FINAL REPORT: RICHMOND REGIONAL TECHNICAL ASSISTANCE

Federal Fiscal Year 2023

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Executive Summary

Coordination and Training Meetings

PlanRVA Hosted an Environmental TAC meeting on 10/26/23 which provided a training and coordination opportunity for PlanRVA, member localities, and regional partners to receive training on the James River Association's Buffer Program –Attendees were trained on the operations of the program, as well as tools for citizens to use in determining their eligibility. Locality staff also received training on the regional structure of JRA's watershed consortium and how to become involved in coordinating water quality and riparian habitat improvements to protect this coastal watershed.

PlanRVA hosted an Environmental TAC meeting on 1/31/2024 which provided a training and coordination opportunity for PlanRVA, member localities, and regional partners to receive training on the City of Richmond CSO Plan – Attendees learned the innovative strategies that Richmond has incorporated into their Combined Sewer Outflow Plan update and how planned projects will positively impact water quality if the City of Richmond and downstream along the James River. Richmond staff also shared data methodologies and strategies that could be utilized by other urbanized areas in the PlanRVA region to protect water quality by reducing runoff into surface waters.

PlanRVA hosted an Environmental TAC meeting on 4/25/24 which provided a training and coordination opportunity for PlanRVA, member localities, and regional partners to receive training on the DEQ Environmental Justice office –Attendees were trained on the current operations of DEQ's Environmental Justice program, and the new role of the EJ coordinator.

PlanRVA hosted a Don't Trash Central Va coordination meeting on 4/30/24 which provided a training and coordination opportunity for PlanRVA, member localities, and regional partners to receive training from Friends of the Lower Appomattox River staff –Attendees were trained on the co-benefits of invasive species removal when hosting a debris cleanup event. This training addressed coastal habitat conservation and debris removal. FOLAR staff answered questions regarding planning and replicating these events in attendee localities.

PlanRVA hosted an Environmental TAC meeting on 7/25/2024 which provided a training and coordination opportunity for PlanRVA, member localities, and regional partners to receive training on new PlanRVA Pluvial Data – Attendees learned the technical details of creating this data for the region and were provided with an opportunity to ask questions as well as provide feedback and ideas on potential future applications.

PlanRVA hosted an Environmental TAC meeting on 9/26/2024 which provided a training and coordination opportunity for PlanRVA, member localities, and regional partners to receive training on Green Infrastructure Network Mapping – Attendees learned from VCU professor Shruti Syal about her current work mapping green infrastructure organizations and their relationships across the region.

At all Environmental TAC meetings there is a roundtable opportunity for attendees to share and discuss local program issues. Each Env TAC agenda also includes at time for updates on PlanRVA regional projects with an opportunity for feedback and questions about progress.

PlanRVA staff coordinate meetings for the Don't Trash Central Virginia campaign with local litter managers and campaign partners, see below for more information.

Regional Coordination and Local Technical Assistance

Local Technical Assistance

PlanRVA staff provided technical support to Chesterfield County by providing guidance on mapping and policies related to preservation of prime agricultural land to be included in the county's Comprehensive Plan.

PlanRVA staff participate in the Plant RVA Native campaign in cooperation with VCZM Program staff and other partners in the Richmond region. PlanRVA provided funding to support a reprinting of the Central Virginia Native Plants guide. This guide is provided as a free handout during relevant meetings and events.

During this grant year, PlanRVA staff processed 130 environmental reviews.

Don't Trash Central Virginia Campaign

PlanRVA staff continued their work with the *Don't Trash Central Virginia* campaign and promoted regional coordination through meetings where members and partners engaged in roundtable discussions about their ongoing efforts. Additionally, PlanRVA staff provided various tools for members and partners to utilize such as social media content. PlanRVA staff continues to share information regarding local clean up events on social media platforms, as well as provides support when possible.

Lower Chickahominy Watershed Collaborative Support

PlanRVA staff maintained the LCWC SharePoint site and webpages, as well as provided administrative support for Steering Committee and Workgroup meetings, intermeeting coordination with signatories and stakeholders, and related technical assistance in support of LCWC priorities. Significant progress was made on deliverables, including mapping, data gathering, and outreach planning for erosion management with partners DCR-SEAS and Colonial SWCD. This year, PlanRVA staff instituted a new meeting structure to make Workgroup and Steering Committee meetings more actionable and meaningful.

Benefits Accrued

Throughout the year PlanRVA staff made notes about items to include in the final report. This grant term the Benefits Accrued report focuses on PlanRVA's subsequent work and benefits gained from tools created in past years: the Solar Suitability Tool's utilization in achieving SolSMART designation, Pluvial Flooding Data use in project planning and funding acquisition, and CPRG Network Development based upon Environmental TAC and LCWC partnerships.

Resilience Planning

PlanRVA staff supported regional coordination and technical work related to resilience. PlanRVA facilitated a regional resilience workshop, providing a platform for local government input on flood resilience priorities. PlanRVA staff participate in the Virginia Coastal Resilience Technical Advisory Committee (TAC) and the Project Prioritization subcommittee. At Environmental TAC meetings, PlanRVA staff included resilience agenda items. Key resilience-related work efforts were undertaken by PlanRVA staff during the grant period. PlanRVA staff kicked off an update of the Regional Green Infrastructure Plan. The Plan will be a core document guiding the work of the environment program as well as others at PlanRVA. PlanRVA staff also conducted the annual review of the Hazard Mitigation Plan. PlanRVA staff developed a resilience Public Outreach Plan to aid in resilience engagement by both Planners and Outreach staff.

Coordination & Training Meetings

Throughout the grant year, PlanRVA staff provide coordination and training opportunities for locality staff in the region.

PlanRVA Environmental Technical Advisory Committee

PlanRVA staff hosted multiple coordination events for staff of member localities during the grant term. A formal venue and forum for coordination with local staff are the PlanRVA Environmental Technical Advisory Committee (TAC) meetings. All meetings include at least one training agenda item and time for roundtable organizational updates.

PlanRVA Hosted an Environmental TAC meeting on **October 26, 2023** for 24 attendees which provided a training and coordination opportunity for PlanRVA, member localities, and regional partners to receive training on the James River Association's Buffer Program. Attendees were trained on program operation, as well as tools for citizens to use in determining their eligibility. Locality staff also received training on the regional structure of JRA's watershed consortium and how to become involved in coordinating water quality and riparian habitat improvements to protect watersheds in the coastal zone and upstream.

The agenda included the following discussions or presentations supported by this grant:

1. JRA Buffer Program Training
2. PlanRVA Hazard Mitigation Plan Review & Update
3. DEQ Chesapeake Bay Preservation Act Program Update
4. PlanRVA Project Updates
    i. November 14 Solar Workshop
    ii. Climate Pollution Reduction Grant
    iii. VA Coastal Resilience TAC
    iv. BMP Story Map – Photo Request
    v. BMP Implementation Support Feasibility
    vi. Critical Infrastructure
5. Partner Program Updates

PlanRVA hosted an Environmental TAC meeting on **January 31, 2024** for 25 attendees which provided a training and coordination opportunity for PlanRVA, member localities, and regional partners to receive training on the City of Richmond CSO Plan – Attendees learned the innovative strategies that Richmond has incorporated into their Combined Sewer Outflow Plan update and how planned projects will positively impact water quality if the City of Richmond and downstream along the James River. Richmond staff also shared data methodologies and strategies that could be utilized by other urbanized areas in the PlanRVA region to protect water quality by reducing runoff into surface waters.

The agenda included the following discussions or presentations supported by this grant:

1. City of Richmond CSO Plan Training
2. DEQ Chesapeake Bay Preservation Act Program Update

3. DCR Resilience Web Explorer, Matt Dalon, DCR
4. PlanRVA & Regional Updates
    i. Hazard Mitigation
    ii. Critical infrastructure
5. Partner Program Updates

PlanRVA hosted an Environmental TAC meeting on **April 25, 2024** for 23 attendees which provided a training and coordination opportunity for PlanRVA, member localities, and regional partners to receive training on the DEQ Environmental Justice office –Attendees were trained on the current operations of DEQ's Environmental Justice program, and the new role of the EJ coordinator.

The agenda included the following discussions or presentations supported by this grant:

1. DEQ Piedmont Regional Office, Environmental Justice Training
2. Regional Green Infrastructure Project
3. PlanRVA Environment Project Updates
    i. Lower Chickahominy Watershed Collaborative
4. PlanRVA & Regional Updates
    i. Hazard Mitigation
    ii. Critical infrastructure
    iii. Water Supply Planning
5. Partner Program Updates

PlanRVA hosted a Don't Trash Central Va coordination meeting on **April 30, 2024** for 13 attendees which provided a training and coordination opportunity for PlanRVA, member localities, and regional partners to receive training from Friends of the Lower Appomattox River staff –Attendees were trained on the co-benefits of invasive species removal when hosting a debris cleanup event. This training addressed coastal habitat conservation and debris removal. FOLAR staff answered questions regarding planning and replicating these events in attendee localities.

The agenda included the following discussions or presentations supported by this grant:

1. Don't Trash Campaign Management Update
2. Pledges
3. Media Toolkit Review
4. FOLAR Invasive Plant Removal and Debris Cleanup Training
5. REME Program Update
6. Local Program Update Highlights

PlanRVA hosted an Environmental TAC meeting on **July 25, 2024** for 18 attendees which provided a training and coordination opportunity for PlanRVA, member localities, and regional partners to receive training on new PlanRVA Pluvial Data – Attendees learned the technical details of creating this data for the region and were provided with an opportunity to ask questions as well as provide feedback and ideas on potential future applications.

The agenda included the following discussions or presentations supported by this grant:

1. Regional Green Infrastructure Project Goals and Lenses

2. PlanRVA Pluvial Data Training
3. State Agency Updates
    i. Mary Jacobs, DEQ Office of Watersheds & Local Government Assistance Programs
    ii. Virginia Coastal Resilience Master Plan Update
4. PlanRVA Environment Program Updates
5. Other PlanRVA Updates
6. Partner Program Updates

PlanRVA hosted an Environmental TAC meeting on **September 26, 2024** for 30 attendees which provided a training and coordination opportunity for PlanRVA, member localities, and regional partners to receive training on Green Infrastructure Network Mapping – Attendees learned from VCU professor Shruti Syal about her current work mapping green infrastructure organizations and their relationships across the region.

