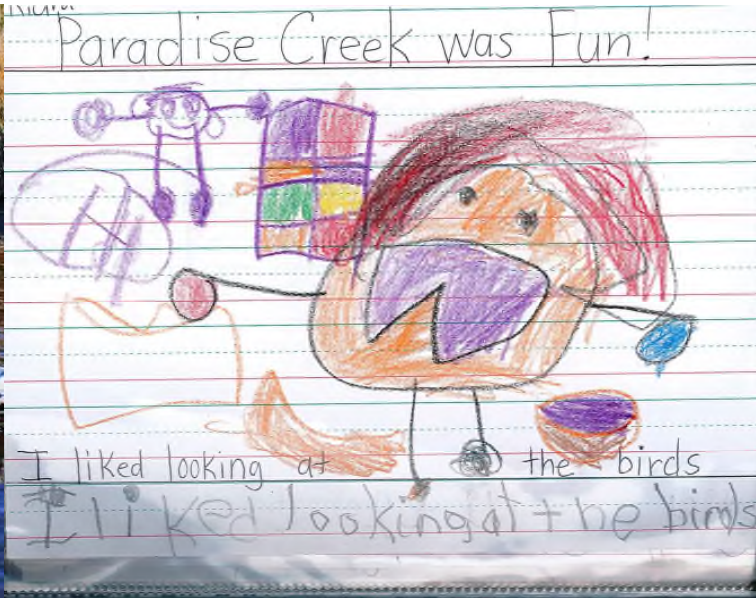
"Paradise Found" – Paradise Creek Restoration

"Paradise Creek Nature Park is the hidden jewel of Portsmouth"

– Bracey Hong Parr, Cradock Civic League President, 2021



RIVERFest 2016



Artwork from Mt. Hermon Pre-K



Paid Youth Conservation Interns

Youth Conservation Interns



Interns learn horticulture and landscaping skills, will be certified as CBLP, learn leadership and career skills. Partnership with HR Workforce – NextGen.

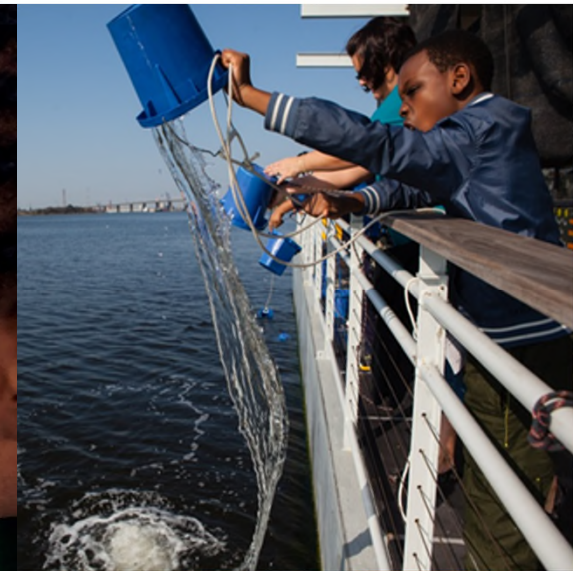
"Paradise Found" – Paradise Creek Restoration



- ✈ More than 10 million lbs. PCB contamination being removed and replaced with clean sand
- ✈ Additional sediment treated with new technology using an activated carbon purifier to isolate PCBs



DOMINION LEARNING BARGE



SIX LEARNING STATIONS



60 students/1.5 hour program
2 programs a day 10-1, M-F
6 small groups (10 students)





Education Programs During COVID



Learning Barge
School



Barge on Wheels



Park Forest



Virtual Barge School



Youth Water Monitoring



Youth Conservation Interns



River Leaders

Progress BUT WORK to do...




“We will more thoroughly examine and quantify the unfair impacts of environmental degradation on minority communities of the Elizabeth River, and ensure that addressing these inequities is a cornerstone of our next Watershed Action Plan for the Elizabeth River.”

- Commitment to More Proactive Action to Address Racial Disparities, Elizabeth River Project Board of Directors, June 8, 2020




Elizabeth River Environmental Justice Mapping Tool

Elizabeth River Environmental Justice Mapping Tool



Elizabeth River
Environmental Justice Tool



Map Viewer

Dashboards



Information button will provide a brief description of data layer.



Home button will return map to default extent



Ellipsis button in Layer List will reveal more actions (transparency changer, information button)



Search button opens a text box for the entry of an address or place. The map will zoom to the location.



Elizabeth River Watershed Boundary



Demographics

Percent Low Income

% Low Income: the percent of a census block group's population in households where the household income is less than or equal to twice the federal 'poverty level'.

 > 80%

 < 1 - 80%



Map showing the Elizabeth River Watershed boundary and various demographic layers. The map includes labels for locations such as Piney Grove, Sycamore Crossroads, Smithfield, Wythe, Isle of Wight, Whitley, Windsor, Indika, Myrtle, Sadler Heights, Virginia, Powell's Corner, Lynnhaven Shores, North Virginia Beach, Beyside, Radmont, and Norfolk. The map is overlaid with a purple color-coded layer representing low income demographics.

