



# PORTSMOUTH RESILIENCE ACTION WORKSHOP JUNE 28, 2017 REPORT

# SPONSORS & ACKNOWLEDGEMENTS

The first year of research for The Resilience Adaptation Feasibility Tool (The RAFT) was conducted in the 2015-16 academic year by the UVA Institute for Environmental Negotiation in collaboration with the William & Mary Virginia Coastal Policy Center. The RAFT was officially “launched” by a 2016 grant by the National Fish & Wildlife Foundation (NFWF), which enabled completion of the Scorecard and testing The RAFT process on three pilot communities in three different coastal planning district commissions.

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# WHAT IS THE RAFT?

Local governments in Virginia's coastal region are facing the most daunting challenges related to climate change, as the southern Virginia coastal region faces the greatest risk from sea level rise on the East Coast. Historical and projected sea level rise are presenting all Virginia coastal localities with a challenge that affects residents, businesses, and key national security facilities, as well as plans for future development and infrastructure.

One important gap in the toolbox of Virginia's localities is an easy and accessible scorecard to define a locality's resilience. The RAFT attempts to fill this gap. The RAFT features three key components, creating a "full service" tool for localities:

- 1) The Resilience Scorecard provides a comprehensive assessment of community resilience to flooding while remaining economically and socially relevant.
- 2) A workshop for community thought leaders to use the assessment to develop a Resilience Action Checklist for increasing community resilience.
- 3) Ongoing assistance during implementation of the Resilience Action Checklist, both in the form of technical assistance and assistance in finding funding.



# THE RAFT TEAM & RESILIENCE SCORECARD

The Resilience Adaptation Feasibility Tool (The RAFT) was conceived and developed by an academic interdisciplinary collaborative core team, led by the University of Virginia Institute for Environmental Negotiation (IEN), the William & Mary Law School Virginia Coastal Policy Center (VCPC), and Old Dominion University/Virginia Sea Grant (ODU), collectively "The RAFT Team." Funded by a Restoration and Community Stewardship grant from the National Fish & Wildlife Foundation (NFWF), the core team's goal was to develop a robust Resilience Scorecard and to test it with three coastal communities.

The Resilience Scorecard is designed to be completed independently by the academic collaborative, and provides a comprehensive assessment of the locality's resilience to flooding while remaining economically and socially relevant. The Scorecard is comprehensive in that it measures environmental, economic and social resilience factors. It covers local policy, infrastructure, budgeting and economics, land use, community engagement, community health and wellness, and ecosystems.

Development of the Scorecard was informed by an Advisory Committee consisting of academic advisors (from architecture, planning, environmental sciences, environmental psychology, engineering, and water quality), as well as representatives of local governments, nonprofits and state agencies. In addition, a special focus group (of coastal local governments, NGO's, and relevant state agencies) reviewed the draft Scorecard and provided valuable guidance on how to make it more relevant to Virginia's coastal localities.

