

Making Military Bases and Their Communities More Resilient

March 1, 2019

In partnership with



Materials will be available at:

www.eesi.org/030119defense

Tweet about the briefing:

[#ClimateSecurity](https://twitter.com/ClimateSecurity) [#eesitalk](https://twitter.com/eesitalk) [@eesionline](https://twitter.com/eesionline)

THE CENTER FOR
CLIMATE AND
SECURITY



EESI
Environmental and
Energy Study Institute

- The **Environmental and Energy Study Institute (EESI)** is a bipartisan non-profit organization dedicated to promoting environmentally sustainable societies. EESI believes meeting this goal requires transitions to social and economic patterns that sustain people, the environment and the natural resources upon which present and future generations depend.
- The **Center for Climate and Security (CCS)** is a non-partisan policy institute with a team and distinguished Advisory Board of military and security experts, and the only institution exclusively focused on the intersection of climate and security.

Working Together to Become More Resilient

Challenges and Opportunities for
Communities and Military Installations

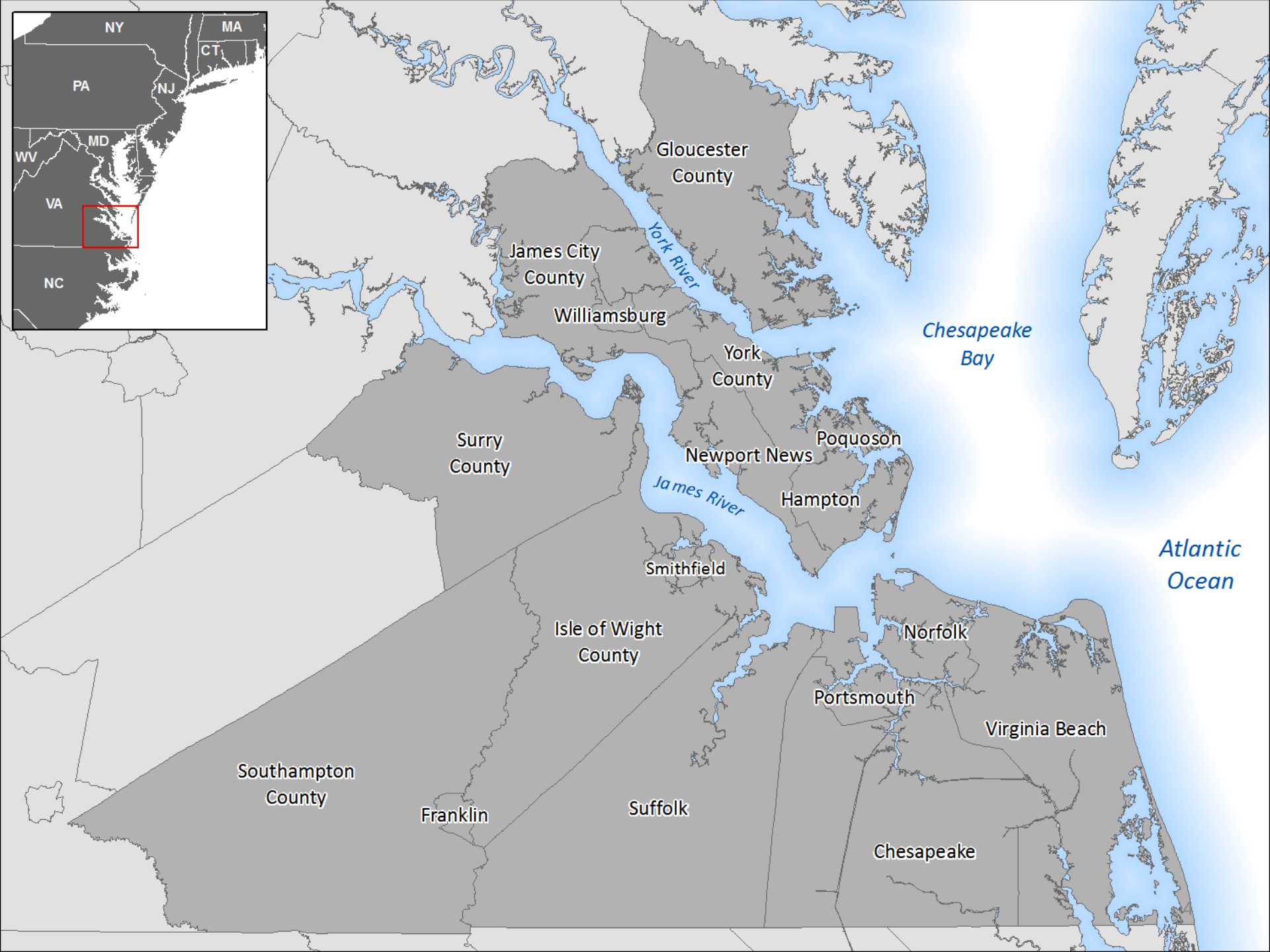


March 1, 2019

Benjamin J. McFarlane, AICP, CFM

Senior Regional Planner

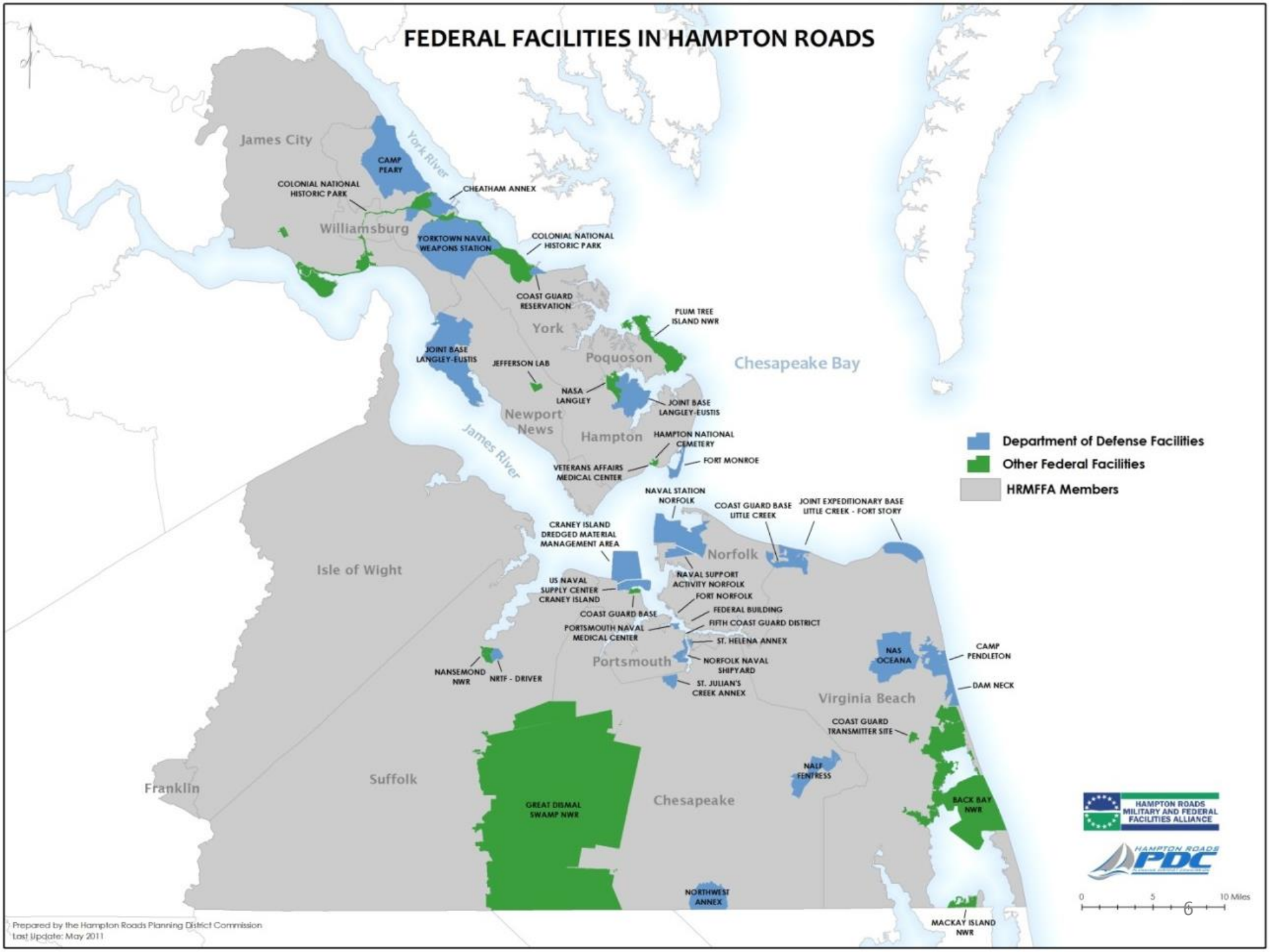
Hampton Roads PDC



What does HRPDC do?