The agenda included the following discussions or presentations supported by this grant:

1. Green Infrastructure Implementation Network Mapping Training
2. PlanRVA Projects Update
    a. Regional Green Infrastructure Plan
3. Looking Forward:
    a. Community Flood Preparedness Fund Opportunity
    b. Wildlife Crossing Pilot Program – wildlife corridor planning
4. State Agency Notes
    a. DEQ Pay-For-Outcomes Nonpoint Source Pollution Reduction grant program
    b. Virginia Flood Preparedness Coordination Meeting Information
5. Partner Program Updates

Regional Coordination and Local Technical Assistance

PlanRVA staff provide various forms of local technical assistance and regional coordination support.

Local Technical Assistance

Chesterfield County Comprehensive Plan Update

In November and December 2023, PlanRVA staff provided consultative service to the Chesterfield County staff by advising on content and resources available to support an update to the county's comprehensive plan, specifically on the topic of mapping prime agricultural land and identifying conservation policy options. PlanRVA staff advised on available data, analysis methodologies, state agency and other organization contacts, and other information or resources that could support language, analysis or other content to be included in the plan.

DEQ – Locality Chesapeake Bay Preservation Act Coordination and Facilitation

PlanRVA staff always offer staff of DEQ's Office of Watersheds & Local Government Assistance Programs opportunity to speak at all Environmental TAC meetings. Occasionally PlanRVA staff assist in amplifying or spreading messages from DEQ staff. During the grant term, PlanRVA staff assisted DEQ staff by sharing information with locality staff about guidance related to the new resilience requirement in local Chesapeake Bay Preservation Act Programs.

Environmental Reviews

PlanRVA staff receive requests for environmental reviews of projects and permits from state agencies and other partners. PlanRVA staff circulate these reviews to member locality staff for comments and questions to inform the PlanRVA response to DEQ or another requesting agency. The types of reviews typically include, but are not limited to:

- **Environmental Assessments and Impact Reports** - Virginia code requires state agencies to prepare an environmental impact report (EIR) for each major state project.
- **Coastal Consistency Determinations and Certifications** - Due to receipt of Federal funds or permits, proposed projects must prove consistency with the enforceable policies of Virginia's Coastal Zone Management Program.
- **Groundwater Withdrawal Permits** - PlanRVA staff receives notice of Groundwater Withdrawal Permits in the Eastern Virginia Ground Water Management Area (GWMA). The eastern portion of PlanRVA is located in the Eastern Virginia GWMA. All jurisdictions in the Eastern Virginia GWMA are notified of pending permits as part of this process, therefore PlanRVA receives review requests for projects outside of the Richmond region. For more information about the Eastern Virginia GWMA see https://www.deq.virginia.gov/our-programs/water/water-quantity/advisory-committees/eastern-virginia-groundwater-management-advisory-committee.
- **Virginia Water Protection (VWP) Permits** - DEQ issues VWP Permits for activities related to the quality of surface waters in the Commonwealth including the filling, dredging, draining or excavation of wetlands, streams, or other state waters. Surface water withdrawals are also permitted through VWP permits.
- **Virginia Pollutant Discharge Elimination System (VPDES) Permits** – DEQ issues VPDES permits to any person who discharges any pollutant into surface waters of the Commonwealth from a point source.
- **State Agency grant applications for Federal funding**, including:
    - CERCLA grant funds from US EPA (Superfund programming and site remediation)
    - Virginia Coastal Zone Management Program funding from the National Oceanic and Atmospheric Administration
    - Diesel Emission Reduction Act (DERA) State Clean Diesel funds from US EPA
    - Capitalization funds for the Virginia Clean Water Revolving Loan Fund for wastewater treatment facility improvements from US EPA
- **FHWA Section 5310 funding** for projects involving transit and mobility enhancements for seniors and individuals with disabilities.

During the grant year, PlanRVA staff completed 130 environmental reviews of the following types.

- 26 Coastal Consistency Determinations and Certifications
- 11 Environmental Assessments and Impact Reports
- 40 Groundwater Withdrawal Permits
- 25 State agency grant applications for federal funding
- 0 Superfund grant applications
- 19 Virginia Pollution Discharge Elimination System Permits
- 1 Virginia Water Protection Permits
- 1 State Corporation Commission Application
- 3 Other – 2 NEPA reviews, 1 Project Scoping review

Regional Coordination

PlanRVA consults with member localities and other partners to support better regional planning and coordination. PlanRVA staff also participate in and follow local, regional, state, and national planning and coordination efforts related to Coastal issues. Information about these efforts is shared with local staff at coordination meetings.

PlanRVA staff regularly attend Virginia Coastal Zone Management Program Coastal Policy Team Meetings and Coastal Planning District Commission meetings. The training and coordination opportunities provided to the Coastal PDC staff are greatly valued and shared with locality staff in the Richmond region.

PlanRVA staff sit on the Virginia Department of Mines, Minerals, and Energy's Geologic Mapping Committee. Meetings are held twice a year to prioritize geologic mapping projects across Virginia. PlanRVA staff provide a local and regional land and coastal resource planning perspective on the committee. Information gained from the meetings is shared with member localities of PlanRVA.

PlanRVA staff are working with VCZM Program staff and other regional partners to maintain the Plant RVA Natives campaign. PlanRVA is also a partner on the statewide Plant Virginia Natives campaign. The campaign encourages citizens to learn more about the importance and value of native plants and use them in landscaping.

PlanRVA staff participated in a project committee for a Wetlands Watch CZM Project of Special Merit, a resource guide for designing living shorelines in the face of sea level rise in Virginia.

PlanRVA staff participate in two regional watershed roundtables. The northern portion of the PlanRVA region is located in the York River watershed. PlanRVA staff participate in the York River & Small Coastal Basins Roundtable attending all-hands meetings and occasionally providing updated presentations about activities at the PDC. PlanRVA staff also participate in the Upper and Middle James Riparian Consortium, actively attending and contributing to Outreach Team meetings as well as this year's Buffer Summit. PlanRVA staff also participated as a stakeholder in the development and review of a Virginia Native Riparian Plant Guide by the James Riparian Consortium.

During the grant term, PlanRVA staff met with Crater PDC staff to review past regional and multi-regional green infrastructure planning projects, primarily that were funded by past VCZM Program technical assistance grants. The discussion included data and analysis methods, partner engagement, and translation to present-day projects.

In September 2024 PlanRVA staff spoke at a VCU Urban and Regional Planning class about environmental planning and coastal management issues. Students gained a better appreciation for the complexity of issues facing Virginia's coastal zone communities and how urban planning is critical in managing risks or harm and harnessing opportunities.

Don't Trash Central Virginia

Don't Trash Central Virginia is an anti-litter campaign for the central Virginia region that approximately coincides with the Central Virginia Waste Management Authority service area. The campaign was first brought to PlanRVA by Litter Managers of several localities in the region. While interested in

cooperating on an anti-litter message campaign, they lacked the resources and organization to run a regional campaign. Since this initial outreach, PlanRVA has supported the *Don't Trash* campaign seeking funding and a broader community support for the message. The campaign has a series of pages on the PlanRVA website. PlanRVA staff produce content for campaign members and partners to utilize online, in print, and on social media. PlanRVA staff host campaign meetings, typically on a quarterly basis, for collaboration, information sharing, and networking among campaign members and partners. Campaign members include representatives from governments in the region, including nine localities as well as the Chickahominy Indian Tribe. There are currently nine campaign partners, which include local businesses and organizations. PlanRVA staff create customized logos for each member and partner to use on their materials related to litter. Each logo includes *Don't Trash* for consistency. An example of a *Don't Trash* partner logo is included below.

Figure 1 Don't Trash Central Virginia campaign logo

Figure 2 Don't Trash campaign sample partner logo for GRTC

Campaign Content

PlanRVA staff create content for the *Don't Trash* campaign; it is posted to the PlanRVA Facebook page and shared with campaign members and partners via a SharePoint site. Most of the social media content produced by PlanRVA staff for the campaign is provided to campaign members and partners in seasonal media toolkits. The toolkits are previewed at quarterly campaign meetings and posted to the *Don't Trash* SharePoint site once finalized. The seasonal toolkits have been used to promote different 'pushes' that motivate members, partners, and the public to stay involved. Each toolkit includes social media posts (including both general litter awareness posts and seasonally themed posts), any newly produced *Don't Trash* flyers, and a link to the *Don't Trash* anti-litter pledge. Examples of *Don't Trash* social media content produced during the grant term are included in Appendix A.

In FY23, PlanRVA expanded Don't Trash content onto a new PlanRVA Instagram account in addition to the PlanRVA Linkedin account to increase the reach of the campaign.

Promoting the Campaign

PlanRVA staff promote the *Don't Trash* campaign by attending public events around the region to raise awareness of the many negative impacts of litter and marine debris. PlanRVA staff hand out campaign-branded items to promote the campaign among the general public. Items distributed include stickers, car litter bags, reuseable grocery bags, reuseable water bottles, and trash grabbers. PlanRVA staff attended the following events and distributed *Don't Trash* items during the grant term. At all events PlanRVA staff spoke to attendees about the goals of the *Don't Trash* campaign and provided general education about the impacts of litter.

Date	**Sponsor**	**Event / Focus**	**County**	**Location**
4/20/24	Henrico County	Henrico Earth Day	Henrico	Deep Run Park
6/13/24	PlanRVA	PlanRVA Day	Richmond City	PlanRVA Office
9/28/24	Chickahominy Indian Tribe	Pow Wow	Charles City / Chickahominy Tribal Lands	Chickahominy Tribal Center

Campaign Coordination Meetings

On December 13, 2023 PlanRVA staff hosted a coordination meeting for *Don't Trash* campaign members and partners. PlanRVA staff discussed how the Community Engagement staff team at PlanRVA would be playing a larger support role for the campaign. PlanRVA staff reviewed a new media toolkit and upcoming events. The meeting concluded with next steps for the campaign and an opportunity for member and partner program updates.

