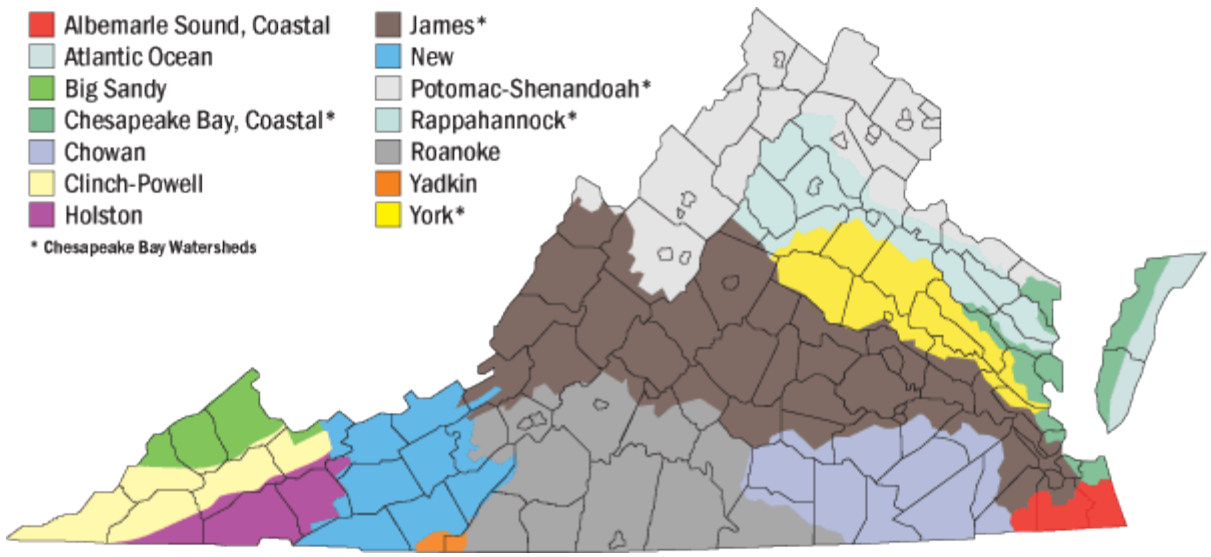
Strategic Principles for a Resilient Virginia

Virginia Floodplain Management Association Annual Conference
November 13, 2023
Matthew Wells - Director, Department of Conservation and Recreation

About the Virginia Department of Conservation and Recreation

- The Department of Conservation and Recreation (DCR) is the state's lead natural resource conservation agency. DCR protects what Virginians care about - natural habitat, parks, clean water, dams, open space and access to the outdoors.
  - Parks and Natural Area Preserves
  - Land Conservation
  - Soil and Water Conservation
  - Dam Regulation
  - Floodplain and Resilience



Virginia Major River Basins

How We Approach Resilience

Principle 1: We are committed to addressing challenges relating to flooding and resiliency

Principle 2: We must address these challenges with programs that work for all impacted parts of Virginia

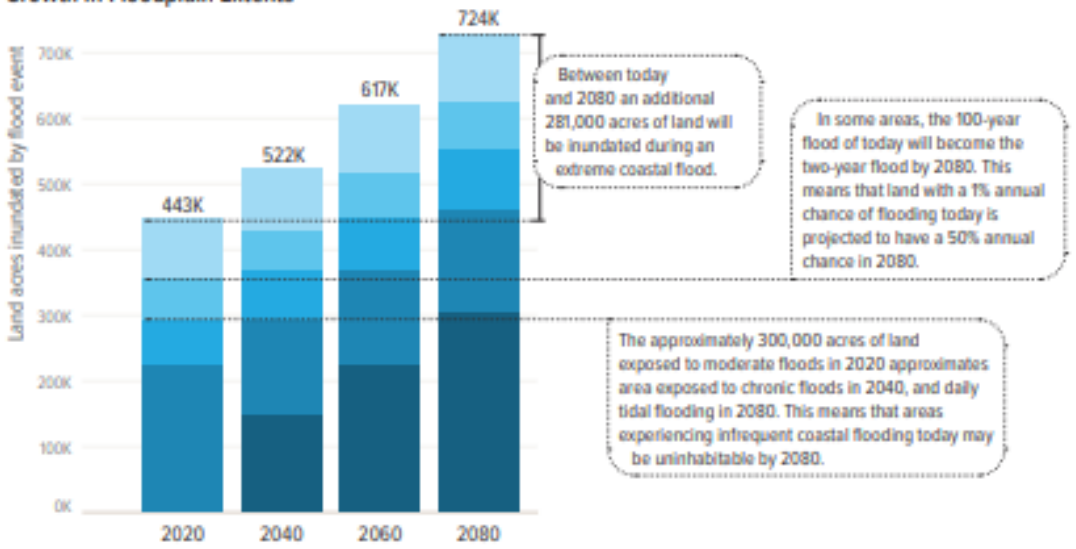
Principle 3: The programs we implement must work together as parts of comprehensive, cohesive plans

Principle 4: These programs and plans must be developed and implemented with transparency and input from the public

Principle 1: We are committed to addressing challenges relating to flooding and resiliency

"The impacts of flooding are felt across the commonwealth, and Governor Youngkin has ensured that resiliency and flood mitigation efforts are a priority for this administration." *– Travis Voyles, Chief Resilience Officer and Acting Secretary of Natural and Historic Resources*

Growth in Floodplain Extents



Reference Flood Event	Annual Exceedance Probability (AEP)	Average Return Interval (Frequency)	Example Storm/Event Type
Tidal	Mean High Water	Inundated Daily	Daily High Tide
Chronic	20% AEP	5 years	Gale, Smaller Coastal Storm
Moderate	4% AEP	25 years	Tropical Storm, Nor'easter
Major	1% AEP	100 years	Strong Nor'easter, Category 2 hurricane
Extreme	0.2% AEP	500 years	Category 3+ hurricane

Between 2020 and 2080...

the number of **residents** living in homes exposed to major coastal flooding is projected to grow from approximately 360,000 to 943,000, an increase of **160%**.

the number of residential, public, and commercial **buildings** exposed to an extreme coastal flood is projected to increase by almost **150%**, from 140,000 to 340,000, while annualized flood damages increase by over **930%** from $550 million to $5.7 billion.

the number of miles of **roadways** exposed to chronic coastal flooding is projected to increase from approximately 500 to nearly 2,800 miles, an increase of **460%**.

an estimated 170,000 acres, or **89%**, **of existing tidal wetlands** and 3,800 acres, or **38%**, **of existing dunes and beaches** may be permanently inundated, effectively lost to open water.

Principle 1: We are committed to addressing challenges relating to flooding and resiliency

Dam Safety

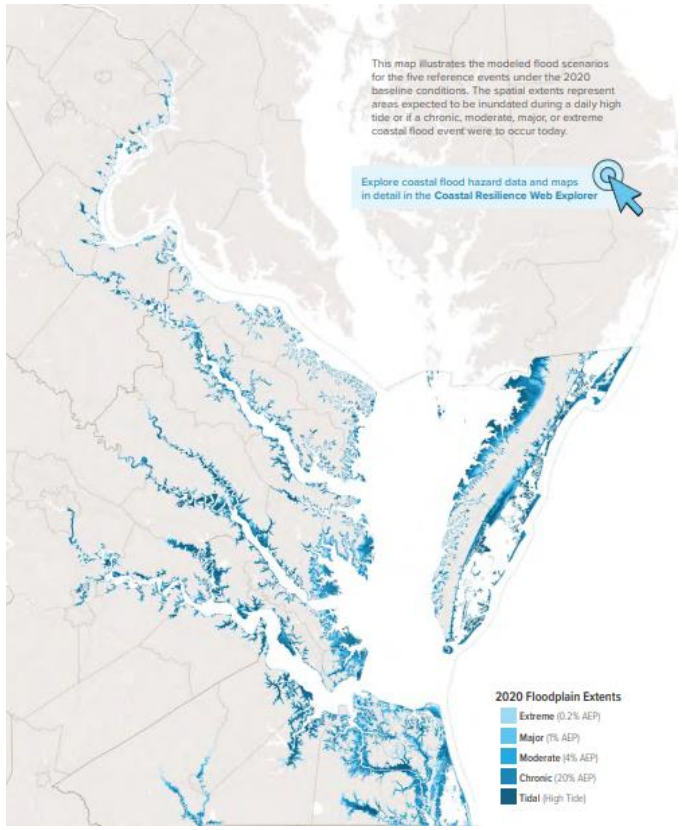
- DCR regulates over 2,500 dams across the Commonwealth through the Soil and Water Conservation Board. Over 80% of these dams are privately owned.
- Almost 400 are known to be “High Hazard”
- It is estimated nationally that up to 70% of dams are reaching the end of their useful life.
- ASDSO estimates bringing Virginia dams up to standards will cost $5.4 billion in a 2023 report.
- A significant portion of the dam inventory have historically lacked hazard classifications, condition assessment, and/or ownership information.

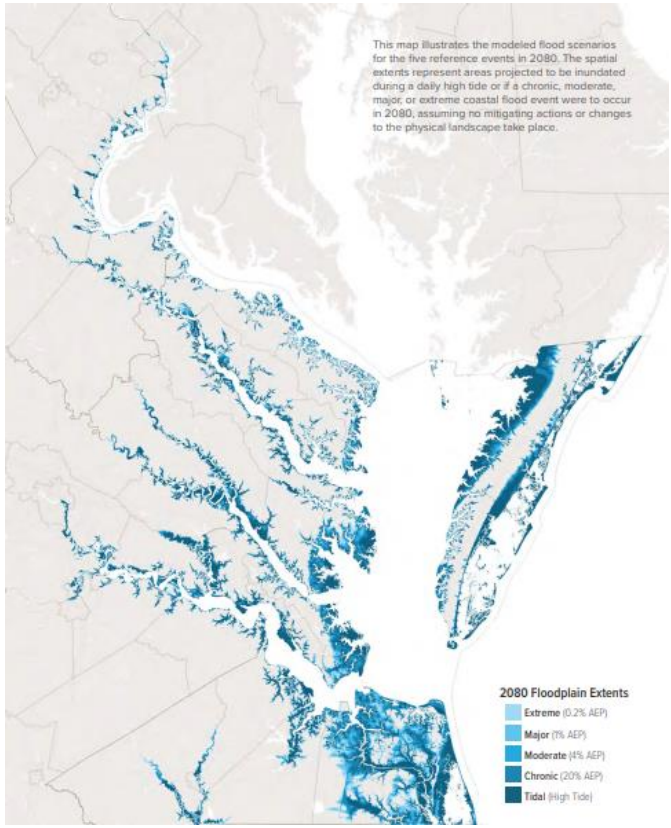
Count of Regulated Dams by Ownership		
Dam Owner Type	Dam Count	Percent
Private	2,107	83%
Local Government	191	7%
Soil & Water Conservation District	105	4%
State (DWR)	75 (39)	3%
Public Utility	69	3%

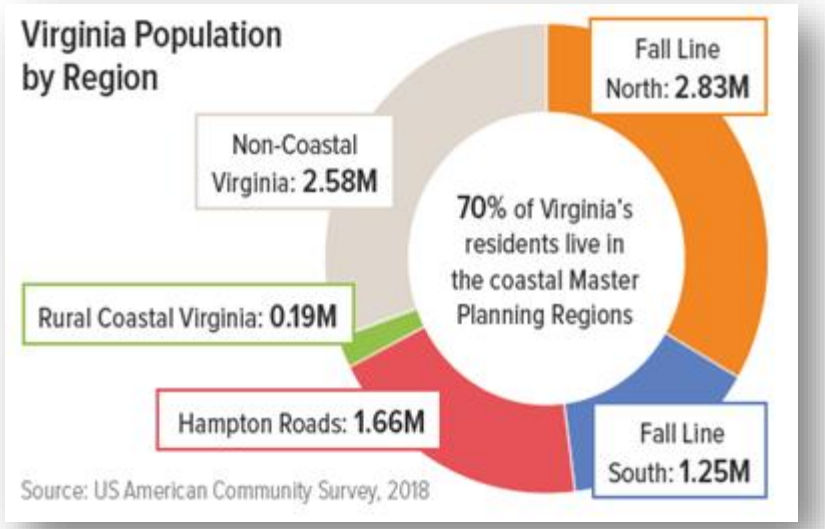
Regulatory Dam Inventory		
Metric	Initial	Sep. 2023
Number of dams with unknown ownership	812	318
Number of dams of unknown hazard	1876	1,699
Number of regulated dams with 'not rated' condition assessment	1974	1714

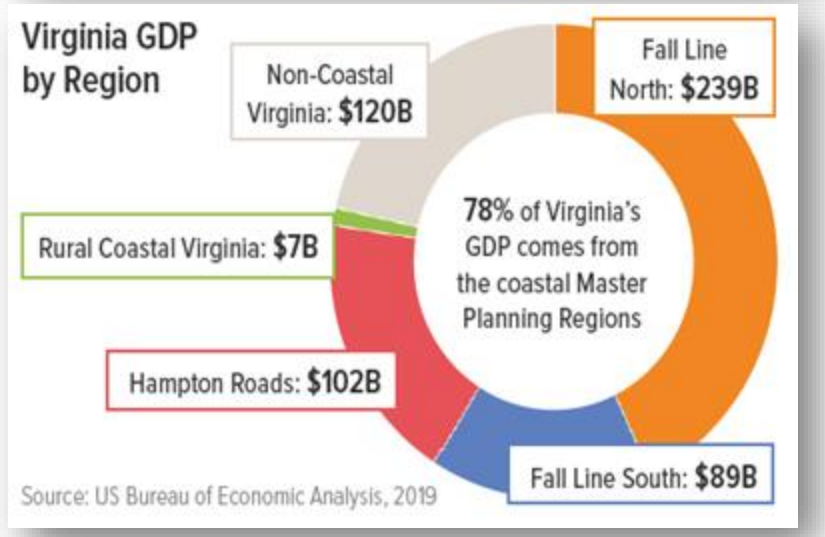
Principle 2: We must address these challenges with programs that work for all impacted parts of Virginia

Coastal Virginia Sea Level Rise Risk Projections



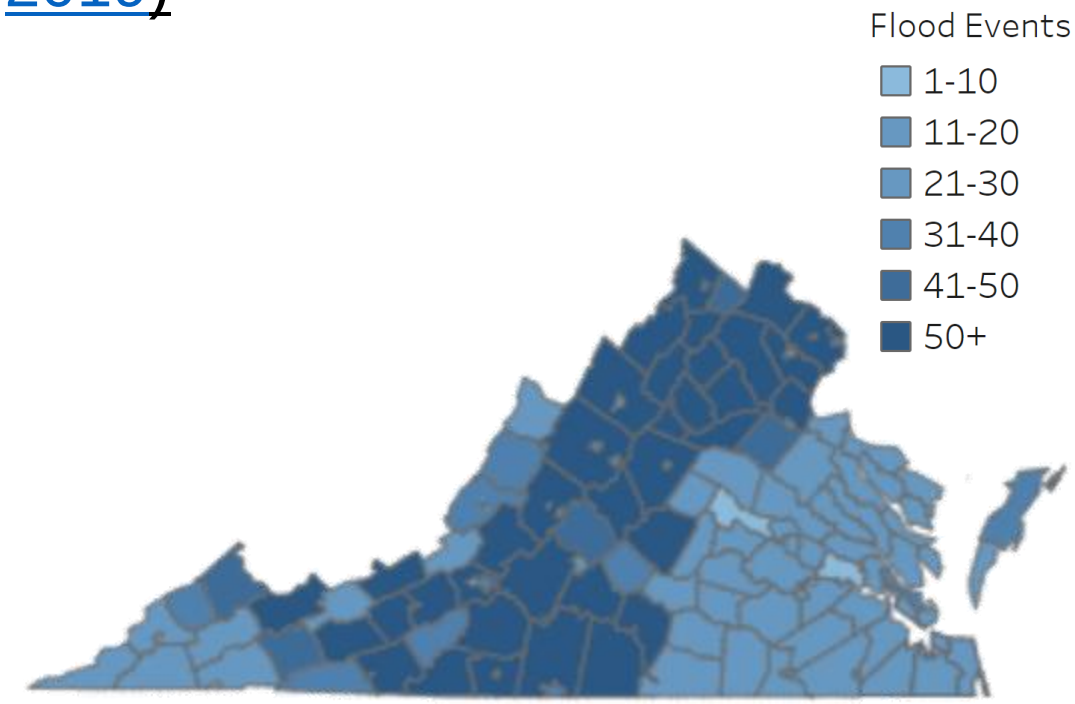




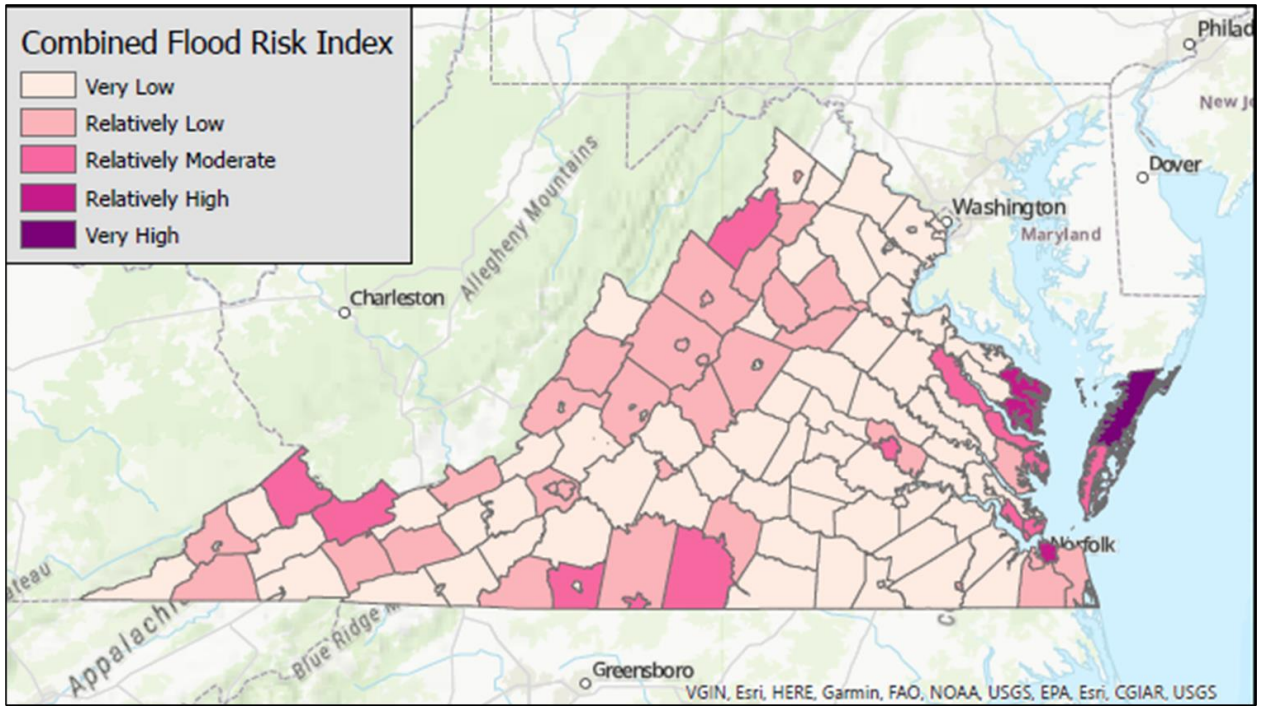


Principle 2: We must address these challenges with programs that work for all impacted parts of Virginia

Statewide Historic Flood Risk Data (1996-2019)



FEMA Combined Flood Risk (2021)



Principle 2: Programs that work for all impacted parts of Virginia

Community Flood Preparedness Fund

	Round 1	Round 2	Round 3	Totals
Funds Available	$ 18,000,000	$ 17,000,000	$ 70,000,000	**$ 105,000,000**
Number of Applications	32	37	64	**133**
CFPF Funds Requested	$ 14,532,740	$ 29,725,495	$ 92,472,050	**$ 136,730,285**
Funds Awarded	$ 7,796,040	$ 24,551,923	$ 65,388,627	**$ 97,736,590**
Low Income Awarded	*$ 3,766,515*	*$ 19,759,944*	*$ 42,384,643*	***$ 65,911,103***
Non-Low Income Awarded	*$ 4,029,525*	*$ 4,791,979*	*$ 23,003,983*	***$ 31,825,487***

Principle 2: Programs that work for all impacted parts of Virginia

Community Flood Preparedness Fund

Principle 2: Programs that work for all impacted parts of Virginia

Resilient Virginia Revolving Fund

- CFPF and RVRF – working together
  - CFPF Round 4 and RVRF Round 1 Grant Manual(s) put out for public comment
  - Shift to an annual cycle, combination of grants and loans
  - Goal is to have programs run together and complement each other
  - Both programs have tremendous flexibility for project types; both can offer grants and loans
  - Generally, the CFPF is geared towards larger, community-scale projects, while the RVRF is more directed towards individual property and buildings
  - CFPF prefers nature based; has 25% low-income requirement
  - RVRF prefers projects that will utilize private industry and/or serve 2+ local gov'ts; has building hazard mitigation carve-out

CFPF	RVRF
Community Scale • Flood protection studies • Capacity Building • Flood Planning Activities • Hazard mitigation projects • Land acquisition • Implementation of land use controls	Property Scale • Hazard mitigation of buildings • Hazard mitigation of real property • Home buyouts and relocation • Loans and grants to persons for hazard mitigation and infrastructure improvement projects for resilience purposes • Projects identified in the Virginia Flood Protection Master Plan or the Virginia Coastal Resilience Master Plan • Support for local resilience funding programs

Principle 2: Programs that work for all impacted parts of Virginia

CFPF Round 4

Community Flood Preparedness Fund Round 4 – Total Available $85,000,000
Closed November 12, 2023 at 11:59 p.m

Round 4 will be the first time that the CFPF offers loans, and the first time that awards are capped.