- The Commission:
 - “**serves as a forum** for local and elected officials and chief administrators to **deliberate** and **decide** issues of **regional importance**”
- The Staff:
 - “provides the local governments and citizens of Hampton Roads credible and timely **planning, research, and analysis** on matters of mutual concern, and”
 - “**provides leadership and offers strategies and support services** to other public and private, local, and regional agencies, in their efforts to improve the region’s quality of life.”

FEDERAL FACILITIES IN HAMPTON ROADS



- Department of Defense Facilities
- Other Federal Facilities
- HRMFFA Members



Challenges

Understanding

- Installations do not understand community governance mechanisms, and communities do not understand installation missions

Data

- Not sharing data across the fence line can lead to suboptimal results for both installations and communities

Priorities

- Communities and installations value different (sometimes mutually exclusive) things

Funding

- Overall lack of funding to implement projects
- Difficult to align funding from multiple sources when several entities would benefit

Plan to restrict boating near Little Creek Navy base draws hundreds of critical comments

By Claire Mitzel
The Virginian-Pilot
Aug 7, 2018



Credit: Virginian-Pilot

Stephen M. Katz | The Virginian-Pilot
An aerial of Little Creek Amphibious Base, May 9, 2005.

Buy Now

Ad closed by Google

Report this ad

Why this ad? ▶

LET'S TALK



ICYMI: TOP STORIES

- 1 Walmart to close a Neighborhood Market in Virginia Beach 8
- 2 Virginia first lady criticized for handling