In Spring 2024, PlanRVA's Outreach Coordinator and Don't Trash Campaign coordinator left the agency. In the meantime, PlanRVA has worked to restructure the campaign. In September 2024, PlanRVA onboarded a new Outreach and Engagement Coordinator who will be leading the Don't Trash Campaign Coordination Meetings in collaboration with PlanRVA's Environment staff.

Marine Debris

The *Don't Trash* campaign suite of web pages developed by PlanRVA staff includes content to educate the public about marine debris. It is important that residents of the Richmond region understand how their actions contribute to the issue of marine debris. The web content makes clear that litter on land is only one rainstorm away from becoming marine debris in nearby waterways and beyond. The web content also explains the harms of marine debris for water quality and local ecosystems. Links to existing resources developed by the Virginia CZM Program and others in the state working on marine debris are also included.

Lower Chickahominy Watershed Collaborative Support

In late 2016 PlanRVA received a 309 grant from the Virginia Coastal Zone Management Program to undertake a multi-year project focused on the lower Chickahominy River watershed. The goal of the project was to work with stakeholders to develop and adopt policies that would accomplish both natural resource conservation and sustainable economic development. Three counties constitute the

watershed: Charles City, James City, and New Kent. Three recently federally recognized Tribes were included in the study area footprint: Chickahominy Indian Tribe, Chickahominy Indian Tribe – Eastern Division, and the Pamunkey Indian Tribe.

The project prioritized the relationship of the Tribes and counties in pursuit of the creation of a regional organization focused on the watershed to support eco-tourism, natural resource conservation, and sustainable economic development. That focus led to the creation of the Lower Chickahominy Watershed Collaborative (LCWC) Memorandum of Understanding (MOU) and the committee structure of the LCWC to carry actions forward. The LCWC MOU was signed by the three counties, three Tribes, and two planning district commissions with a full or partial footprint in the project area. Other partners wishing to support the LCWC can sign a formal Supporting Cooperative Partner Statement and/or participate on any of the LCWC Workgroups: Land Conservation and Ecological Stewardship, Recreational Infrastructure and Marketing, and Sustainable Economic Development and Protection of Tribal Sites and Traditions.

Steering Committee

The LCWC Steering Committee aims to meet biannually. The Steering Committee is composed of staff of the LCWC MOU signatories. The purpose of the Steering Committee is to oversee and provide guidance to the Workgroups about how activities should move forward. PlanRVA staff schedule, host, and facilitate Steering Committee meetings. During this grant term, PlanRVA used grant funds to support two Steering Committee meetings:

March 27, 2024: PlanRVA staff began the meeting with some administrative matters: new staffing updates, future meeting planning, and task tracking suggestions across workgroups. The bulk of the agenda was a facilitated discussion covering the progress implementing changes to the workgroup structure and task tracking methodology. Planning was begun on a Spring 2025 LCWC Summit.

October 15, 2024: The meeting began with an Administration Overview, where members reviewed recent updates to the meeting structure, designed to streamline sessions and enhance collaboration on task progress across workgroups. The group then reviewed tasks completed since the last Steering Committee meeting. Updates included: 1. Tribal History Task: Workgroup discussions and outreach efforts advanced to foster a deeper understanding of tribal heritage. 2. Erosion Outreach Task: Progress was reported on public awareness initiatives, with next steps outlined for further outreach. Next, planning for the 2025 Workgroup Meeting Schedule was discussed, with proposed dates presented and feedback gathered from attendees to finalize the calendar. 2025 LCWC Watershed Summit Planning followed, starting with a Purpose Statement to outline summit goals. Several venue options were considered, including the James City County Recreation Center, Legacy Hall, and the Law Enforcement Center. The group discussed potential summit dates (weeks of March 24 and April 14), a preliminary agenda featuring panel discussions, workgroup reports, a NOAA study presentation on recreation travel times, and an LCWC feedback activity. The summit was tentatively planned as a half-day event. The meeting concluded with an Around-the-Room session for updates and questions from each member, followed by confirmation of the next Steering Committee meeting date.

Workgroups and Priorities

The LCWC Workgroups meet quarterly. Workgroups are composed of staff of the LCWC MOU signatories as well as staff of partner agencies relevant to each workgroup topic area. Examples of these

partner agencies include state agencies, land conservancies, academia, and other organizations. Each workgroup has a set of key priorities that aim to advance the goal of economic development and natural resource conservation in the watershed. The following are the three workgroups and their corresponding key priorities as worded at the conclusion of the grant term:

Land Conservation and Ecological Stewardship:

Key Priority 1: Develop watershed-wide policies/ programs for improving data on contiguous forest blocks. Increase geospatial mapping and access to data.

Key Priority 2: Enhance public education efforts for Family Legacy and Forest Conservation. Conduct Generation Next landowner education programs emphasizing underserved communities.

Key Priority 3: Collaborate to support land acquisition for land conservation, including for Tribal acquisition.

Key Priority 4: Establish policies to better support “living shorelines” for river restoration projects.

Recreational Infrastructure and Marketing:

Key Priority 1: Develop watershed-wide policies/ programs to expand on the Virginia Capital Trail by creating spur trails from the existing trail.

Key Priority 2: Make recommendations regarding infrastructure improvements that will support and encourage growth of the ecotourism industry in the LCW counties.

Key Priority 3: Develop an app that provides all appropriate ecotourism opportunities and historic landmarks/other educational features.

Key Priority 4: Develop programs to better educate recreationists about water safety and to enforce existing safety and boating regulations and establish a buoy system for safety.

Sustainable Economic Development and Protection of Tribal Sites and Traditions:

Key Priority 1: Develop watershed-wide policies and programs that support using the river as a "soft" economic driver for activities such as ecotourism, ecological tours, fishing, and fish farming.

Key Priority 2: Combine different types of tourism experiences to create larger tourist packages.

Key Priority 3: Develop watershed-wide programs to educate residents and visitors about sustainable economic development and its impact on ecological integrity and natural resources. Integrate into each county's comprehensive plan.

Key Priority 4: Develop watershed-wide policies and programs to systematically integrate Tribal and other history into public access points including family-owned fishing industries.

Key Priority 5: Engage stakeholders in how local and Tribal history can be integrated into the three county Comprehensive Plans for both ecological significance and sustainable business opportunities.

Workgroup Meetings

PlanRVA staff schedule, host, and facilitate all Workgroup meetings. PlanRVA staff also maintain a strategy and activity progress chart on the LCWC SharePoint site. This chart allows all those with access to see what is in progress and the next steps planned for each strategy. PlanRVA staff utilize the chart to

plan Workgroup meetings and coordinate with Workgroup members in between meetings. Workgroup meetings hosted by PlanRVA during this grant term include:

Land Conservation and Ecological Stewardship

November 3, 2023 Meeting:

The meeting began with **Welcome and Introductions**. In **Workgroup Administration**, members received an overview of the LCWC, updated contacts, and confirmed future meeting dates. Task tracking enhancements were discussed.
During the **Review of Priority Actions and Tasks**:

- **EJ Report and Matrix** (Task 1.1) was in progress, with content updates needing integration into the report.
- **In-Progress Data for Urban Heat and Cooling Capacity Analysis** (Task 1.2) was discussed
- **Forest Block and Ecological Value Matrix** (Task 1.3) was completed.

February 9, 2024 Meeting:

The meeting opened with **Welcome and Introductions**. During **Workgroup Administration**, updates were provided on the LCWC's structure, contact list adjustments, and meeting dates. Task tracking was discussed, with a proposal to add categories like "Current Actions," "Next Steps," and "Issues" for clarity.
The **Review of Priority Actions and Tasks** covered:

- **Heat Island Mapping**: Nicole Keller, PlanRVA Resilience Planner provided an update on task 1.2b.
- **Rewording of Task 1.1**: Updates included May Fornari's replacement of Danielle in the region and completed tasks now available on SharePoint.
- **Public Education on Family Legacy and Forest Conservation**: The group discussed existing and potential education efforts, including the Generation NEXT workshops.
- **Land Conservation Mapper Review**: Reviewed data layers and potential additions or filters, such as minimum acreage and maximum price per acre, to refine the conservation focus.
- **Living Shoreline Outreach**: Updates were provided on SEAS/Colonial's progress.

In **Open Discussion**, members noted the release of the **5th National Climate Assessment** and updates on the **CPRG** initiative. The meeting concluded with **Next Steps** and a recap before adjourning.

June 14, 2024 Meeting:

The meeting began with **Welcome and Introductions**. In **Workgroup Administration**, members reviewed updates from the March 2024 Steering Committee meeting. Key points included:

- Agreement for workgroups to focus on specific projects, with short-term goals tracked in a task spreadsheet, updated between meetings to monitor progress.
- Introduction of a "Priorities Recommendations" chart to streamline tasks, with PlanRVA clarifying task needs, and partner groups assigning appropriate staff.
- Updates on preliminary planning for the **Spring 2025 LCWC Summit**, with suggestions invited for speakers, locations, and field visits.

The **Focal Area Discussion** covered current resources, including:

- Presentation of the Land Conservation mapper and potential filters for conservation areas, along with a review of data layers like ConserveVA and county parcels.

- Proposal for a funding suitability mapping tool to identify potential grant-eligible lands, with funding presentations planned, starting with DOF's Meghan Mulroy-Goldman.

Open Discussion included an update on **CPRG and the recent survey**. The meeting concluded with **Next Steps**, a recap, and adjournment.

August 23, 2024 Meeting:

The **Land Conservation and Ecological Stewardship Workgroup** met on **August 23, 2024**, beginning with introductions and an outline of objectives. For **Workgroup Administration**, members discussed the upcoming **2025 LCWC Summit**, including planning for panel presentations, educational components, and networking activities. Venue options and potential dates were reviewed, and the structure was considered as a half or three-quarter day event. **Task Updates** included:

- **Living Shoreline Outreach** progress by SEAS/Colonial,
- Updates on the **Land Conservation Workshop**,
- Discussion on a potential **Guest Presentation**.