Category	Amount	Award Type	Notes
Planning & Capacity Building, Studies, and Resilience Projects	$50,000,000	Grants	Awards require match that varies depending on activity/project type. Reduced match for low-income geographic areas. Total awards per applicant are capped.
Resilience Projects	$25,000,000	Loans	Below market-rate loans for resilience projects. Awards do not require match. Designed primarily to accommodate large projects that exceed grant caps.
Start-Up Funding	$10,000,000	Loans	Short term (36 month) loans to provide up-front funding for activities funded by CFPF grants. Currently, CFPF grants are paid on a reimbursement basis, which is a limiting factor for some localities.

* Assuming Round 4 is fully subscribed, DCR anticipates approximately $106 million in unobligated funding will remain in the fund after the December 2023 auction.

Principle 2: Programs that work for all impacted parts of Virginia

RVRF Round 1

Resilient Virginia Revolving Fund Round 1 – Total Available $18,500,000*
Closes December 12, 2023 at 11:59 p.m.

Category	Amount	Award Type	Notes
Non-federal match for federal resilience grants to localities.	$5,000,000	Loans	Below market-rate loans for localities to use as non-federal match for resilience projects (FMA, HMA, CDBG, BRIC, etc).
Hazard Mitigation of Buildings	$7,500,000	Loans	Below market-rate loans for projects related to the hazard mitigation of buildings. Awards are for discrete projects that localities wish to support (may be on private property). Satisfies statutory requirement that a portion of the RVRF be set aside for this purpose.
Capitalization for Local Flood Resilience Programs	$1,000,000	Loans	Interest-only loans to localities with existing revolving funds. Providing interest-only loans allows principal to be revolved within the locality. Loans to localities may be rolled over indefinitely.
Capacity Building for Local Flood Resilience Funding Programs	$5,000,000	Grants	Grants to localities to support the establishment of Local Flood Resilience Funding Programs. Subject to the approval of DCR, these programs could fund a range of property-scale projects.

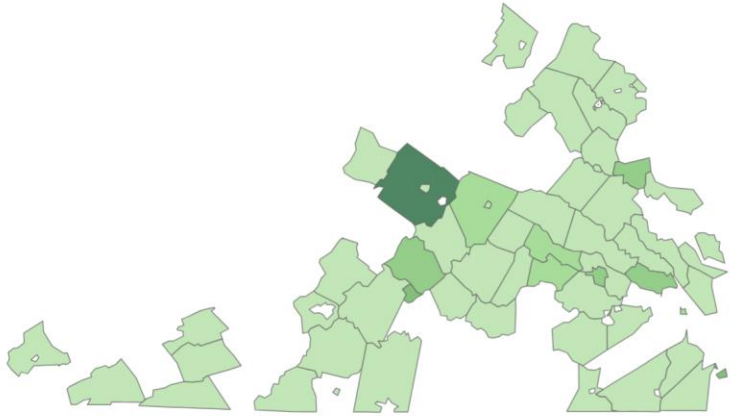
* Total capitalization of fund is $25,000,000; $5,000,000 has been set aside for FEMA STORM RLF Grant match; $1,500,000 has been set aside for administrative costs (including support VRA loan closing costs).

Principle 2: Programs that work for all impacted parts of Virginia

Dam Safety, Flood Prevention and Protection Fund

- Virginia's **Dam Safety, Flood Prevention and Protection Assistance Fund** provides grants to local governments and private dam owners whose dams fall under state regulations. The FY23/24 budget appropriated $21,464,294 for the Fund.

	Total Grant Round Maximum	Approved by SWCB	Funds Disbursed	Unexpended Balance	Number of Funded Projects	Number of Distinct Dams Funded
2021	$1,000,000	$726,039	$476,411	$249,628	55	34
2022	$1,250,000	$1,600,001	$287,785	$1,312,216	202	64
2023	$5,000,000	$2,862,541	0	$2,862,541	113	43
2024	$10,000,000	TBD	0	TBD	TBD	TBD
Totals	$17,250,000	$5,188,581	$764,196	$4,424,385	370	141



- DCR anticipates releasing $10,000,000 for the 2024 DSFPPF round.

Category	Amount
Dams of regulatory size without hazard classification.	$1,000,000
Dams of Regulatory size with known hazard classification.	$2,000,000
Privately-owned, high-hazard dams.	$7,000,000

Principle 3: The programs we implement must work together as parts of comprehensive, cohesive plans

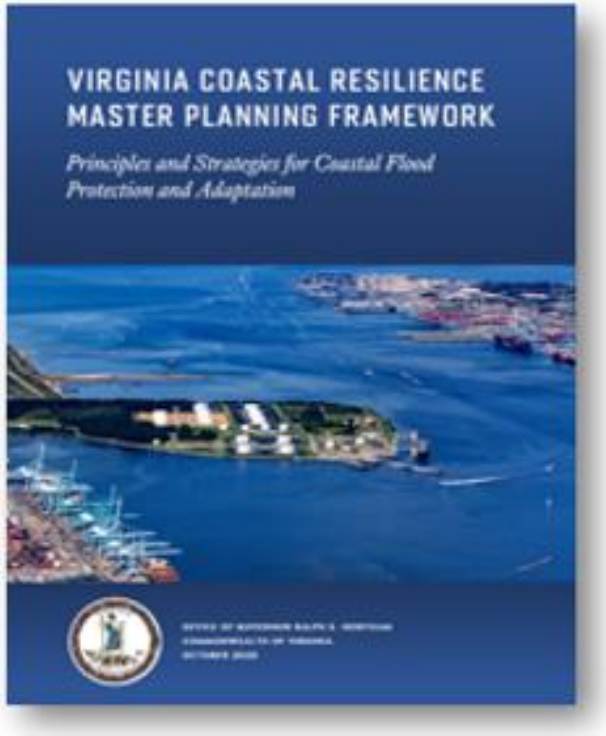
Coastal Resilience Master Planning Framework

Framework Goals

- Prioritize Projects
- Financing Strategy
- Incorporate Climate Change Projections
- Coordinate Efforts

Framework Principles

- Best Available Science
- Socioeconomics
- Nature-Based Solutions
- Community and Regional Scale
- Cost-Effective Solutions



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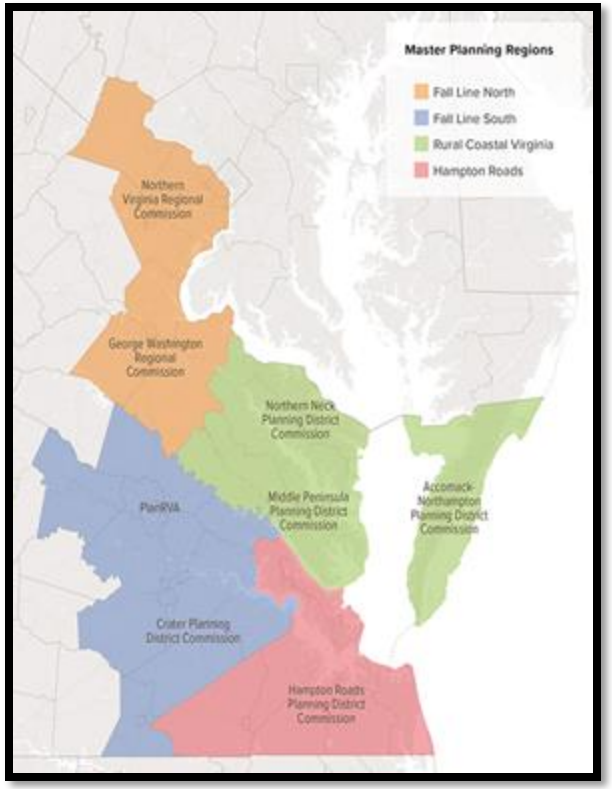
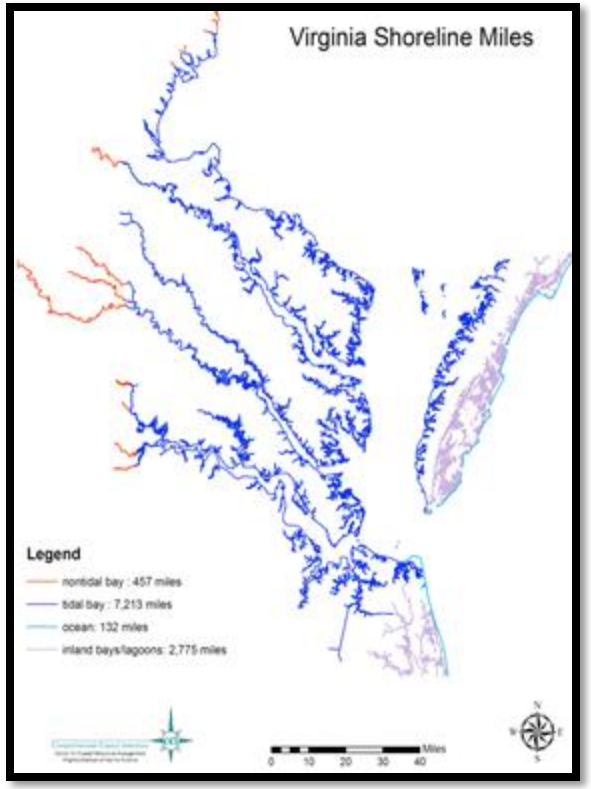
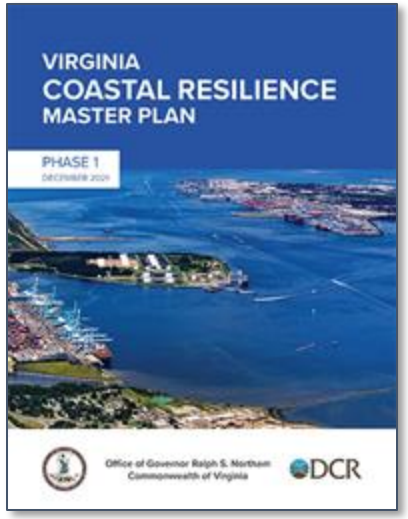
Coastal Resilience Master Plan







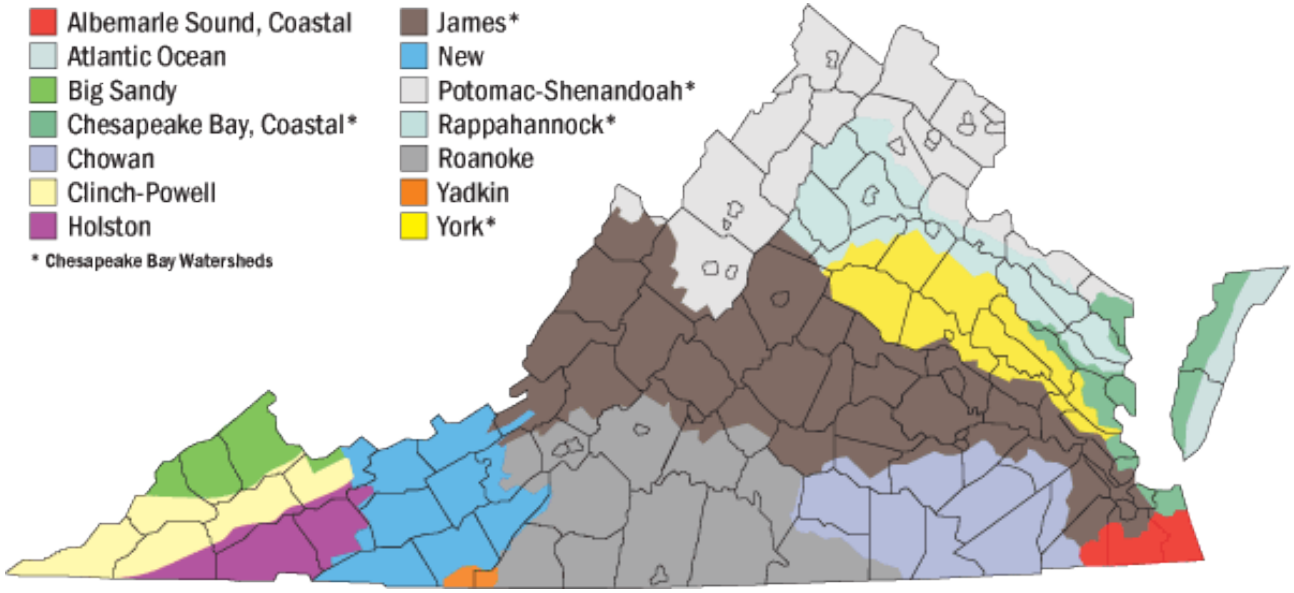
VIRGINIA COASTAL RESILIENCE WEB EXPLORER Ver 1.0

Coastal Resilience Master Plan (CRMP) Update

- Codified by HB516 (Bulova) / SB551 (Marsden)
- Special Advisor for Coastal Adaptation and Protection, in coordination with DCR Director, shall update CRMP to incorporate all major flood hazards, including precipitation-driven flooding;
- A list of all projects considered and an update of the status of all projects previously implemented;
- A comprehensive risk assessment of critical human and natural infrastructure.
- DCR is the lead administrator and required to implement
- Due no later than December 31, 2024 and updated at least every 5 years

Principle 3: The programs we implement must work together as parts of comprehensive, cohesive plans

Virginia Flood Protection Master Plan



VIRGINIA FLOOD PROTECTION MASTER PLAN

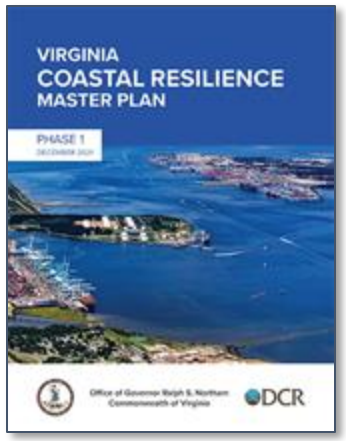
Virginia Flood Protection Master Plan (VFPMP) Update

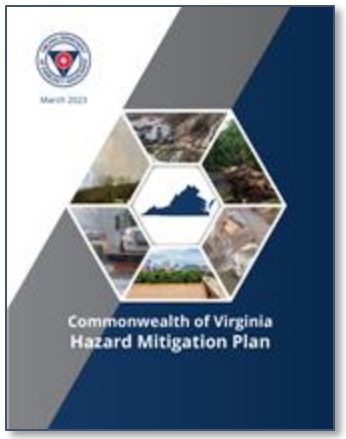
- Existing plan w/ requirement for update every 5 years
- Must use a watershed-based approach
- Immediate challenge is availability of types of data needed - data are more available for coastal region and CRMP
- Must integrate Coastal Resilience Master Plan
- Other requirements contained in 10.1-658
- DCR is the lead administrator and required to implement
- Due no later than Dec 31, 2026 - DCR plans to deliver Dec 2025

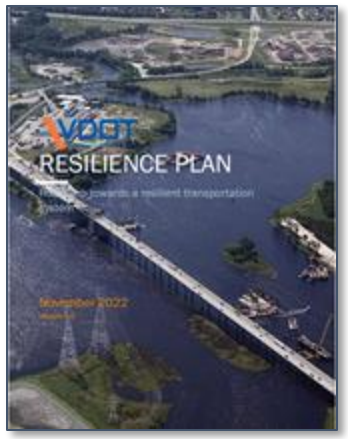
Principle 3: The programs we implement must work together as parts of comprehensive, cohesive plans

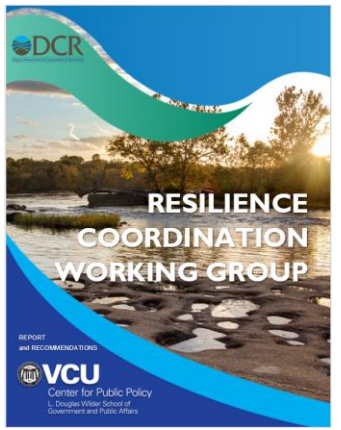
Additional Efforts

- Coastal Resilience Technical Advisory Committee
- Annual Flood Resilience Meeting
- Resilience Coordination Working Group – Recently Concluded









Principle 3: The programs we implement must work together as parts of comprehensive, cohesive plans

Resilience Coordination Working Group

- Virginia faces challenges related to coordinating state-level resilience planning, programs, and funding efforts, which are dispersed across multiple agencies and secretariats. Additionally, our current structure hampers our ability to capture federal dollars and does not provide localities with the support they need to address challenges at a local level.
- The Administration convened a Resilience Coordination Working Group (RCWG), comprised of a broad group 39 of stakeholders, to develop recommendations to address these challenges.

Resilience Coordination Working Group Members				
Central Shenandoah PDC (CSPDC)	Home Builders Association of Virginia (HBAV)	The Nature Conservancy (TNC)	Virginia Department of Emergency Management (VDEM)	Virginia Farm Bureau (VFB)
Chesapeake Bay Commission (CBC)	Middle Peninsula PDC (MPPDC)	University of Virginia - IEN (UVA)	Virginia Department of Environmental Quality (DEQ)	Virginia Institute of Marine Science (VIMS)
Chesapeake Bay Foundation (CBF)	Mount Rogers PDC (MRPDC)	Virginia Marine Resources Commission (VMRC)	Virginia Department of Housing and Community Development (DHCD)	Virginia Manufacturer's Association (VMA)
City of Alexandria	Old Dominion University - ICAR/CCRFR (ODU)	Virginia Agribusiness Council (VAC)	Virginia Department of the Treasury (Treasury)	Virginia PACE Authority (VPA)
Clark Nexsen	Port of Virginia	Virginia Association of Soil and Water Districts (VASWCD)	Virginia Department of Transportation (VDOT)	Virginia Resources Authority (VRA)
Cumberland Plateau PDC (CPPDC)	Secretary of Natural and Historic Resources (SNHR)	Virginia Association of Counties	Virginia Department of Energy (Energy)	Virginia Tech - CCS (VT)
Environmental Defense Foundation (EDF)	Secretary of Veterans and Defense Affairs (VADA)	Virginia Chamber of Commerce (VAChamber)	Virginia Department of Wildlife Resources (DWR)	Citizen Member
Hampton Roads PDC (HRPDC)	Soil and Water Conservation Board (SWCB)	Virginia Department of Conservation and Recreation (DCR)	Virginia Economic Development Partnership (VEDP)	

Principle 3: The programs we implement must work together as parts of comprehensive, cohesive plans

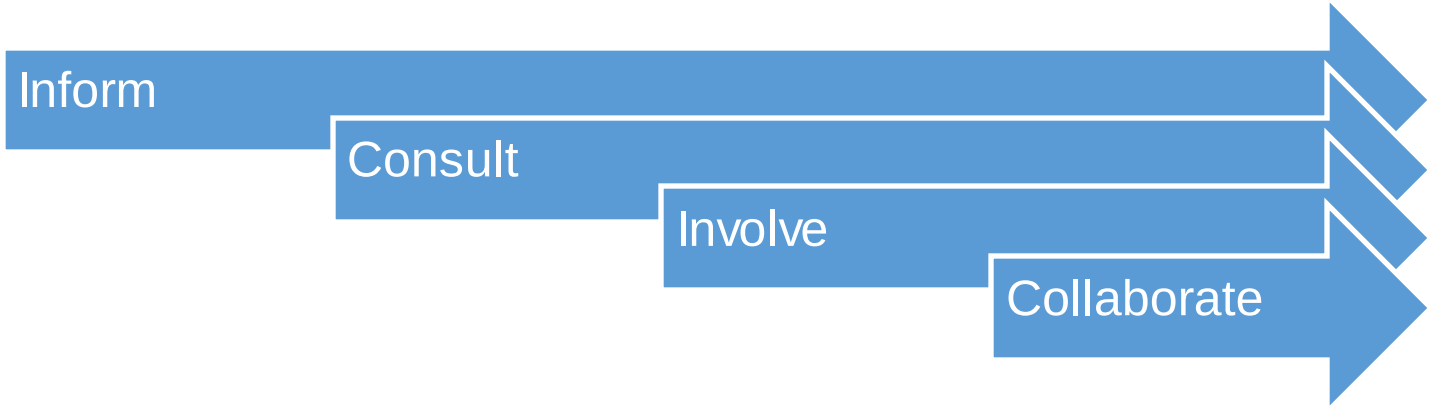
Resilience Coordination Working Group

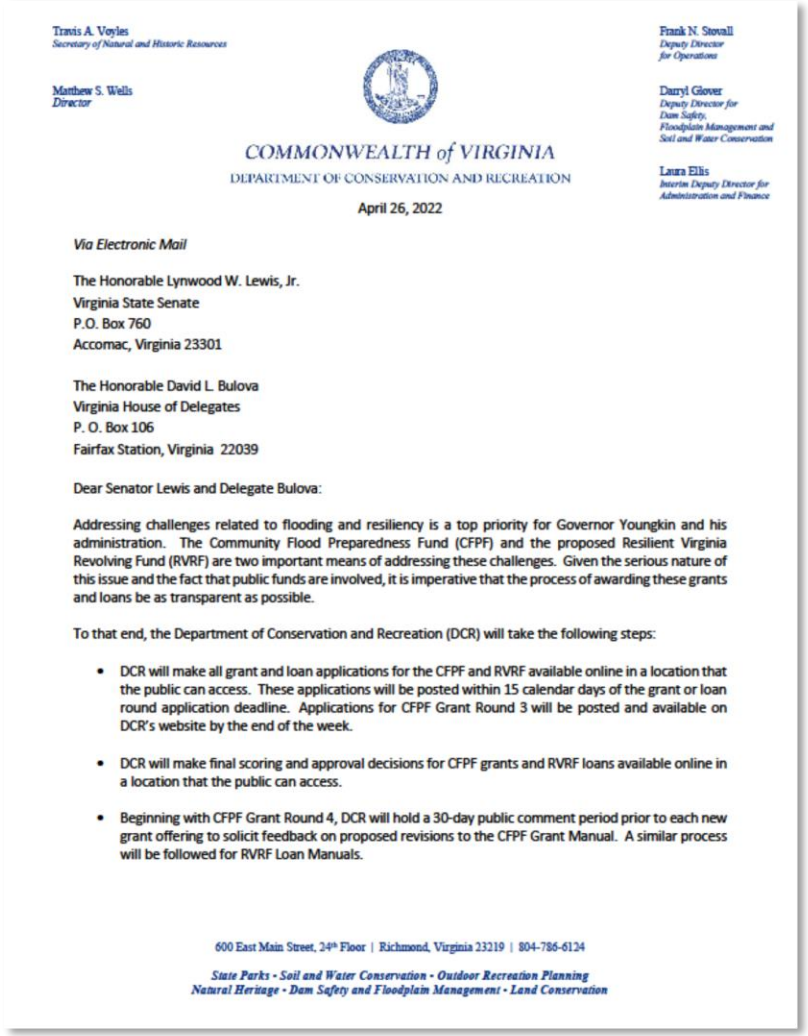
- The group adopted 23 recommendations with no opposition. Key recommendations are:
  - Shifting the Chief Resilience Officer (CRO) to report to the Governor in a non-cabinet role and establishing an office to support.
  - Adopting a “hub and spoke” model for resilience (as defined in § 10.1-603.28), where the CRO serves as the hub, facilitating coordination and communication between agencies (the “spokes”), who would retain their existing resilience-related responsibilities.
  - Establishing an interagency working group, headed by the CRO, to support this coordination.
  - Tasking the CRO with maximizing the availability and use of federal, state, and private funding for resilience efforts (including serving as the non-federal sponsor for USACE projects in some circumstances).
  - Supporting localities by tasking the CRO with providing knowledge-based support to local governments seeking to address resilience challenges within their communities.
  - Adopting a statutory framework to ensure oversight and transparency for the CFPF and RVRF.