DRAFT

Data – Stormwater Management near JEB Little Creek

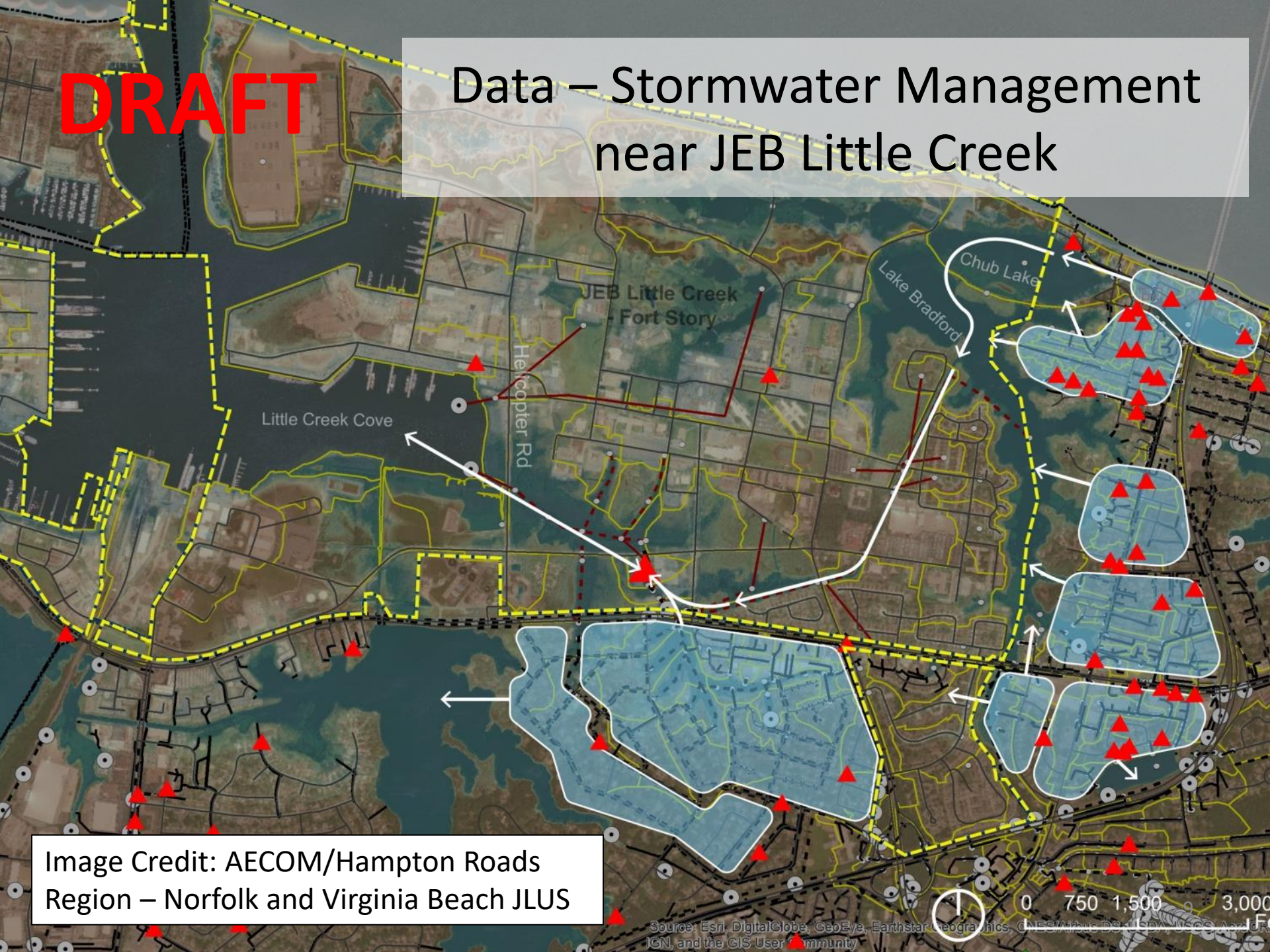
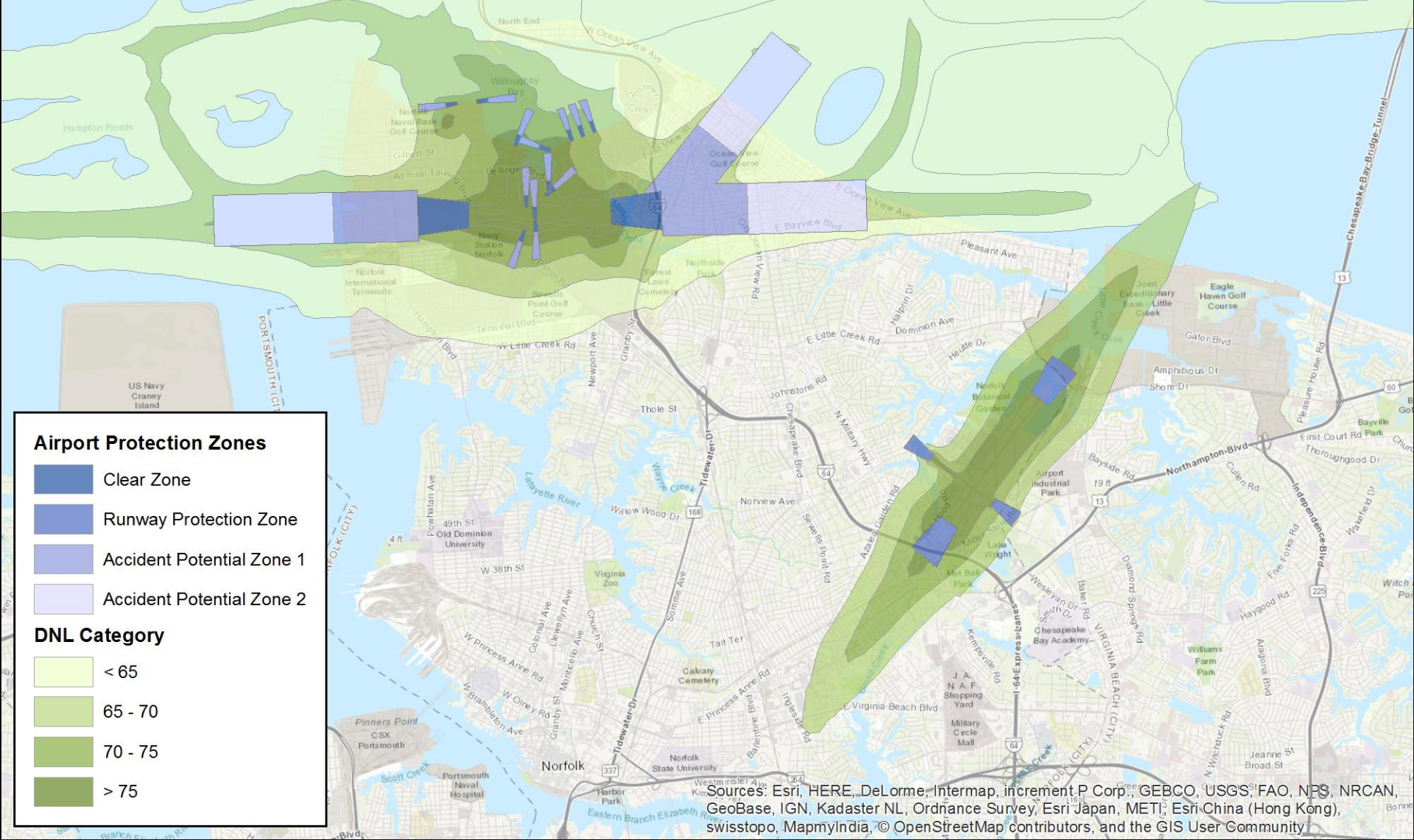