An **Open Discussion** provided updates on **Heat Island Mapping** (task 1.3), followed by next steps and adjournment.

Recreational and Infrastructure Marketing

November 3, 2023 Meeting:

The meeting began with **Welcome and Introductions**. In **Workgroup Administration**, members received an overview of the LCWC, reviewed the group's representation and agency contacts, confirmed meeting dates, and discussed task tracking improvements, adding new categories like "Current Actions," "Next Steps," and "Issues."

During the **Review of Priority Actions and Tasks**:

- Task 1.1 involved creating a comprehensive webmap, with GIS layers from PlanRVA's bike-ped and HRPDC Active Transportation plans to visualize current and proposed routes.
- Task 2.2 focused on reviewing the **Lower Chickahominy Resilience Assessment**.
- Ideas for further actions supporting ecotourism infrastructure were discussed, including literature reviews, signage, boat ramps, parking, road conditions, and amenities. The idea of using a dynamic web map for discussion was proposed.
- Task 4.1 suggested creating a list of non-ecotourism outdoor activities, like golf, wineries, and historical sites, that could complement ecotourism.

In **Open Discussion**, the "Thriving Communities" Farmers Market Barge project proposal was highlighted. The meeting concluded with **Next Steps** and adjourned.

January 26, 2024 Meeting:

The meeting began with **Welcome and Introductions**. In **Workgroup Administration**, members confirmed group representation, discussed agency contact updates, and reviewed meeting dates. The task tracking structure for this round of meetings was introduced, including categories for "Current Actions," "Next Steps," and "Issues."

During the **Review of Priority Actions and Tasks**:

- Task 1.1b: a webmap was presented integrating GIS layers from PlanRVA's bike-ped, HRPDC Active Transportation plan, and other sources for a comprehensive view of existing and proposed routes.

- Task 1.3: PlanRVA staff began adding Dominion easement data to the mapper.
- Task 2: PlanRVA staff presented an Infrastructure Asset Characterization Mapper, which currently includes 30 recreational sites, sought input for missing sites. Information on ADA accessibility and other potential data (e.g., sea level rise) was discussed.
- Task 3: Tourism packages were reviewed.
- Task 4.1: A list of non-ecotourism outdoor activities, such as golf, wineries, and historical sites, was created as a complement to eco-tourism.

An update on the **Brickyard Landing Master Plan** was provided by James City County Staff, with approval from the James City County Planning Commission and upcoming final approval by the Board of Supervisors in February. In **Open Discussion**, the group was briefed on scoping Green Infrastructure (GI) planning. The meeting concluded with **Next Steps** and adjournment.

June 12, 2024 Meeting:
The meeting began with **Welcome and Introductions**. In **Workgroup Administration**, members discussed updates from the **Steering Committee (SC) March 2024 meeting**.

During the **Review of Priority Actions and Tasks**:

- **Spreadsheet Updates**:
  - The group discussed defining "ecotourism infrastructure"
- **Focal Area Proposal**:
  - Potential **Practitioner Presentations** were discussed, including topics like the NOAA Recreation Visitation Study, Trail Development, Invasive Species Removal, and Infrastructure Risk Mitigation. The group will identify specific interests or speakers, and PlanRVA will coordinate presentations.

In **Open Discussion and PlanRVA update**, the following was covered:

- **PlanRVA Projects**:
  - **CPRG Update**: Measure identification is in progress.
  - **Transatlantic Seminar**: Updates on this initiative.
  - **PlanRVA Day**: Updates shared on this event.

The meeting ended with **Next Steps** and adjournment.

August 19, 2024 Meeting:
The meeting began with **Welcome and Introductions**. In **Workgroup Administration** the following was discussed:

- **LCWC Summit update – Spring 2025 Planning**

In the **Ecotourism Infrastructure** section:

- **2.1 Definition Consensus**: The group finalized the working definition of "Ecotourism Infrastructure."
- **2.2 Infrastructure Inventory**: The group reviewed the **County Ecotourism Inventory Storymaps**, discussing any necessary updates to improve the content.

During **Ecotourism Promotion and Awareness**:

- **3.2 Virginia Water Trails Page**: The group discussed tasks and opportunities for the **Virginia Water Trails Lower Chickahominy page**, including ideas for guest blogs. Suggestions included the **Berkeley Living Shoreline Project**, among others.

- **3.3 Funding Opportunities**: The group explored and reviewed new funding opportunities to enhance and market ecotourism features in the region.

In **Quarterly Project Updates** (1:55 PM - 2:20 PM):

- **4.1 Trail757 and PlanRVA Bike-Ped Planning**: Updates were provided by James City County staff and PlanRVA regarding ongoing projects.
- **4.2 Brickyard Landing Progress**: An update was provided by James City County staff on the Brickyard Landing project.
- **Lawrence Lewis Jr. Park**: It was noted that the **Boot Brush Application** has been approved.

The meeting concluded with **Open Discussion and Next Steps**.

Sustainable Economic Development and Protection of Tribal Sites and Traditions

February 2, 2024 Meeting:

The meeting began with introductions and an overview of the agenda.

In **Workgroup Administration**, the group discussed task tracking, using categories like "Current Actions," "Next Steps," and "Issues" to organize ongoing tasks.

The review of priority actions covered several topics:

- Ongoing maintenance of launch information.
- A rewording discussion about gauging interest from local economic development departments.
- Updates on various tasks, including updates from Jeff and other team members on different action items.
- Continued exploration of certain projects and updates on initiatives such as tribal site mapping, tourist packages, and the Comprehensive Plan.

During the open discussion, updates were shared on PlanRVA projects, including a Comprehensive Economic Development Strategy update and Climate Pollution Reduction Grant progress. The meeting concluded with a recap of action items and assignments, followed by adjournment.

May 31, 2024 Meeting:

The meeting started with **Welcome and Introductions**. In **Workgroup Administration**, members discussed updates from the **Steering Committee (SC) March 2024 meeting**.

During the **Review of Priority Actions and Tasks**:

- **Spreadsheet Updates** were covered.
- **Focal Area Proposal**: Locality Economic Development and Tribal History Inclusion Toolkits. The workgroup now has a grant specialist to help expand projects or develop new ones. This will increase capacity to identify a wider variety of funding sources.
- **Update on Berkeley Plantation – Tribal History Coordination** was discussed.

The meeting concluded with **Next Steps** and adjournment.

August 9, 2024 Meeting:

The **Sustainable Economic Development & Protection of Tribal Sites and Traditions Workgroup** meeting covered the following key points:

- **LCWC Summit Update (Spring 2025)**
- **Berkeley Plantation Tour – Tribal History Coordination**: The group reviewed a tour of Berkeley Plantation and identified opportunities to incorporate tribal history, such as acknowledging pre-

colonization tribes and tribal participation in the Civil War. Plans for updating the tour's interpretation and terminology were discussed, with action items and timelines outlined.

- **Open Discussion & PlanRVA Update**: The group was updated on the **Chesapeake Gateways Grant** and encouraged to share relevant projects not yet included in the tracking sheet.

The meeting concluded with **Next Steps**.

Online Content and Resources

PlanRVA staff maintains a Lower Chickahominy Watershed Collaborative SharePoint site for all members of the collaborative to use as a resource. The SharePoint site includes a member directory, a copy of the MOU, notes from workgroup and steering committee meetings, and watershed related resources. In addition to the LCWC SharePoint site, PlanRVA staff maintains multiple webpages dedicated to the Lower Chickahominy watershed and an overview of the project and Lower Chickahominy Watershed Collaborative. The webpage structure and their corresponding links are as follows:

- The Watershed
  - Environment
  - History & Culture
  - Land & Water Use
- The Project
  - Economic Study
  - Recreation and Ecotourism
  - Outreach
- The Collaborative
  - Partners

Technical Assistance

In addition to the contributions of assistance by Workgroup members, PlanRVA staff provide technical assistance to the LCWC to advance actions of key strategies. Below are technical assistance activities PlanRVA staff undertook during the grant term.

Land Conservation and Ecological Stewardship

- **Data Integration & Mapping**: PlanRVA developed GIS layers to create an **Urban Heat and Cooling Capacity Analysis,** and have presented and trained LCWC signatory staff on its utilization. James City County's inclusion in this dataset was a direct result of the LCWC partnership.
- **Living Shoreline Outreach Coordination**: PlanRVA worked on data gathering and outreach strategies for living shoreline outreach with SEAS/Colonial.

Recreational Infrastructure and Marketing

- **Web Mapping and GIS Support**: PlanRVA developed a webmap integrating GIS layers from bike-pedestrian and active transportation plans, and expanding this to include easement data and infrastructure characterizations for recreational sites.
- **Infrastructure & Asset Mapping**: PlanRVA developed a **Recreational Asset Characterization Mapper**, gathering data on watershed recreational sites.

Sustainable Economic Development and Protection of Tribal Sites and Traditions

- **Tribal History Resource**: PlanRVA created a **Guide to Incorporating Tribal History** in collaboration with tribal staff and Berkeley Plantation.

Benefits Accrued

Regional SolSmart Designation

PlanRVA's Solar webpage and Suitability Tool was created in part through CZM grant funding during the FY22 grant term, finalized during this grant term. The tool was developed to assess the viability of solar energy installations across the region by evaluating site properties such as solar irradiance, current land cover, use, slope, distance to existing power lines, and conservation/historical status. By providing local governments and organizations with detailed, data-driven insights, the tool enabled better decision-making for solar projects.

This tool played a significant role in PlanRVA achieving the SolSmart Bronze designation, a recognition program that awards communities for following national best management practices for solar energy. Through the creation and promotion of the Solar Suitability Tool, made possible by CZM grant funding, PlanRVA demonstrated its commitment to responsible and data-based planning for solar energy in the region.

Pluvial Flooding Data

In FY22, PlanRVA utilized CZM grant funding to coordinate the development geographic data mapping pluvial flooding in the PlanRVA region. In FY23, this data was utilized to provide data backing for securing additional coastal resilience funding for the implementation of a project in the city of Richmond. This project will convert a flood-prone parking lot in southside Richmond to permeable pavers. PlanRVA will pursue further coastal resilience implementation projects utilizing the benefits accrued from past Coastal grant funding.

