3-13-2013

USACE Flood Risk Management Partners in Shared Responsibility

Michelle Hamor
U. S. Army Corps of Engineers

USACE Flood Risk Management Partners in Shared Responsibility

Hampton Roads Sea Level Rise / Flooding Adaptation Forum

March 13, 2013

Michelle Hamor, CFM

Acting Chief, Planning and Policy Branch

Chief, Flood Plain Management Services Section

U.S. Army Corps of Engineers, Norfolk District

US Army Corps of Engineers

BUILDING STRONG®

Norfolk District, U.S. Army Corps of Engineers - Windows Internet Explorer

http://www.nao.usace.army.mil/

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NORFOLK DISTRICT

US Army Corps of Engineers

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HOT INFO

Norfolk District STEM Team

Norfolk District STEM team members: Kristen Donofrio, Holly Carpenter, Capt. Antonio Pazos and Steven Vanderploeg recently provided district mission-related career information to more than 800 seniors during Senior Planning Day at Woodside High School in Newport News, Va.

Public Notices

Coastal Zone Management Act and the Norfolk District Regulatory Program

3/7/2013

Prior to final issuance of any Corps permit, the applicant must obtain a Virginia Department of Environmental Quality (DEQ) Coastal Zone Management Act (CZMA) federal consistency concurrence (for activities affecting the Coastal Zone) and a DEQ 401 certification. Proof of these approvals must be provided to the Corps before issuance of any Corps standard permit. A permit will not be granted until the required certifications have been obtained or waived. This public notice announces new CZMA procedures intended to facilitate this process.

NAO-2011-00081

2/6/2013

Latest News

Arlington National Cemetery to share design for Millennium expansion project

3/2/2013

Arlington National Cemetery is interested in sharing information about the new design and obtaining public feedback about the project, and has scheduled an open house and site visit on Saturday, March 16 from 1 to 4 p.m. The open house will begin with a briefing at the Women In Military Service for America Memorial (WIMSA) and then transition to a site visit of three areas associated with the Millennium Project.

New veterinary clinic expands Langley's pet services

Photos

PREV NEXT

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Civil Works Missions Overview

- **Navigation**
- **Flood Risk Management & Coastal Storm Damage Reduction**
- **Ecosystem Restoration**
- **Watershed Planning**
- **Water Supply (Local)**
- **Hydropower**
- **Recreation**
- **Emergency Operations**

High Priority Missions

From Flood Control to Flood Risk Management

Flood refugees evacuated to “tent city” on the hills of Vicksburg, Mississippi.
Courtesy Mississippi Department of Archives and History, accession no.: PI/1992.0002.071 (Mississippi History Now)

IWR – U.S. Army Engineer Institute for Water Resources - Windows Internet Explorer

http://www.nfrmp.us/frmp.cfm

ional Flood Risk Management Program

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IWR INSTITUTE FOR WATER RESOURCES

US ARMY CORPS OF ENGINEERS

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FLOOD RISK MANAGEMENT PROGRAM

- USACE Flood Risk Management Program
- Partners in Shared Responsibility
- Federal/Regional/State Coordination
- News and Events
- Frequently Asked Questions

FLOOD RISK MANAGEMENT PROGRAM

The USACE Flood Risk Management Program (FRMP) works across the agency to focus the policies, programs and expertise of USACE toward reducing overall flood risk. This includes the appropriate use and resiliency of structures such as levees and floodwalls, as well as promoting alternatives when other approaches (e.g., land acquisition, flood proofing, etc.) reduce the risk of loss of life, reduce long-term economic damages to the public and private sector, and improve the natural environment.

EXPLORE FLOOD RISK MANAGEMENT FROM YOUR PERSPECTIVE

SILVER JACKETS
Many Agencies One Solution

Coastal Flood Risks

IN THE SPOTLIGHT

HURRICANE SANDY: MOVING FROM RESPONSE TO RECOVERY

In the initial weeks and months after Hurricane Sandy, federal actions were guided by the *National Response Framework* (2008). The U.S. Army Corps of Engineers acts as the lead for public works and engineering-related support, supporting immediate emergency response priorities, sustaining lives, and initiating recovery efforts...continue reading.

More Spotlight Articles

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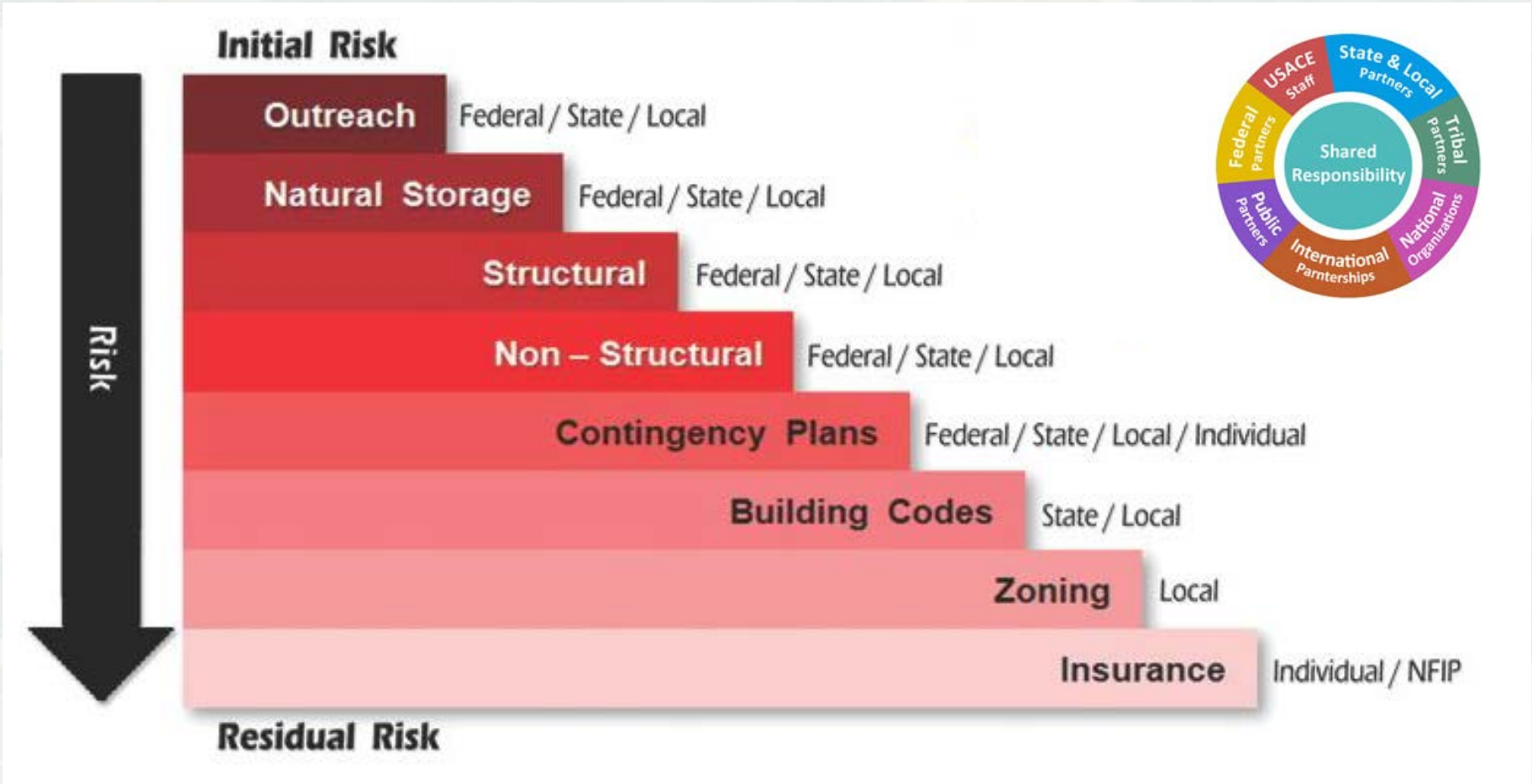
Partners in Shared Responsibility



Opportunities to Reduce Risk

- **Silver Jackets**
- **Flood Plain Management Services / Planning Assistance to States**
- **Continuing Authority Program (CAP)**
- **Study Authority**

SILVER JACKETS

Many Agencies One Solution

Home
About the Program
Upcoming Events
Develop a Team
State Teams
Regional Teams
Tool Box
Guidance
Webinars
Best Practices
Newsworthy

US Army Corps of Engineers | IWR | FEMA

Welcome

Effective and continuous collaboration between state and federal agencies is critical to successfully reducing the risk of flooding and other natural disasters in the United States and enhancing response and recovery efforts when such events do occur. No single agency has all the answers, but often multiple programs can be leveraged to provide a cohesive solution.