§ 10.1-603.28: "Resilience" means the capability to anticipate, prepare for, respond to, and recover from significant multi-hazard threats with minimum damage to social well-being, health, the economy, and the environment.

Principle 4: These programs and plans must be developed and implemented with transparency and input from the public

- Community Outreach and Engagement Plan
- Public Comment Periods for Coastal & Statewide Plans
- Transparency Measures for Community Flood Preparedness and Resilient Virginia Revolving Funds





Travis A. Voyles
Secretary of Natural and Historic Resources

Matthew S. Wells
Director

Frank N. Stovall
Deputy Director for Operations

Darryl Glover
Deputy Director for Dam Safety, Floodplain Management and Soil and Water Conservation

Laura Ellis
Interim Deputy Director for Administration and Finance

COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

April 26, 2022

Via Electronic Mail

The Honorable Lynwood W. Lewis, Jr.
Virginia State Senate
P.O. Box 760
Accomac, Virginia 23301

The Honorable David L. Bulova
Virginia House of Delegates
P. O. Box 106
Fairfax Station, Virginia 22039

Dear Senator Lewis and Delegate Bulova:

Addressing challenges related to flooding and resiliency is a top priority for Governor Youngkin and his administration. The Community Flood Preparedness Fund (CFPF) and the proposed Resilient Virginia Revolving Fund (RVRF) are two important means of addressing these challenges. Given the serious nature of this issue and the fact that public funds are involved, it is imperative that the process of awarding these grants and loans be as transparent as possible.

To that end, the Department of Conservation and Recreation (DCR) will take the following steps:

- DCR will make all grant and loan applications for the CFPF and RVRF available online in a location that the public can access. These applications will be posted within 15 calendar days of the grant or loan round application deadline. Applications for CFPF Grant Round 3 will be posted and available on DCR's website by the end of the week.
- DCR will make final scoring and approval decisions for CFPF grants and RVRF loans available online in a location that the public can access.
- Beginning with CFPF Grant Round 4, DCR will hold a 30-day public comment period prior to each new grant offering to solicit feedback on proposed revisions to the CFPF Grant Manual. A similar process will be followed for RVRF Loan Manuals.

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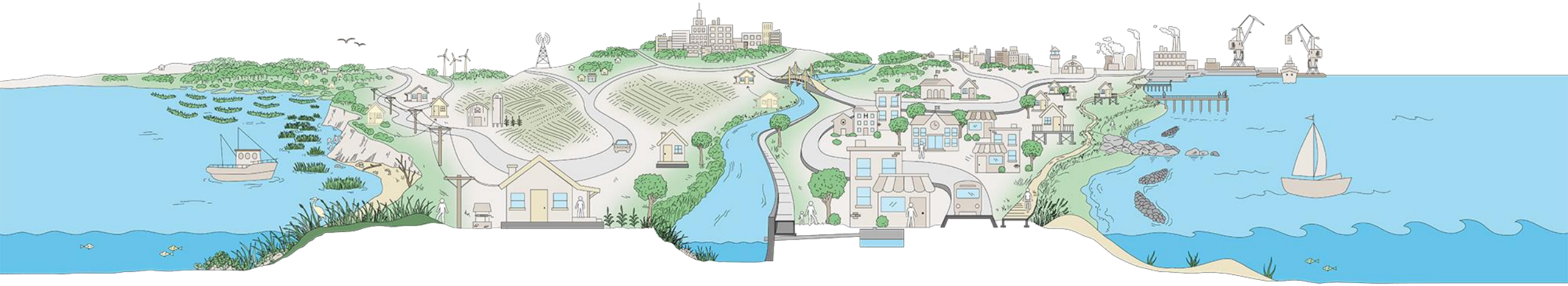
State Parks • Soil and Water Conservation • Outdoor Recreation Planning
Natural Heritage • Dam Safety and Floodplain Management • Land Conservation

Strategic Principles for a Resilient Virginia

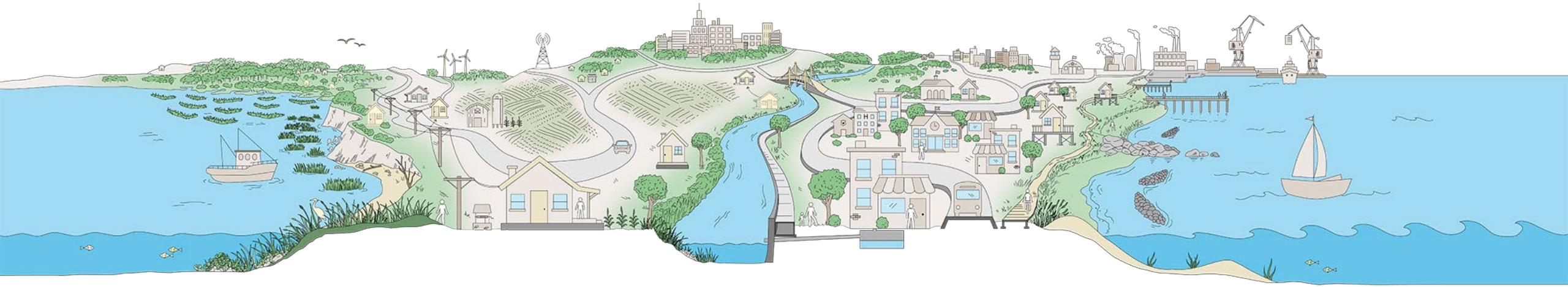


Virginia's Flood Resilience Plans

Matt Dalon, DCR Office of Resilience Planning Program Manager

DCR
Virginia Department of Conservation & Recreation

Achieving a Flood Resilient Commonwealth

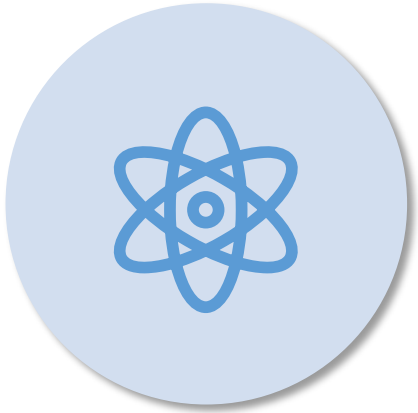


Our charge: to minimize loss of life, property damage, and negative impacts on the environment resulting from flooding.

Flood Resilience: the capability to anticipate, prepare for, respond to, and recover from flood hazards with minimal damage to social well-being, health, the economy, and the environment.

DCR
Virginia Department of Conservation & Recreation

Our Principles for Flood Resilience [CRMP Framework/Code of Virginia]



Science-Based

Base decision making on the best-available science

Equitable

Identify and address socioeconomic inequities and strive to enhance equity

Natural

Protect and enhance natural infrastructure and utilizing nature-based approaches

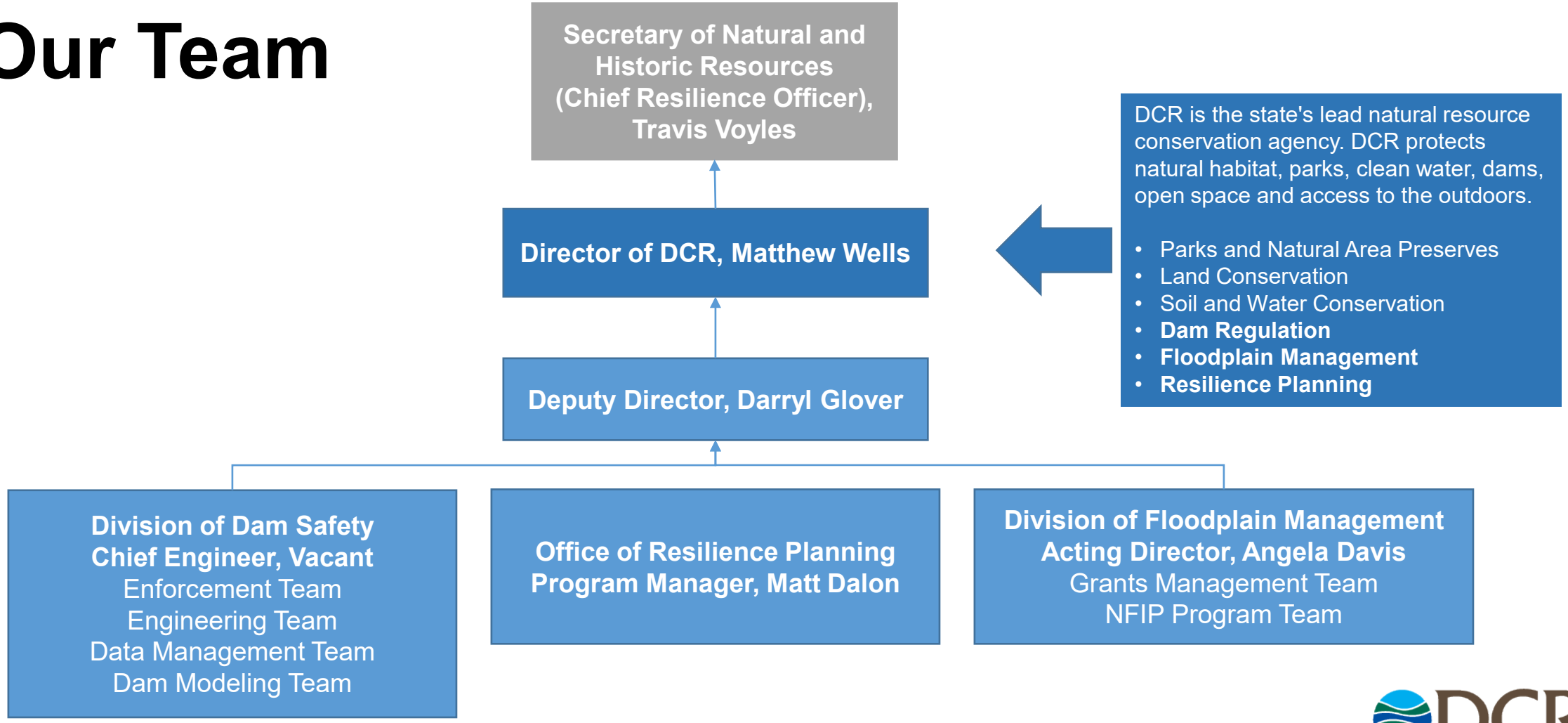
Tailored

Seek region-specific approaches tailored to the needs of individual communities

Cost-Effective

Understand fiscal realities; focus on cost-effective solutions

Our Team



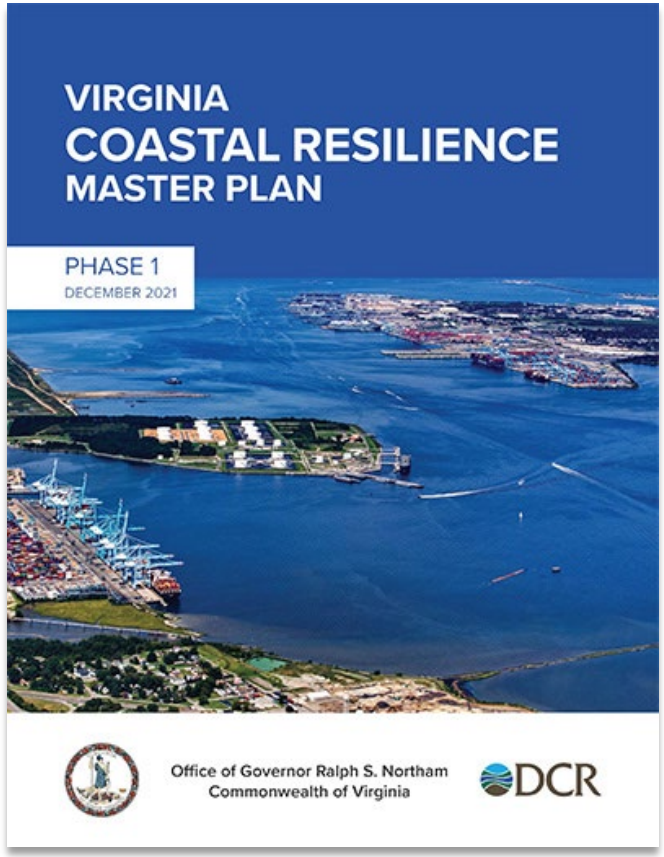
DCR is the state's lead natural resource conservation agency. DCR protects natural habitat, parks, clean water, dams, open space and access to the outdoors.

- Parks and Natural Area Preserves
- Land Conservation
- Soil and Water Conservation
- **Dam Regulation**
- **Floodplain Management**
- **Resilience Planning**

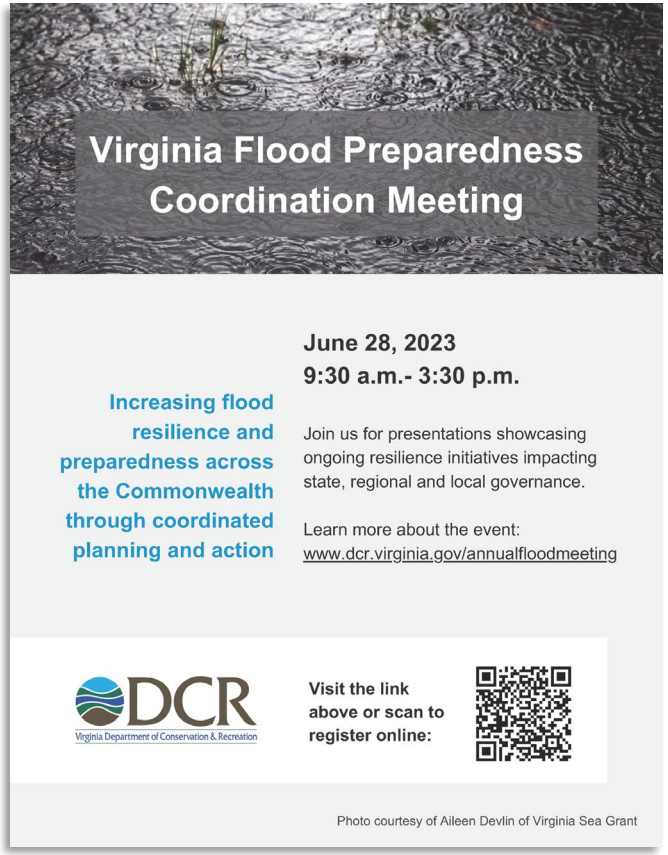
DCR
Virginia Department of Conservation & Recreation

CRO and DCR's Resilience Planning Role

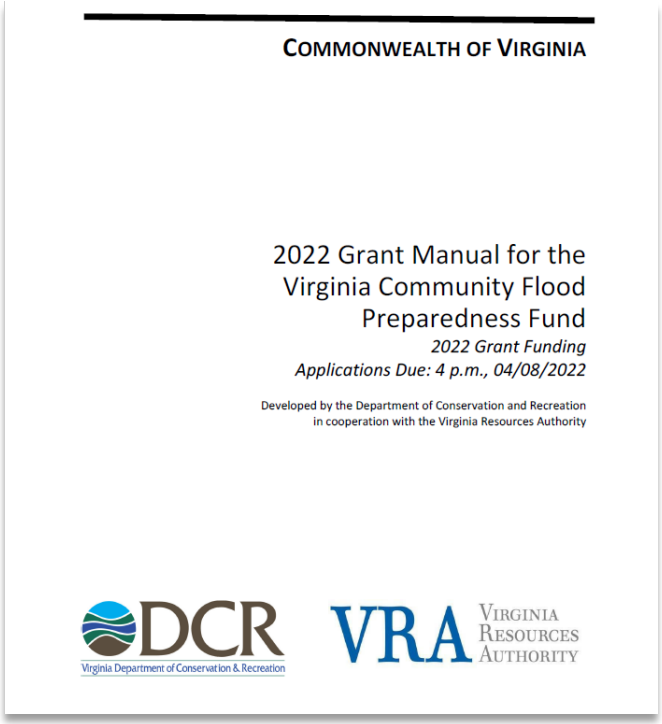
Plan Development



Plan Coordination



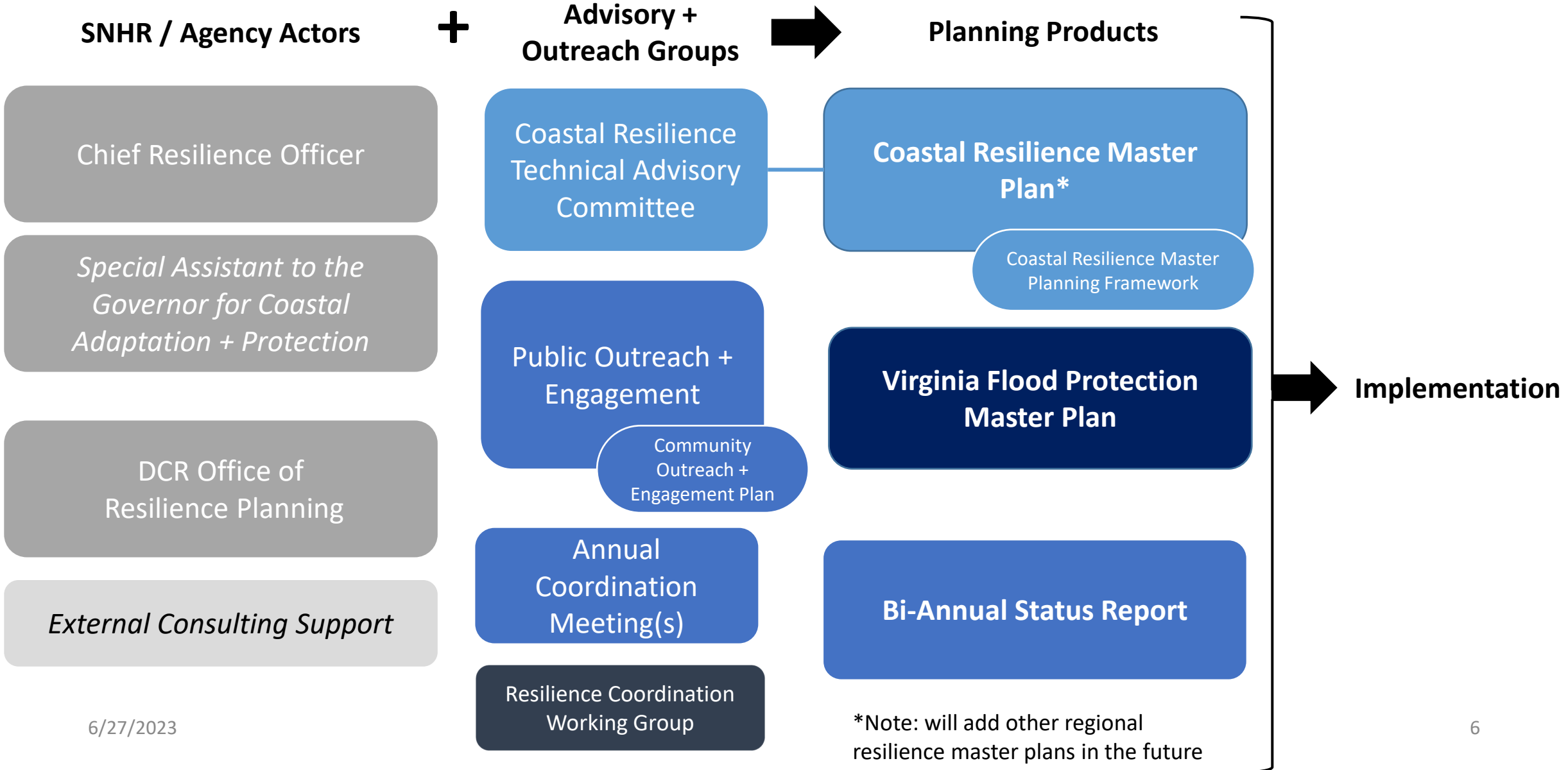
Plan Implementation Support



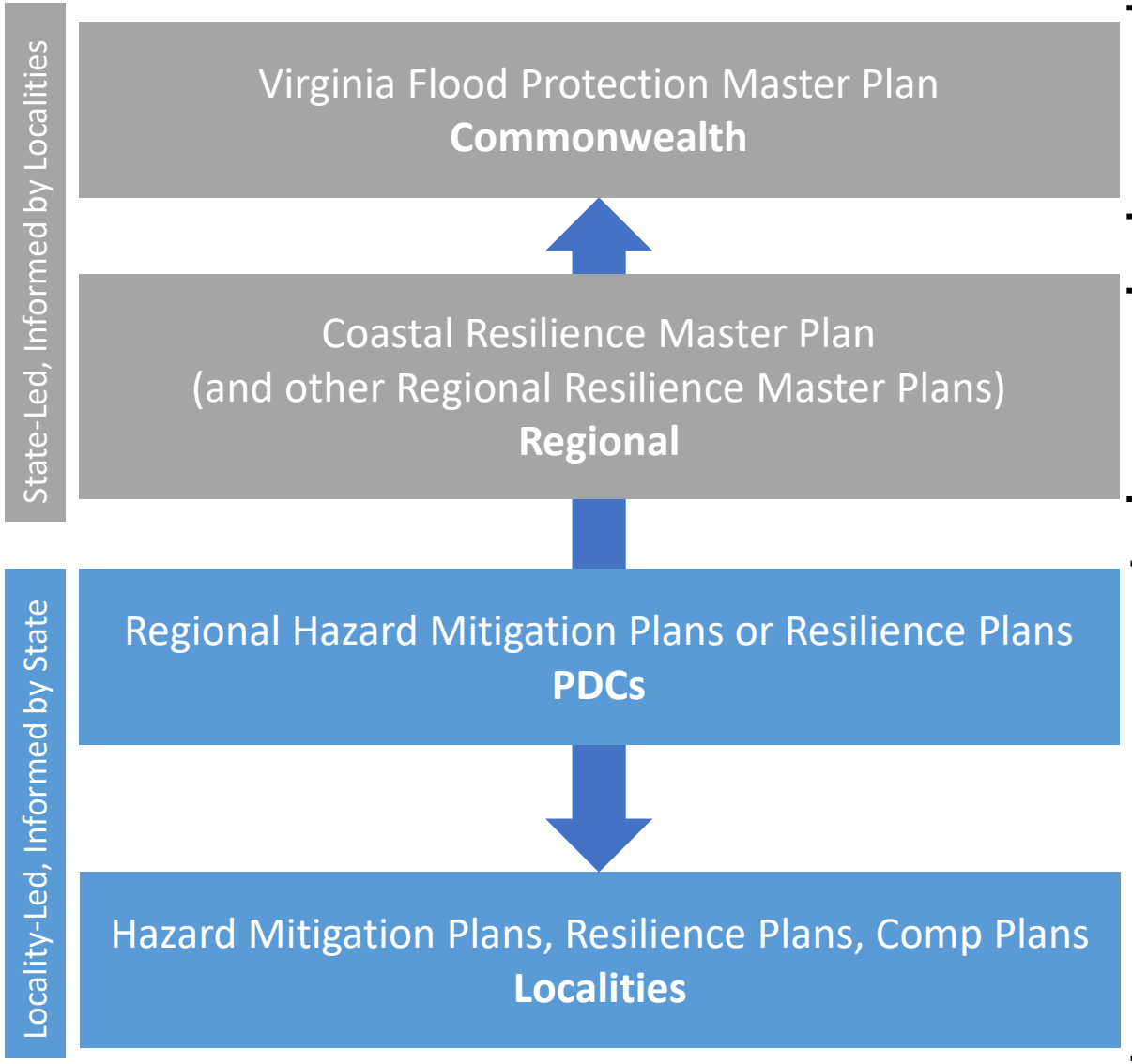
For more information, see Code of Virginia:

§ 10.1-602. Powers and Duties of the Department
§ 10.1-658. State interest in resilience and flood control
§ 10.1-659. Flood protection programs; coordination
§ 2.2-220.5. Chief Resilience Officer

CRO and DCR's Resilience Planning Activities



Looking Ahead: Multi-Level Plan Integration



DCR leads and administers the planning process with state agencies and other stakeholders to focus on statewide risk and state policy action informed by regional master plans.