Climate Pollution Reduction Network Development and Planning

PlanRVA has leveraged past funding and relationships cultivated through the Virginia Coastal Zone Management (CZM) Program to strengthen initiatives like the Climate Pollution Reduction Grant (CPRG) network. The PlanRVA Environmental Technical Advisory Committee (TAC), funded in part by previous CZM grants, has served as a foundational network for building collaborations and exchanging best practices in environmental planning. This group, composed of experts and stakeholders, has provided technical support, guidance, and recommendations that have proven essential for strategic planning and decision-making. By using this established forum, PlanRVA has streamlined its approach to regional network development and enriched the CPRG planning process with valuable insights and data.

The relationships and contacts developed through the Lower Chickahominy Watershed Collaborative (LCWC)—an initiative that brings together localities, Virginia Indian Tribes, planning districts, and various partners—have also become a resource for engagement and outreach. These partnerships, supported by CZM funding, have facilitated a more inclusive and collaborative approach in CPRG activities. The established trust and communication channels have enhanced PlanRVA's ability to coordinate efforts, share information efficiently, and align stakeholders on the importance of green infrastructure and resilience planning.

By building on these connections from the Environmental TAC and LCWC, PlanRVA has been able to broaden the reach and effectiveness of the CPRG network, incorporating experienced voices and

creating a more cohesive regional planning framework. This strategic use of past investments has strengthened current projects and demonstrated the value of continuity in CZM-funded initiatives.

Resilience Planning

PlanRVA staff advanced regional resilience planning the Richmond region working with locality staff and other partners.

Regional Resiliency Coordination

PlanRVA has identified the Environmental TAC as the primary engagement body for environmental and resilience planning concerns with locality and partner staff at the agency. Resilience informational items and coordination discussions are included on Environmental TAC agendas throughout the year. During this grant term, resilience agenda items on Environmental TAC agendas included:

- October 26, 2023 Environmental TAC meeting
    - Hazard Mitigation Plan Review
    - Project Updates: November 14 Solar Workshop about adequately planning for solar energy, Virginia Coastal Resilience TAC Updates
- January 31, 2024 Environmental TAC meeting
    - DCR staff presented on the Virginia Coastal Resilience Web Explorer
    - Hazard Mitigation Plan Review
- April 25, 2024 Environmental TAC meeting
    - PlanRVA Green Infrastructure Plan Update
    - Hazard Mitigation Plan Review
- July 25, 2024 Environmental TAC meeting
    - Virginia Coastal Resilience TAC Update
    - Green Infrastructure Plan Goals and Lenses Overview
- September 26, 2024 Environmental TAC meeting
    - Green Infrastructure Plan Update
    - Possible pursuit of additional funding for a Community Flood Preparedness Fund regional resilience plan

On June 17, 2024 PlanRVA hosted a regional resilience workshop, providing a platform for local government input on flood resilience priorities to be reflected in Phase II of the Virginia Coastal Resilience Master Plan.

Regional Resiliency Technical Assistance

PlanRVA staff coordinated planning, data gathering and analysis, and other efforts to support regional resilience in the Richmond region.

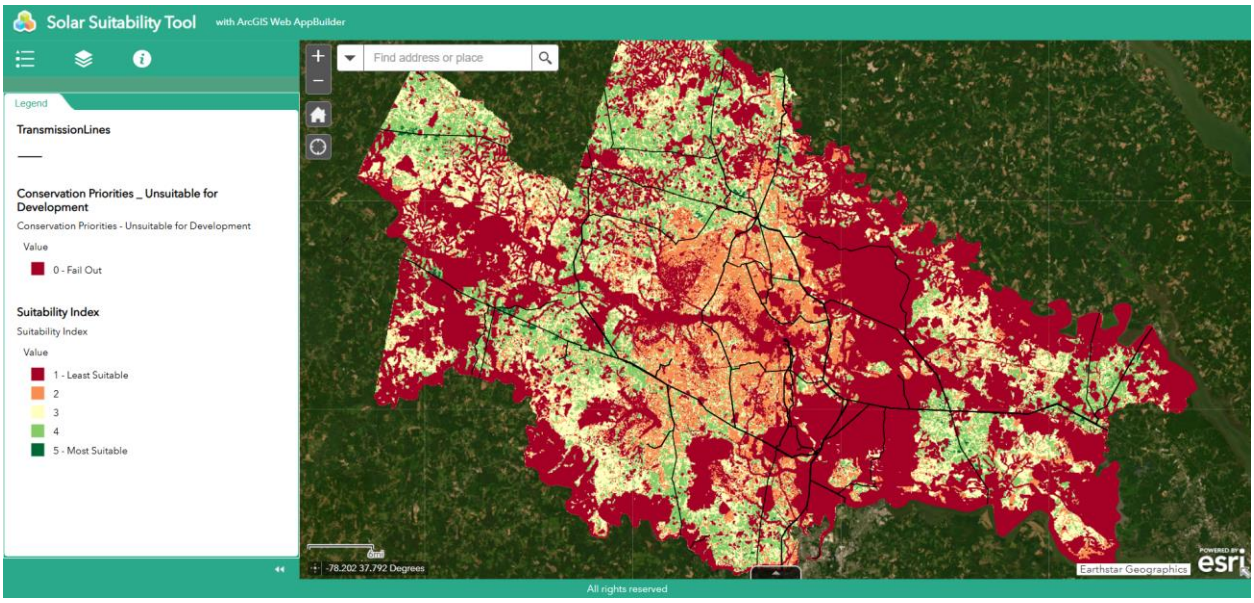
Solar Suitability Analysis

Begun during the FY22 grant term, the Solar Suitability Analysis and mapping tool is complete. Version 1 was released in late calendar year 2023. The regional solar suitability analysis considers geographic features that make the development of large-scale solar installations more or less likely and more or less suitable across the landscape. In brief, this analysis helps planners see where large-scale solar installations should not go and where they may make the most sense. This data can help local and

regional planners better able to protect valuable environmental resources and avoid or mitigate land use conflicts. Geographic features included in the analysis include:

- Conserved lands
- Easements
- Agricultural-Forestal Districts
- Transmission Lines
- Slope
- Land cover
- Land use
- Floodplains
- Endangered species and community areas

The PlanRVA Solar Suitability Tool may be found here.



Regional Hazard Mitigation Coordination

Hazard Mitigation Plans evaluate the risks posed by various natural hazards and identify strategies and actions to mitigate those risks. PlanRVA coordinates and maintains the hazard mitigation plan in the Richmond region, both through full plan updates every 5 years and annual reviews required by FEMA. In the Richmond region, several hazards that threaten coastal resources were identified in the 2022 Hazard Mitigation Plan. These hazards include flooding, extreme heat, strong storm events, and shoreline erosion. During 2024, PlanRVA staff conducted an annual review of the Richmond-Crater Hazard Mitigation Plan, partly relying on these grant funds.

The conduct of an annual review dovetails well with broader resilience planning and coastal mitigation concerns. The annual review process involves both research and data gathering about updated hazard data and recent events. It also includes outreach to each locality and partner associated with mitigation actions included in the plan so that progress updates can be recorded. PlanRVA staff are finalizing the 2024 annual review now and will submit it to FEMA in late November 2024.

PlanRVA staff have also provided educational presentations about hazard mitigation planning, including its relationship to green infrastructure planning. On July 24, PlanRVA staff joined City of Richmond staff to present during a FEMA webinar about inclusion of resilience in the Richmond Hazard Mitigation Plan and implementation of local resilience mitigation actions. PlanRVA staff provided an overview of the plan and key resilience concerns in the Richmond region while City of Richmond staff discussed the implementation of mitigation actions that are also projects recommended in the City's Clean Water and Sustainability Plans. Many of these projects are green infrastructure implementation projects to improve water quality and habitat across the City.

Regional Green Infrastructure Plan

In spring 2024, PlanRVA staff commenced work on an update of the Richmond region's 2009 Green Infrastructure Plan. The full Plan update will span both this grant term and the FY24 grant term. The updated Regional Green Infrastructure Plan will present green infrastructure features across the region and indicate priority areas and actions for preserving or improving the Richmond region's green infrastructure network. The Regional Green Infrastructure Plan will serve as a core document for the Environment Program at PlanRVA as the Regional Strategic Plan. To ensure plan interconnection, It will inform and be woven into other core Plans at the agency, such as the Comprehensive Economic Development Strategy, Long Range Transportation Plan, and the Regional Hazard Mitigation Plan.

During this grant term, PlanRVA staff conducted literature review, goal mapping, and initiated data gathering and categorization. A literature review of other regional and local green infrastructure plans to identify best practices and models for the plan update. PlanRVA staff reviewed all local comprehensive plans in the region for goals and strategies related to resilience and green infrastructure. A large matrix was constructed that mapped all of these local goals to draft goals for inclusion in the regional plan update. This goal mapping and the draft goals were presented to Environmental TAC on July 25, 2024. PlanRVA staff have also considered organizing concepts and data in the plan. Key green infrastructure features will be presented in a series of maps, one for each conceptual lens: terrestrial habitat, water quality, flood resilience, working lands, and recreation & culture. PlanRVA staff are currently gathering data for inclusion in the lens maps and evaluating methodologies for analysis and prioritization.

PlanRVA staff have also been educating partners about how green infrastructure planning fits into the larger landscape of resilience planning. In September, PlanRVA staff presented to the Emergency Management Alliance of Central Virginia about green infrastructure planning and the importance of green infrastructure when planning for coastal hazards. Emergency Management professionals in attendance left the meeting with an improved understanding of the role of green infrastructure in reducing risk and as a consideration in short- and long-term planning.