The Silver Jackets is an innovative program that provides an opportunity to consistently bring together multiple state, federal, and sometimes tribal and local agencies to learn from one another and apply their knowledge to reduce risk. State agencies, including those of the State Hazard Mitigation Officer and State NFIP Coordinator, come together with the Federal family of agencies, including the U.S. Army Corps of Engineers and the Federal Emergency Management Agency (FEMA), in a common forum to address the state's flood risk management priorities. Silver Jacket programs are developed at the state level. There are currently 33 active state teams; the ultimate goal is to offer an interagency team in every state.

The program's primary goals are to:

- Create or supplement a mechanism to collaboratively identify, prioritize, and address risk management issues and implement solutions
- Increase and improve risk communication through a unified interagency effort
- Leverage information and resources and provide access to such national programs as FEMA's Risk Mapping, Assessment, and Planning (Risk MAP) program and USACE's Levee Inventory and Assessment Initiative
- Provide focused, coordinated hazard mitigation assistance in implementing high-priority actions such as those identified by state mitigation plans
- Identify gaps among agency programs and/or barriers to implementation, such as conflicting agency policies or authorities, and provide recommendations for addressing these issues.

Why the name Silver Jackets? Traditionally, different agencies wear different colored jackets when responding to emergencies. For example, FEMA personnel wear blue and USACE personnel wear red. The name Silver Jackets is used to underscore the common mission of the diverse agencies involved.

Silver Jackets Newsletter

- January 2013 (*pdf, 1.02 MB*)
- October 2012 (*pdf, 1.35 MB*)
- July 2012 (*pdf, 1.68 MB*)
- April 2012 (*pdf, 1.68 MB*)
- January 2012 (*pdf, 2.09 MB*)
- October 2011 (*pdf, 2.37 MB*)
- July 2011 (*pdf, 1.36 MB*)
- April 2011 (*pdf, 1.51 MB*)
- January 2011 (*pdf, 2.60 MB*)
- September 2010 (*pdf, 1.89 MB*)
- March 2010 (*pdf, 1.6 MB*)

2012 Workshop
2011 Workshop

New! For advice from successful state teams visit the Develop a Team page.
Virginia Silver Jackets Brochure (*pdf, 1.27 MB*)
Brochure Template (*pub, 12.9 MB*)

Webinars Supporting Flood Risk Management

- ***Natural Hazard Mitigation Association's Resilient Neighbors Network*** — February 2013
- ***RiskMAP and North Carolina's Digital Vision*** — July 2012
- ***FloodSmart Provides Flood Awareness Tools*** — July 2012

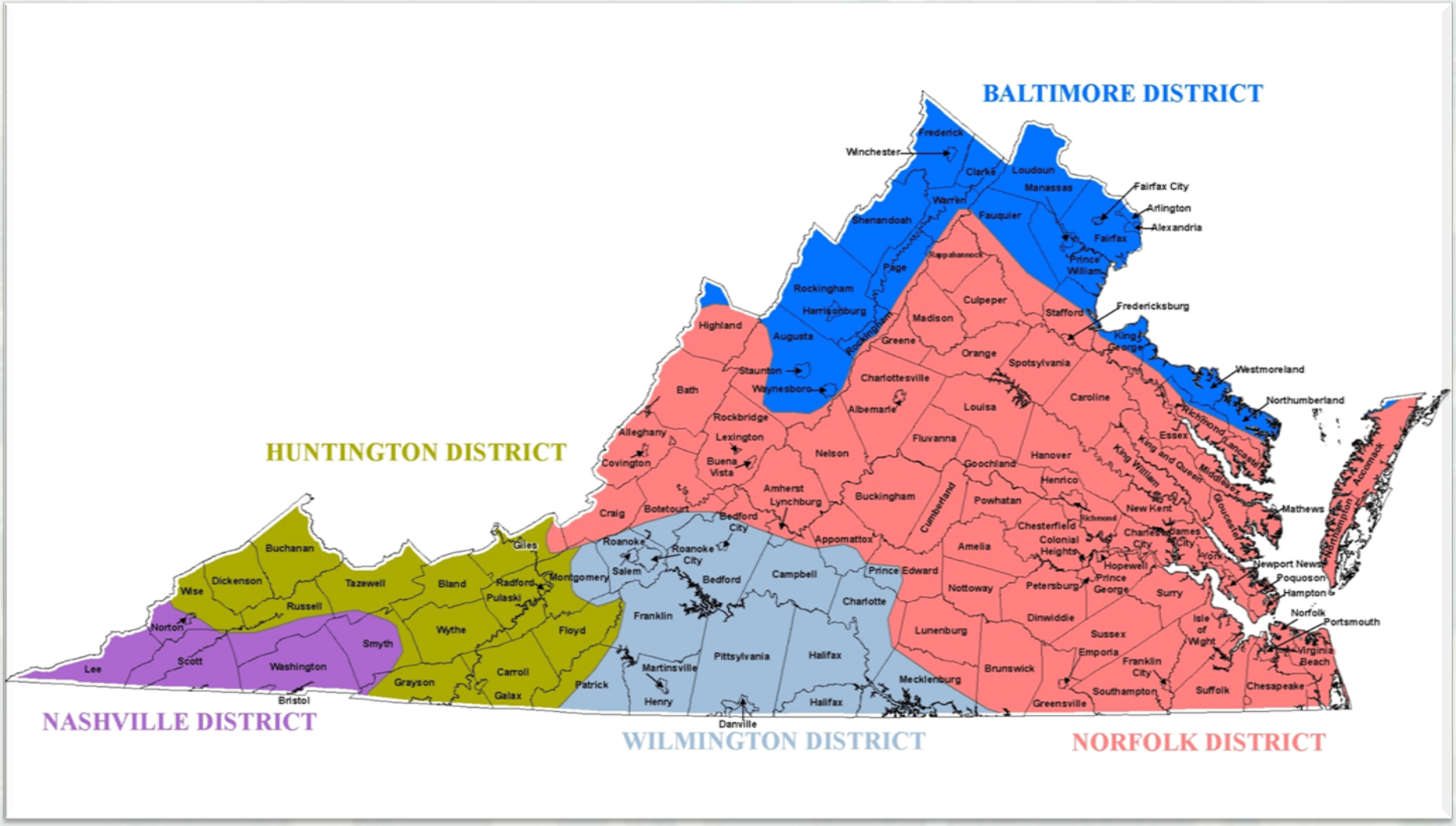
Flooding at Dayton along the Miami River.

Newsworthy…The Flood of 1913 - Remembered 100 Years Later

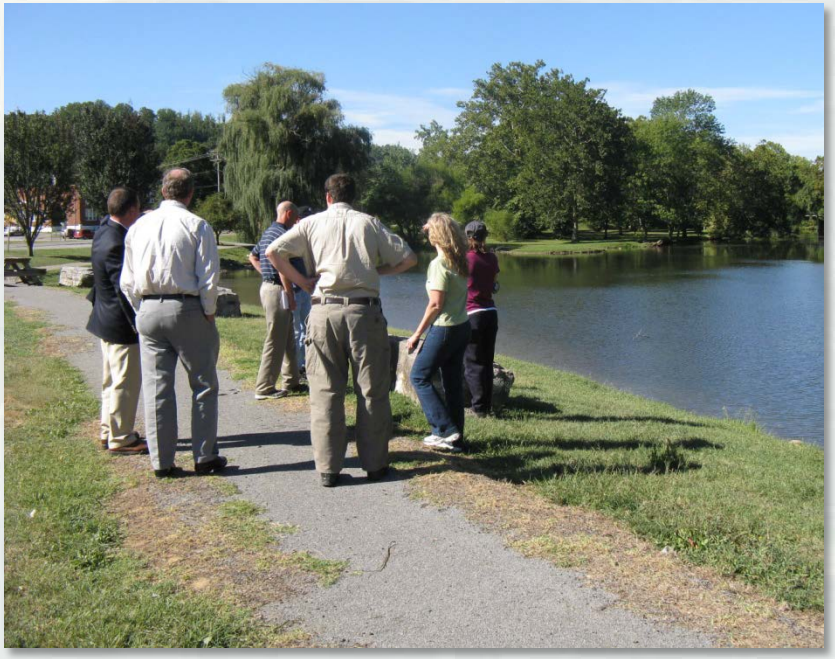
The Silver Jackets teams of Ohio and Indiana, with support from the Midwest Regional Climate Center, have launched a Silver Jackets Flood of 1913 website. The web site is packed with historical information, as well as current-day tips on flood preparedness, mitigation, and more.