DCR leads and administers a planning process with groups of PDCs to translate contents of PDC and/or local plans into prioritized regional actions and needs for state support.

PDCs and/or localities - cognizant of local conditions, capacities, and priorities - develop detailed flood resilience master plans with support from CFPF and/or incorporate flood resilience in hazard mitigation plans with support from VDEM/FEMA or other local plans (i.e. Comprehensive Plan).

Engaging Stakeholders in Planning

Community Outreach and Engagement Plan

Draft Engagement Guiding Principles

- Whole Community
- Transparency
- Opportunity
- Tailored Approaches

Draft Engagement Goals

1. Collaborate with existing flood resilience planning outreach and engagement efforts.
2. Seek out the participation of affected and vulnerable communities.
3. Provide access to information and opportunity for participation.
4. Incorporate the views and perspectives of affected communities into decision-making.

Inter-Agency Coordination

State agencies can help us to…

- Develop and implement a cohesive vision and strategy to build flood resilience
- Establish metrics to monitor and evaluate progress
- Identify critical infrastructure at risk of flooding, and projects, policies, or programs to mitigate risk
- Identify program and capacity needs to build resilience through state agencies
- Participate in annual coordination meetings and other coordination activities to share knowledge and align flood resilience plans, funding, and activities

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Virginia Department of Conservation & Recreation

Inter-Governmental Coordination

Local and regional governments can help us to…

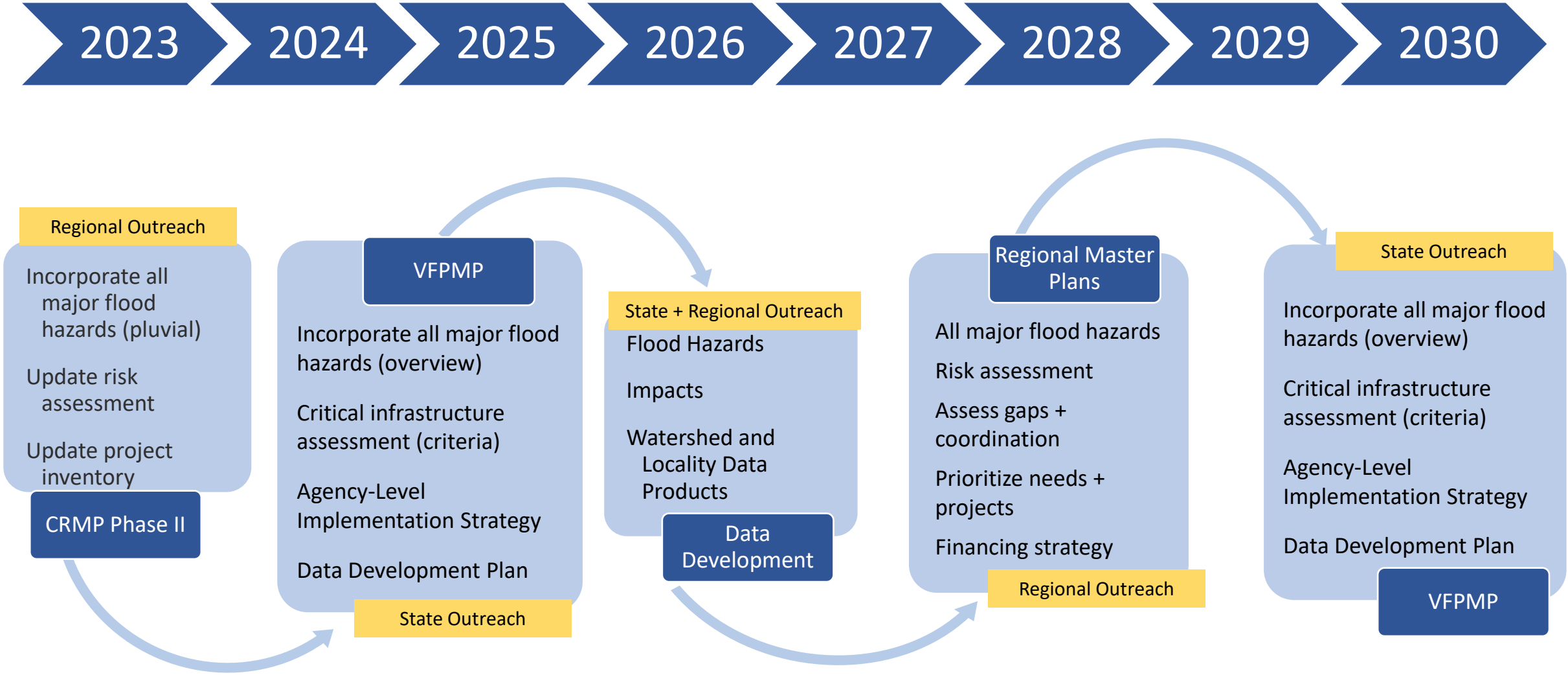
- Develop and implement Regional Resilience Master Plans
- Understand the different challenges and opportunities within regions
- Prioritize place-based resilience actions
- Participate in stakeholder meetings and other coordination activities to share knowledge and align flood resilience plans, funding, and activities

DCR
Virginia Department of Conservation & Recreation

Coastal Resilience Master Plan

Overview and Updates

DCR
Virginia Department of Conservation & Recreation



An adaptative management approach will provide improved flexibility.

Each Plan has a….

- Objective
- Process
- Audience
- Stakeholders
- Decision-Maker(s)
- End-Users

Five-Year Cycle of Flood Resilience Planning

CRMP Phase II - Overview

The Phase II plan will be delivered by December 2024.

This planning process will result in two major deliverables:

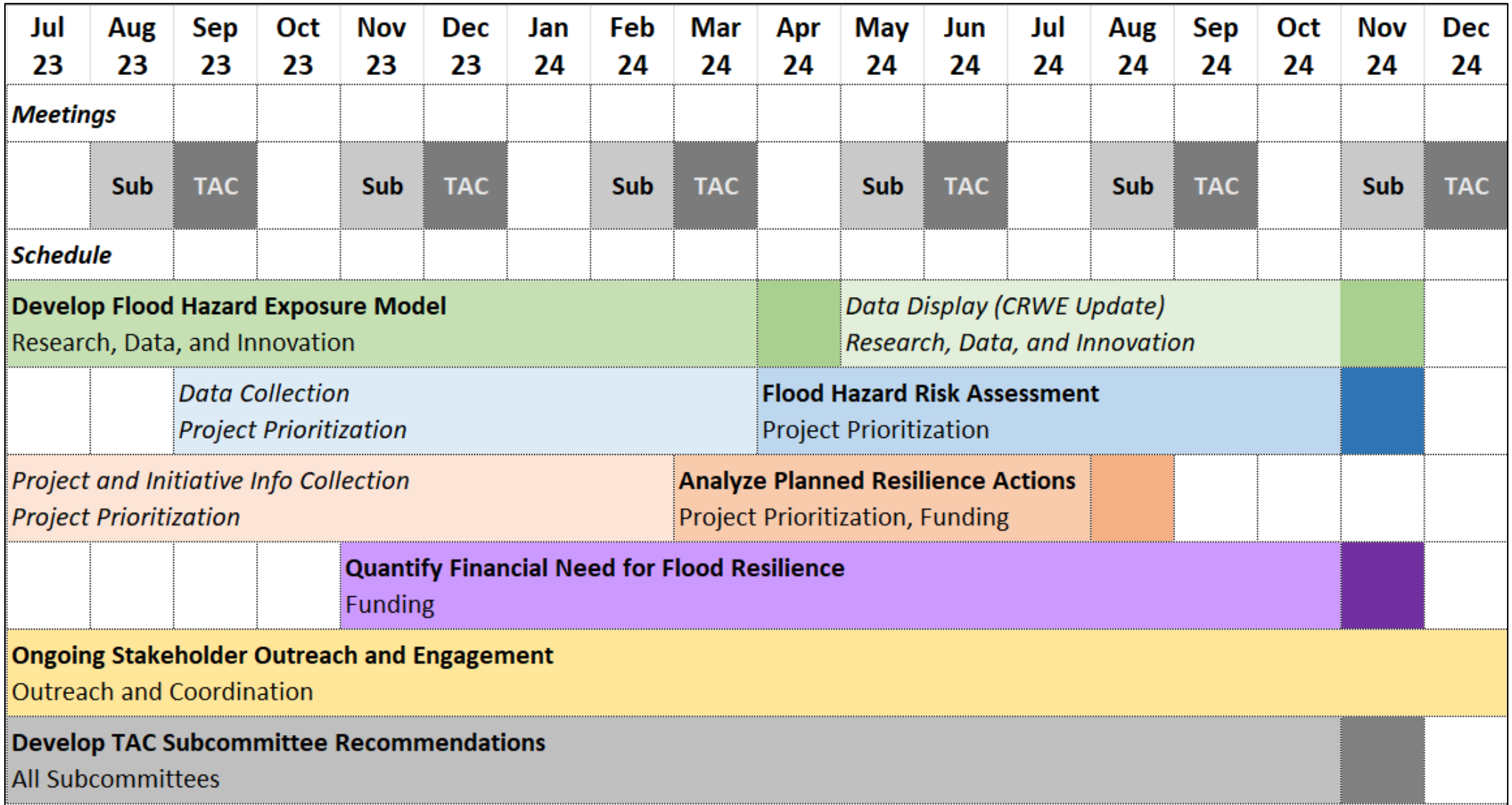
1) an updated Coastal Resilience Web Explorer
2) a PDF Document Plan

The key components of these two deliverables are:

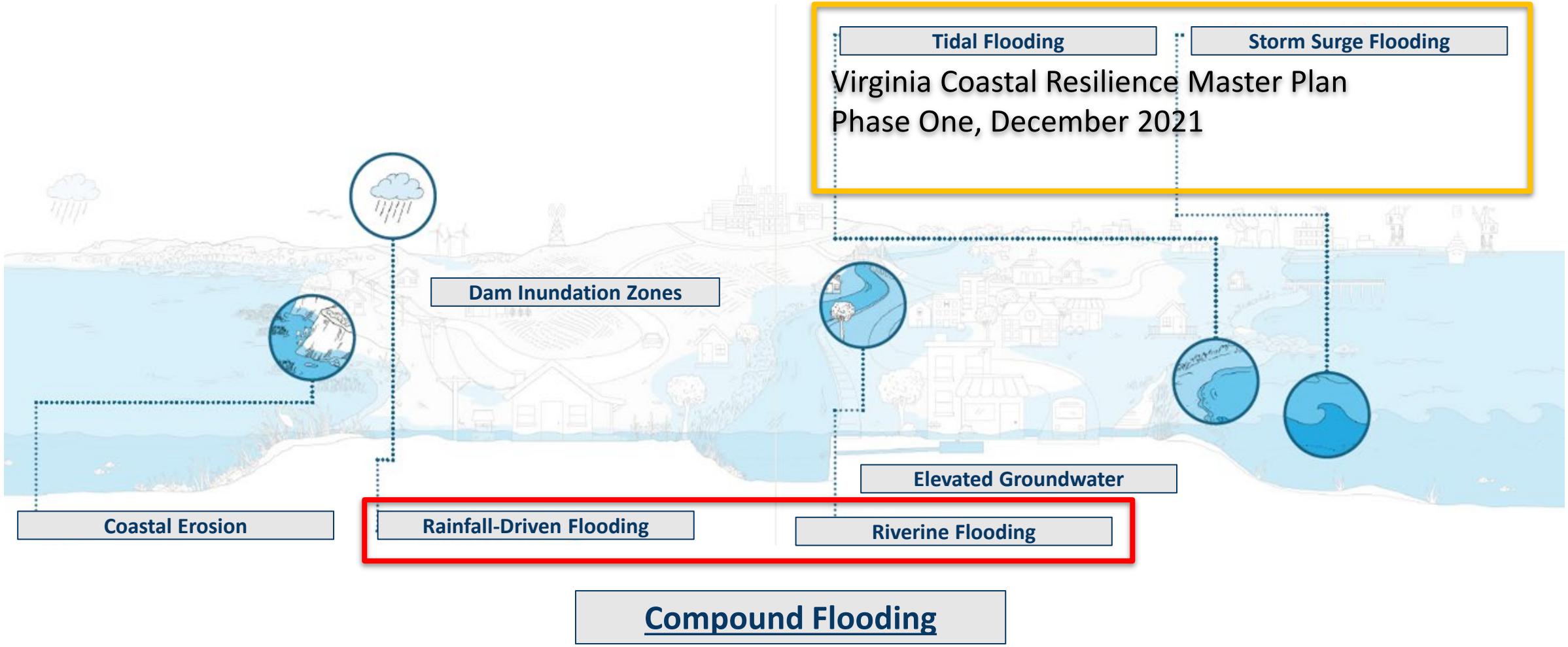
1) Flood Hazard Exposure Model
2) Flood Hazard Risk Assessment
3) Planned Resilience Actions
4) Financial Need for Flood Resilience
5) TAC Subcommittee Recommendations

Outreach and engagement will be utilized throughout the plan's development to collect feedback on the content and direction of these key components.

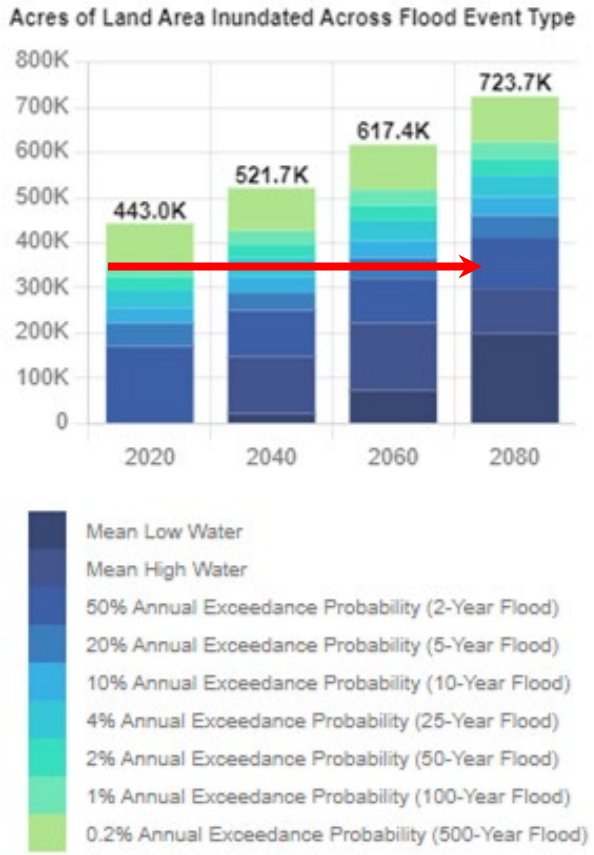
CRMP Phase II - Plan Development Timeline

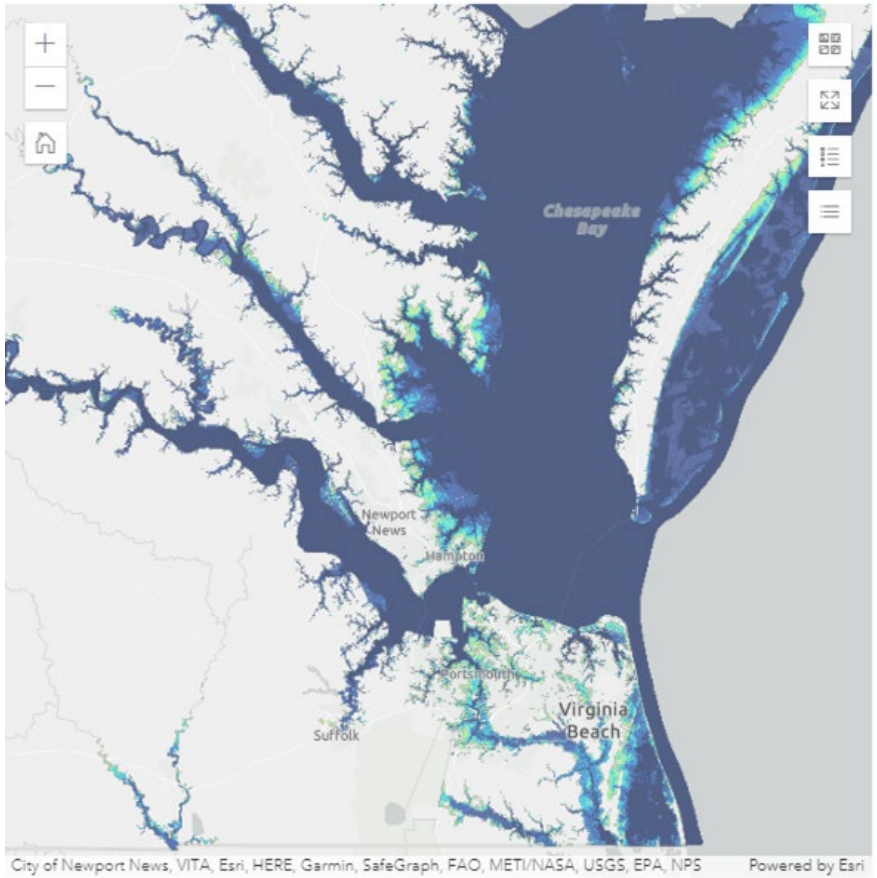


Model the Flood Hazard

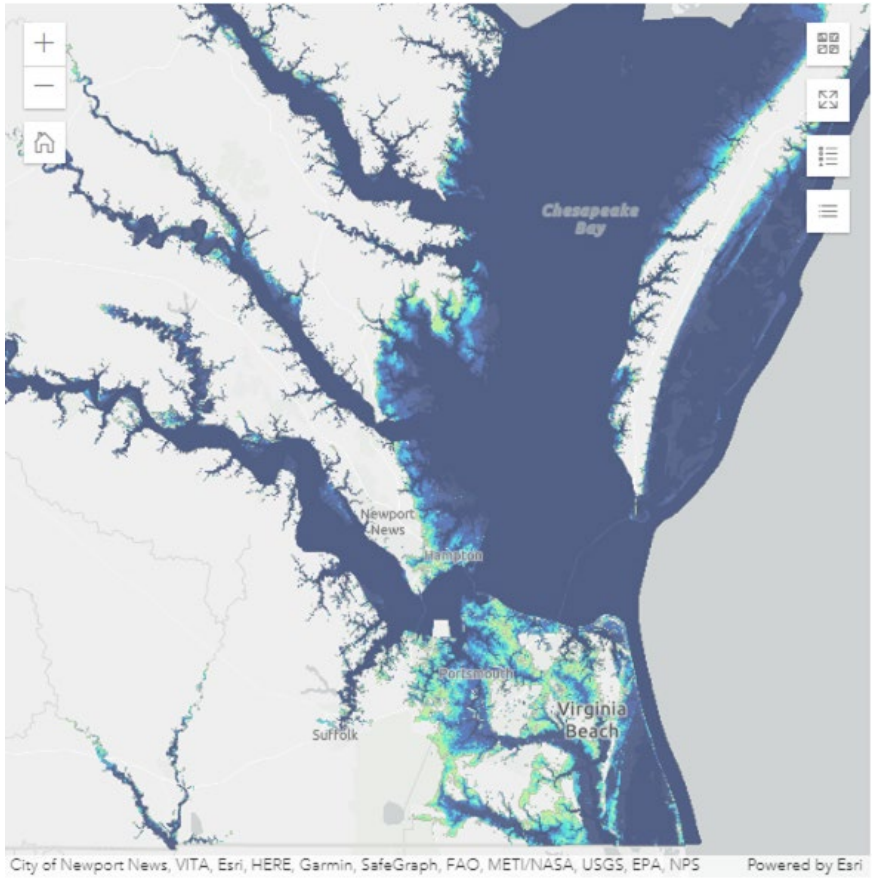


CRMP Phase I - Coastal Flood Hazard Outputs





2020



2080

CRMP Phase I - Coastal Flood Hazard Outputs

- Floodplain Extent (plyg)
- Water Surface Elevation w/ & w/o Waves (10-ft raster)
- Water Depth w/ & w/o Waves (10-ft raster)