State Resilience Planning Support

PlanRVA staff maintained communication during the grant term with resilience related project and program staff at DCR and other state agencies. Updates and information were readily passed on to locality staff and other regional partners through Environmental TAC meetings and emails. PlanRVA staff serve on the Virginia Coastal Resilience TAC and were assigned to the Project Prioritization Subcommittee in 2023. PlanRVA staff attended the following meetings during the grant term:

- December 15, 2023 – Virginia Coastal Resilience TAC meeting

- February 15, 2024 – Virginia Coastal Resilience TAC meeting – Project Prioritization Subcommittee
- May 17, 2024 – Virginia Coastal Resilience TAC meeting – Project Prioritization Subcommittee
- June 17, 2024 – Workshop - Phase II of Virginia's Coastal Resilience Master Plan
- August 7, 2024 – Virginia Coastal Resilience TAC meeting – Project Prioritization Subcommittee
- October 8, 2024 – Virginia Coastal Resilience TAC meeting – Project Prioritization TAC Subcommittee

Regional Resilience Outreach

PlanRVA staff developed a resilience Public Outreach Plan for planners and outreach staff to use in engaging with the public on coastal resilience issues. The document provides information about resilience concerns, resources, and partners for 4 key coastal resilience topics: flood, heat island, sea level rise, and surface water quality. The document concludes with recommendations for using engagement channels at PlanRVA and next steps for improvement of existing resources.

A copy of the plan is included in Appendix B.

Appendix A: Samples of *Don't Trash Central Virginia* Campaign Materials

Samples of Don't Trash Campaign Social Media Materials


DON'T
trash
CENTRAL
VIRGINIA
Powered By:
PlanRVA
Where the region comes together to look ahead.
No if, ands, or butts...
keep our landscape litter free!


Every Litter Bit Hurts...
Did you know?
"Nine out of ten pieces of litter on the ground in the U.S. were under four inches in size. Though smaller litter may be less visible, it remains the dominant type of litter in the United States."
Source: Keep America Beautiful Litter Study
Powered By:
PlanRVA
Where the region comes together to look ahead.
DON'T trash CENTRAL VIRGINIA
#DontTrashCentralVA
DontTrashCentralVA.org

Appendix B: PlanRVA Resilience Public Outreach Plan

Public Outreach Plan: Resilience Education and Engagement

Virginia Coastal Zone
MANAGEMENT PROGRAM

Grant Number NA23NOS4190255 Task Number 48

This project was funded, in part, by the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant FY23 #NA23NOS4190255 of the US Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended. The views expressed herein are those of the authors and do not necessarily reflect the views of the US Department of Commerce, NOAA, or any of its subagencies.

Contents

Introduction

This document aims to assist PlanRVA staff by providing information about coastal resilience topics and guidance about using various outreach methods. For each topic covered, this document lays the groundwork for resilience outreach and communication with the public by stating key principles and facts, indicating measures individuals can undertake, and highlighting key partners and resources. We hope to enhance community preparedness and involvement in resilience planning by raising awareness and providing actionable information.

The scope of this document is limited to concerns of coastal resilience. PlanRVA staff hope to expand this document to consider additional resilience threats and hazards in the future with additional funding and capacity.

Intended Use of This Document

This document will serve as a guide for public outreach on resilience topics, focusing on both immediate and long-term risks. The information and actions it recommends will be used to educate the public, foster engagement in planning projects, and build stronger, more resilient communities.

Title VI of the Civil Rights Act of 1964

PlanRVA ensures that no one who uses our services will be excluded from participation, denied benefits or discriminated against while using these services on the basis of their race, color or national origin.

Resilience at PlanRVA

Core Aspects of Resilience at PlanRVA

Resilience encompasses the ability to withstand and recover from various challenges. At PlanRVA, we consider resilience across a spectrum:

- **Immediate Disasters:** Immediate disasters have a defined start and end. They may begin suddenly, with little warning or may be anticipated hours or days in advance.
    - Hurricanes,
    - Tornadoes,
    - Flash floods

- **Longer-Term Risks:** Longer-term risks are trends seen over years that amount to a growing threat to regional resiliency. These trends may be punctuated by extreme, immediate disasters or may be seen as subtle shifts gradually accumulating over time.
    - Flood risk – precipitation pattern changes, shifting floodplains, etc.,
    - Extreme heat – days and nights of extremely high temperatures, urban heat islands, etc.

- **Drivers of Change:** Drivers of change affect the likely impact of both immediate disasters and longer-term risks across society. Divers of change can be natural processes or effects of human actions, or a mix of the two. Policy decisions and individual actions can have a range of impacts on drivers of change.
    - Greenhouse gas emissions
    - Land cover change and land use patterns
    - Subsidence

2024 - PlanRVA Projects with Resilience Concerns

- Regional Strategic Planning Process
- Urban Heat Island Mapping and Mitigation Planning
- Lower Chickahominy Watershed Collaborative
- Regional Flooding Data Analysis and Mitigation Planning

- Climate Action Plan
- Green Infrastructure Plan Update
- Hazard Mitigation Planning
- Regional Resilience Hub Planning

Future projects will continue to address the evolving needs of our region, focusing on comprehensive strategies to manage flood risks, mitigate heat islands, adapt to sea level rise, and maintain surface water quality.

Resilience Concerns for General Outreach
(Coastal Resilience Focus)

Flood Resilience
Definition and Risk Level

Flood resilience involves preparing for and mitigating the impacts of various types of floods, which are significant threats within the PlanRVA region. Twenty-two major disasters have been declared in the region between 1965 - 2024, stemming from hurricanes, severe storms, snow and ice, droughts, and floods. Flooding, often associated with hurricanes and severe storms, can occur at any time of the year, especially during:

- Late winter, due to snowmelt and ice jam breakaway.
- Early spring, due to seasonal rain patterns.
- Late summer, due to hurricanes and tropical systems.

Localized riverine flooding can affect areas not adjacent to major water bodies, while tidal flooding occurs during tropical storms and nor'easters. Flooding can occur along all waterways in the region, causing damage to public and private infrastructure, including roads, bridges, and critical facilities like police and fire stations. Many residents and workers in the Richmond region are more vulnerable to flooding than they realize, experiencing both riverine and tidal flooding as well as potential dam inundation.

Types of Floods

- **Riverine Flooding:** Occurs when a river's water level rises, overruns the banks, and threatens nearby areas, causing damage ranging from flooded roads to residential basements.
- **Coastal Flooding:**
    - Tidal Flooding**:** Results from the combination of winds, offshore storms, and high tide events during full and new moons, affecting at-risk areas multiple times a year.
    - Storm Surge Flooding: Occurs when strong winds from a storm push seawater inland, causing a rise in water levels that can inundate coastal areas and lead to flooding.
- **Pluvial Flooding:** Flooding caused by rainfall. Can inundate low-lying areas or locations where storm drainage systems are blocked or unable to accommodate the level of rainfall.
- **Dam Failures:** Can occur with little or no warning. The region has twenty-three high-hazard dams classified by the Virginia Department of Conservation and Recreation (DCR), with potential downstream losses estimated in the event of failure.

Floodplains

A floodplain a low, generally flat area located along a river or stream that experiences flooding during and/or after heavy rain events.

Associated with the National Flood Insurance Program (NFIP), FEMA designates various flood risk areas through a GIS dataset called the special flood hazard layer. Two of the flood risk areas often referenced in discussions on flood risk as well as flood regulations are:

- 1% annual chance of flood, also known as the 100-year floodplain,
- 0.2% annual chance of flood, also known as the 500-year floodplain.

In spite of the names referencing 100 and 500 year events, flood in these areas can and do occur more frequently than the intervals indicated. A 100-year flood event one year does NOT mean a 100-year flood even will not occur the following year. Data from MARISA indicate that precipitation patterns are changing in the face of climate change; scientists anticipate a shifting flood risk landscape in the future.

Henrico County has local floodplains designated in addition to the FEMA designated floodplains in the County. The county-designated areas area based on the same analysis methodology as the FEMA floodplains but extend farther upstream by looking as smaller drainage areas. The County regulates these areas in the same manner as the FEMA floodplains.

Safety, Preparedness, and Mitigation

Flood Safety Tips:

- **Before the Flood:**
  - Sign up for community warning systems, Emergency Alert System (EAS), and NOAA Weather Radio.
  - Gather supplies in case of immediate evacuation or service cutoffs, including batteries and charging devices. Keep important documents in a secure, waterproof deposit box and create password-protected digital copies.
  - Save money in an emergency savings account and keep some cash at home.
  - Review health, life, and property insurance policies to ensure sufficient coverage.
  - Obtain flood insurance (typically a 30-day waiting period for coverage through the NFIP).
- **During the Flood:**
  - Go to a safe location if warned of imminent flooding. Evacuate if instructed, or move to higher ground. Never drive through flood waters.
  - Do not walk, swim, or drive through flood waters.

    - Listen to EAS, NOAA Weather Radio, or local alerting systems for emergency information and instructions.
- **After the Flood:**
    - Avoid driving except in emergencies.
    - Avoid wading in floodwater, which may contain dangerous debris and contaminants.
    - Use generators or gasoline-powered machinery only outdoors and away from windows.
    - Listen to authorities for information and instructions.

Flood Insurance & CRS

Home and renter insurance rarely covers damage from flood events. All PlanRVA localities participate in the National Flood Insurance Program (NFIP). Flood insurance is often requirement of a lending institution when providing a mortgage for a residence located in the 1% annual chance of flood, or 100-year floodplain. Unfortunately, many residents outside of this mandate do not have flood insurance.

As of 2024, the Town of Ashland, Henrico County, and the City of Richmond also participate in the Community Rating System (CRS). In the CRS program, localities adopt policies and conduct programs and projects to earn credits. Credits correspond to varying levels of reduction on NFIP flood insurance premiums for policyholders.

Resources and Partners

PlanRVA Resources

Flood Aware is a page on the PlanRVA website that informs readers about flood risk. Using PlanRVA's Flood Risk Mapper, users can assess flood risk based on effective flood insurance rate maps (FIRMs) and other flood risk information. Recent FIRM updates include Charles City County (October 21, 2021) and New Kent County (April 2022), with updates in process for Henrico (April 25, 2024) and Richmond (Summer 2024).

PlanSafe is a public preparedness web resource and awareness campaign of PlanRVA and the Emergency Management Alliance of Central Virginia. The PlanSafe web resource is housed on the PlanRVA website. While not solely devoted to flood risk or preparedness, PlanSafe instructs readers on how to be more aware and more prepared for common risks in this region.