☒ Elizabeth River Watershed Boundary

☐ Infrastructure

☐ Public/Private Access and Existing Shoreline Protection

☐ Parcels

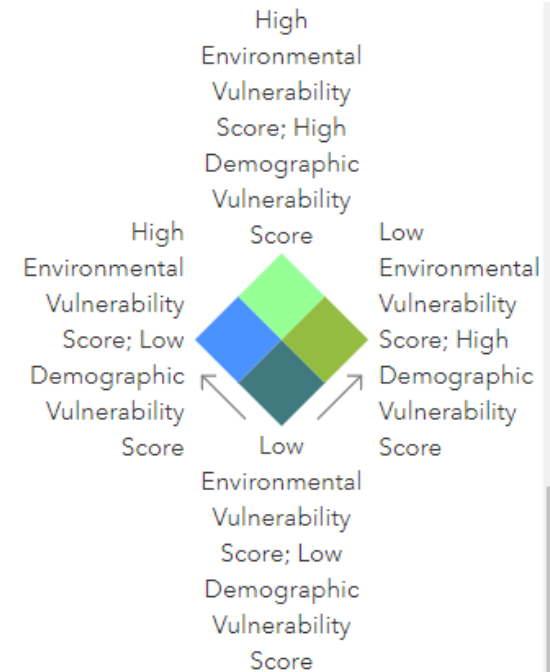
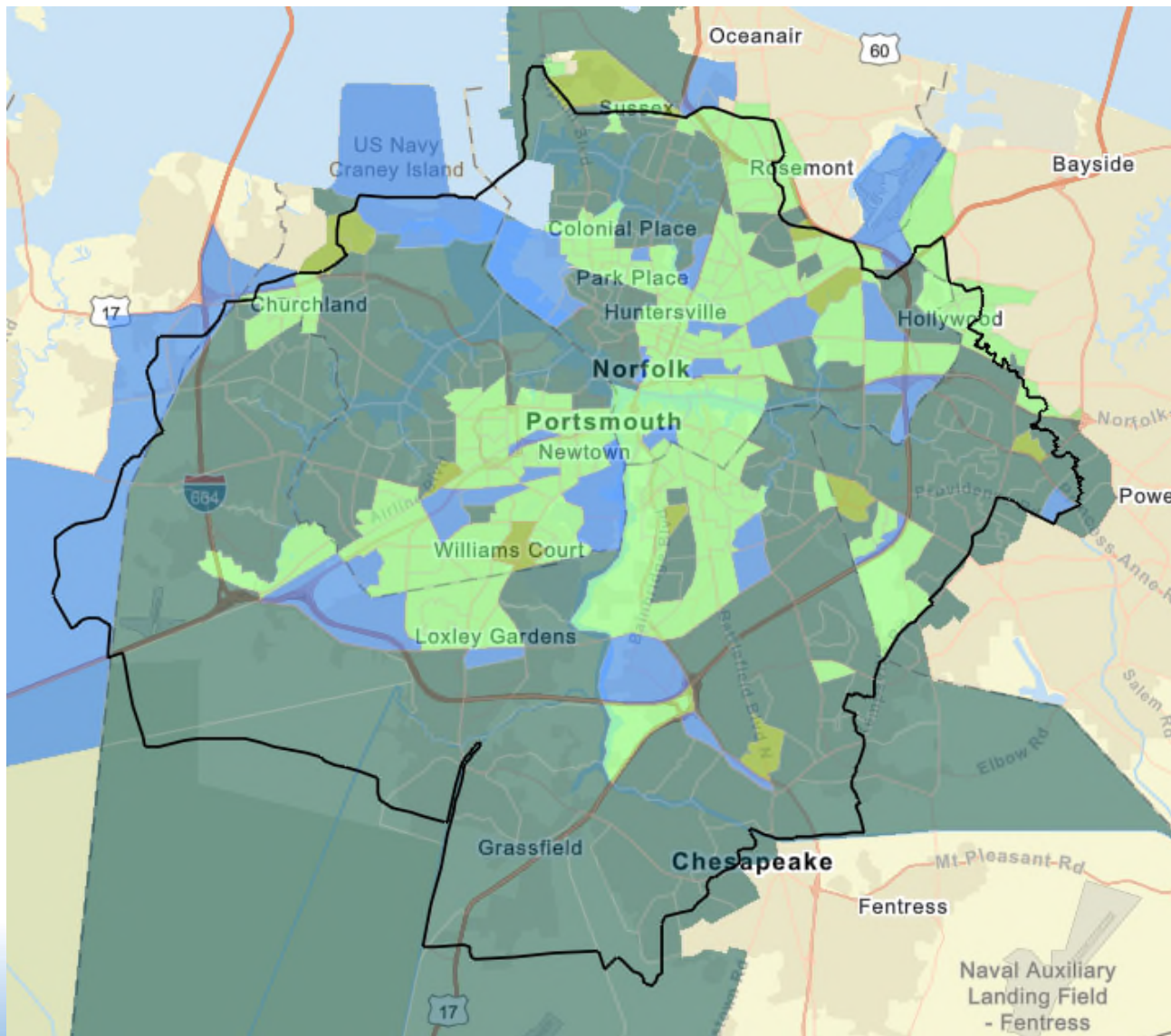
☐ Virginia Pollutant Discharge Elimination System (VPDES) Permit Outfalls