Public outcry after the landmark Flood of 1913 event helped drive the creation of many of the federal, state, and local flood prevention and education efforts we rely on today. In the continual spirit of collaboration, the Silver Jackets teams including member

Virginia USACE Civil Works Boundaries



Giles County



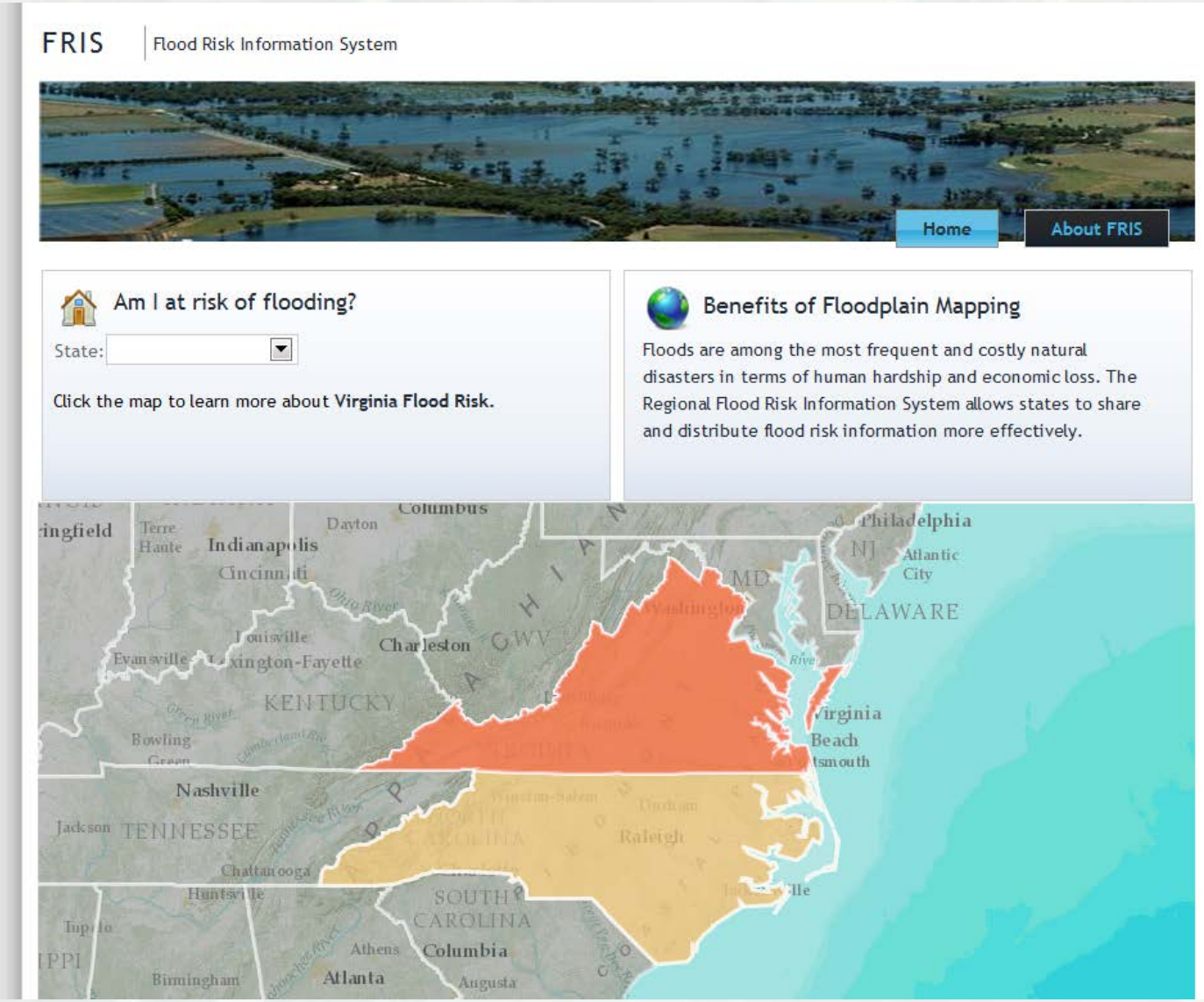
Outreach

Twitter Questions during 2012 Virginia Water Conference

Hurricane Preparedness
Hampton Christian Elementary

Environment, Virginia Symposium
Lexington, VA

Pilot Project
Flood Risk Information System



Flood Risk Information System - Windows Internet Explorer

http://iriskpilot.urscorp.com/rfris/Home.aspx?ST=VA

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Flood Risk Information System | Page | Safety | Tools

FRIS

Virginia Flood Risk Information System

Am I at risk of flooding?

Enter all or part of your address and click GO.

Address

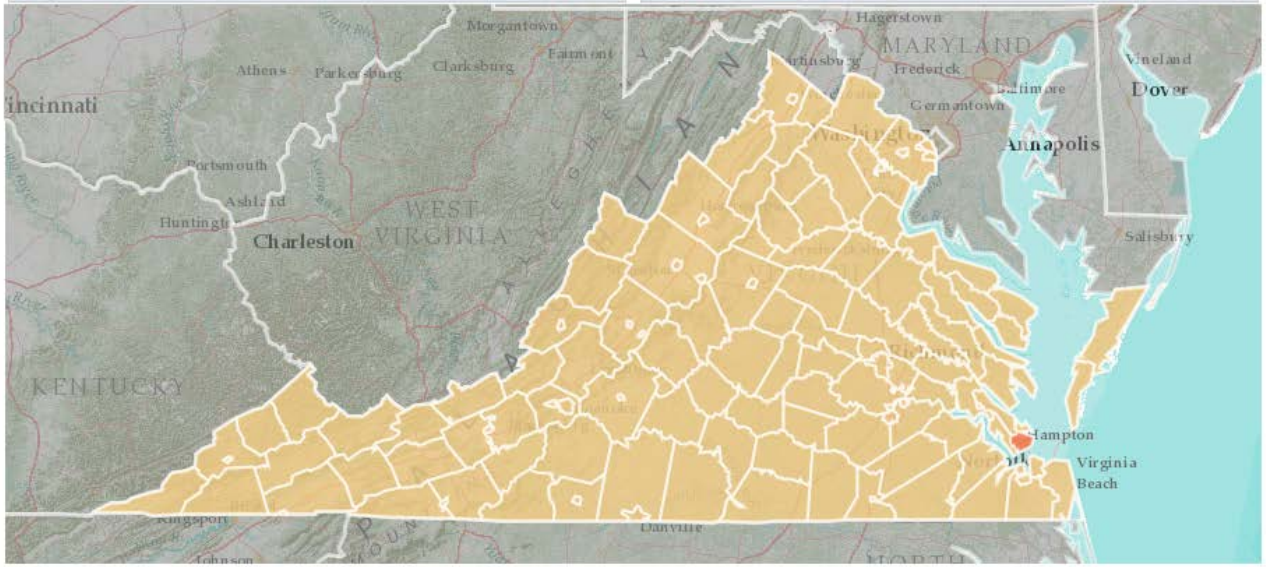
City | Zip | GO

County

Click the map to view **Hampton, Virginia**

Benefits of Floodplain Mapping

Floods are among the most frequent and costly natural disasters in terms of human hardship and economic loss. Virginia's Digital Flood Insurance Rate Maps (DFIRM) enable business leaders and residents to more accurately predict and prepare for flood risks.Go to Virginia Dam Safety and Floodplain Management for more information.