Other Resources

Virginia Flood Risk Information System (VFRIS) – A DCR website and mapping application that enables users to view FEMA and state-level flood risk information. The data presented is comprehensive, but less experienced users may have trouble discerning which data to focus on.

Virginia Coastal Resilience Master Plan – The Virginia Coastal Resilience Master Plan and the associated Web Explorer characterize flood risk in the entirety of Coastal PDCs across Virginia. NOTE: This plan and the associated data include Goochland and Powhatan Counties in the PlanRVA footprint even though they have no tidal/coastal waters.

See also the statewide Virginia Flood Protection Master Plan, kicking off in late 2024.

ADAPT VA – ADAPT VA is a website full of data and other information about resilience in Virginia. It is maintained by the Virginia Institute of Marine Science.

Resilience Adaptation Feasibility Tool (RAFT) – The RAFT is a project partnership between UVA Institute for Engagement & Negotiation, Virginia Tech's Coastal Collaborator, and Old Dominion University's Institute for Coastal Adaptation & Resilience. The traditional RAFT program works with local governments to evaluate resilience risks and local programs and policies. The project concludes with support for localities to refine or update programs and policies to enhance resilience. The RAFT Team also developed a do-it-yourself Scorecard for localities to use. More information about the RAFT Program, local experiences, and the RAFT scorecard is available on the RAFT website.

Commonwealth Center for Recurrent Flooding Resiliency – The CCRFR is a partnership between Old Dominion University, the College of William & Mary, and the Virginia Institute of Marine Science. See the CCRFR's website for more information on projects, data, and other resources.

Partners

- Federal Emergency Management Agency (FEMA)
- National Oceanic & Atmospheric Administration (NOAA)- Both the National Weather Service and the Office for Coastal Management have many useful resources related to flood information.
- Virginia Department of Conservation and Recreation – DCR has three divisions of note on flooding: Dam Safety, Floodplains, and Resilience Planning. DCR produces public awareness materials and content.
    - DCR Dam Safety Resources
    - DCR Flood Awareness Resources
    - May 31 is National Dam Safety Awareness Day
    - In mid-March, DCR conducts Virginia Flood Awareness Week
- Virginia Coastal Zone Management Program (CZM)- With a focus are on coastal resilience, the CZM Program, housed at DEQ, supports projects and provides connections to experts across Virginia and the mid-Atlantic.
- Local Floodplain Managers – DCR maintains a list of local floodplain contacts. People can also look at their locality's website for the most updated contacts and resources.

Heat Island Resilience

Definition and Risk Level

Heat islands refer to areas that are higher in temperature than their surroundings. Heat islands can occur as a result of urban land use, as well as land covers that absorb more solar radiation. Land cover types such as asphalt, concrete, and buildings absorb and hold more heat than natural land covers such as trees and turf. Additionally, lower amounts of tree canopy in urban areas can lead to increases in temperature contributing to heat islands due to a lack of shade.

Safety, Preparedness, and Mitigation

Urban planning can help mitigate heat island effects through increased tree canopy, best management practices, and more reflective pavement materials, which provide shade and deflect radiation.

Resources & Partners

PlanRVA Resources

2024 PlanRVA Heat Island Data – In 2024, PlanRVA staff completed a heat island and cooling capacity analysis for an extended PlanRVA footprint that included James City County. PlanRVA staff are completing a StoryMap describing the data that will go live in early 2025.

Other Resources

Provided by EPA:

U.S. EPA Urban Heat Island Program—Clearinghouse for resources, tools, and educational materials on heat island effects, as well as a compendium of mitigation strategies.

EPA Region 5 Resource - Stormwater Trees -- A how-to technical memorandum for improving success of urban tree programs.

EPA Green Infrastructure Funding Opportunities - this EPA website includes listings for other federal funding opportunities.

Federal Funding Compendium for Urban Heat Adaptation (PDF)(90 pp, 849 K, About PDF) —The Georgetown Climate Center offers this compendium of federal funding opportunities related to urban heat island effects.

Adapting to Urban Heat—A Toolkit for Local Governments —This page on the Georgetown Climate Center website provides an overview of the toolkit.

Reducing Urban Heat Islands: Compendium of Strategies—Green Roofs (PDF) (29 pp, 4MB, About PDF)—This EPA publication describes the causes and impacts of

summertime urban heat islands and promotes strategies for lowering temperatures in U.S. communities.

iTree —A U.S. Forest Service analysis tool for urban forest managers. It uses tree inventory data to quantify the dollar value of annual environmental benefits (e.g., energy conservation, air quality improvement, carbon dioxide reduction, stormwater control, and property value increase).

The Value of Green Infrastructure for Urban Climate Adaptation (PDF)(52 pp, 2 MB, About PDF) —This Center for Clean Air Policy report evaluates the performance and benefits of a variety of green infrastructure strategies that assist with community climate resiliency, including ecoroofs, green alleys and streets, and urban forestry.

Green Works for Climate Resilience: A Guide to Community Planning for Climate Change (PDF)(76 pp, 2 MB, About PDF) —This guide from the National Wildlife Federation provides an overview of nature-based approaches to address and plan for the effects of climate change, including planning resources related to mitigation of extreme heat.

Partners

- Emergency Management Alliance of Central Virginia: Coordinates efforts to enhance community preparedness and response to extreme heat events.
- Virginia Department of Environmental Quality (DEQ): Provides environmental data to support heat resilience initiatives.
- Virginia Department of Forestry (VDOF): Supports urban forestry projects that enhance tree coverage and reduce heat effects in urban areas. Provides grant funding which can be used for data development to combat heat islands.
- Virginia Department of Health (VDH): Partners to incorporate health data and prioritize actions that safeguard public health during extreme heat events.
- Virginia Department of Conservation and Recreation (DCR): Assists with strategies related to conservation and natural resource management that support climate adaptation. Provides environmental data to support heat resilience initiatives.
- Environmental Protection Agency (EPA): Offers technical assistance and grant funding for initiatives aimed at reducing heat island effects.
- National Oceanic and Atmospheric Administration (NOAA): Supplies climate data and forecasting to support planning and response efforts related to urban heat.

Sea Level Rise Resilience

Definition and Risks

Sea level rise refers to the increase in the average level of the world's oceans due to the effects of climate change, primarily driven by the melting of glaciers and ice sheets and the thermal expansion of seawater as it warms. **Land subsidence** is a sinking or lowering of the land surface. Land subsidence has been documented in eastern Virginia since the 1940s. Land subsidence in Virginia occurs due to natural and human-induced factors: primarily glacial-isostatic adjustment and groundwater withdrawal. Sea Level rise and land subsidence combine to result in **relative sea level rise** – or the net impact on sea levels. Virginia and the southern Chesapeake Bay region have the highest rate of sea-level rise on the Atlantic coast in the United States.

The eastern portion of PlanRVA (east of Interstate 95) experiences tidal influence and is considered a coastal area. Given the topography, the impacts of sea level rise may appear less extreme here compared to Hampton Roads and areas directly along the Chesapeake Bay, but increased water levels have impacted and will continue to impact the eastern half of the region.

Sea level rise can cause the following impacts:

- **Salinity Changes:** Higher sea levels can lead to the intrusion of saltwater into freshwater systems, affecting drinking water supplies, agriculture, and natural ecosystems.
- **Habitat Shifts:** As sea levels rise, coastal habitats such as marshes, mangroves, and tidal flats can be inundated or altered, leading to shifts in species distribution and potentially significant biodiversity loss which could impact our region.
- **Wetland Migration:** Wetlands may migrate inland as sea levels rise, but this is often hindered by human development, leading to a loss of these critical ecosystems that provide flood protection, water filtration, and habitat for wildlife.

Safety, Preparedness, and Mitigation

Addressing the risks associated with sea level rise requires a multifaceted approach involving preparedness strategies, and mitigation and adaptation efforts.

Preparedness Strategies:

- **Community Education:** Informing residents about the risks of sea level rise and what they can do to prepare, such as developing emergency plans and evacuation routes.

- **Land Use Planning:** Implementing zoning and development regulations that discourage building in high-risk areas and promote sustainable land use practices.
- **Monitoring Systems:** Establishing robust monitoring and early warning systems to provide timely information about rising water levels and potential flooding events.

Mitigation & Resilience Efforts:

The Chesapeake Bay Protection Act (CBPA) applies in all but two of our localities (Goochland and Powhatan). The CBPA requires certain actions for nonpoint source pollution management.

"The purpose of the Bay Act program is to protect and improve water quality in the Chesapeake Bay by requiring the implementation of effective land use management practices."

"Local governments, when considering any proposed land development that will encroach into an RPA, are required by Section 9 VAC 25-830-155 to conduct an assessment of sea level rise, storm surge, and flooding impacts (Resiliency Assessment) on the proposed development."

Below are several general categories of mitigation and resilience activities -

- **Green Infrastructure:** Utilizing Best Management Practices such as permeable pavement and bioretention areas to enhance water absorption and reduce runoff.
- **Carbon Emission Reduction:** Implementing policies and practices to reduce greenhouse gas emissions, addressing one of the root causes of rising sea levels.
- **Resilience Planning:** While mitigation efforts seek to reduce risk, resilience measures seek to better accommodate existing risk and conditions. Develop long-term resilience plans that include elevating infrastructure and buildings, as well as investments in resilient infrastructure and ecosystems.

Resources & Partners

Resources

- **Adapt Virginia:** A comprehensive resource providing tools, data, and information to help Virginia's coastal communities plan for and adapt to sea level rise.
- **Virginia Coastal Resilience Master Plan:** This plan outlines strategies and actions for enhancing coastal resilience, including the use of the Coastal Resilience Web Explorer, an interactive tool for visualizing sea level rise impacts and adaptation projects.

- **Land Subsidence and Relative Sea-level Rise in the Southern Chesapeake Bay Region**: USGS report describing anticipated sea-level rise, subsidence, and relative sea level rise in the southern Chesapeake Bay Region.
- **Example of a Regional Tool: Fight The Flood - MPPDC:** An initiative by the Middle Peninsula Planning District Commission to support flood resilience projects and provide resources for property owners and local governments.