Image Credit: AECOM/Hampton Roads
Region – Norfolk and Virginia Beach JLUS

Community and Navy Priorities – Norfolk International Airport



Airport Protection Zones

- Clear Zone
- Runway Protection Zone
- Accident Potential Zone 1
- Accident Potential Zone 2

DNL Category

- < 65
- 65 - 70
- 70 - 75
- > 75

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Opportunities

Coordination

- The Joint Land Use Study can be a catalyst for ongoing coordination and relationship-building at multiple levels

Planning

- Coordinated planning can identify better and/or more cost-effective options and reduce conflicts

Funding

- Pooling funding from multiple sources could lead to faster or better implementation

Criteria to Evaluate Local Projects for Military Benefit

Installation
Readiness

Personnel
Readiness

Community
Co-Benefits

System
Performance

DRAFT

JLUS – Impacts of Flooding on Accessing Military Installations

Hampton Roads JLUS
Minor Tidal Flooding (Sunny Day) and Sea Level Rise Scenarios

- Legend**
- Minor Tidal Flooding, 0' SLR
 - Minor Tidal Flooding, 1.5' SLR
 - Minor Tidal Flooding, 3' SLR
- Roadways Impacted by Minor Tidal Flooding
- 0.0 ft SLR
 - 1.5 ft SLR
 - 3.0 ft SLR
- Navy Installation
- Controlled Access Gates
 - City Limits