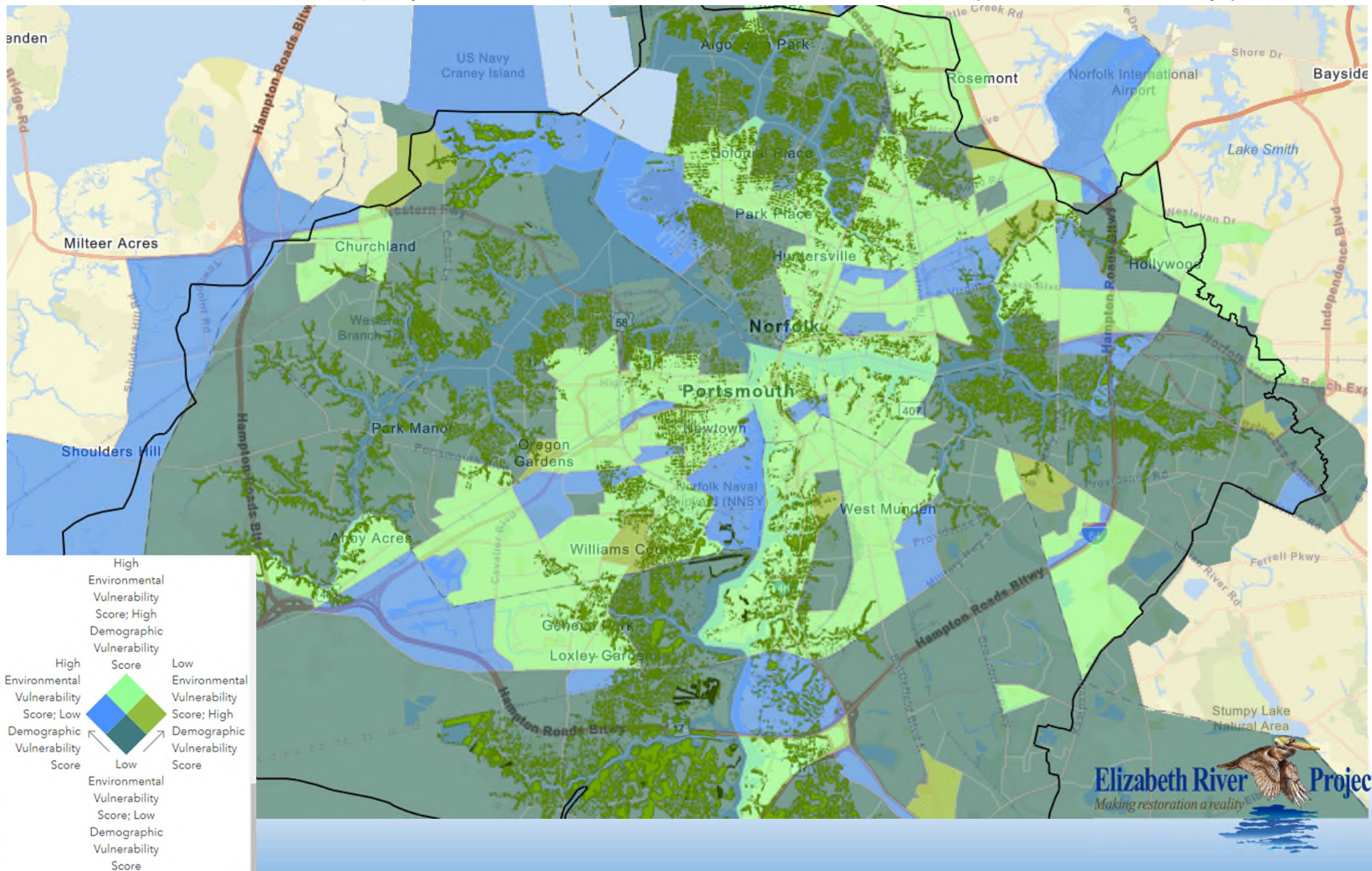


<https://cmap2.vims.edu/EREJTool/>

Environmental Justice & Equity – Combined Demographic & Environmental Vulnerability