Partners

Effective resilience to sea level rise requires collaboration among various stakeholders. PlanRVA works with several key partners to enhance regional resilience:

- **National Oceanic and Atmospheric Administration (NOAA):** Provides scientific data, tools, and resources for understanding and addressing sea level rise.
- **Virginia Coastal Zone Management (CZM):** Supports integrated coastal management efforts and promotes sustainable use of coastal resources.
- **Virginia Institute of Marine Science (VIMS):** Conducts research and provides expertise on marine and coastal issues, including sea level rise.
- **Coastal Planning District Commissions (PDCs):** In this context - Regional organizations that support local governments in planning and implementing resilience strategies.

Surface Water Quality Resilience

Definition and Risks

Surface Water Quality Resilience refers to the capacity of water bodies such as rivers, lakes, streams, and coastal waters to maintain their ecological integrity, support human use, and recover from disturbances. Good water quality is essential for drinking water, recreation, agriculture, and the overall health of ecosystems. Various factors can degrade water quality, posing significant risks:

- **Fishing and Recreation Concerns:** Contaminated water can affect fish populations, making fishing unsafe and reducing recreational opportunities such as swimming and boating.
- **Septic Maintenance:** Improperly maintained septic systems can leak harmful substances into nearby water bodies, leading to contamination.
- **Drinking Water:** Polluted surface water can compromise drinking water supplies, making it unsafe for consumption and requiring expensive treatment processes.

Existing Issues Characterization

Several contaminants and issues can impact surface water quality, including:

- **Nutrient Runoff:** Excessive nutrients, primarily nitrogen and phosphorus, from agricultural runoff, urban areas, and wastewater can lead to algal blooms. These blooms can produce toxins harmful to humans and wildlife and create dead zones where oxygen levels are too low to support aquatic life.
- **Bacteria:** Pathogenic bacteria from sewage, septic systems, and animal waste can contaminate water bodies, posing health risks to humans and animals.
- **Total Maximum Daily Loads (TMDLs):** TMDLs represent the maximum amount of a pollutant that a water body can receive while still meeting water quality standards. Many water bodies are impaired due to pollutants exceeding these limits.
- **Polychlorinated Biphenyls (PCBs):** These toxic industrial chemicals can accumulate in sediments and the tissues of aquatic organisms, posing long-term ecological and human health risks.
- **Per- and Polyfluoroalkyl Substances (PFAS):** These persistent chemicals are found in various consumer products and industrial processes, contaminating water bodies and posing health risks due to their bioaccumulative nature.

Safety, Preparedness, and Mitigation

Ensuring the resilience of surface water quality involves various strategies and practices aimed at preventing contamination, preparing for potential risks, and mitigating the impacts of pollutants.

Safety Measures:

- **Water Quality Monitoring:** Regular monitoring of water bodies to detect contamination early and take necessary actions to protect public health and ecosystems.
- **Public Health Advisories:** Issuing advisories and warnings when water quality is compromised to inform the public about risks and necessary precautions.

Preparedness Strategies:

- **Education and Outreach:** Educating the public and stakeholders about the sources of water pollution, its impacts, and ways to reduce it. This includes promoting best practices for septic system maintenance, agricultural runoff management, and proper disposal of hazardous substances.
- **Land Use Planning:** Implementing zoning and land use regulations that protect water quality, such as establishing buffer zones around water bodies and restricting development in sensitive areas.

Mitigation Efforts:

- **Nutrient Management:** Implementing agricultural practices that reduce nutrient runoff, such as cover cropping, buffer strips, and precision fertilization.
- **Green Infrastructure:** Using green infrastructure solutions like rain gardens, bioswales, and permeable pavements to reduce runoff and filter pollutants before they reach water bodies.
- **Pollutant Reduction Programs:** Enforcing regulations and programs like the Virginia Pollutant Discharge Elimination System (VPDES) that limit pollutants entering streams, rivers, and other waterways.
- **Restoration Projects:** Undertaking projects to restore degraded water bodies and habitats, improving their natural ability to filter pollutants and support aquatic life.

Resources & Partners

Resources

To support surface water quality resilience, various resources are available for communities, policymakers, and practitioners:

- **Virginia Pollutant Discharge Elimination System (VPDES):** Regulates point source discharges to ensure compliance with water quality standards.
- **Virginia Water Protection Program:** Oversees activities impacting surface waters, such as land clearing, dredging, and water withdrawals, to minimize adverse effects.
- **Educational Materials:** Resources provided by organizations like the EPA, VIMS, and local non-profits to inform and educate the public and stakeholders about water quality issues and best practices.

Partners

Building resilience in surface water quality requires collaboration among various stakeholders, including government agencies, non-profits, and community organizations. Key partners include:

- **Virginia Department of Environmental Quality (DEQ):** Regulates and monitors water quality, enforces pollution control laws, and provides funding and technical assistance for water quality improvement projects.
- **Virginia Institute of Marine Science (VIMS):** Conducts research and provides expertise on water quality issues, including the impacts of pollutants and effective mitigation strategies.
- **Community Partners:** Organizations like the James River Association (JRA), Chesapeake Bay Foundation (CBF), and Alliance for the Bay work on local and regional water quality initiatives, engage in public education, and advocate for stronger water protection policies.

Outreach Methods & Recommendations

This section provides recommendations on strategies to share and integrate the above information into PlanRVA's outreach strategies.

Digital Resources

PlanRVA plans to utilize digital outreach methods, including a website, story maps, and social media . These methods will enhance public engagement and education on resilience topics.

Website

The existing Resiliency webpage will be expanded to include an updated definition of resilience and adapted to serve as a centralized hub for various resilience topics. This page will provide and link to comprehensive information and resources on flood risks, heat islands, sea level rise, and surface water quality, among other concerns. Future redesigns will aim to continuously improve the user experience and expand features and resources.

Story Maps

The Resiliency story map will undergo a design revamp to improve information clarity and user experience. This interactive tool will illustrate risks, current projects, and future plans, making it easier for the community to understand and engage with resilience initiatives.

Social Media

PlanRVA should develop a plan for social media engagement related to resilience concern awareness. A suite of targeted social media campaign that aligns with the viewers of each social media channel (Facebook, Instagram, and LinkedIn) is proposed. These campaigns should include educational infographics on resilience topics and aim to increase traffic to the Resiliency story map. Existing partner relationships, such as those involved in the Don't Trash Central Virginia Campaign, could be leveraged to expand the reach of the social media campaigns. In addition to content produced and shared by the agency, PlanRVA could develop media toolkits for partners to share and distribute among their networks and community members. The campaign's success could be measured by the number of people engaged directly on social posts and the number of views on the Resiliency site.

When designing the campaigns it is important to remember the following:

- With the volume of information available, it's important to break up messaging into simple and bite sized pieces via social and other outreach efforts.

- A toolkit would provide actionable messaging built into graphics and other content: ex. *Flood risk preparedness checklist* or *incorporate ways to help maintain water quality at home in a visual*.

- Incorporate a resilience outreach calendar to leverage seasonal and timely messaging throughout the year: flood risk during hurricane season; heat desert during summer months and evergreen topics during other months.

PlanRVA Newsletter

PlanRVA's newsletter can distribute higher level asks like resilience surveys, solicit participants for focus groups, and participation in community events.

Community Events

PlanRVA representation at community events will be utilized to promote resilience messaging and engage directly with the public. This face-to-face interaction will help to reinforce digital outreach efforts and provide opportunities for deeper community involvement.

By employing these outreach methods, PlanRVA aims to build a more informed and resilient community, capable of facing current and future challenges with confidence and preparedness.

Integrating Coastal Resilience Into Other Planning Processes

PlanRVA will leverage other planning processes as they arise in order to increase coastal resilience outreach. Examples of upcoming planning processes with opportunities for coastal resilience outreach include:

Long Range Transportation Plan (LRTP) Outreach – The LRTP is a comprehensive transportation plan the identifies and prioritizes transportation projects for the next 25 years. Given the long horizon of the plan and the importance and cost of transportation infrastructure, resilience is a key consideration when identifying and prioritizing projects. Concepts such as flood risk, sea level rise, and extreme heat are all relevant. LRTP outreach presents an opportunity to educate the public about resilience concerns can impact transportation infrastructure now and in the future.

Comprehensive Economic Development Strategy (CEDS) Outreach – The CEDS allows PlanRVA to underscore the importance of economic resilience, and the risks posed by flood, heat, and other resilience concerns to economic growth.

Cross-Plan Outreach Strategies

- Use social media, newsletters, and PlanRVA's website to consistently communicate resilience themes across planning processes.
- Utilize community events or forums to facilitate dialogue on regional resilience goals, ensuring local needs and priorities are reflected in planning.
- Share resources to help the public understand resilience benefits and encourage broader community participation.

Conclusion

Building resilience within the PlanRVA region is an ongoing process that requires a multifaceted approach, combining education, community engagement, strategic planning, and robust partnerships. This document outlines a comprehensive strategy for public outreach on resilience topics, including resources for outreach staff to reference, aiming to enhance general education and facilitate public engagement in planning projects.

Our plan addresses immediate disasters, longer-term risks, and the underlying drivers of these changes, providing clear definitions, risk levels, safety tips, preparedness measures, and mitigation strategies. By focusing on flood risks, heat islands, sea level rise, and surface water quality in phase 1, we aim to equip the community with the knowledge and tools needed to face these challenges.

Digital outreach methods, including an expanded website, revamped story maps, and a proposed targeted social media campaign, will be central to our efforts. These

will be complemented by integrated outreach with the CPRG Comprehensive Climate Action Plan, surveys, focus groups, community intercepts, and participation in community events.

Moving forward, PlanRVA will continue to refine and expand our resilience outreach efforts, ensuring that we remain responsive to the evolving needs of our region. By prioritizing key messages and methods, leveraging existing partnerships, and continuously improving our resources, we aim to foster a culture of resilience that empowers our communities to thrive in the face of adversity.

Together, through collaborative efforts and sustained engagement, we can build a more resilient future for the PlanRVA region, ensuring that our communities are prepared for whatever challenges lie ahead.