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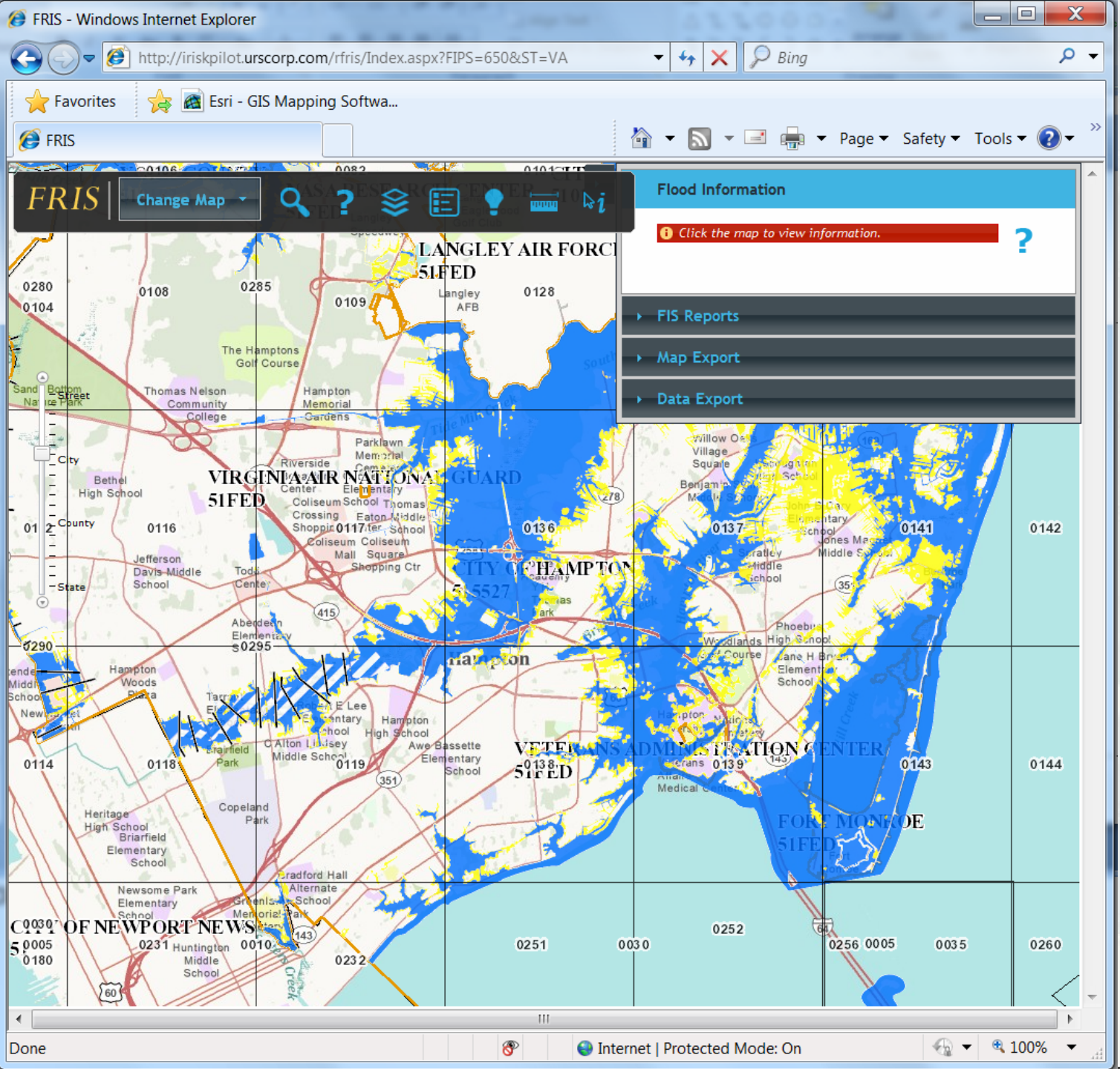
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FRIS
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FRIS
Change Map
Flood Information
Click the map to view information.
FIS Reports
Map Export
Data Export
LANGLEY AIR FORCE
51FED
VIRGINIA AIR NATIONAL GUARD
51FED