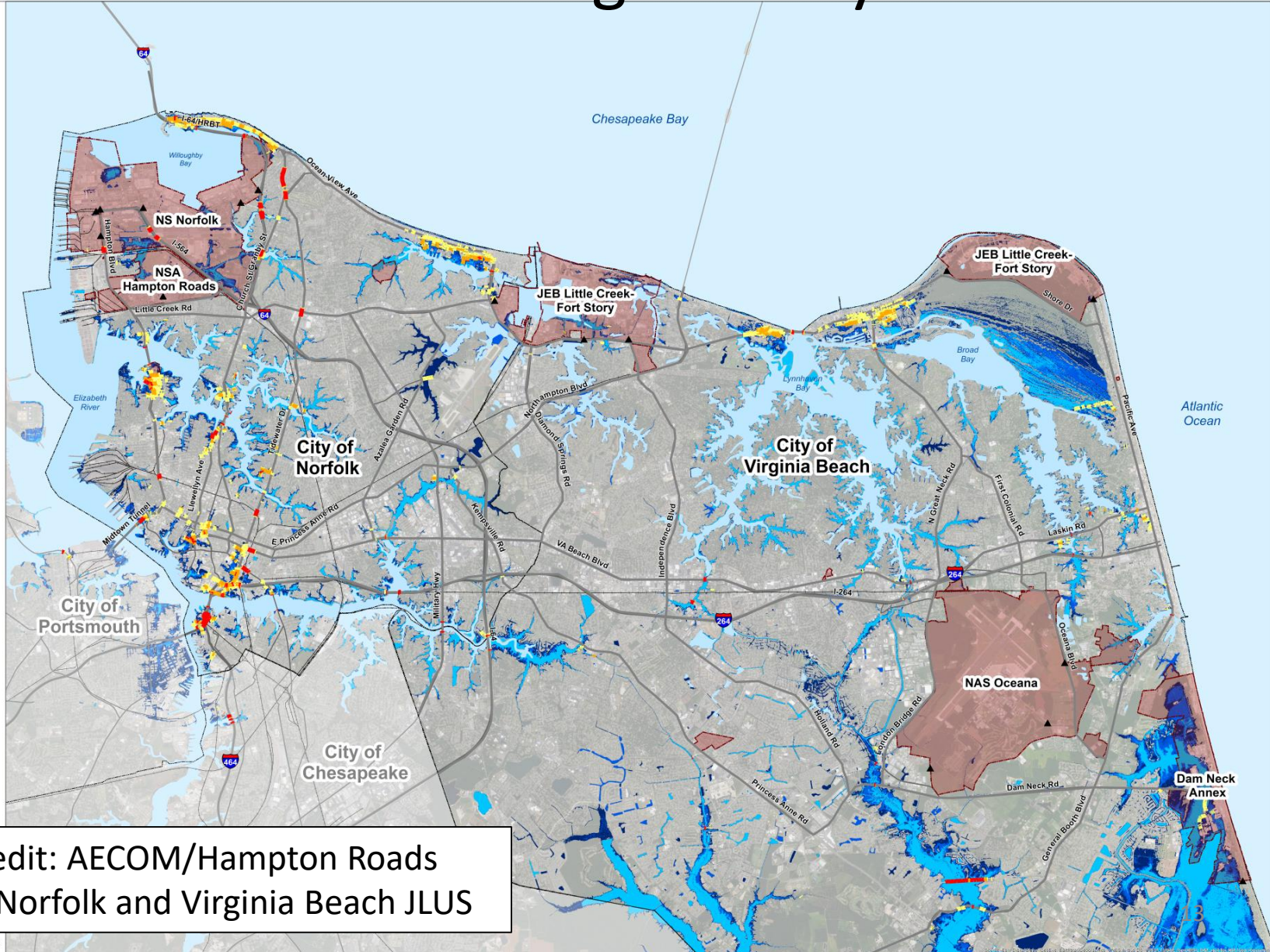


Image Credit: AECOM/Hampton Roads Region – Norfolk and Virginia Beach JLUS

DRAFT

JLUS – Sea Level Rise Impacts on Access to Community Assets

Hampton Roads JLUS
Access to Community Assets, Minor Tidal Flooding, 3.0 Ft SLR

Legend

- Blocked Access
- Blocked or Indirect Access (2 or More Assets)
- Blocked or Indirect Access (Less Than 2 Assets)
- Community Assets
 - Treatment Plant
 - Emergency Operations
 - Hospital
 - Fire / Emergency Station
 - Police Station
 - Shelter
 - Elementary Schools

- Inundated Roadways (3.0'SLR)
- Navy Installation
- Controlled Access Gates
- City Limits
- Minor Tidal Flooding, 0' SLR
- Minor Tidal Flooding, 1.5' SLR
- Minor Tidal Flooding, 3' SLR