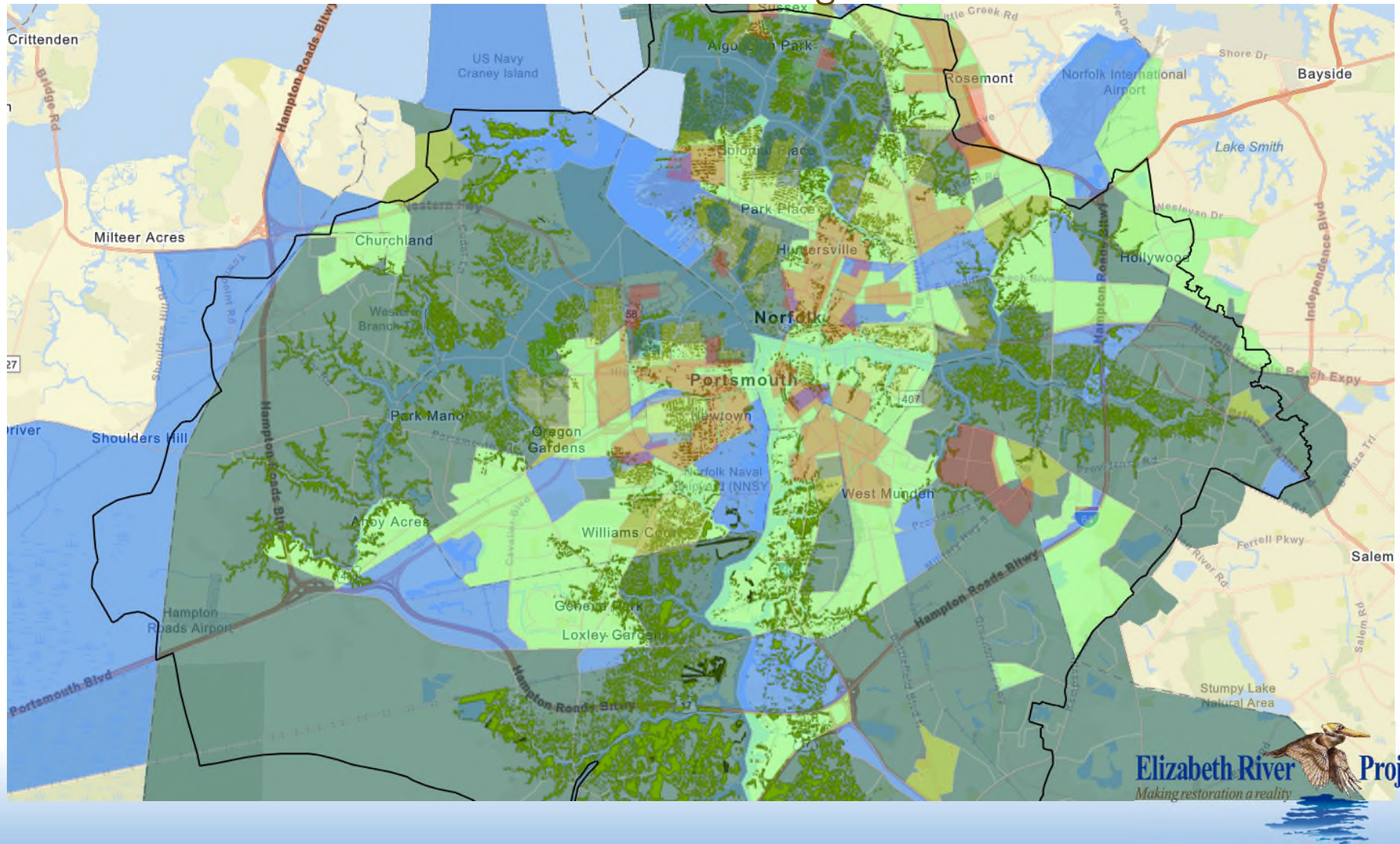


Environmental Justice & Equity – Combined Demographic & Environmental Vulnerability + Tree Canopy

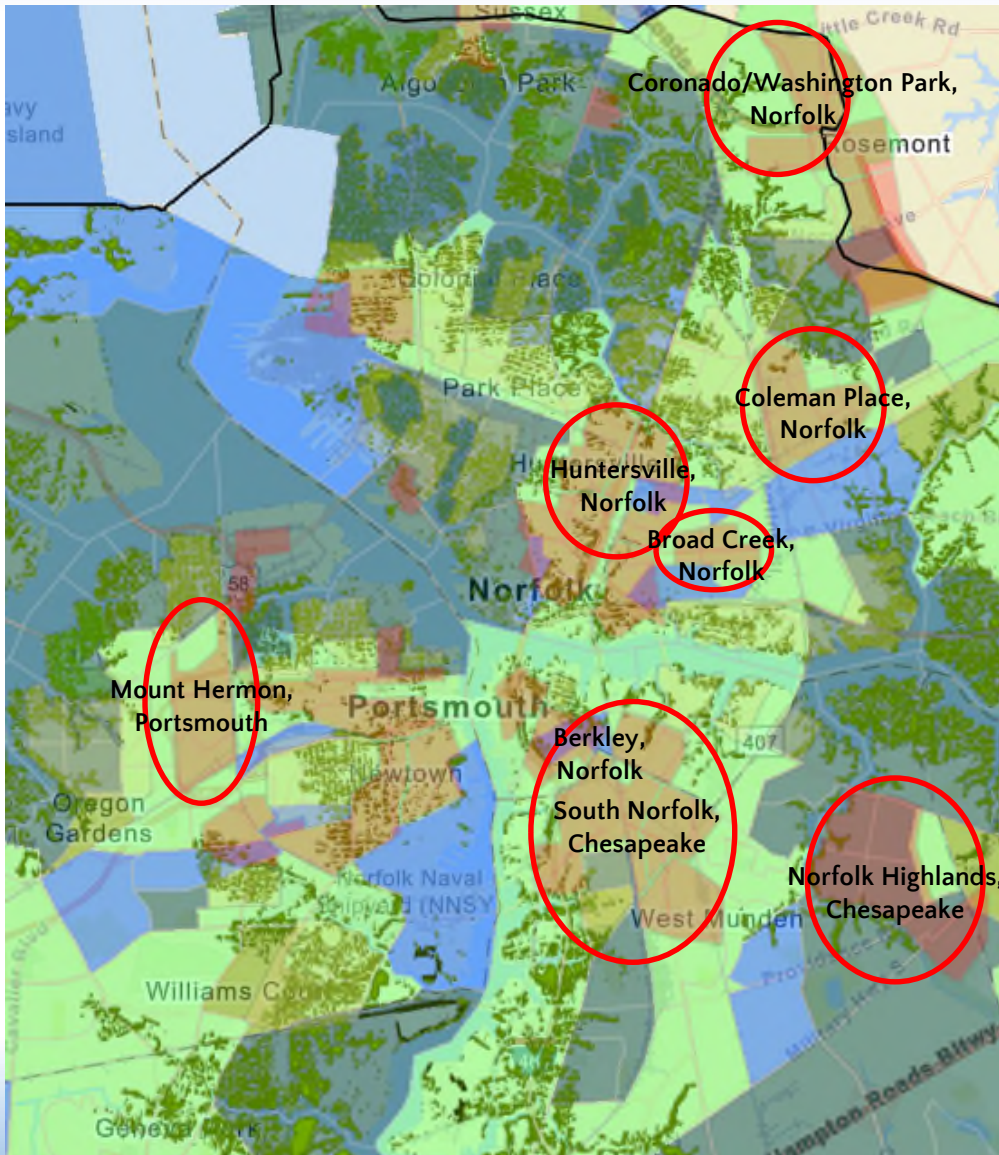


Environmental Justice & Equity –

Combined Demographic & Environmental Vulnerability + Tree Canopy +
Historic Redlining