4) LAND USE	<div>4.2 ZONING AND REGULATIONS</div> <div>DESCRIPTION</div> <p>A locality's zoning ordinance is done in accordance with its comprehensive plan. Zoning can be used to conserve and protect natural resources, ecosystems, agricultural lands, and areas vulnerable to flooding.</p> <div>LOCALITY ACTIONS</div> <p>4.2.a. Localities protect vulnerable areas by limiting or prohibiting development. 4.2.b. Localities work with FEMA to keep floodplain boundaries and flood zones up to date. 4.2.c. Localities strive to preserve open space zoning. 4.2.d. Localities require overlay zoning, setbacks, and/or buffers for natural areas. 4.2.e. Localities use zoning ordinances to guide development in a sustainable way, while also protecting private property rights. 4.2.f. Localities reference FEMA to designate flood zones.</p> <div>SCORING</div> <p>4 points - Locality zoning code and regulations protect areas vulnerable to flooding by limiting development, setting buffers, specifying setbacks, and designating flood zones. 3 points - Locality zoning code and regulations include at least three actions from Score 4. 2 points - Locality zoning code and regulations include at least two actions from Score 4. 1 point - Locality zoning code and regulations include at least one action from Score 4. 0 points - Locality zoning code does not protect areas vulnerable to flooding.</p> <div>DATA SOURCES</div> <p>Locality website. Zoning code section. Comprehensive Plan.</p> <div>LOCALITY SCORE</div> <p>4 / 4 POINTS</p> <div>0 / 1 BONUS POINT</div> <div>NOTES</div> <p>All 4 points are mentioned in the ordinance.</p>	<div>4.3 INCENTIVES FOR COASTAL RESILIENCE</div> <div>DESCRIPTION</div> <p>Incentive programs encourage littl development and protect open spaces, flood-prone areas, and critical ecosystems. Incentive programs are distributed fairly and equitably, and are successful at promoting resilience.</p> <div>LOCALITY ACTIONS</div> <p>4.3.a. Localities offer incentives including, but not limited to, the following: - transfer of development rights; - density bonuses; - tax credit programs; - preferential assessment programs; and - tax abatements. 4.3.b. Incentives align with local zoning ordinances and comprehensive plans. 4.3.c. Incentives: - discourage development in areas prone to flooding; - protect critical ecosystems; - encourage sustainable development; - improve high-risk areas; and - preserve natural assets.</p> <div>SCORING</div> <p>4 points - Locality offers four incentives. 3 points - Locality offers three incentives. 2 points - Locality offers two incentives. 1 point - Locality offers one incentive. 0 points - Locality does not offer any incentives. Bonus +1 if locality offers more than four incentives.</p> <div>DATA SOURCES</div> <p>Comprehensive Plan.</p> <div>LOCALITY SCORE</div> <p>0 / 4 POINTS</p> <div>0 / 1 BONUS POINT</div> <div>NOTES</div> <p>Portsmouth's comprehensive plan does not offer any incentives.</p> <div>TOTAL SCORE FOR SECTION 4: 8 OUT OF 12 POSSIBLE POINTS</div> <div>TOTAL BONUS POINTS FOR SECTION 4: 0 OUT OF 3 POSSIBLE POINTS</div>	5) COMMUNITY HEALTH AND WELLNESS	<div>6.3 CITIZEN LEADERSHIP FOR COASTAL RESILIENCE</div> <div>DESCRIPTION</div> <p>Creating citizen leaders is important because local leaders are involved and know their locality and, therefore, will be able to better represent and assist local citizens. Leaders will be responsible for informing citizens, expressing citizen concerns, encouraging new leaders, and assisting with local preparedness efforts in order to create a more resilient, prepared, and collaborative locality.</p> <div>LOCALITY ACTIONS</div> <p>6.3.a. Locality has leadership opportunities available for coastal hazard relief. 6.3.b. Locality educates residents on leadership opportunities. 6.3.c. Locality provides training opportunities for volunteers to lead teams. 6.3.d. Locality gathers leaders in a central location to discuss plans. 6.3.e. Leadership opportunities include training residents to lead and/or educate others in the case of a coastal hazard.</p> <div>SCORING</div> <p>Scoring - 1 point per program: 1 point - Locality supports and invests in community-led initiatives on coastal resilience. 1 point - Locality highlights work of citizen leaders and/or supports gatherings of citizen leaders on coastal hazards. 1 point - Locality uses citizen leaders for community education and outreach on coastal resilience and hazards. 1 point - Locality offers citizen leadership training opportunities on coastal resilience and hazards. 0 points - Locality has no citizen leadership training opportunities. Bonus +1 if locality has a central location dedicated for the above. Bonus +1 if locality offers leadership opportunities in other community services not directly related to coastal resilience.</p> <div>DATA SOURCES</div> <p>Locality website.</p> <div>LOCALITY SCORE</div> <p>0 / 4 POINTS</p> <div>1 / 2 BONUS POINTS</div> <div>NOTES</div> <p>Bonus point received for offering leadership opportunities in other community services not directly related to coastal resilience.</p>	<div>6.4 VOLUNTEER NETWORKS FOR COASTAL RESILIENCE</div> <div>DESCRIPTION</div> <p>Creating citizen volunteers is important because local volunteers are involved and know their locality and therefore will be able to better aid in the event of a coastal hazard.</p> <div>LOCALITY ACTIONS</div> <p>6.4.a. Locality has volunteer opportunities available for coastal hazards and incident response. 6.4.b. Locality has educated residents on volunteer opportunities. 6.4.c. Locality provides training opportunities for volunteers to lead teams. 6.4.d. Locality collects volunteer opportunities in a central location like a web plan or public plan. 6.4.e. Locality engages with the State VNL (Volunteer Agency Liaison) who will provide a nexus to the greater volunteer community. 6.4.f. Locality will maintain a list of "vetted" local volunteer organizations that will act as drop-in labor coordinators.</p> <div>SCORING</div> <p>Scoring - 1 point per program: 1 point - Locality educates and engages public, NGOs and businesses on use of volunteer coastal hazard assistance. 1 point - Locality offers leadership training for volunteers to lead a coastal hazard resilience team. 1 point - Locality highlights work of volunteers. 1 point - Locality offers volunteer opportunities for coastal resilience. 0 points - Locality has no volunteer opportunities. Bonus +1 if locality has a central location dedicated for the above. Bonus +1 if locality offers volunteer opportunities in other community services not directly related to coastal resilience.</p> <div>DATA SOURCES</div> <p>Locality volunteer website.</p> <div>LOCALITY SCORE</div> <p>1 / 4 POINTS</p> <div>1 / 2 BONUS POINTS</div> <div>NOTES</div> <p>Locality offers volunteer opportunities for coastal resilience. Bonus point received for offering volunteer opportunities in other community services not directly related to coastal resilience.</p>