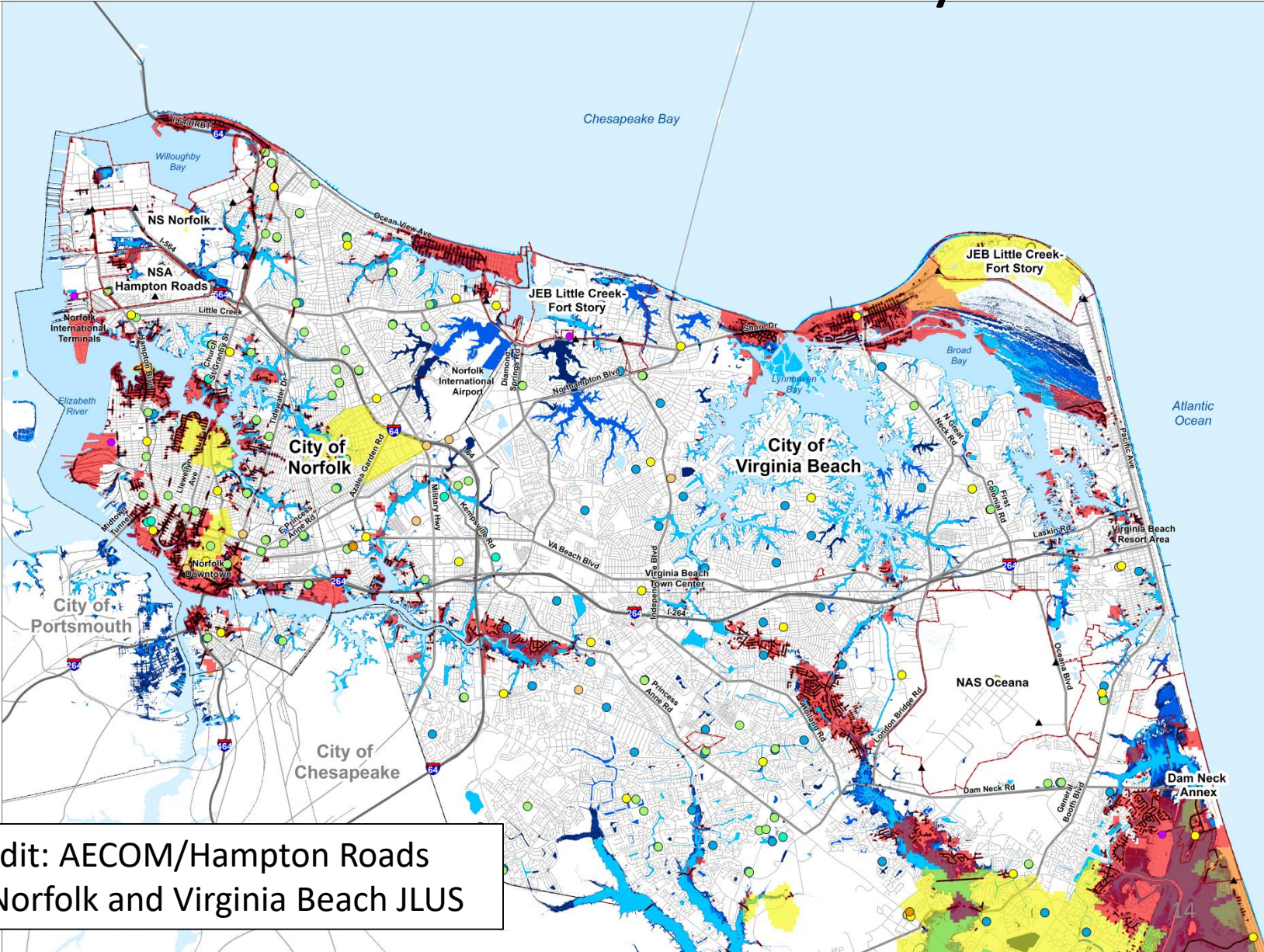


Image Credit: AECOM/Hampton Roads Region – Norfolk and Virginia Beach JLUS

Flood Risk Management

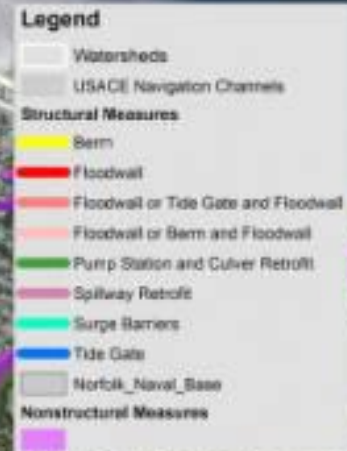


Image Credit: Norfolk District,
U.S. Army Corps of Engineers

Shoreline Management



Photo Credit: Patrick Bloodgood, Norfolk District, U.S. Army Corps of Engineers

Benjamin J. McFarlane, AICP, CFM
Senior Regional Planner
Hampton Roads Planning District Commission
bmcfarlane@hrpdcva.gov



Making Military Bases and Their Communities More Resilient

What did you think of the briefing?

Please take 2 minutes to let us know at: www.eesi.org/survey

In partnership with



Materials will be available at: www.eesi.org/030119defense

Tweet about the briefing: [#ClimateSecurity](https://twitter.com/ClimateSecurity) [#eesitalk](https://twitter.com/eesitalk) [@eesionline](https://twitter.com/eesionline)