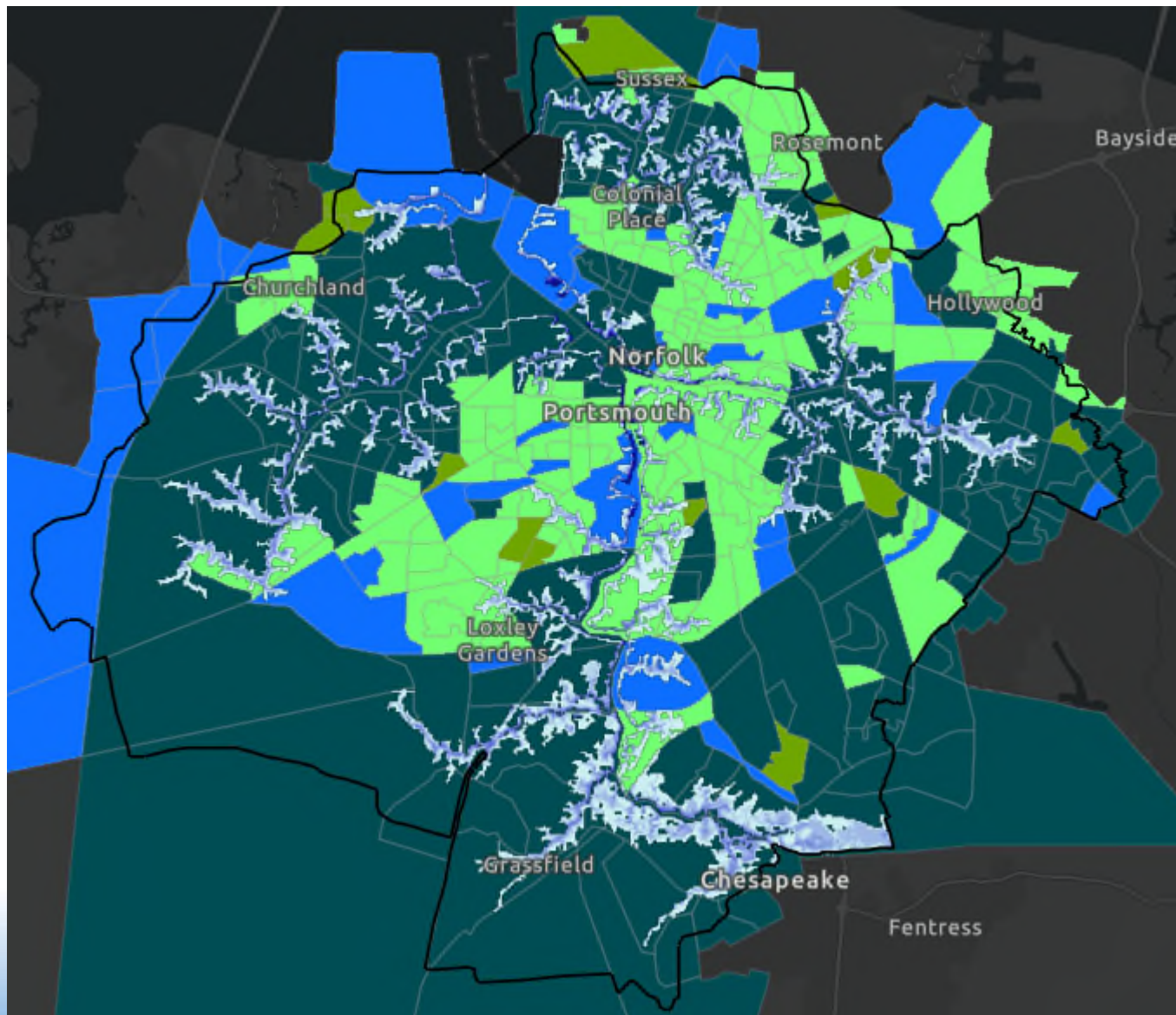
Environmental Justice & Equity –



Combined Demographic & Environmental Vulnerability + Tree Canopy + Historic Redlining

- Mount Hermon, Portsmouth
- Berkley, Norfolk
- South Norfolk, Chesapeake
- Huntersville, Norfolk
- Broad Creek, Norfolk
- Norfolk Highlands, Chesapeake
- Coleman Place, Norfolk
- Coronado/Washington Park, Norfolk

Environmental Justice & Equity –



2070 Sea Level Rise
Intermediate-High
Scenario
& Combined Economic &
Demographic
Vulnerability (HIGH –
Bright Green)

Sea Level Rise Intermediate-High
Scenario (Depth in feet)

