

# Catching Up on All Things Resilience in Virginia

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# Resilience to What? (What Does That Mean, Anyway?)

## Increasing Chronic Flooding

- VIMS tools: [AdaptVA](https://www.vims.edu/ccrm/research/climate_change/adaptation/nnbfs/index.php), [NOAA NNBFS](https://www.vims.edu/ccrm/research/climate_change/adaptation/nnbfs/index.php) ([https://www.vims.edu/ccrm/research/climate\\_change/adaptation/nnbfs/index.php](https://www.vims.edu/ccrm/research/climate_change/adaptation/nnbfs/index.php))
- [MARISA Mid-Atlantic Climate Data Tools](https://www.midatlanticcrisa.org/data-tools/climate-data-tools.html) (<https://www.midatlanticcrisa.org/data-tools/climate-data-tools.html>)

## Sudden, emergency events

- Hurricanes, tornadoes, unnamed “rain bomb” events, forest fires
- [NOAA Billion Dollar Disasters Mapping Tool](https://www.ncei.noaa.gov/access/billions/) (<https://www.ncei.noaa.gov/access/billions/>) now at census tract level, with CDC SOVI data; [NOAA/USDN Climate & Hazard Mitigation Planning \(CHaMP\) Tool](https://champ.rcc-acis.org) (<https://champ.rcc-acis.org>) – historical & projected data by county for extreme heat, severe weather/tropical storms/hurricanes, wildfire, extreme rainfall)

**Heat** (air & water temperatures and species shifts, urban heat islands, increased fire risk)

## Fossil fuel reliance

- EVs in Inflation Reduction Act; Clean VA Economy Act & solar; offshore wind

## Resilience for all

# Federal Update

## 2021 Infrastructure Investment & Jobs Act

- \$550 billion in new spending over the next 5 years;
  - \$50 billion to protect against droughts, heat, floods, wildfires
- Funds distributed via **formula grants** for states (amounts based on population, state size, etc.) and **competitive grants**
- \$1B over 5 yrs for **Building Resilient Infrastructure & Communities (BRIC)**
- \$500M (\$100M/yr for 5 yrs) for the **Safeguarding Tomorrow Through Ongoing Risk Mitigation (STORM) Act (2021)**
- \$3.5B in **Flood Mitigation Assistance** grants over 5 yrs;
  - \$700M/yr for FY2022–2026
- **NOAA habitat restoration and coastal resilience funding**

# Federal Update, cont.

## 2022 Inflation Reduction Act

- More than \$300B for clean energy; over \$20B in Ag conservation funding
- 1<sup>st</sup> center of wind component manufacturing in US in Portsmouth; IRA incentives could motivate companies to create parts to supply that center.
- Projected 40% cut in GHG emissions by 2030

# Federal Update, cont.

## NFIP Risk Rating 2.0

- Launched for new policies Oct. 1, 2021; expanded to existing policyholders in April 2022.
- More aligned with real risk.
- Lower premiums for an est. 1.2M property owners.

# Regional Update

## **Chesapeake Bay TMDL**

- Incorporating climate change impacts and population growth
- Infrastructure Bill is providing \$238M for restoration and improvement projects over the next 5 years

# State Update

- Community Flood Preparedness Fund and VA Coastal Resilience TAC**
  - Waiting to hear about 3<sup>rd</sup> round, which has \$40M available (decisions have to be made by Sept.). Schedule not set yet for 4<sup>th</sup> round.
  - Of \$75M in funds available, approx. \$32M have been awarded.
  - June grants manual update includes incentives for projects that use nature
- Resilient VA Revolving Loan Fund (SB756)**
- Go VA grants and RISE competition – Carol will cover!**
- HB 206, HB774, HB894 (2022)** and VCPC solar paper
- USBC 2021 Code Development Cycle**; Resiliency Sub-Workgroup
- Coastal Zone Management Program Initiatives**
  - Ocean Plan, Conservation Targeting
- VDOT** resilience work with VIMS; Ch. 33 of Structure & Bridge Div. Manual



# Local Government Update

## The RAFT

**Heat** – New Extreme Heat Model at property scale, with 30-yr projections ([https://assets.firststreet.org/uploads/2022/08/FSF\\_HEAT-MODEL-PR-1.pdf](https://assets.firststreet.org/uploads/2022/08/FSF_HEAT-MODEL-PR-1.pdf))

- Dr. Jeremy Hoffman's work in Richmond combining ground & satellite data

## Fairfax County's new ordinance under consideration

- Would require all future development to have proper drainage, pipe conveyance, and safety measures to accommodate a 100-yr storm (1% chance of occurring in a given year) in light of climate change
- Proof of concept study due next spring, followed by flood mitigation plan

## duPont-funded septic & wastewater work

## APA monthly lunchtime webinars





# *Connecting the Dots*

## **Incorporate Resilience in the comp plan**

- RAFT workshop  
(<https://raft.ien.virginia.edu/raft-resilience-research-policy-products>)

## **Identify and prioritize projects in the pipeline (review Hazard Mitigation Plan)**

- CFPF \$ for capacity building or studies (match!)
- CFPF \$ for projects + Hazard Mitigation Grants + Resilient VA Revolving Loan Fund

## **Carbon Capture Opportunities**

- soils (peat) and trees and marshes (Ag in Inflation Reduction Act + VA efforts)



Welcome  
below sealevel

Questions?

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