VETERANS ADMINISTRATION CENTER
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FORT MONROE
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CITY OF NEWPORT NEWS
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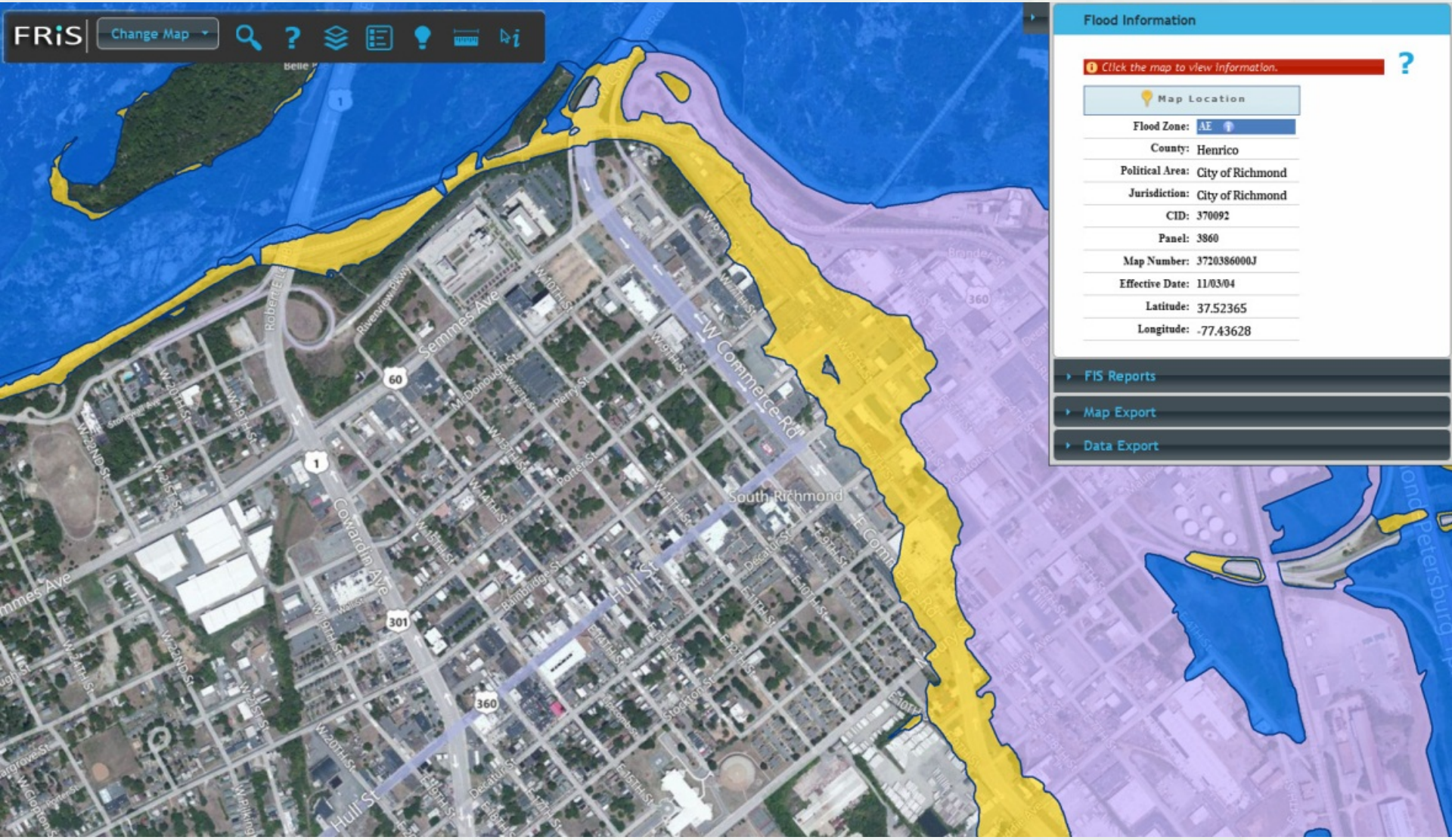
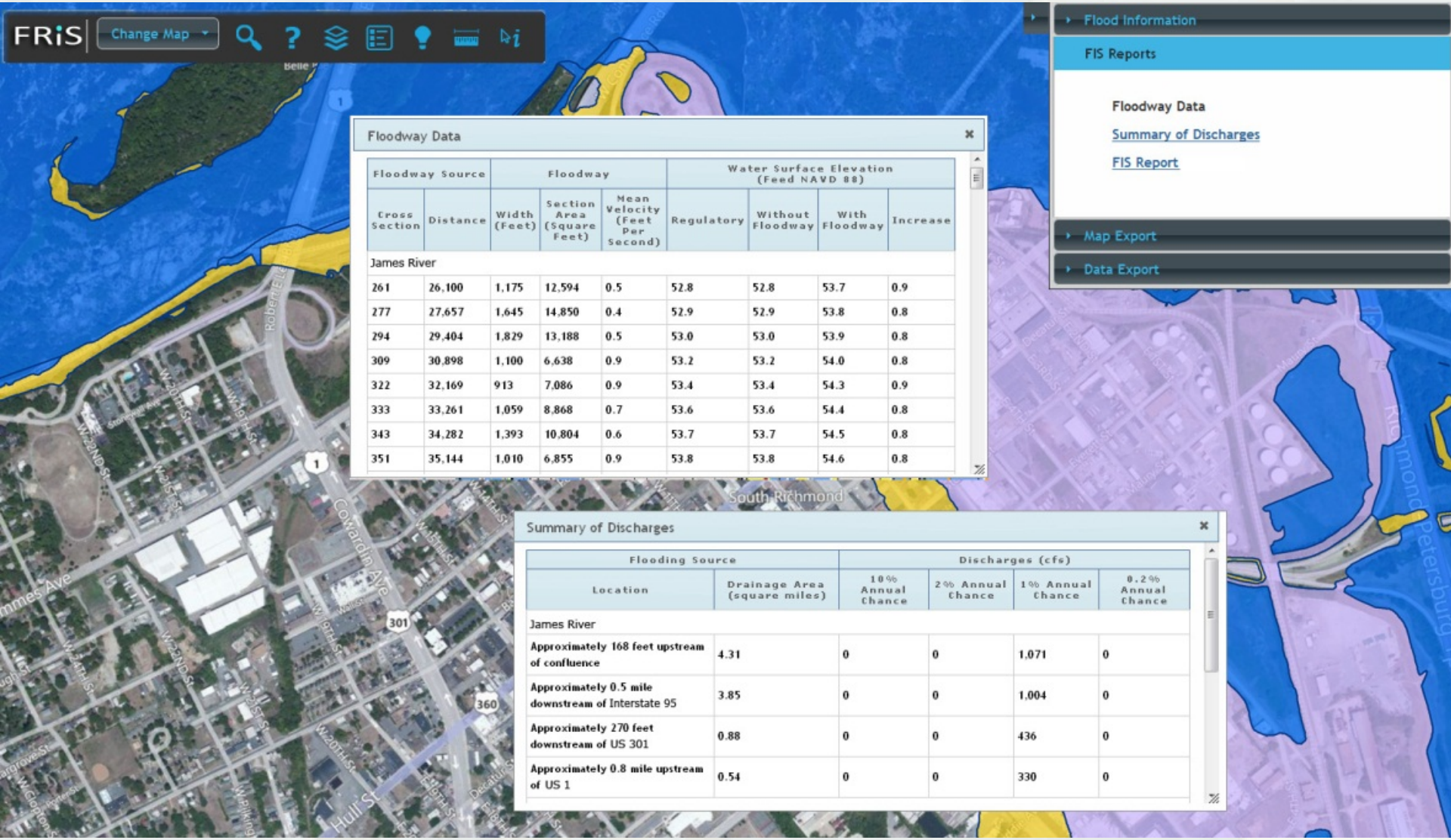
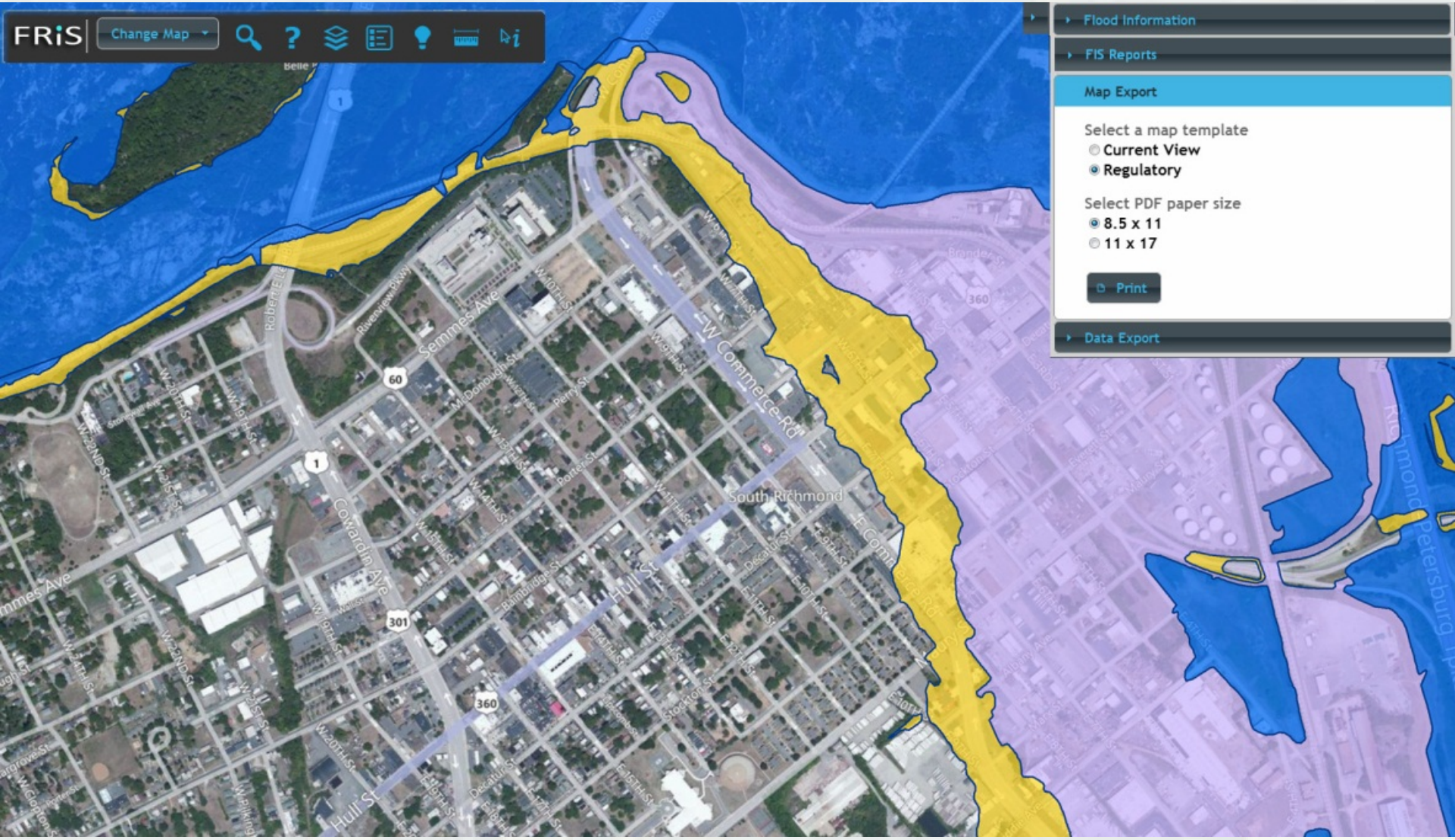
Flood Information Tab