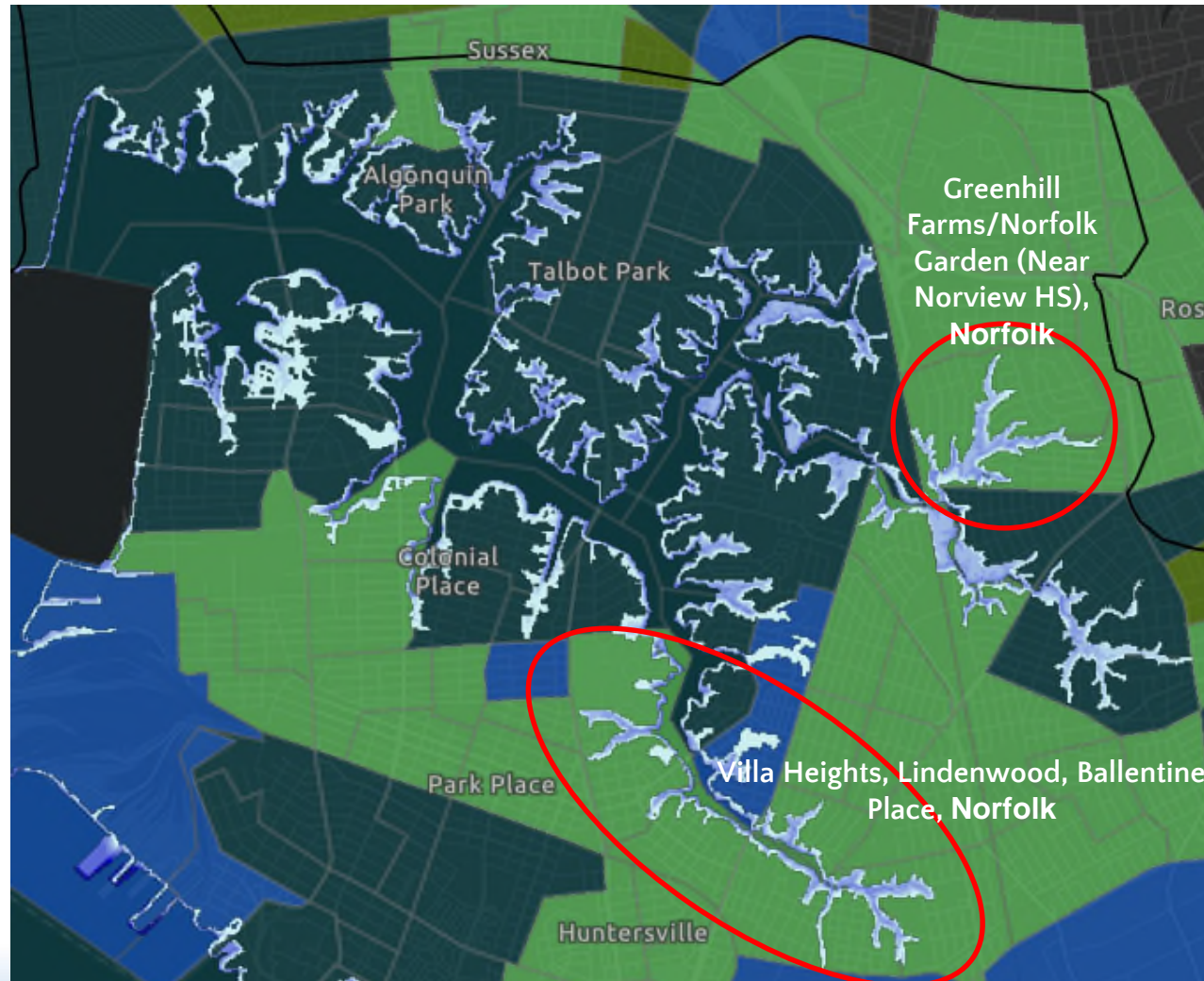
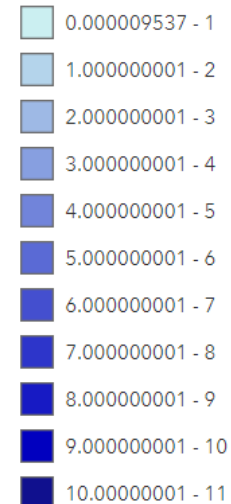


Environmental Justice & Equity –

2070 Sea Level Rise Intermediate-High Scenario
& Combined Economic & Demographic Vulnerability (HIGH – Bright Green)

Lafayette Branch of Elizabeth River

Sea Level Rise Intermediate-High Scenario (Depth in feet)