# WORKSHOP PURPOSE & PROCESS

The Resilience Action Workshop was conceived as a way to help catalyze meaningful action at the local level to increase a locality's resilience to coastal hazards. While, on its own, The Resilience Scorecard might increase understanding, community leadership is needed to bring about meaningful change. The three pilot community workshops in June 2017 sought to bring together community thought leaders who represented a broad range of community interests - such as planning, stormwater, health, emergency services, schools, Navy, and neighborhood interests. In Portsmouth, 25 community leaders were invited and 10 were able to participate.

During the workshop, participants were introduced to the Scorecard and reviewed its findings to identify the locality's greatest resilience strengths as well as opportunities for improving resilience in the next year. With this information, participants followed a typical strategic planning approach by brainstorming and prioritizing possible actions that could be taken to improve community resilience. Finally, working together, participants refined specific priority actions to create a one-year Resilience Action Checklist of specific next steps, including (where possible) a timeline, partners and resources needed to implement the actions. Additionally, when applicable, participants mapped locations where the action would be most impactful.



Photo credit: IEN

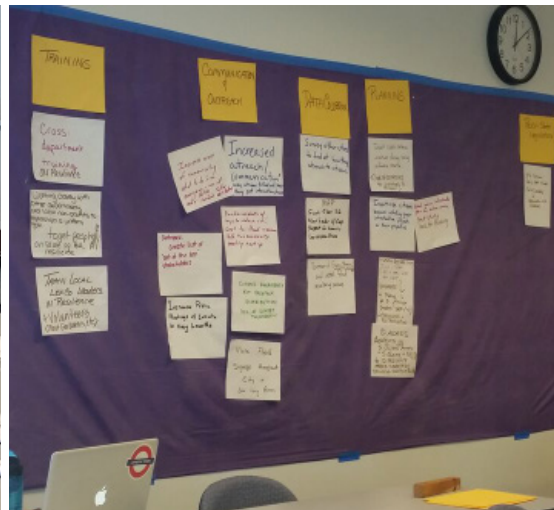


Photo credit: IEN

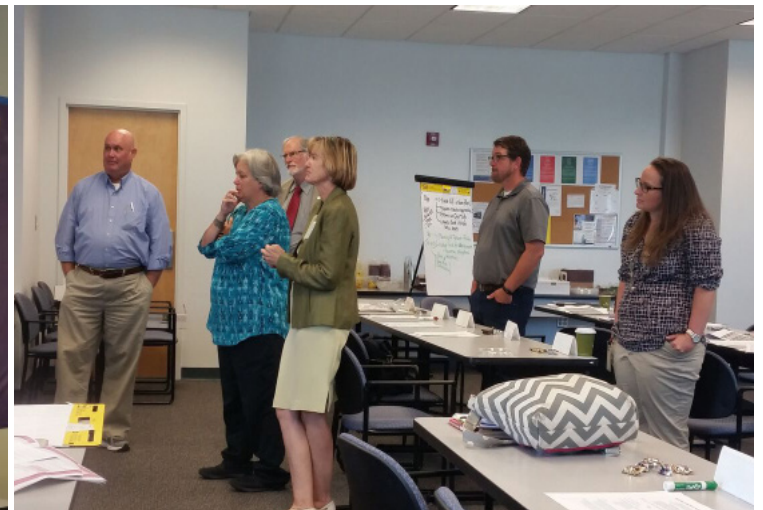


Photo credit: IEN

# RESILIENCE SCORECARD

## STRENGTHS & OPPORTUNITIES

After completion of Portsmouth's pilot assessment within The RAFT Scorecard, The RAFT Team identified the locality's strengths and opportunities for presentation at the workshop. Generally, strengths were sections that received scores of 3 and above, whereas opportunities were those sections that received scores of 2 and below. Information in the Scorecard findings elaborated on why the locality received a particular score. The RAFT Team used this information to provide a presentation on why one area might be a strength, and, for opportunities, identify specific actions the community might take to improve its score. Opportunities were divided into primary and secondary. Primary opportunities were considered "low-hanging fruit" in terms of potential ease of implementation. Secondary opportunities were those actions that would likely take more time or resources to effectively implement.

### 2) FUTURE RISK AND CURRENT INFRASTRUCTURE ASSESSMENT

#### STRENGTHS

2.1 Flood Exposure and Vulnerability Assessment	4/4	A flood exposure and vulnerability assessment has been created, is publicly available, identifies areas and sectors at risk, and has been updated within the last 5 years
	+ 1	Bonus: +1 Coastal Hazard Map is publicly available
2.2 Stormwater Management	4/4	Includes development and land use, wetlands, best practices, enforcement, floodplain management, monitoring, and maintenance, and is up to date