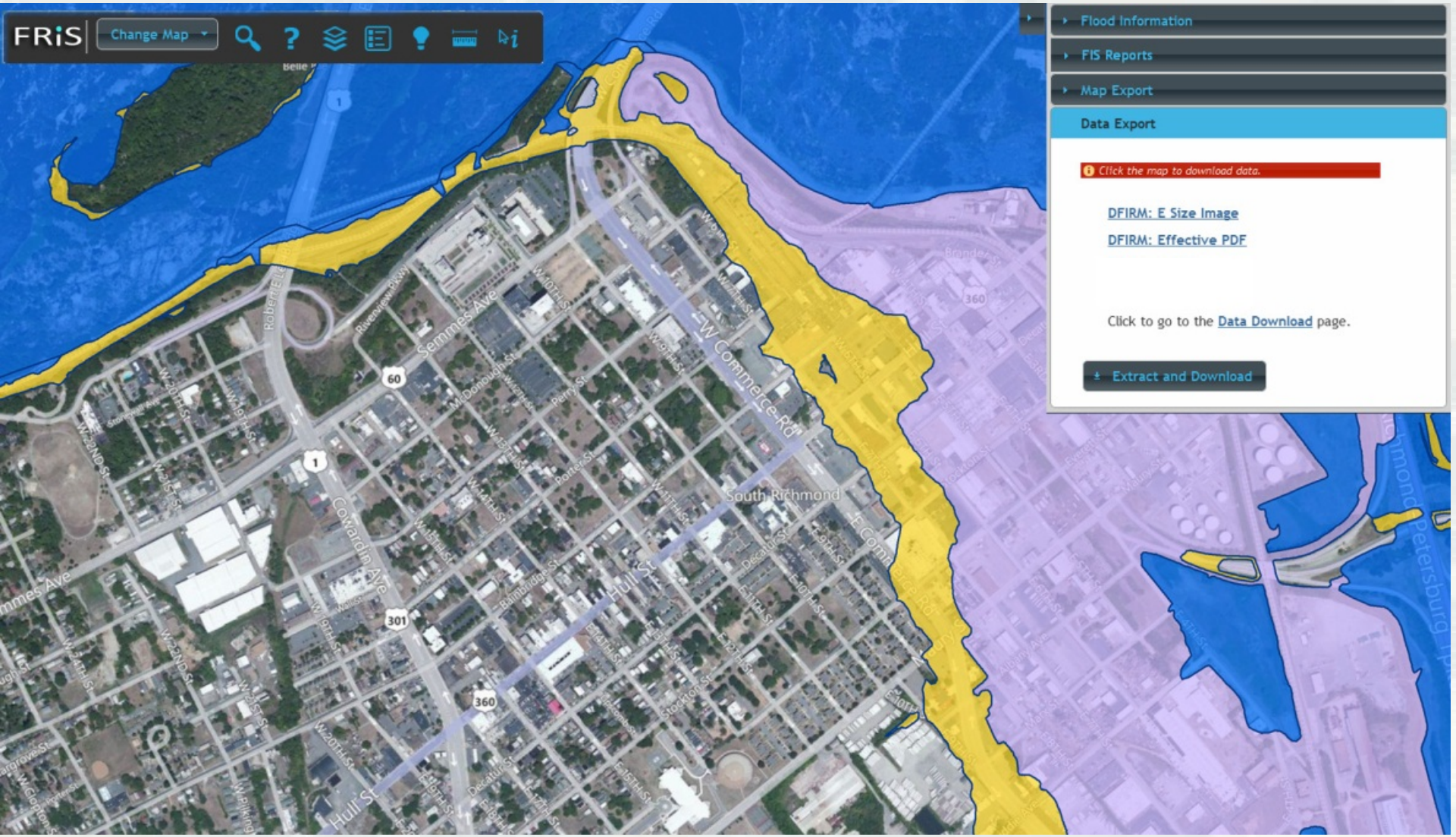
FIS Report Tab



Map Export Tab

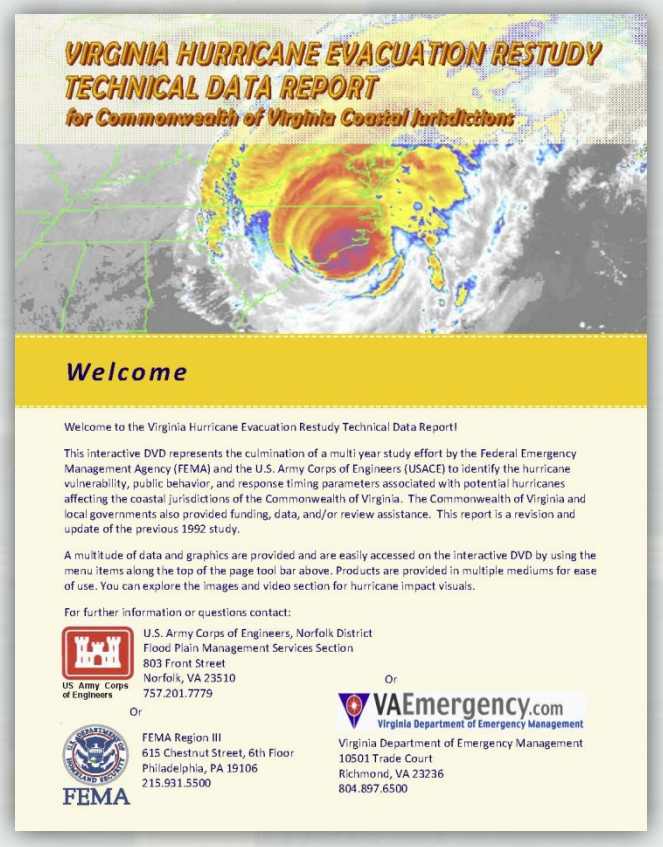


Data Export Tab



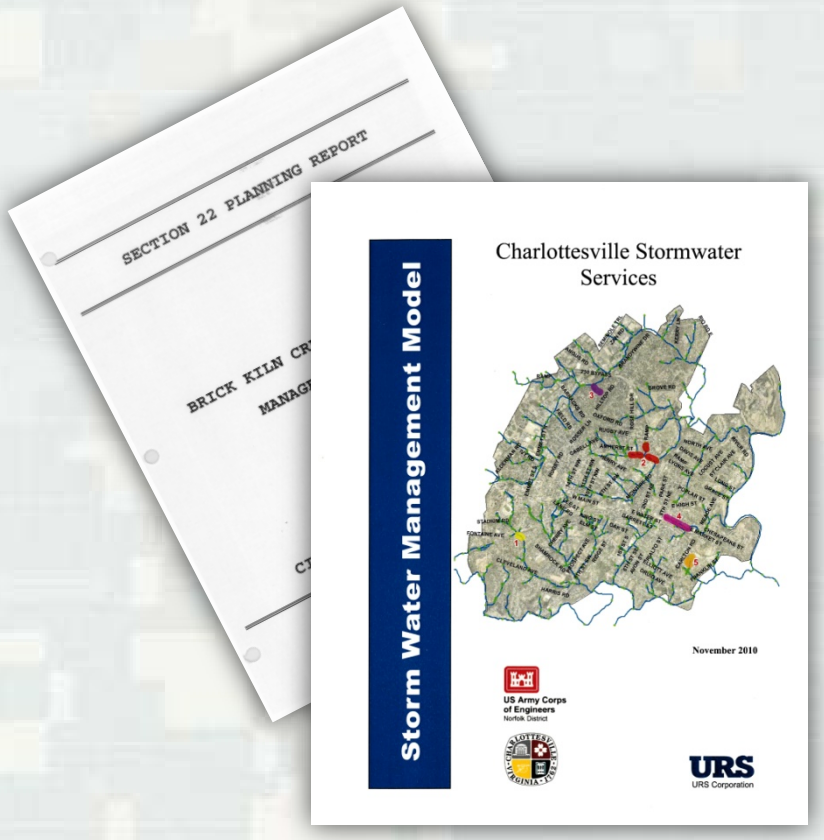
Flood Plain Management Services Section

- Special Studies
  - Flood Plain Delineation / Flood Hazard Studies
  - Dam Break Analysis
  - Hurricane Evacuation Studies
  - Flood Warning / Preparedness Studies
  - Comprehensive Flood Plain Management Studies
  - Urbanization Impact Studies
  - Stormwater Management Studies
  - Assistance in obtaining CRS credits



Planning Assistance to States

- PAS
  - Coastal Zone Management
  - Flood Plain Management
  - Flood Damage Reduction
  - Water Supply and Demand
  - Water Conservation
  - Water Quality
  - Environmental Conservation
  - Wetlands Evaluation
  - Dam Safety
  - Harbor / Port Studies



Continuing Authorities Program (CAP)

- Over time many “continuing” program authorities have been granted (do not require Congressional study or construction authorization)
- Designed for smaller projects (generally <$11M total)
- Each authority addresses a specific water resource requirement
- Funds appropriated via Construction General account annually
- Fund distribution managed by HQUSACE - both program and project limitations apply

Continuing Authorities Program (CAP)

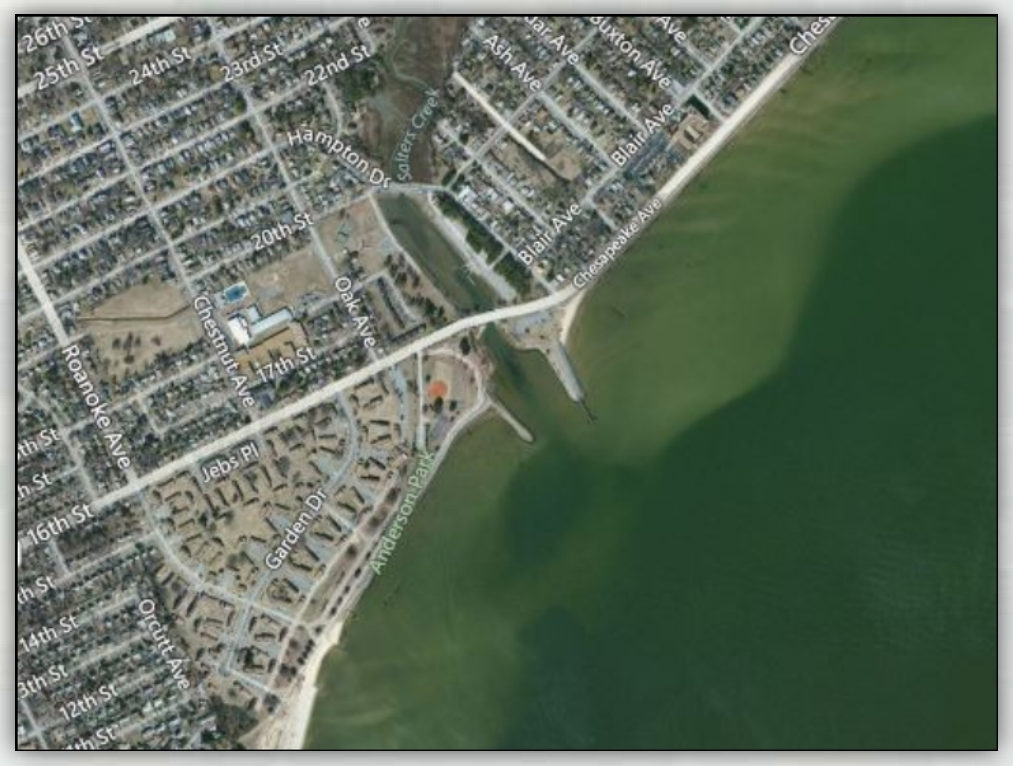
- **Letter of request from local sponsor initiates project**
  - **$100K (all fed) = Initial investigations**
  - **Over $100K, execute feasibility cost share agreement, 50% fed/50% non-fed**
  - **With approved feasibility report, execute Design and Implementation agreement (completes design and construction)**