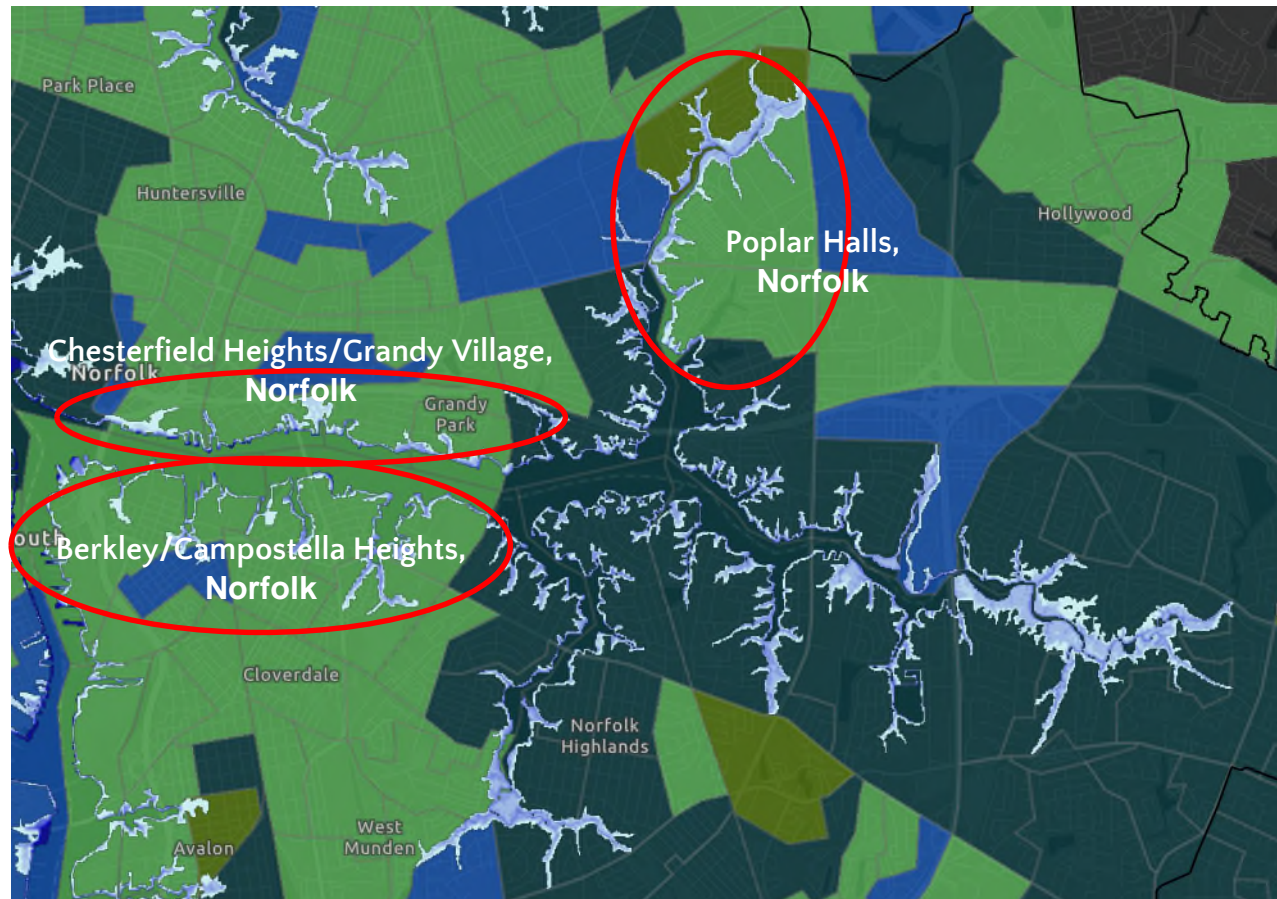
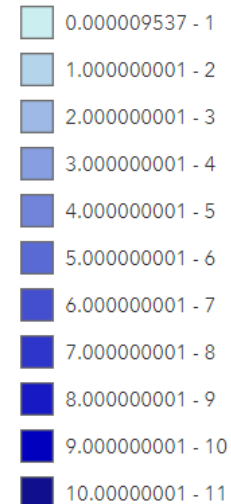


Environmental Justice & Equity –

2070 Sea Level Rise Intermediate-High Scenario
& Combined Economic & Demographic Vulnerability (HIGH – Bright Green)

Eastern Branch of Elizabeth River

Sea Level Rise Intermediate-High Scenario (Depth in feet)



Environmental Justice & Equity –



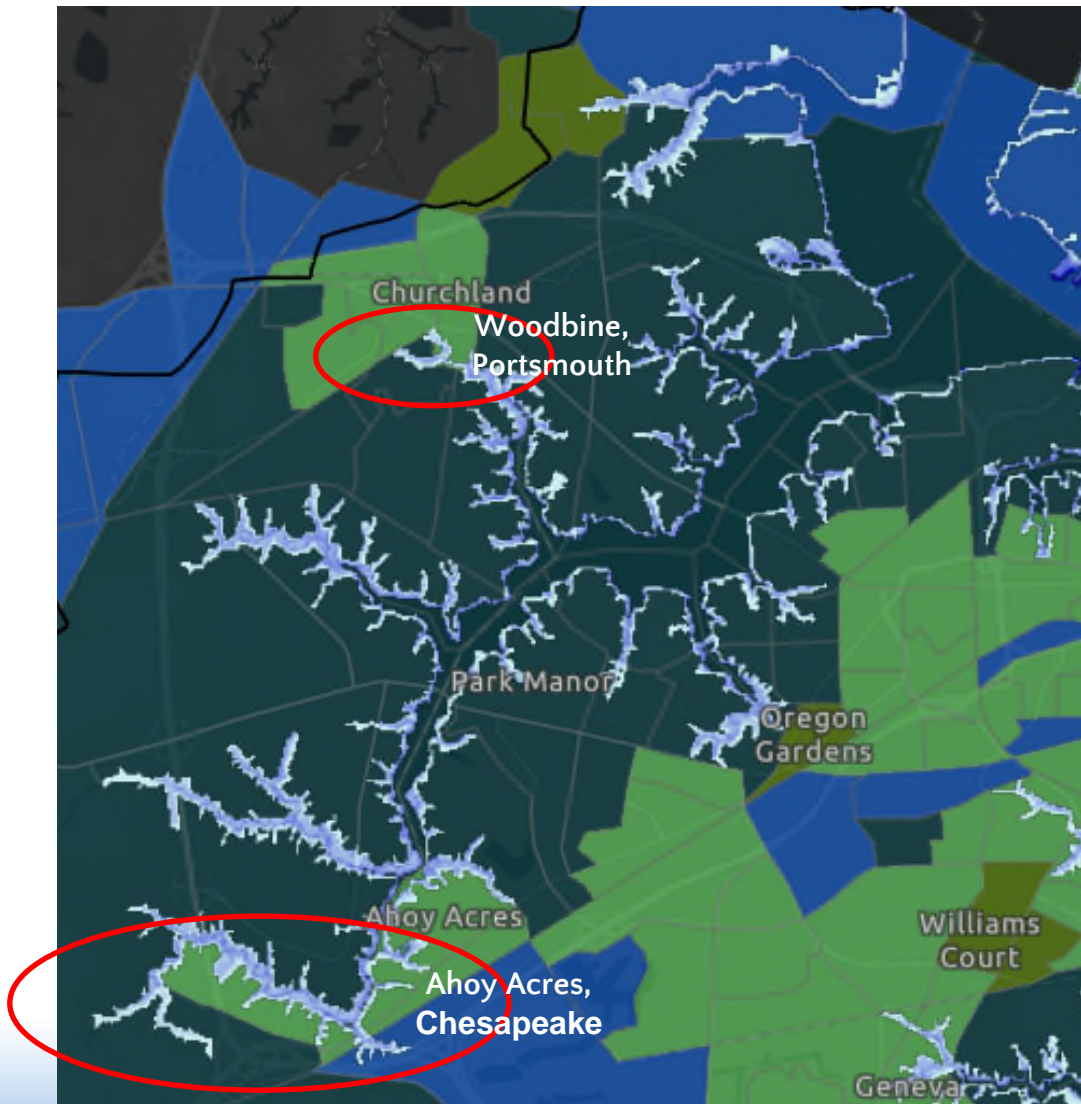
2070 Sea Level Rise Intermediate-High Scenario
& Combined Economic & Demographic Vulnerability (HIGH – Bright Green)