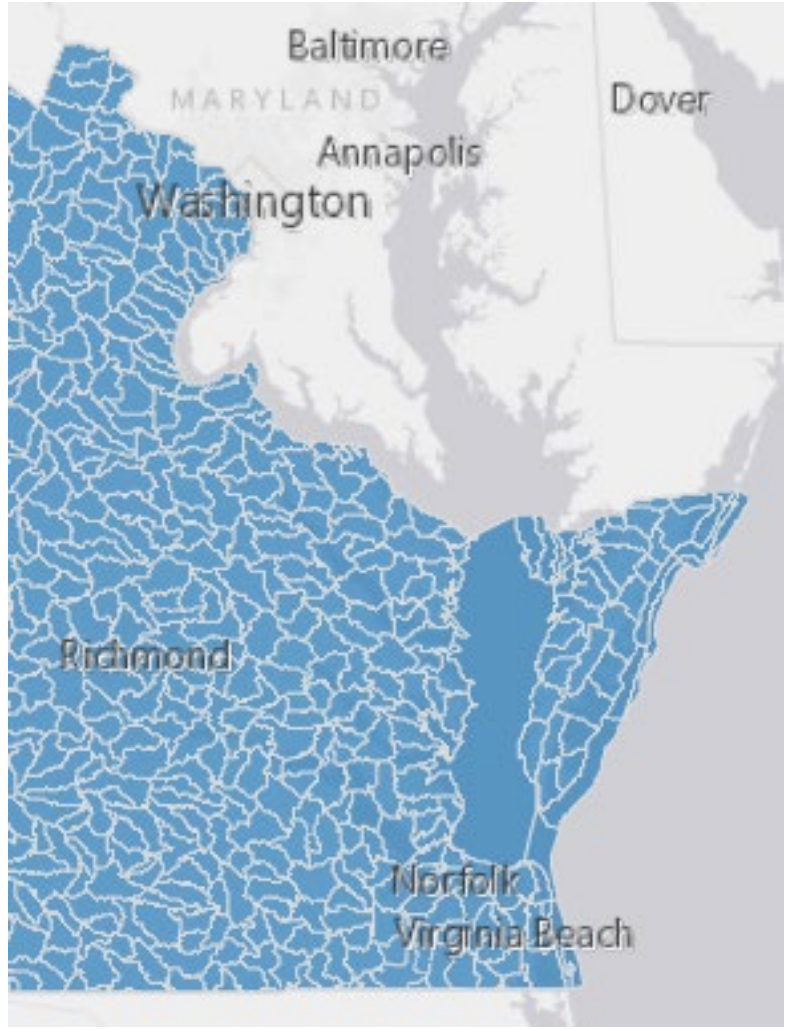
- Relative Sea Level Rise at:
  - 2020
  - 2040
  - 2060
  - 2080
  - 2100

[NOAA 2017 Int-High Input]

- Water Level:
  - MLW
  - MHW
  - 1.5 x Mean Tide Range
  - 2-yr RI (50% AEP)
  - 5-yr RI (20% AEP)
  - 10-yr RI (10% AEP)
  - 25-yr RI (4% AEP)
  - 50-yr RI (2% AEP)
  - 100-yr RI (1% AEP)
  - 500-yr RI (0.2% AEP)

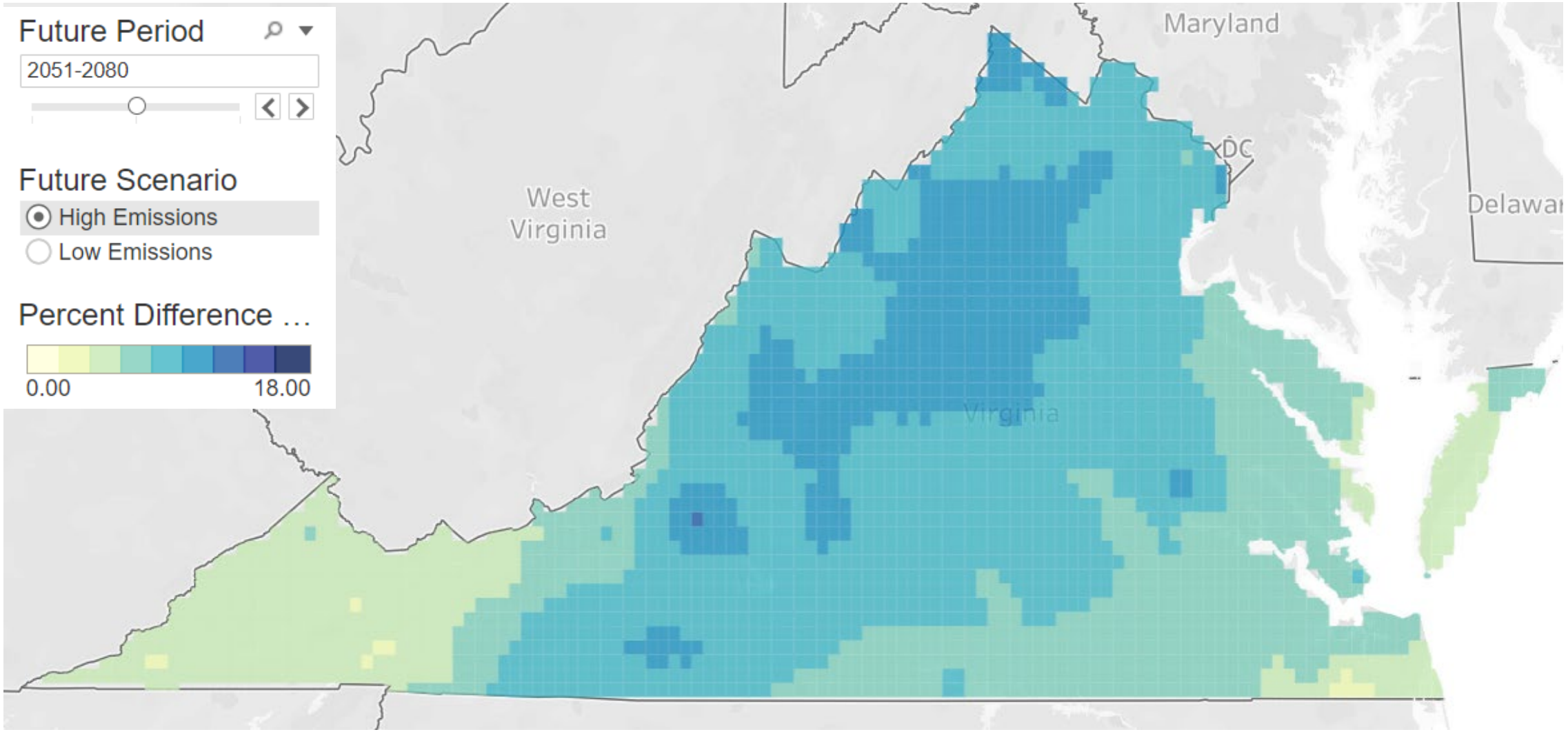
Pluvial Flood Modeling Overview

- 8 Coastal PDCs. 57 Localities.
- ~400 HUC-12 basins, 5 to 10 sub-basins per HUC-12.
- Duration
  - 2-hr, 6-hr, 24-hr durations;
- Return Interval
  - 2-, 5-, 10-, 25-, 50-, 100-, 500-year events; and
- Existing and Future Conditions



Percent Difference from “Normal” Total Annual Precipitation

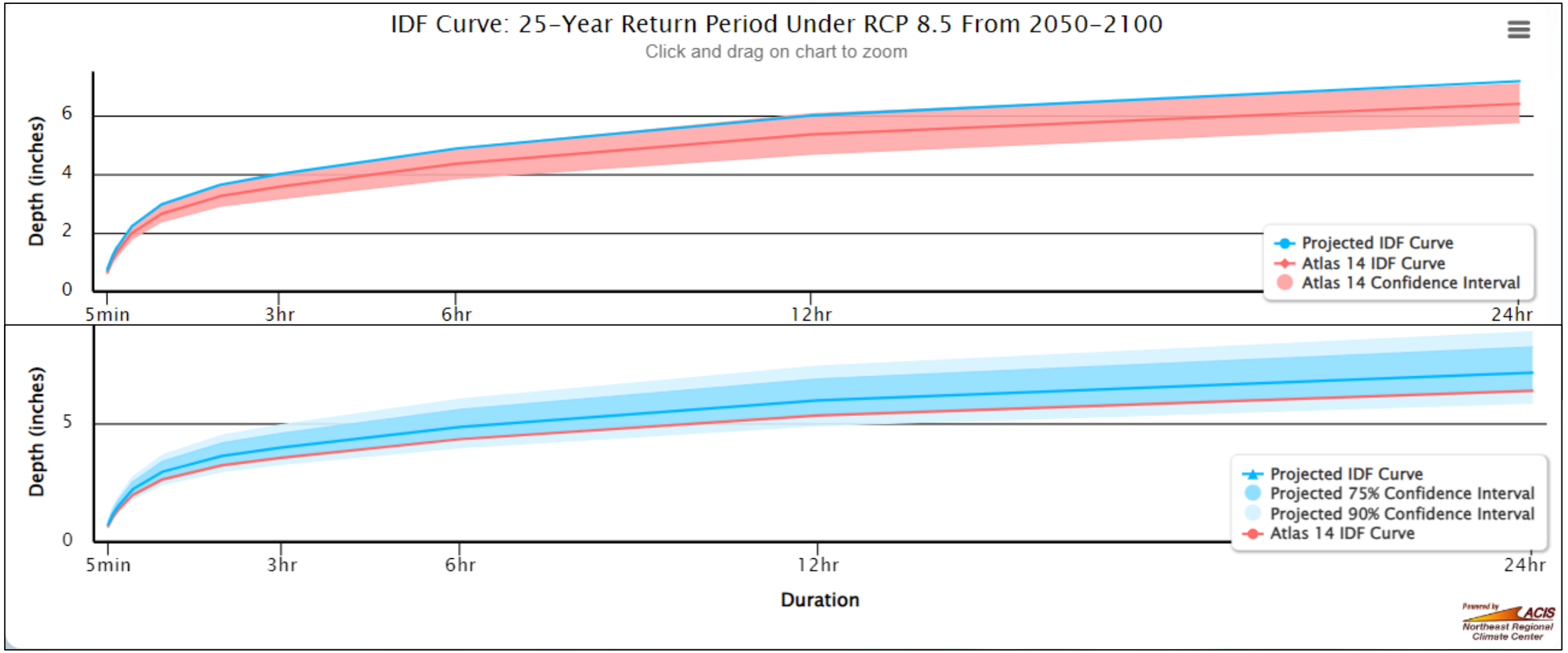
Based on 1981-2010 "Normal" Total Annual Precipitation



Citation: Romita Grocholski, Krista, Michelle Miro, Lena Easton-Calabria, Jessica Spaccio, Samantha Borisoff, and Arthur DeGaetano Mid-Atlantic Regional Climate Impacts Summary and Outlook: Winter 2021-2022. Santa Monica, CA: RAND Corporation, 2022.

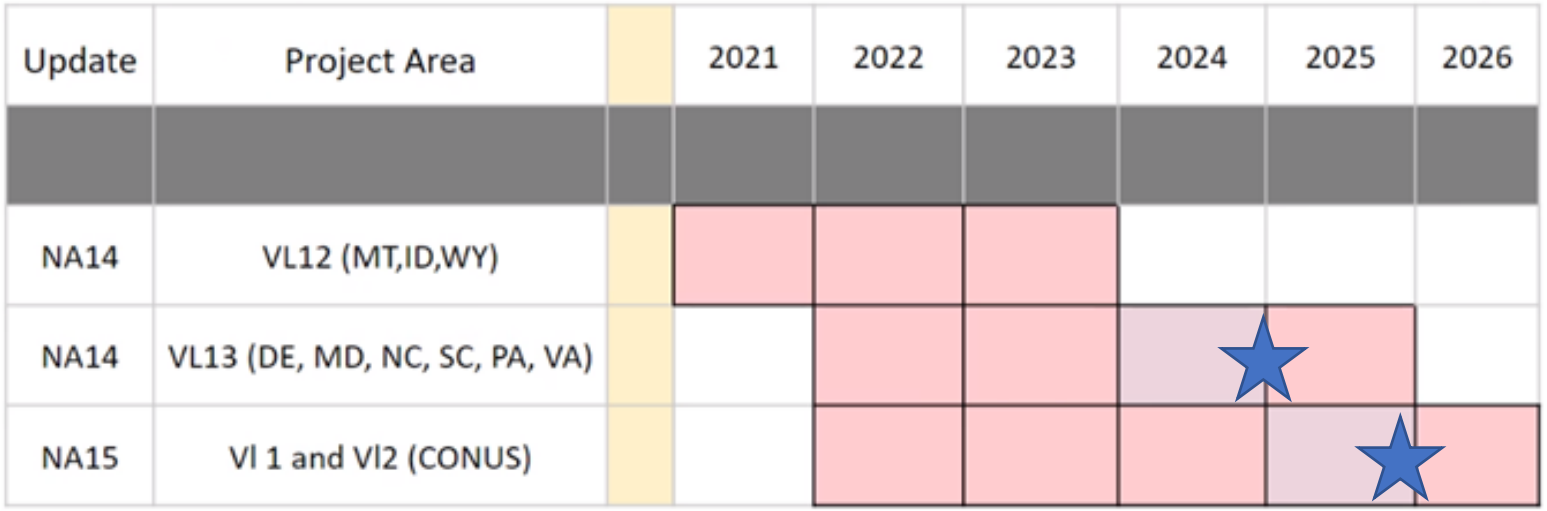
Pluvial Uncertainty

(MARISA Predictive IDF)



NOAA Atlas 14/15 Updates

Timeline



Planned release of the preliminary estimates, part of the peer review process

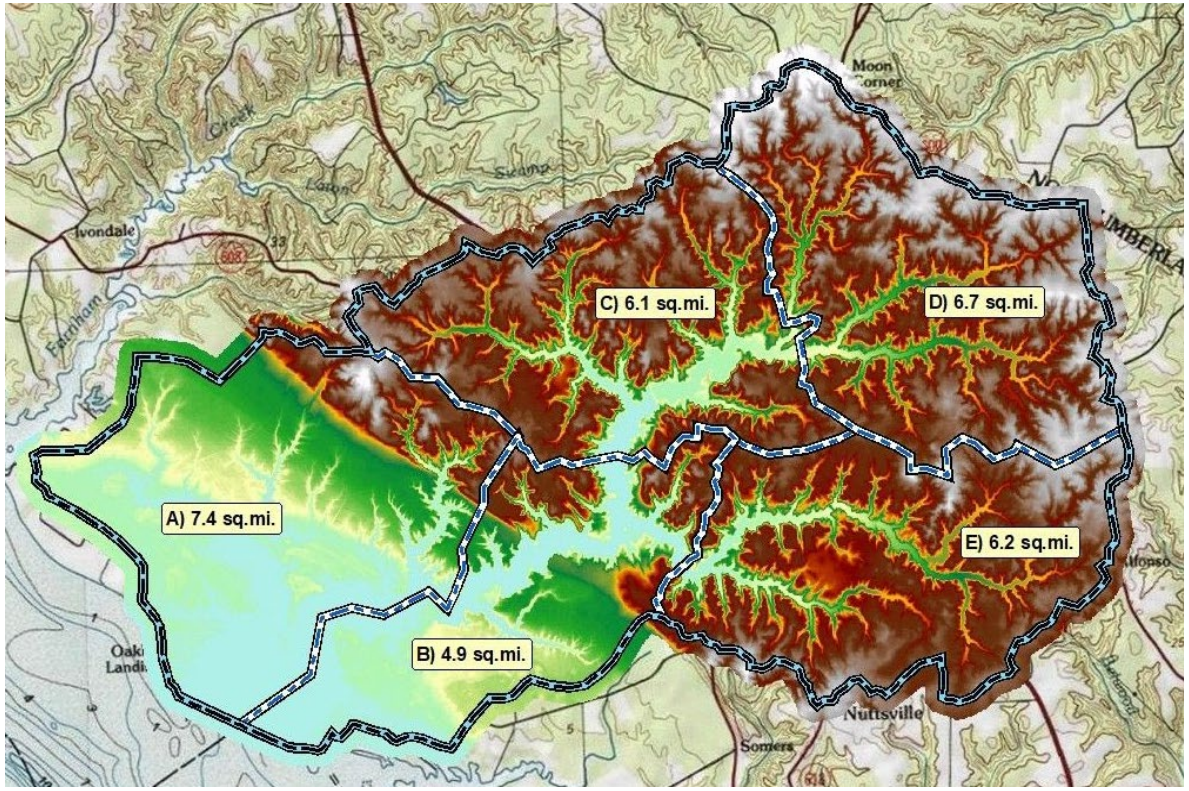
- **Atlas 15** Volume 1 will **supersede Atlas 14** Volumes

Pluvial Model, Draft Precipitation Inputs

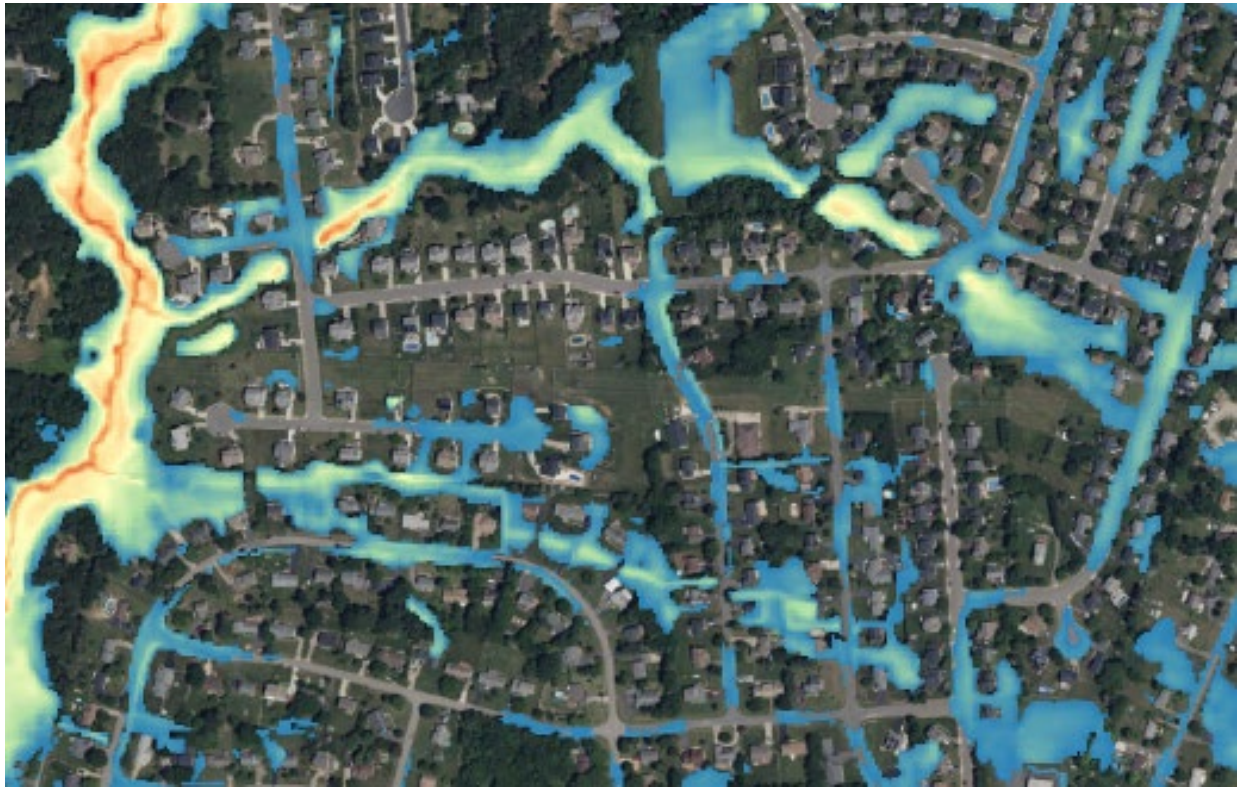
- Intensity Intervals related to Climate Scenarios
  - 2-hr Duration
    - 1 ~ 10 in @ 0.5-in interval (19 runs*)
    - Median Value Range = 1.45 – 7.63 in
  - 6-hr Duration
    - 1 ~ 15 in @ 1-in interval (15 runs*)
    - Median Value Range = 1.94 – 10.71 in
  - 24-hr Duration
    - 2 ~ 22 in @ 1-in interval (20 runs*)
    - Median Value Range = 2.75 – 16 in
- Frequency
  - 2-, 5-, 10-, 25-, 50-, 100-, 500-year

**Models with a tidal boundary conditions will have additional model runs to account for SLR changes in the tidal boundary (MHW).*