2.3 Coastal Hazard Mitigation Plan	4/4	Covers coastal resilience, includes community engagement, participates in NFIP, and has regional collaboration
2.4 Critical Infrastructure: Protective, Public Services, Shelter, Emergency Facilities, and Transportation	3/4	Plan to inform residents which critical infrastructures to utilize in the case of a coastal emergency, contingency plan for continuing services and critical infrastructure, map which is free and publicly available
	+ 1	Bonus: +1 Locality addresses structural improvement plans for critical facilities in their plan

### SECONDARY OPPORTUNITIES

6.6 Resilient Systems to Provide Food and Medicine	2/4	Create a plan to protect critical supply chains for food/health/medicine during emergencies. Identify critical infrastructure for food/health/medicine delivery at risk during emergencies
6.7 Community Health Rankings	2/4	Improve Community Health Rankings (improve poor physical health days, poor mental health days, uninsured numbers, and ratio of mental health providers): communicate with City Health Department and care providers about score and initiate discussions on how to improve
6.8 Distressed Community Index Score	0/4	Improve Distressed Community Index Score (high school degrees, housing vacancy rate, adults not working, poverty rate, median income, change in employment, change in businesses): communicate with local agencies about score and initiate discussions on how to improve

# RESILIENCE SCORECARD

## STRENGTHS

CATEGORY	SECTION	SCORE	DESCRIPTION
<b>1) Policy, Leadership, and Legislation</b>	<i>1.1 Locality Leadership and Planning for Resiliency</i>	3/4	Roles are established and published on the website, and contact information is available
	<i>1.2 Leadership and Responding to an Emergency</i>	4/4	Officials coordinate with multiple stakeholders and roles of emergency response are established and published
	<i>1.3 Information Sharing</i>	4/4	Information is shared, does not require a login, and is free
	<i>1.4 Local Collaboration with State Agencies and PDCs</i>	4/4	Local officials communicate with planning district commissions and state agencies to address coastal resilience at least once per month. Meet every two months for Coastal Virginia CRS Workgroups
	<i>1.5 Adaptive Management</i>	4/4	Have updated long-term coastal resilience in local codes, short-term coastal resilience in local codes, long-term coastal resilience embedded in current policy documents, and have updated coastal resilience embedded in current city codes
<b>2) Future Risk and Current Infrastructure Assessment</b>	<i>2.1 Flood Exposure and Vulnerability Assessment</i>	4/4 +1	<p>A flood exposure and vulnerability assessment has been created, is available on the locality's website, identifies areas and sectors at risk, and has been updated within the last 5 years</p> <p>Bonus: +1 Coastal Hazard Map is publicly available</p>