Southern Branch of Elizabeth River

Sea Level Rise Intermediate-High Scenario (Depth in feet)



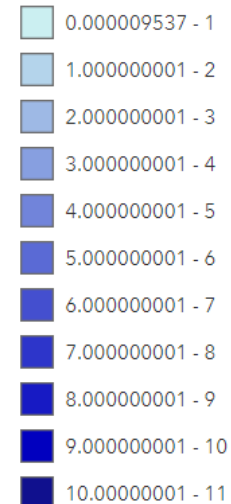
Environmental Justice & Equity –



2070 Sea Level Rise Intermediate-High Scenario
& Combined Economic & Demographic Vulnerability (HIGH – Bright Green)

Western Branch of Elizabeth River

Sea Level Rise Intermediate-High Scenario (Depth in feet)



Environmental Justice & Equity Subcommittee

Assignment: Identify and address environmental justice & equity disparities in the Elizabeth River watershed

Our dreamers: 21 subcommittee members from diverse sectors such as state and local government, academia, environmental non-profits and community representatives

Our perspective: We all have privilege blind spots, committed to be aware

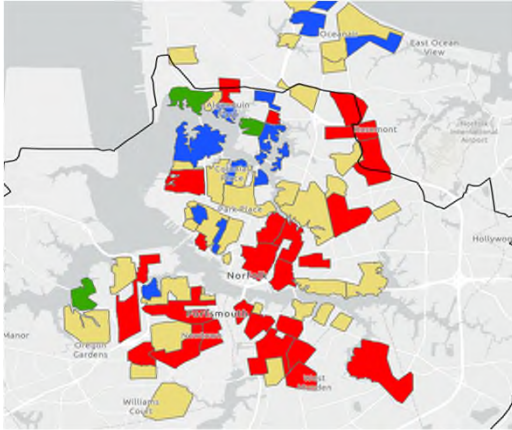
Our framework: EPA's definition of Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.

Environmental Justice & Equity – High Risk Problems

After multiple meetings, discussions and reflection, our committee identified the top risks as it pertains to Environmental Justice and Equity are:

1. **Flooding in underserved communities**
2. **Negative Health Impacts of Pollution in Underserved Communities**
3. **Disproportionate Environmental Education & Community Advocacy in Underserved Communities**
4. **Lack of or limited access to river and natural spaces**

Environmental Justice & Equity – High Risk Problems



*Left – 1940s Redlining
Right – Flooding in
Portsmouth, VA
featured in TIME
Magazine, 2011*

1. Flooding in Underserved Communities

- Historical red-lining placed communities of color in areas more prone to flooding
- Lack of green space leads to more flooding
- In flooding events, higher concentrations of harmful substances threaten vulnerable communities near pollution sources

Environmental Justice & Equity – High Risk Problems

2. Negative Health Impacts of Pollution in Underserved Communities

- Vulnerable populations are more likely to near sources of both air and water pollution.
- Communities lack environmental mechanisms like green space, tree canopy, and flood reduction that could mitigate some of the negative impacts.
- Lack of advocacy for neighborhoods that may be facing proposed incoming polluting risk during the planning process.

Environmental Justice & Equity – High Risk Problems



*Culpepper's Bait & Tackle,
Elizabeth River, VA*

3. **Disproportionate Environmental Education & Community Advocacy in Underserved Communities**
 - Communities may not be aware of health and environmental risks due to lack of appropriate communication or language barriers
 - Unfamiliarity with potential mitigating resources (i.e. grant funding).
 - Limited in their capacity to advocate against environmental impacts or restoration projects, which can lead to a disproportionate allocation of funding for environmental projects

Environmental Justice & Equity – High Risk Problems

4. Lack of or Limited Access to River and Natural Resources

- Located further from resources such as public green spaces or access points to the river (public fishing piers, public kayak/boat launches, trails, public parks), or may not be aware of them in their area.
- Historically, these spaces have not been marketed toward minorities, sometimes fostering an inhospitable environment.
- Limited tree canopy within communities themselves can exacerbate the urban heat island effect, elevating health risks and economic pressure to effectively cool homes in the summer months



Questions