Pilot Study Outputs

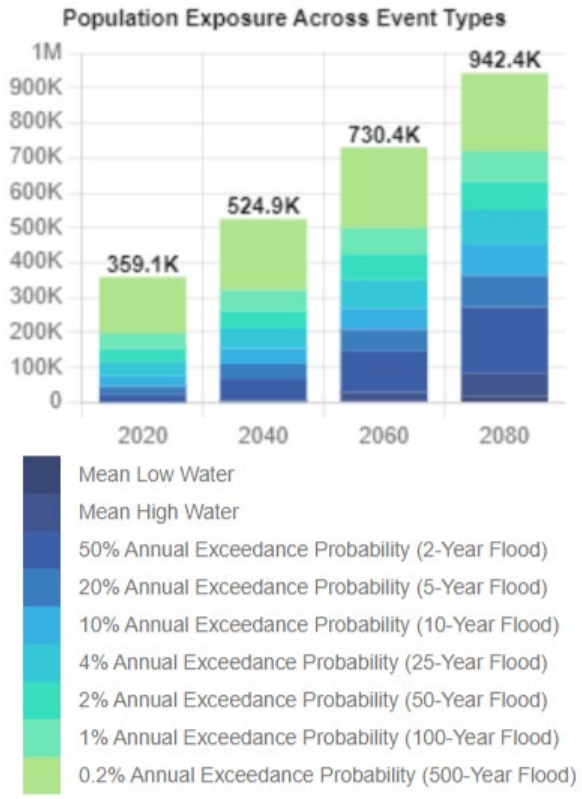


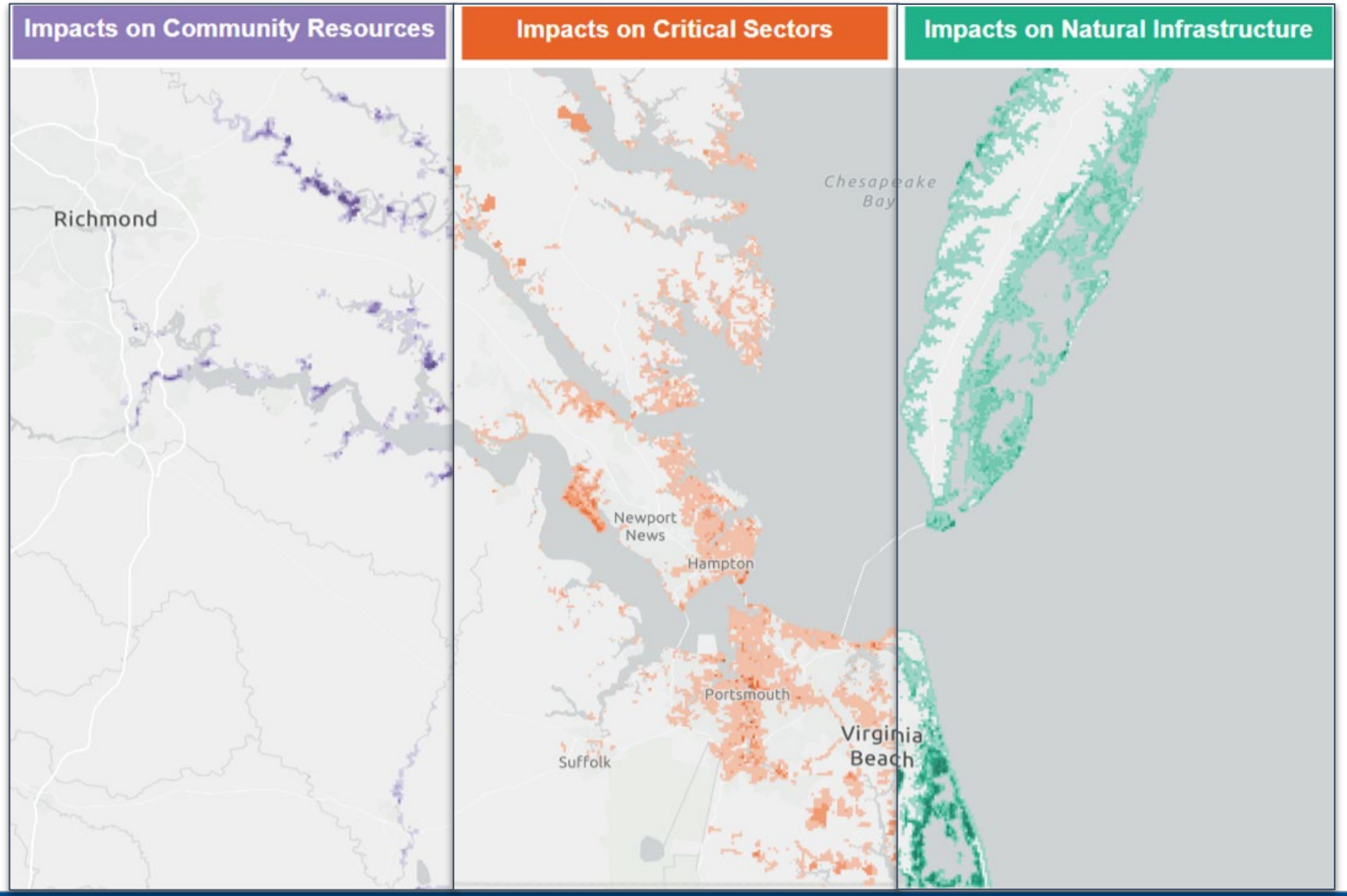
Example HUC12 split into subbasins



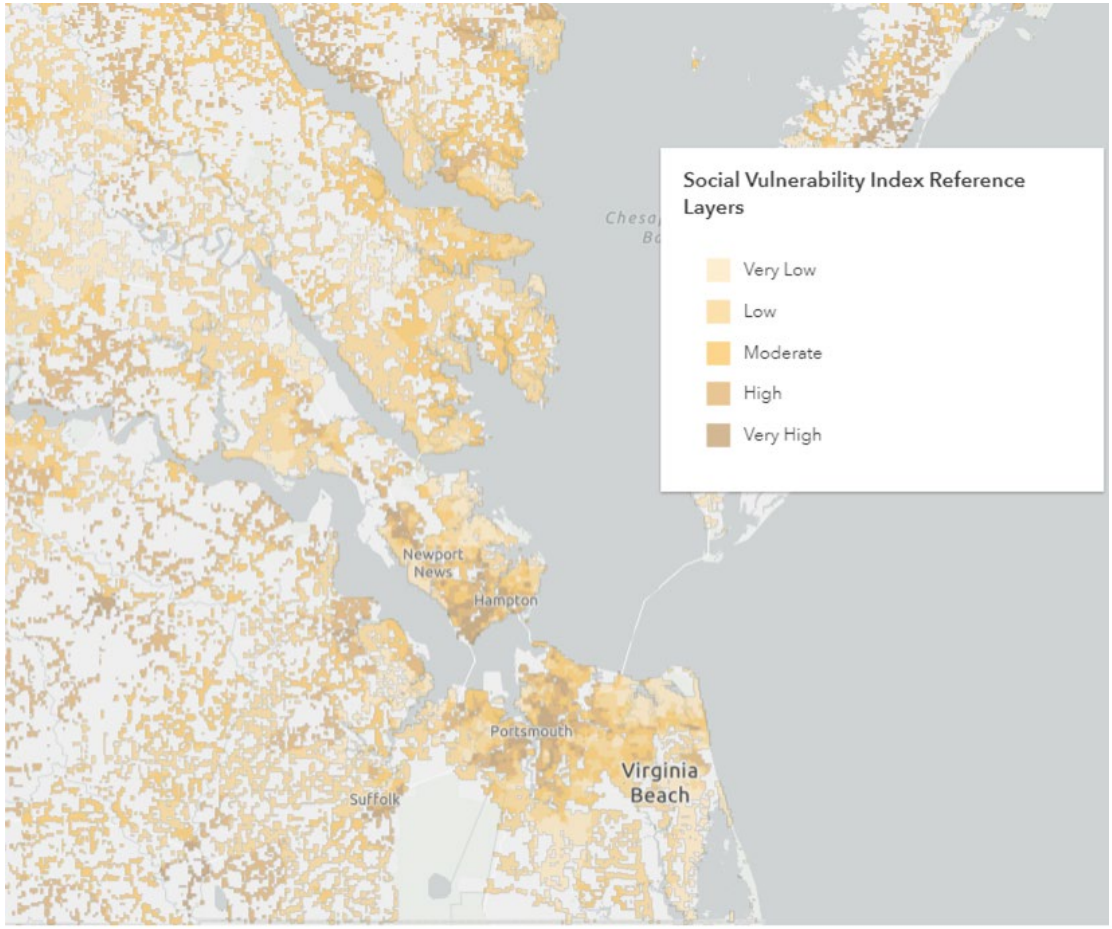
Example Flood Inundation Raster demonstrating a 24-hour, 500-year storm under 2050-2100, RCP 8.5 conditions.

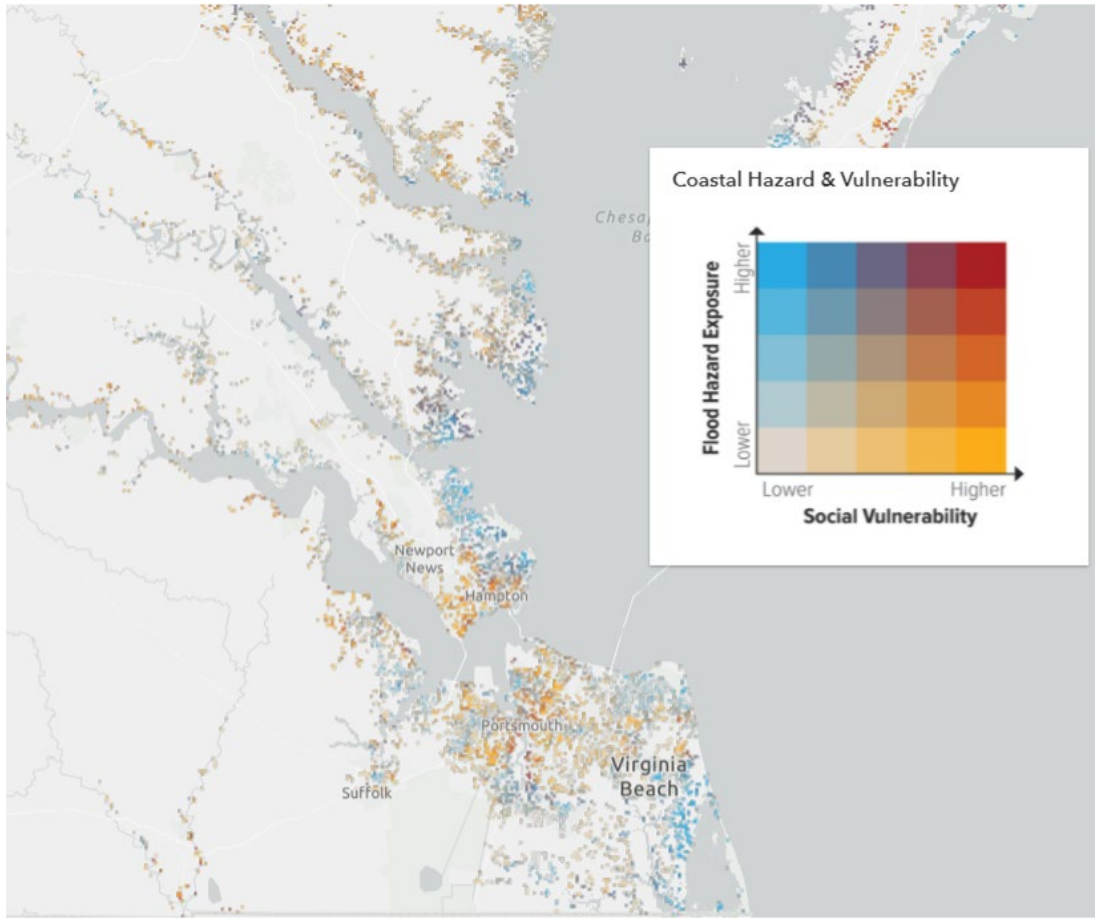
Flood Hazard Impacts





Community Context





Building Coastal Resilience

Select Area of Interest:

Commonwealth | Virginia

Filters:

Category: All

Hazard Addressed: All

Project Class: All

Reset All Filters & Map

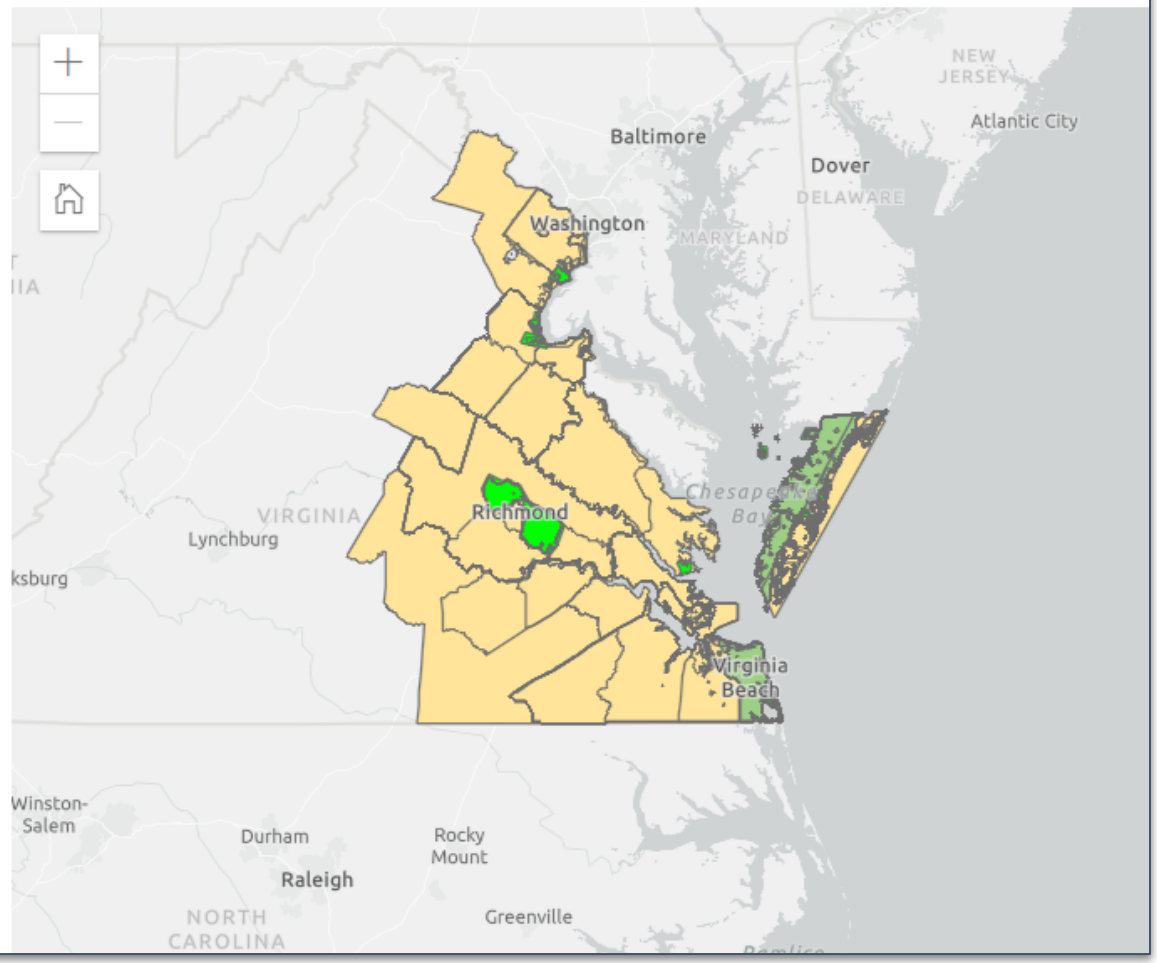
Additional Map Layers: Clear Map Layers

- Coastal Floodplains +
- Community Resource Impact Areas +
- Critical Sector Impact Areas +
- Natural Infrastructure Impact Areas +
- Coastal Hazard and Social Vulnerability +

Search: Clear

Projects and Initiatives (Features: 517, Selected: 0)

Name
18th Street Drainage Improvements
1. Crow's Nest Peninsula and Estuary Conservation
2019 FMA
5th Street Improvements
Aberdeen Gardens Drainage Improvements
Aberdeen Road Disconnect Wet Pond
Aberdeen School Neighborhood Park ED Wetland Retrofit
Amherst Road Wetlands
Annual Coastal Bays seagrass restoration
Appomattox River Trail (blueway and greenway)
Aquatic Center Parking Lot
Aquisition of LiDAR Data
Aragona Drainage Improvements



Funding Coastal Resilience

VA Funding for Projects (Features: 96, Selected: 0)

Name	Administering Office	Funding Source	Funding Type	Purpose
Addressing the Impacts of Multiple Stressors on Shellfish Aquaculture Through Research/Industry Partnerships	National Oceanic and Atmospheric Administration (NOAA) Oceanic and Atmospheric Research	NOAA	Federal	Supports: establishing, continuing, and/or expanding collaboration between researchers and shellfish growers in order to st address how acidification and at least one other environmental stressor affects the U.S. shellfish aquaculture industry. Projec multiple parameter physical, chemical, or biological observing systems and/or conduct multiple stressor experimental resea priorities of this funding opportunity are to (1) build or strengthen relationships between the shellfish aquaculture industry a aquaculture research community (including university, industry, private sector, tribal, state, and/or federal scientists represen perspectives), (2) develop scientific knowledge on the impact of ocean and coastal acidification in combination with other st shellfish aquaculture, and (3) create data products, tools, technologies, management practices, or other deliverables that are applicable to building resilience within the shellfish aquaculture sector.
Building Resilience Against Climate Effects: Implementing and Evaluating Adaptation Strategies that Protect and Promote Human Health	National Center for Environmental Health	CDC	Federal	Supports: the building and enhancement of the resilience of U.S. cities and states to the health impacts of climate change th overarching strategies. These strategies include 1) collaboration with stakeholders to create a Climate Impact Compendium data on local climate projections, health effects, social determinants of health, and current adaptive capacity; 2) implementa evaluation of adaptation actions that address the threats identified in the Compendium; and 3) use and dissemination of eva to improve adaptation actions and enhance understanding of effective climate resilience adaptations in public health and re
Bureau of Indian Affairs (BIA) Tribal Climate Resilience Program	Department of Interior, Bureau of Indian Affairs (BIA), Trust Services, Tribal Climate Resilience Program	BIA	Federal	Supports: tribal resilience and ocean and coastal management and planning. The Tribal Climate Resilience Program support prepare for climate change impacts on tribal treat and trust resources, economies, infrastructure, and human health and safe of Available Funding: - Adaptation planning - Ocean and Coastal Management Planning - Capacity Building - Relocation, Ma or Protect-in-Place Planning - Internships and Youth Engagement

Coastal Resilience Web Explorer User Portal

DCR
Virginia Department of Conservation & Recreation

Contents

- Background web explorer and user portal
- Getting access to the user portal
- Understanding workflows and submissions statuses
- Creating and editing projects, initiatives and funding opportunities

VIRGINIA COASTAL
RESILIENCE
WEB EXPLORER
Ver 1.0

Background

Coastal Resilience Web Explorer

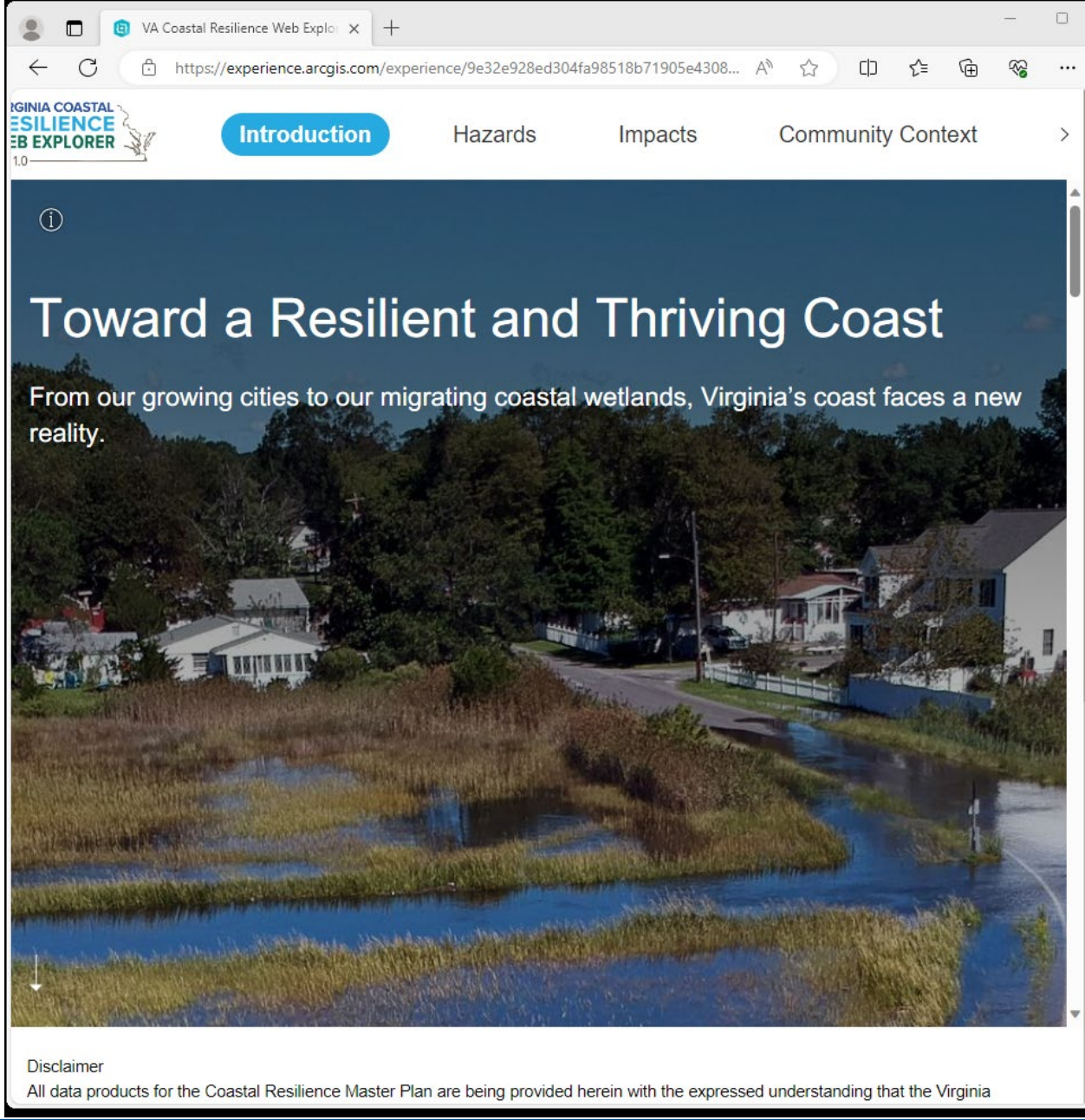
Allows users to interact with products of the Coastal Resilience Master Plan

Includes maps and other visualization tools, data viewers and downloads, and links to external resources

Features:

- Projects and Initiatives
- Funding Opportunities

Visit online: dcr.virginia.gov/crmp/cr-web-explorer



Background

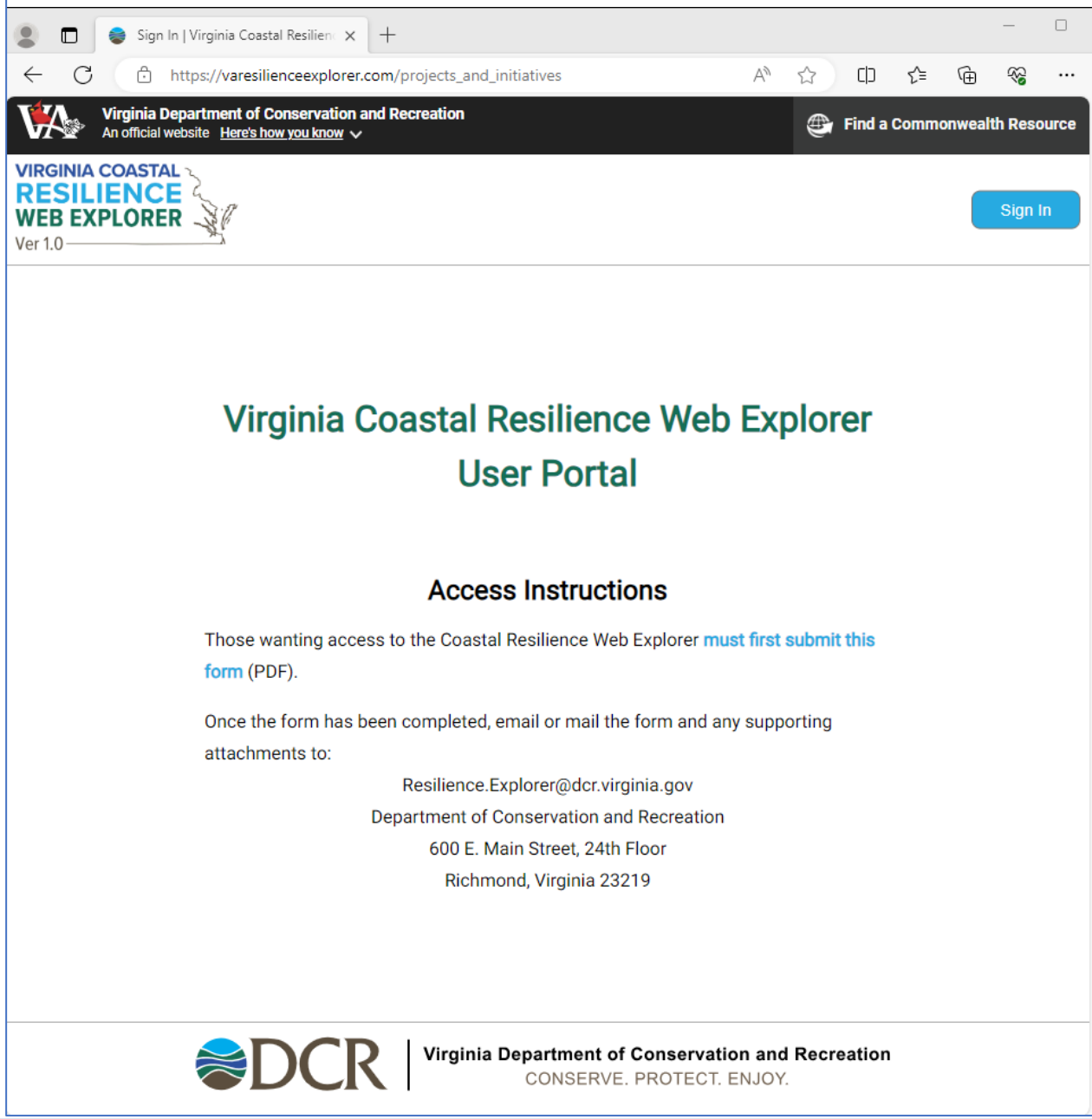
User Portal for the Web Explorer

New online platform connected to the Coastal Resilience Web Explorer

Provides continuous access for coastal resilience practitioners to submit and edit Initiatives, Projects, and Funding Opportunities that appear in the portal.

Once approved by DCR for completeness, submitted entries will appear on the web explorer.

Visit online: varesilienceexplorer.com



How will the projects and initiatives submissions be used?

Coastal Resilience Master Plan, Phase II

- Only those projects and initiatives submitted to the User Portal will be considered in the Coastal Resilience Master Plan, Phase II.
  - The submission deadline for inclusion in the plan has not yet been established but will not occur prior to the end of Q1 2024.
  - DCR will publish this deadline via its newsletter, website, and emails to PDCs once established.

Other benefits to appearing in the explorer may include…

- Automatic matching of projects and initiatives to potential funding sources also appearing in the web explorer.
- Increased visibility with regional, state, and federal actors for a locality's resilience needs.
- Means of communicating a complete pipeline of a locality's or PDC's resilience initiatives and projects to the public.
- Potential to connect complementary projects and initiatives to multiply outcomes.

How will the funding opportunities be used?

- Detailed information about a wide variety of funding opportunities submitted to the portal will remain available to the public via the **Coastal Resilience Web Explorer.**
- The Web Explorer will automatically match submitted projects and initiatives with funding opportunities submitted to the portal to suggest opportunities based on likelihood of eligibility.
- This funding information may assist local governments and other stakeholders interested in conducting projects and initiatives to **identify opportunities to gain access to needed financial support**.

Getting Access

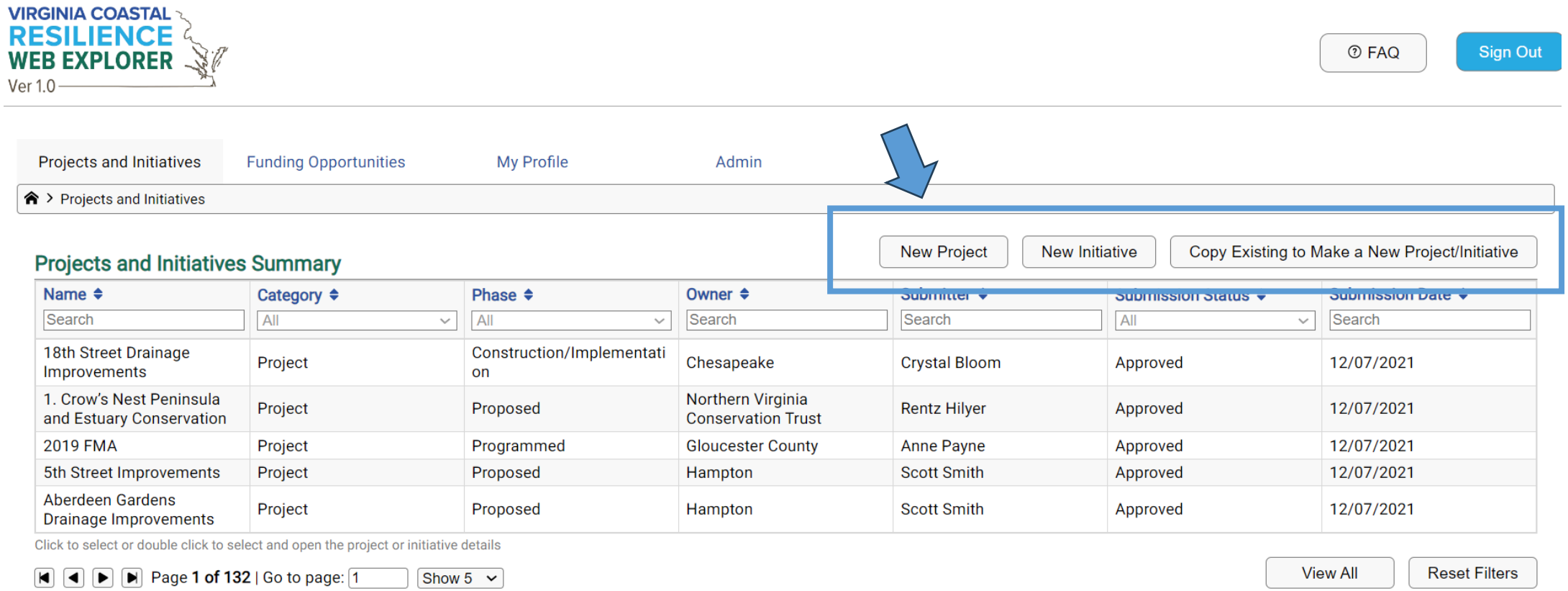
Setting up your User Portal account

- New users must submit a completed User Access Form (PDF) to DCR (resilience.explorer@dcr.virginia.gov).
- Forms can be accessed via DCR's website or the user portal website.
  - dcr.virginia.gov/crmp/cr-web-explorer
  - varesilienceexplorer.com
- Accounts are specific to an individual, not to an organization.
- Users can only add and edit projects for which they are the owner, or for which they have written approval from the owner's organization.

Projects and Initiatives

Creating a New Project or Initiative

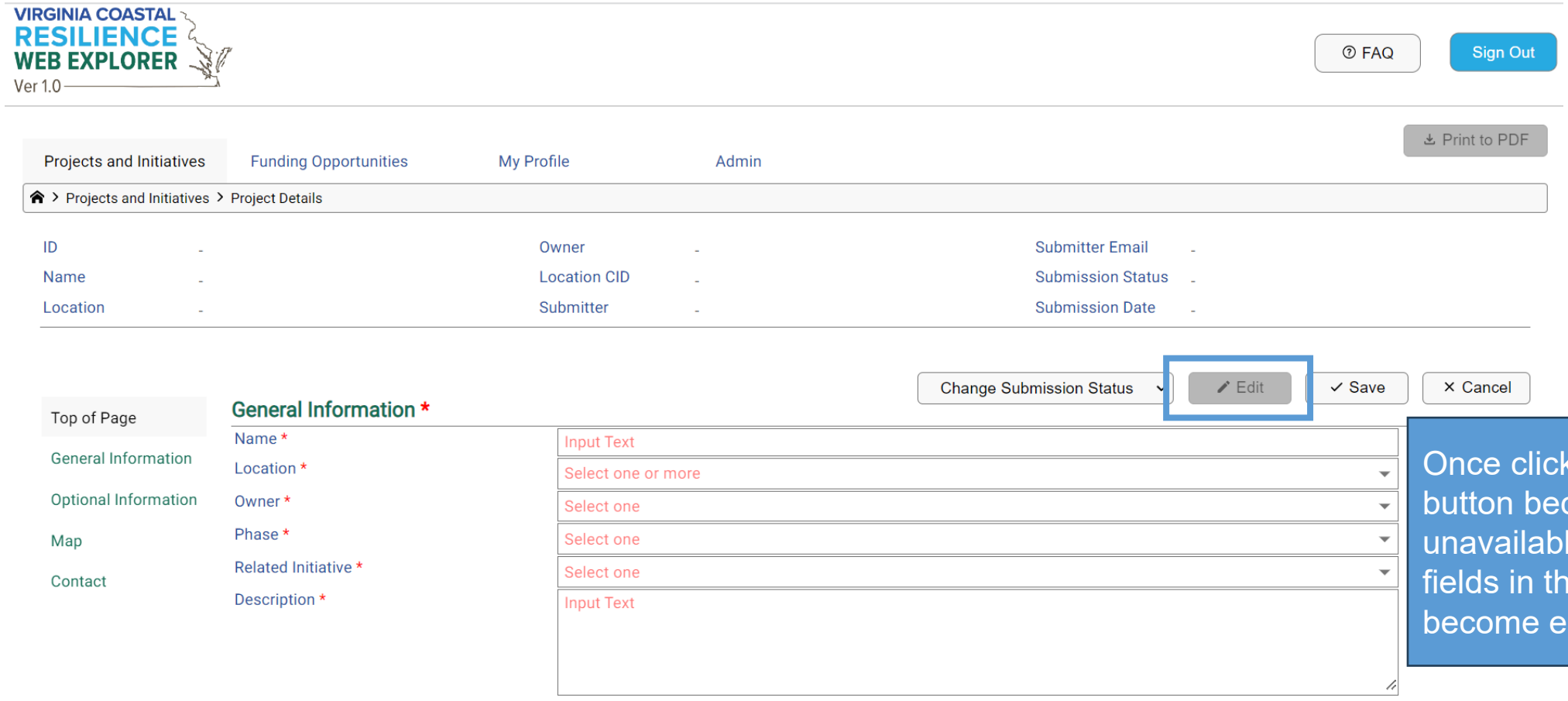
- Users logged into the Portal will automatically see the “Projects and Initiatives” page, with any entries they have access to edit in view.
- To create a new project, users can click either “New Project” for a blank template, or “Copy Existing…” to use an existing project’s details as a starting point.



Projects and Initiatives

Creating a New Project or Initiative

- This will take you to a new page at which to enter all the details, which you can do by clicking the “Edit” button.
- Submit as much detail as you’d like, taking care to complete all required fields indicated with an asterisk.

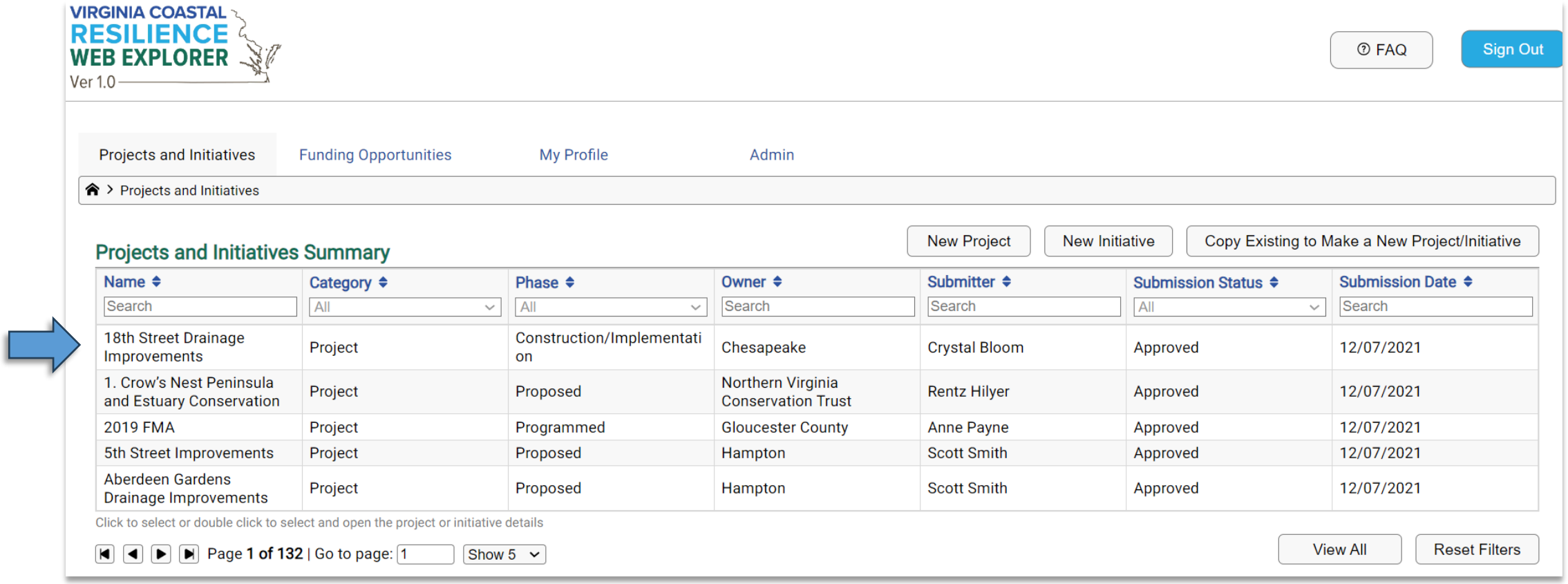


Once clicked, the “Edit” button becomes unavailable and the fields in the form become editable.

Projects and Initiatives

Editing an Existing Project or Initiative

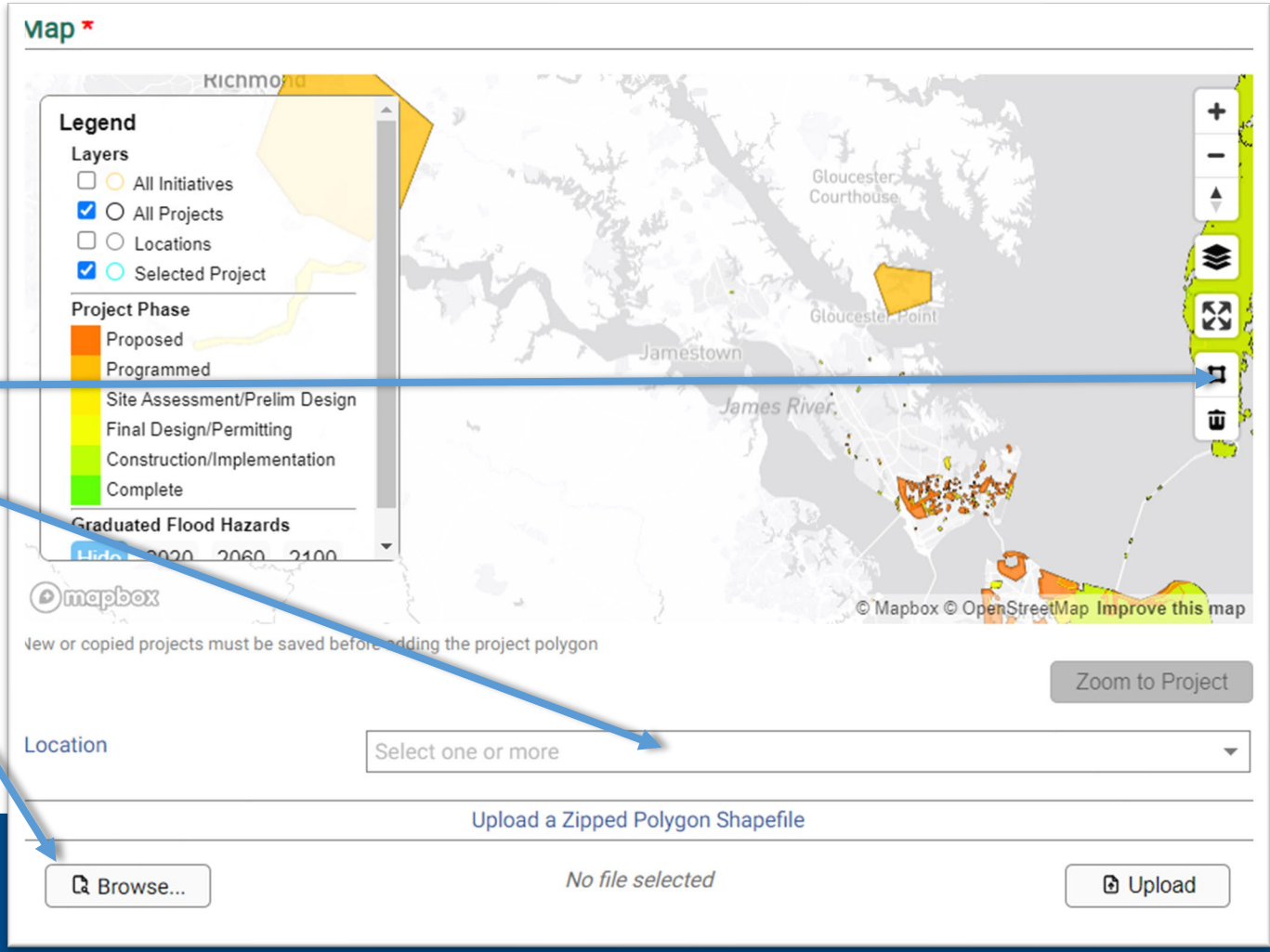
- From the User Portal Landing page, users can edit existing projects and initiatives to which they have access by double clicking on any row in the Projects and Initiatives Summary list.
- From there, you will be able to make any needed edits to the fields and “Save” to resubmit for DCR approval.