# RESILIENCE SCORECARD

## STRENGTHS

CATEGORY	SECTION	SCORE	DESCRIPTION
<b>2) Future Risk and Current Infrastructure Assessment</b>	<i>2.2 Stormwater Management</i>	4/4	Includes development and land use, wetlands, best management practices, enforcement, floodplain management, monitoring, and maintenance, and is up to date
	<i>2.3 Coastal Hazard Mitigation Plan</i>	4/4	Covers coastal resilience, includes community engagement, participates in NFIP, and has regional collaboration
	<i>2.4 Critical Infrastructure: Protective, Public Services, Shelter, Emergency Facilities, and Transportation</i>	3/4 +1	Plan to inform residents which critical infrastructures to utilize in the case of a coastal emergency, contingency plan for continuing services and critical infrastructure, map which is free and is available on the locality's website.  Bonus: +1 Locality addresses structural improvement plans for critical facilities in their plan
	<i>2.5 Water Supply and Services</i>	4/4	Information is available online, and there is sufficient capacity to meet current needs
	<i>2.6 Community Rating System</i>	3/4	Has applied for CRS credits and has a CRS score of 7

# RESILIENCE SCORECARD

## STRENGTHS

CATEGORY	SECTION	SCORE	DESCRIPTION
<b>3) Finance, Budgeting, Funding, and Economics</b>	<i>3.1 Budget, Funding, State and Federal Assistance</i>	3/4	Identified priorities for budget spending for coastal resilience projects in the Capital Improvement Plan
	<i>3.2 Economic Vulnerability and Vitality</i>	3/4	Has plans to encourage new businesses and diversification of economy, analyzed major industries and their impact on local economy, identified key assets
<b>4) Land Use</b>	<i>4.1 Coastal Resiliency and Comprehensive Plan</i>	4/4	Infill plants, preservation of open areas and environment, language and data are clear, land use and zoning ordinance specifically mention extensive involvement of public within the comprehensive plan
	<i>4.2 Zoning and Regulations</i>	4/4	Protects areas vulnerable to flooding by regulating development, setting buffers, specifying setbacks, and designating flood zones
<b>5) Community Engagement</b>	<i>5.1 Public Involvement in Resilience Planning</i>	3/4	Locality has a written policy statement regarding the role of citizens and commercial, institutional, nonprofit, and other stakeholders, has someone who is fully or partially responsible for making sure that citizens and other stakeholders have a role in key decision making, has published results from public meetings, and has a webpage or method for the public to give feedback
	<i>5.2 Public Resources</i>	3/4	Flood maps are readily available and there are designated people in charge of citizen access, information is easy to understand

# RESILIENCE SCORECARD

## STRENGTHS

CATEGORY	SECTION	SCORE	DESCRIPTION
6) Community Health and Wellness	6.1 Vulnerable Populations	3/4 +1	Has "A Ten Year Plan to End Homelessness in Portsmouth, Virginia" document, which mentions engaging the community as well as identification, and has a demographic study  Bonus: +1 points Locality has identified, engaged with, and/or has community education and outreach for more than one vulnerable population
	6.2 Resident Emergency Preparedness	3/4 +1	Has identified resident emergency preparedness risks and needs in a public source, has developed a resident emergency preparedness plan, and conducts community outreach about community hazard mitigation plan and resident emergency preparedness  Bonus: +1 Locality involves schools and/or educational programs in emergency preparedness drills
	6.5 Civic Vulnerability During Coastal Hazards	3/4	Programs and shelters in place to protect local residents during a coastal event
7) Ecosystems and Natural Resources	7.1 Natural Resources Preservation	2/4	Has mapped Chesapeake Bay Preservation Act Resource Protection Areas, wetlands, and flood zones