Section 14
Streambank and Shoreline Protection

Cape Charles, Northampton County

Section 103
Hurricane and Storm Beach Erosion

Anderson Park, Newport News



Buckroe Beach, Hampton

Section 107
Navigation Improvements

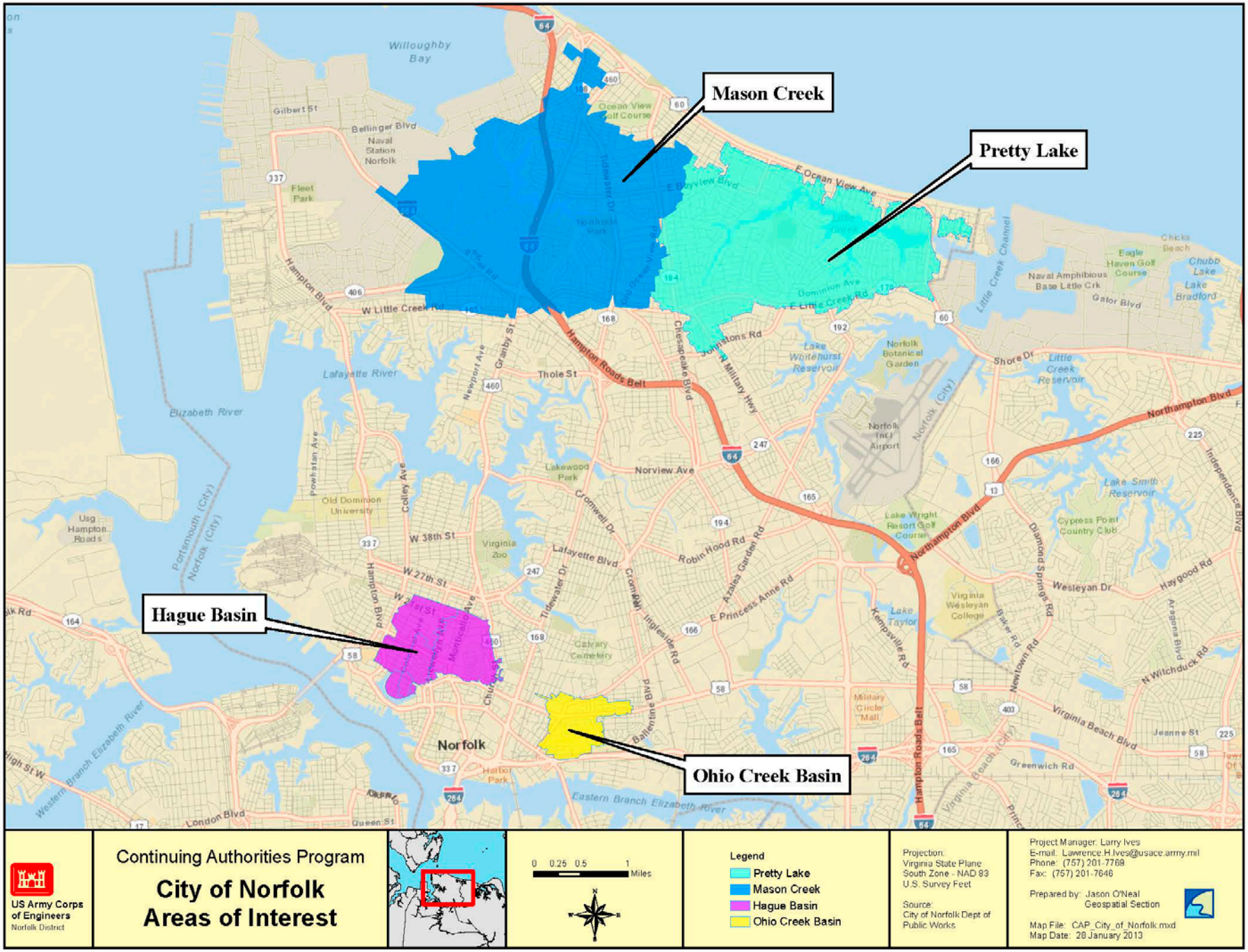
Lynnhaven Jetties, Virginia Beach

Tangier Jetty, Tangier Island

Section 205
Flood Risk Management

Newmarket Creek
Newport News and Hampton

Town of Scottsville



US Army Corps of Engineers
Norfolk District

Continuing Authorities Program

City of Norfolk Areas of Interest

0 0.25 0.5 1 Miles

Legend
- Pretty Lake
- Mason Creek
- Hague Basin
- Ohio Creek Basin

Projection:
Virginia State Plane South Zone - NAD 83 U.S. Survey Feet

Source:
City of Norfolk Dept of Public Works

Project Manager: Larry Ives
E-mail: Lawrence.H.Ives@usace.army.mil
Phone: (757) 201-7769
Fax: (757) 201-7646