Projects and Initiatives

Indicating the Geographic Location of a Project

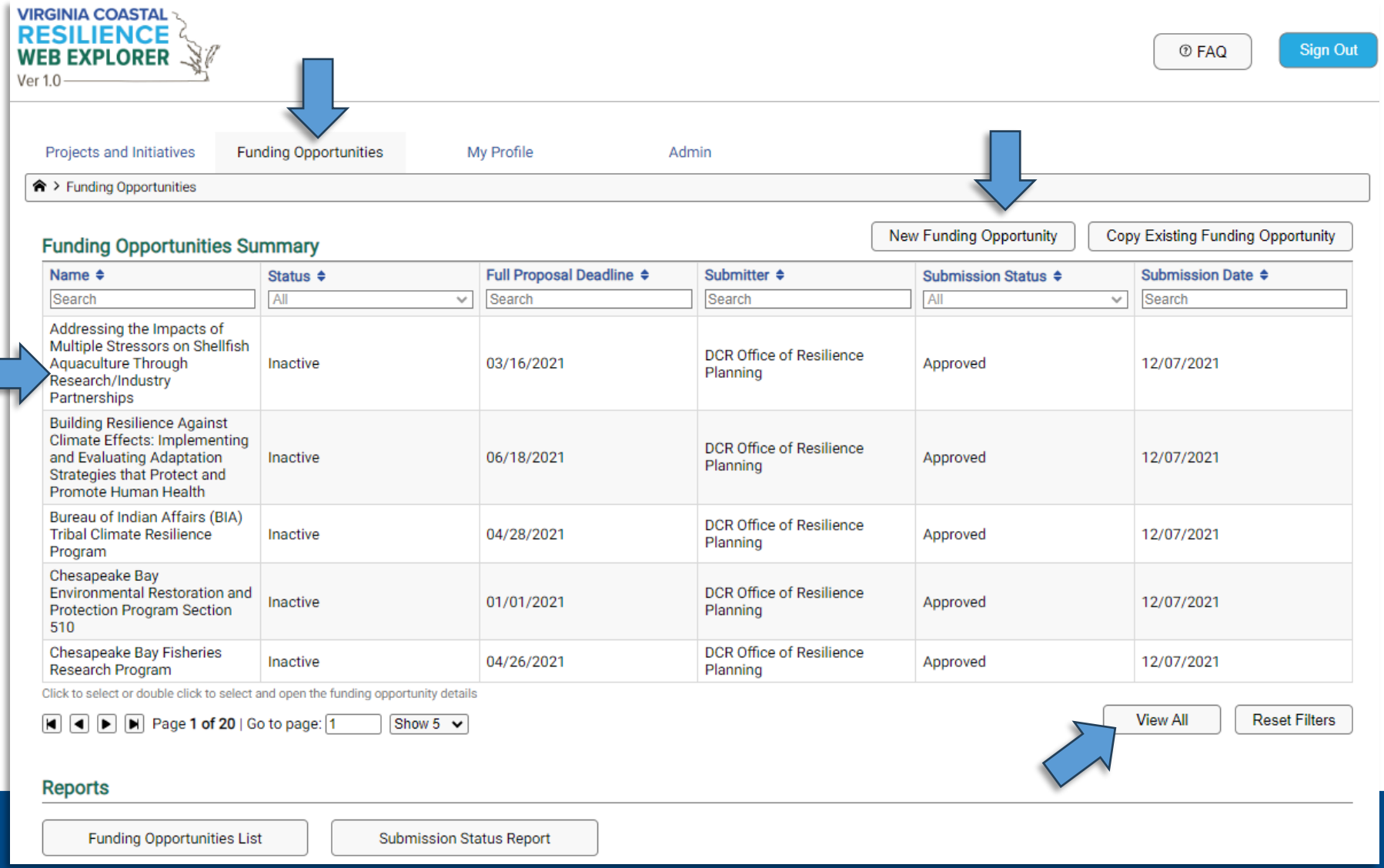
- Save project information to enable mapping feature
- Mapping Options
  - Draw/Edit on Map
  - Select predefined location
  - Upload a zipped polygon shapefile



Funding Opportunities

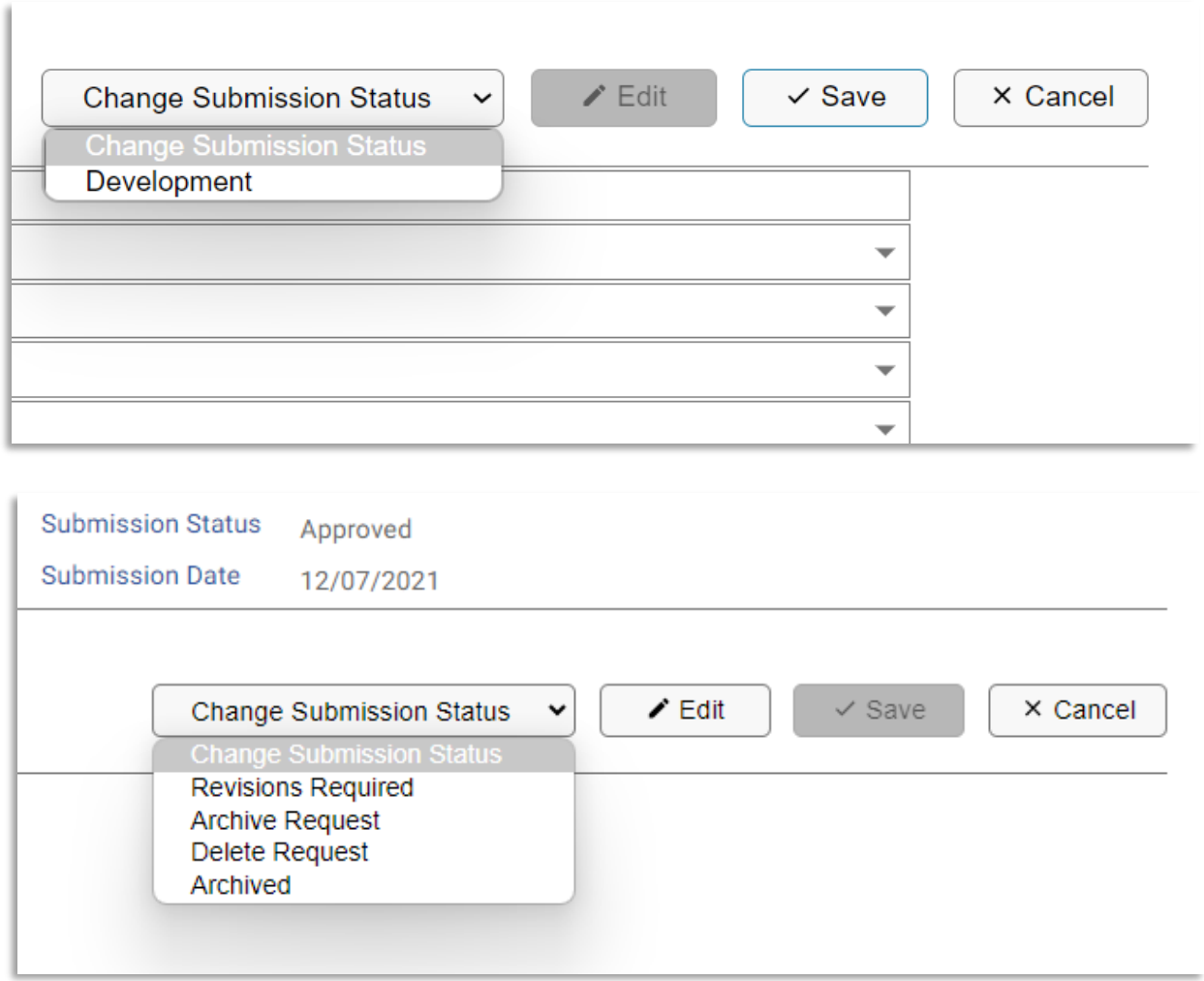
Creating or Editing

- Click the “Funding Opportunities” tab at the top of the page to access.
- Your automatic view will be any opportunities which you have submitted.
- Click “View All” to see additional opportunities which you have access to edit.
- Functionality is basically the same as Projects and Initiatives to create a new opportunity or edit an existing opportunity.

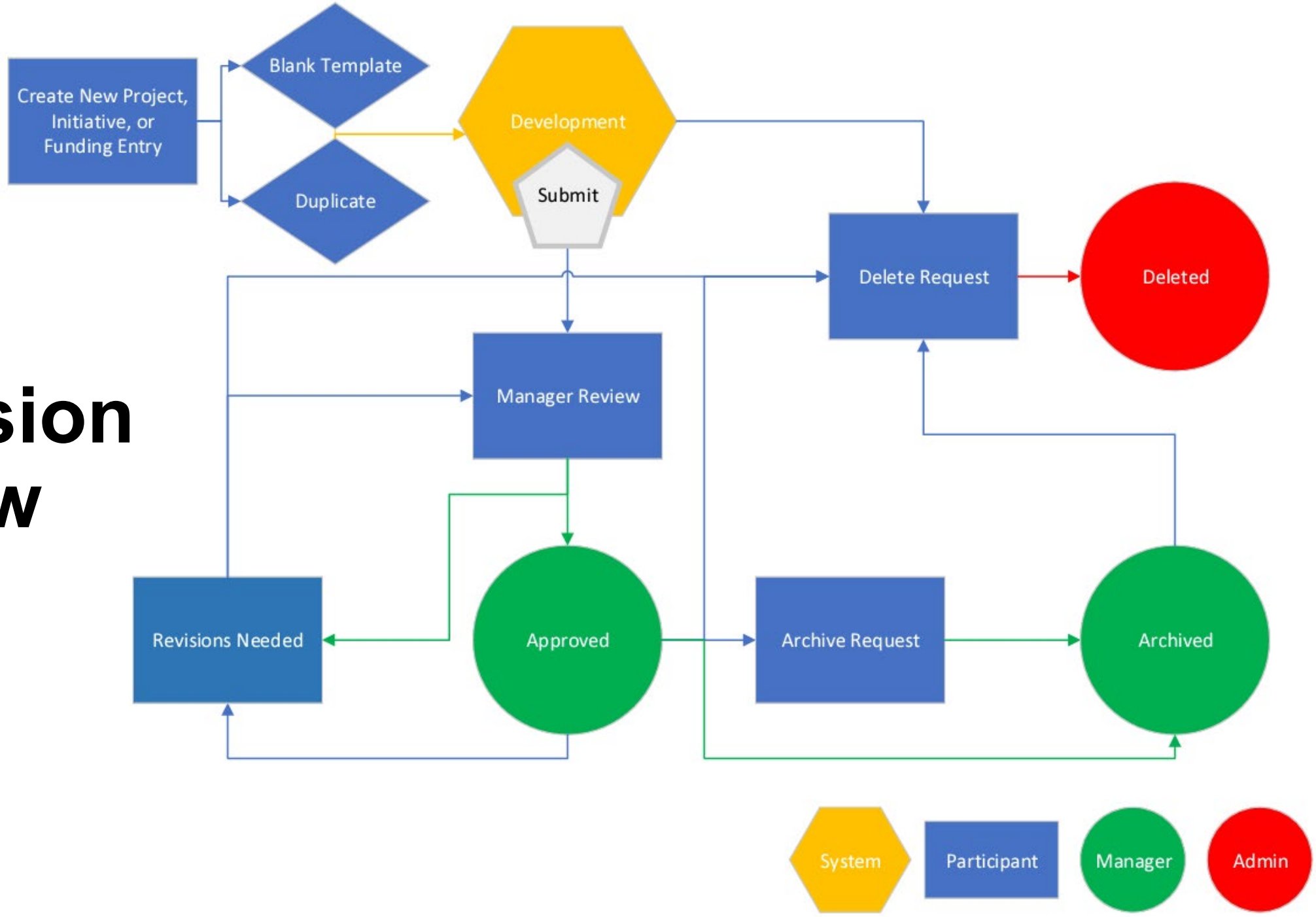


Submission Status

- Users must manually change and save a change in submission status to advance an entry for DCR review and publication.
- Once approved, users will have the option to move an entry back to Revisions Needed for edits, Archive an entry that has concluded, or Delete an entry that was created in error or is a duplicate.

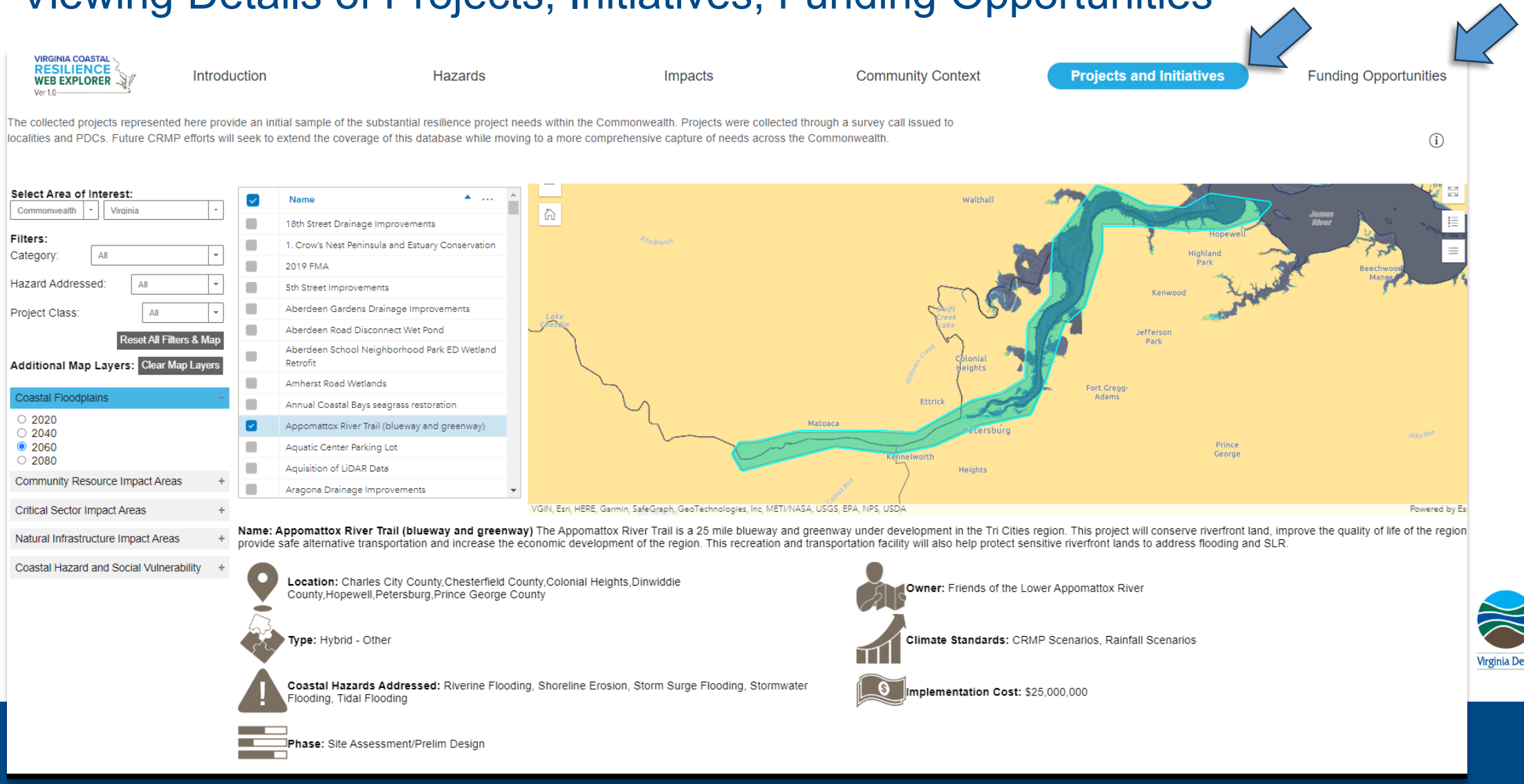


Submission Workflow



Coastal Resilience Web Explorer

Viewing Details of Projects, Initiatives, Funding Opportunities



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Downloading Reports

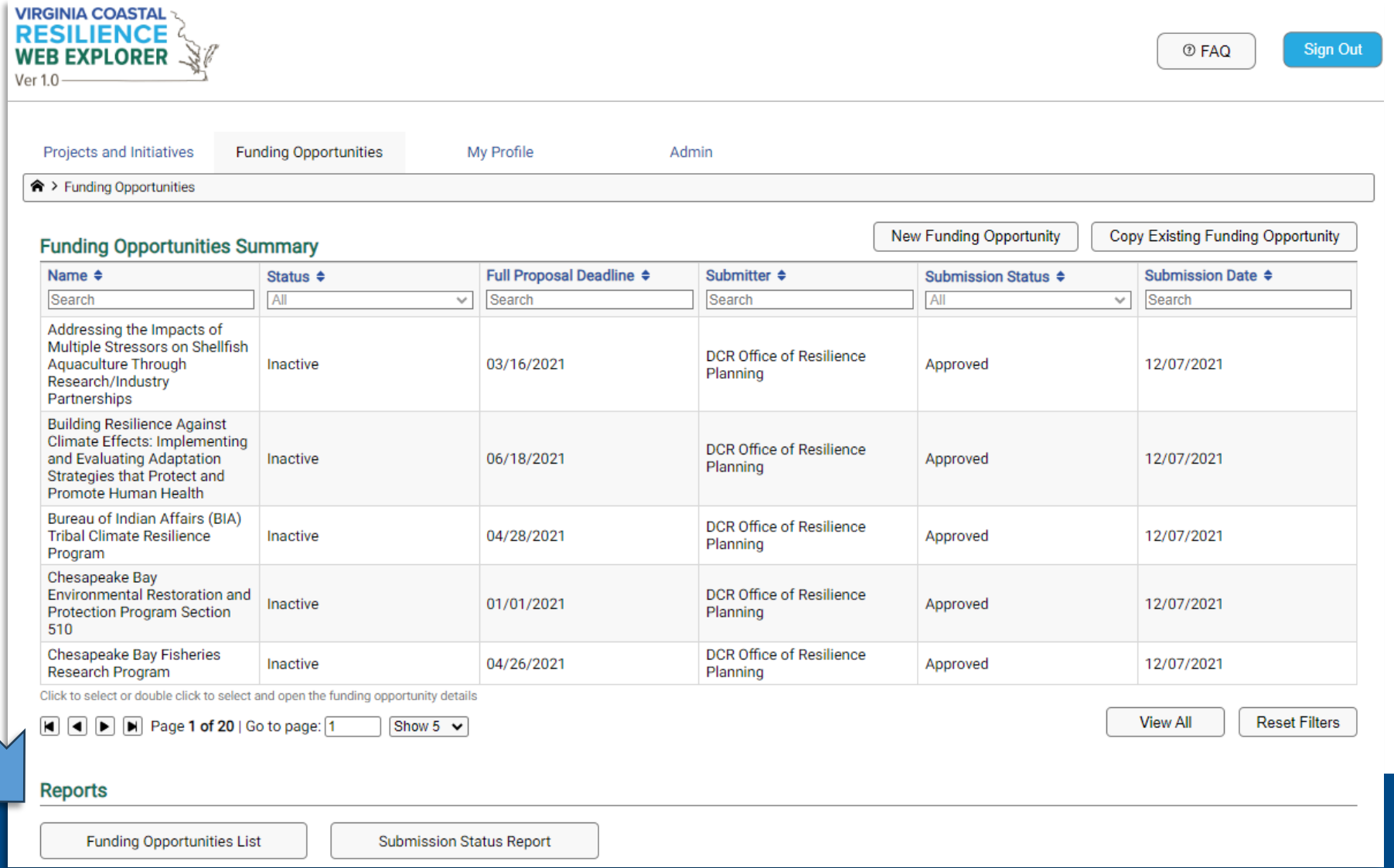
Projects and Initiatives, Funding Opportunities

Two types of reports:
1. “List”
2. “Submission Status Report”

Both download to your desktop an *.xlsx* file.

List provides all submitted details of entries as they currently exist in the portal.

Submission Status Report provides the most recent status change for each entry, with limited additional details.

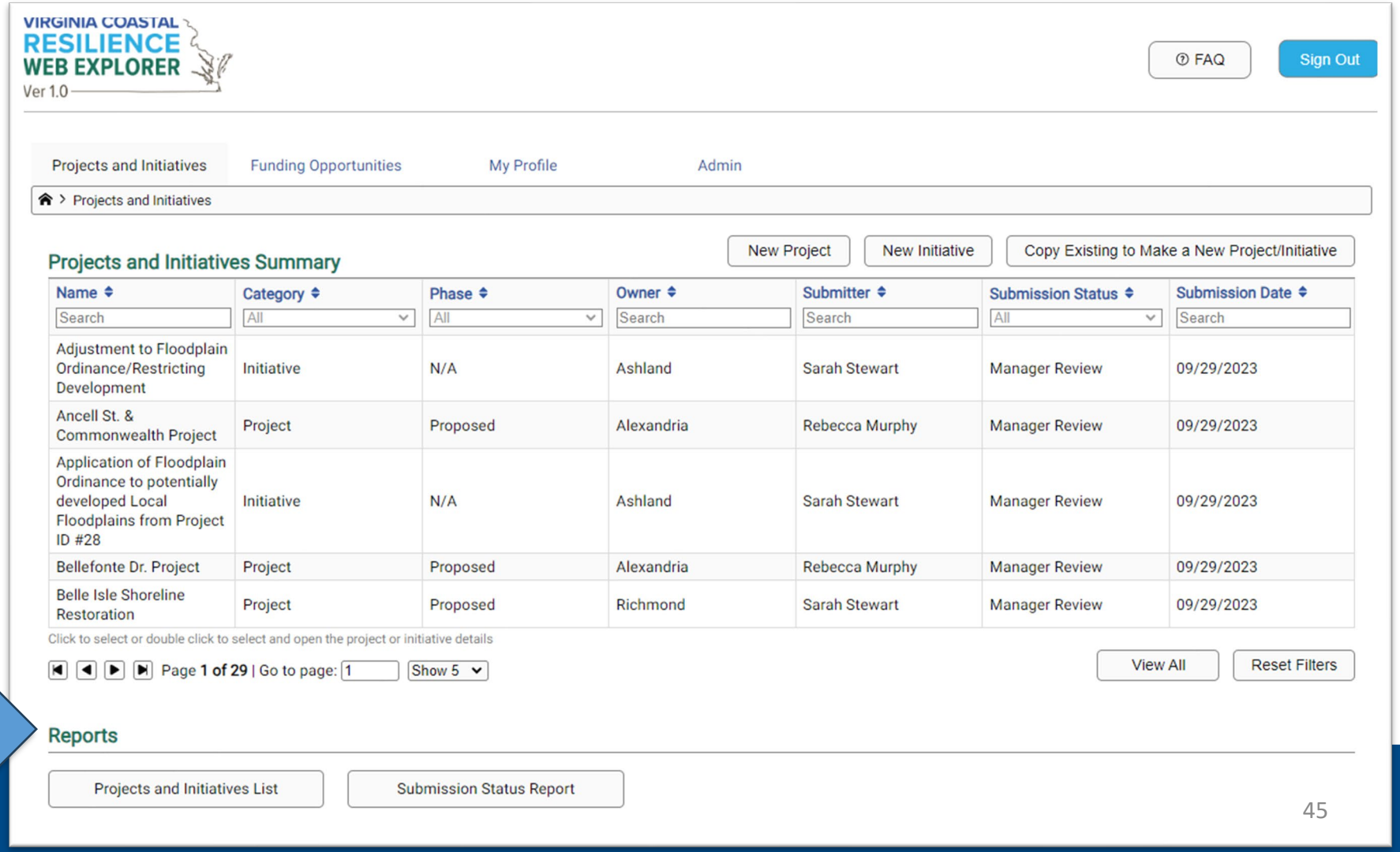


Downloading Reports

Projects and Initiatives, Funding Opportunities

- From the User Portal Landing page, users can download projects and initiatives reports.

- Projects and Initiatives List: Report will include all "Approved" projects and initiatives and all projects and initiatives to which they have access.
  - * A zipped polygon shapefile download of all "Approved" projects and initiatives is pending.
- Submission Status Report: Report will include the submission status for all projects and initiatives to which they have access



Get Involved in the Plans

Sign up for our emails to receive planning updates: www.dcr.virginia.gov/signup

- Coastal Resilience Technical Advisory Committee and Subcommittee Public Meetings posted on Town Hall and DCR's website
- Online updates, interactive feedback tools, public info meetings coming soon!
- Email us your ideas and feedback at flood.resilience@dcr.virginia.gov

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