Prepared by: Jason O'Neal
Geospatial Section

Map File: CAP_City_of_Norfolk.mxd
Map Date: 28 January 2013

Separately Authorized Projects

Virginia Beach Hurricane and Storm Damage Reduction Project

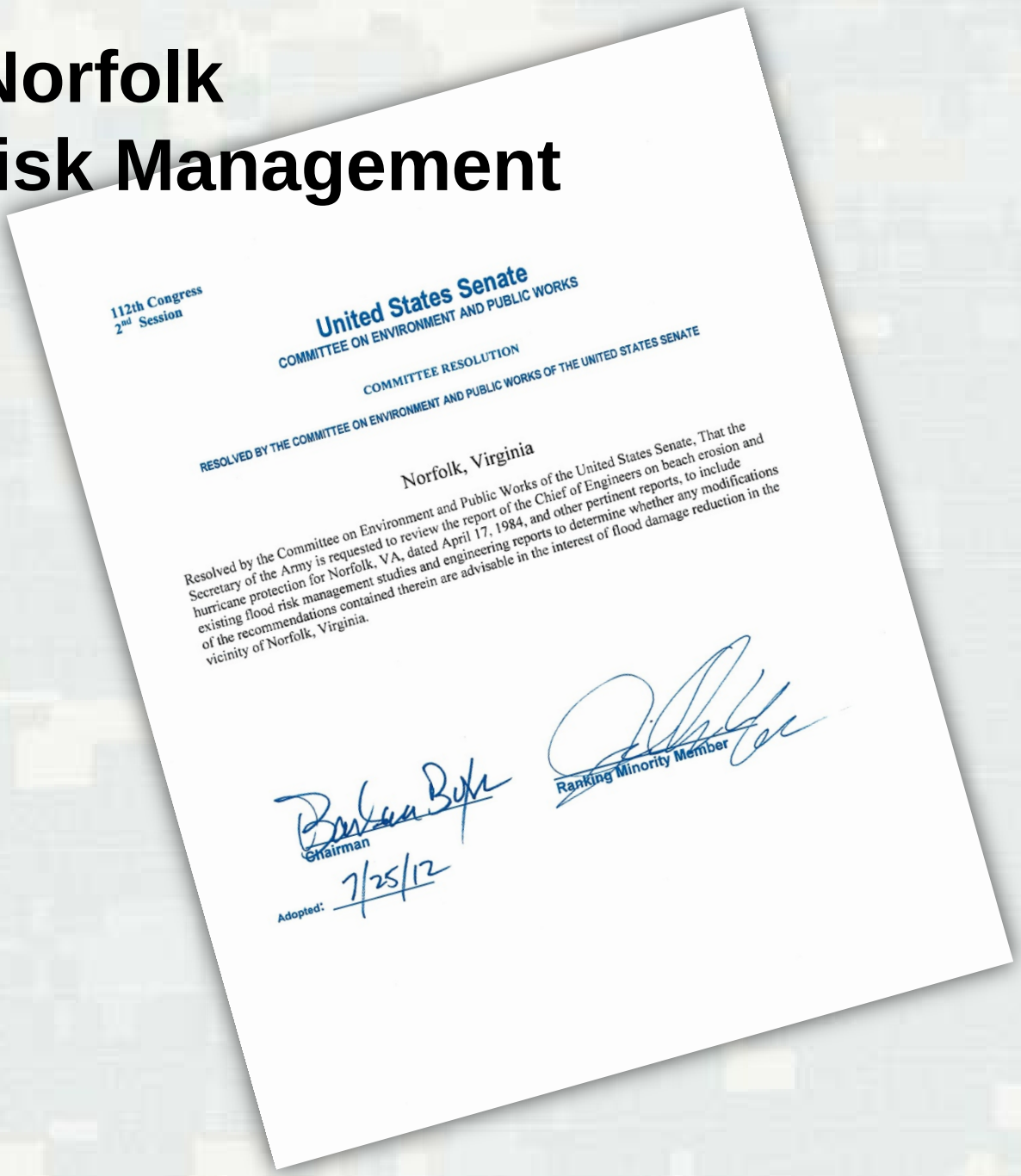
Separately Authorized Projects

Norfolk Floodwall

Separately Authorized Projects

Gathright Dam
Alleghany County

City of Norfolk
Flood Risk Management



112th Congress
2nd Session

United States Senate

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

COMMITTEE RESOLUTION

RESOLVED BY THE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS OF THE UNITED STATES SENATE

Norfolk, Virginia

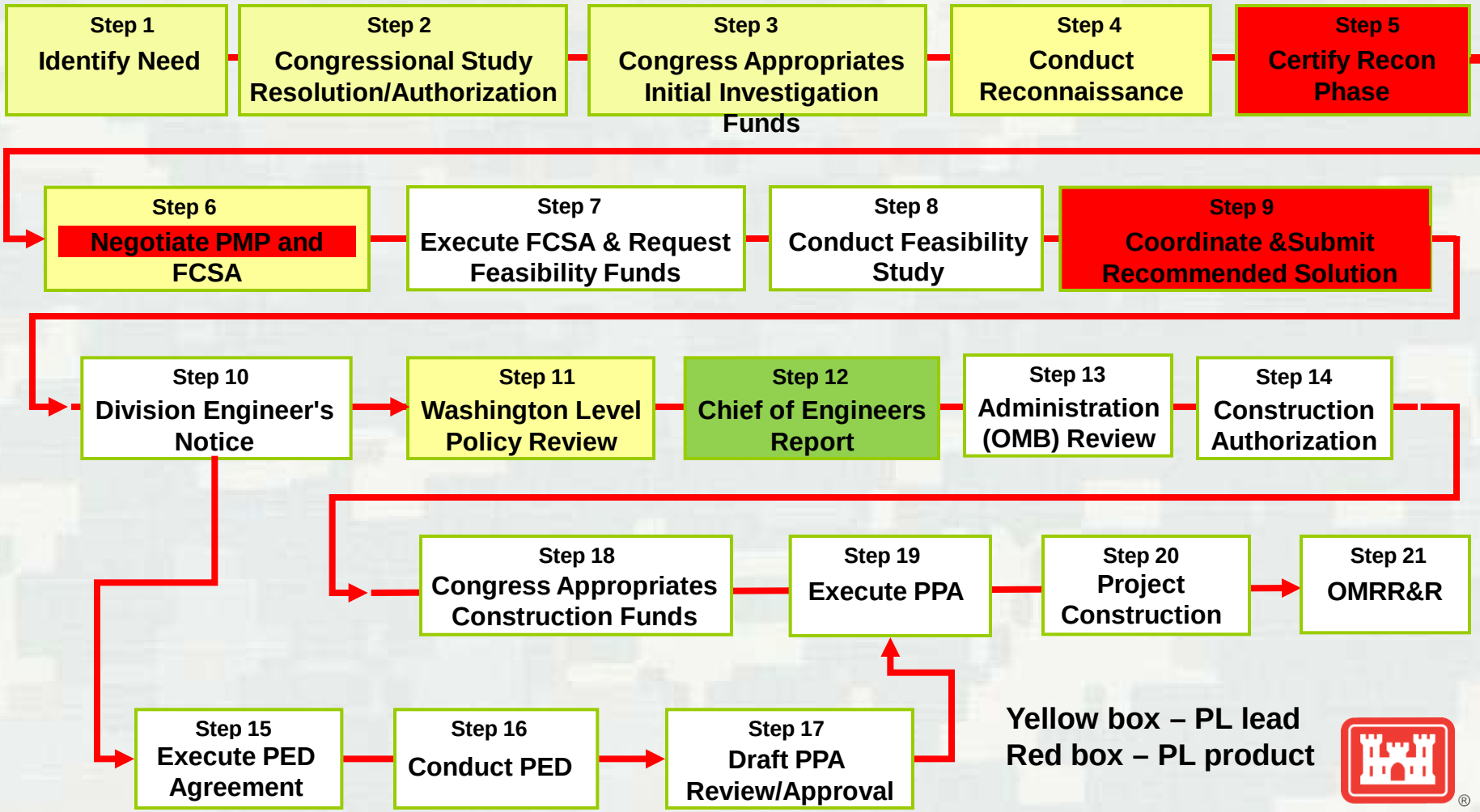
Resolved by the Committee on Environment and Public Works of the United States Senate, That the Secretary of the Army is requested to review the report of the Chief of Engineers on beach erosion and hurricane protection for Norfolk, VA, dated April 17, 1984, and other pertinent reports, to include existing flood risk management studies and engineering reports to determine whether any modifications of the recommendations contained therein are advisable in the interest of flood damage reduction in the vicinity of Norfolk, Virginia.

Chairman

Ranking Minority Member

Adopted: 7/25/12

Traditional Civil Works Project Delivery Process



PROJECT DEVELOPMENT PHASES

	Reconnaissance Phase	Feasibility Phase	Preconstruction Engineering & Design Phase	Construction Phase	Operation & Maintenance Phase
Duration	6 – 12 Months	2 – 3 Years	Approx. 2 years	Varies with Project	As long as Project remains Authorized
Funding **Activities**	*Recon. Funding (100% Federal)* **RECON. ANALYSIS**	*Feasibility Funding 50% Fed-50% non-Fed* **FEAS. ANALYSIS**	*PED Funding 75% Fed-25% non-Fed* **GENERAL** or **LIMITED REEVALUAION** (If Needed) **DESIGN DOCUMENTATION** (If Needed) **PLANS & SPECS.** for 1st Significant Constr. Contract **NEGOTIATE** Design Agreement	*Construction Funding Project purpose cost sharing* **CONSTRUCTION REAL ESTATE ACQUISITION RELOCATIONS ENGR.&DESIGN** (If Needed) **PLANS & SPECS.** (If needed)	*O&M Funding normally 100% non-Fed* **OPERATION MAINTENANCE REPAIR REPLACEMENT REHABILITATION**
Agreements		Feasibility Cost Sharing Agreement Signed	Design Agreement Signed	Project Cooperation Agreement Signed	
Decision Documents		905(b) Analysis	Chief of Engineers Report		
Significant Reports/ Manuals			Feasibility Report and NEPA Documentation	Engineering Design Report (If needed)	O&M Manual

Note: Project authorization generally occurs during PED Phase

RESPONSES TO CLIMATE CHANGE

- Related Links and Information
- Services
- USACE Guidance

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History of Climate Change at USACE

There is increasing concern among the public and the scientific community about climate change. Understanding the potential impacts to both natural and man-made systems is critical to the Corps, especially as we plan today for water resources that will be sustainable in the future and make permit decisions that will affect development trends and the waters of the United States. The most important influences of climate change on Corps missions are changes in temperature; changes in precipitation quantity, intensity and form (snow vs. rain); and changes in sea levels, winds and wave patterns.

How Does Climate Change Affect USACE Mission Areas?

Climate change impacts affect water availability, water demand, water quality, stormwater and wastewater infrastructure, flood and coastal storm infrastructure, wildland fires, ecosystem functioning, coastal zone functioning, navigation, and energy production and demand. All of these factors affect the water resources projects operated by the Corps and its non-Federal sponsors. Many of these were designed and constructed before climate change was recognized as a potential influence.

The entire portfolio of USACE Civil Works water resources infrastructure and programs, existing and proposed, could be affected by climate change and adaptation to climate change. This affects design and operational assumptions about resource supplies, system demands or performance requirements, and operational constraints. Both droughts and floods can affect the operations of these projects. Numerous regulatory decisions made by USACE will need to be informed by climate change impacts and adaptation considerations throughout the U.S., especially in western states.

reviewed 14 Jan 2013

Climate Change

- http://corpsclimate.us/ccaceslcurves.cfm

Questions?

http://www.nao.usace.army.mil/BusinessWithUs/FloodPlainManagement.aspx

Flood Risk Management & Coastal Storm Damage Reduction

- USACE owns and operates 692 dams.
- 11,750 mi of levees / floodwalls
- 400 mi coastal structures
- Flood protection advice/assistance to States
- Every $1 invested has prevented $6.48 in flood damages

From Flood Control to Flood Risk Management

Courtesy:
Patti Wnek
NWSMARFC

Hershey, PA

Courtesy:
David Gard/For The Star-Ledger
New Jersey – Hurricane Irene