# RESILIENCE SCORECARD

## PRIMARY OPPORTUNITIES

CATEGORY	SECTION	SCORE	DESCRIPTION
<b>1) Policy, Leadership, and Legislation</b>	<i>1.1 Locality Leadership and Planning for Resiliency</i>	3/4	Identify more than one City staff responsible for planning for resilience, and more than one training and education opportunity available annually for leadership in resilience
<b>2) Future Risk and Current Infrastructure Assessment</b>	<i>2.4 Critical Infrastructure</i>	3/4	Develop a plan to regularly identify and update at-risk infrastructure, and identify and record loss of critical infrastructure services during the last 5 yrs
<b>3) Finance, Budgeting, and Economics</b>	<i>3.1 Budget, Funding, State and Federal Assistance</i>	3/4	Develop plans, budget analyses, and processes for coastal resilience projects
<b>4) Land Use</b>	<i>4.3 Incentives for Coastal Resilience</i>	0/4	Create incentives to encourage infill development and protect open spaces, flood-prone areas, and critical ecosystems
<b>5) Community Engagement</b>	<i>5.1 Public Involvement in Resilience Planning</i>	3/4	Develop policy statement regarding the role of citizens and commercial, institutional, nonprofit, and other stakeholders



# RESILIENCE SCORECARD

## PRIMARY OPPORTUNITIES

CATEGORY	SECTION	SCORE	DESCRIPTION
6) Community Health and Wellness	<i>6.3 Citizen Leadership for Coastal Resilience</i>	0/4	Develop citizen leadership training opportunities on coastal resilience and hazards
	<i>6.4 Volunteer Networks for Coastal Resilience</i>	1/4	Highlight work of volunteers, offer leadership training for volunteers to lead a coastal disaster resilience team, educate public about importance of volunteer coastal disaster assistance
7) Ecosystems and Natural Resources	<i>7.1 Natural Resource Preservation</i>	2/4	Develop a natural resource protection plan, and engage and educate the community on natural resource preservation
	<i>7.2 Natural and Nature-based Features</i>	2/4	Develop a green infrastructure plan, and implement individual projects to address coastal hazard vulnerabilities

# RESILIENCE SCORECARD

## SECONDARY OPPORTUNITIES

CATEGORY	SECTION	SCORE	DESCRIPTION
<b>6) Community Health and Wellness</b>	<i>6.6 Resilient Systems to Provide Food and Medicine</i>	2/4	Create a plan to protect critical supply chains for food/health/medicine during emergencies. Identify critical infrastructure for food/health/medicine delivery at risk during emergencies
	<i>6.7 Community Health Rankings</i>	2/4	Improve Community Health Rankings (improve physical health days, poor mental health days, uninsured numbers, and ratio of mental health providers): communicate with City Health Department and care providers about the score and initiate discussions on how to improve
	<i>6.8 Distressed Community Index Score</i>	0/4	Improve Distressed Community Index Score (high school degrees, housing vacancy rate, adults not working, poverty rate, median income, change in employment, change in businesses): communicate with local agencies that deal with these issues about score and initiate discussions on how to improve

# INITIAL QUESTIONS & DISCUSSION ON THE RAFT SCORECARD FINDINGS

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## **Q: Who is the audience for the Scorecard?**

**A:** The Scorecard is for the public. Participants remarked that the Scorecard needs to be much clearer for the public to easily understand the information. The group suggested condensing it into one or two pages for the public. One participant suggested that the Scorecard should be presented to the city council and the public without listed scores.

## **Q: How do we communicate information in an emergency?**

**A:** The group discussed communication systems, and stressed that information needs to be digital and non-digital. Furthermore, there are actions that can be taken to encourage people to download or print off needed information before a disaster. One participant also noted that a door-to-door method is an effective way to get the information out.

## **Q: Will the Scorecard help the city address flooding?**

**A:** Yes, if the Scorecard is presented in a format that everyone can understand. It should be presented as a source of opportunities, not as a ranking system. One participant noted that if the Scorecard is used as a ranking system this will only reward rich localities. Additionally, the group believed it highly possible that someone would look at the strengths, decide they were complete, and then cut funding. The group was also concerned with inspiring improvement, rather than just assigning a number to a resilience action. The RAFT Team emphasized that this is why the Resilience Action Checklist is a critical part of The RAFT process.

## **Q: How are community health and flooding connected?**

**A:** The RAFT Scorecard takes a holistic approach examining a variety of factors which contribute to a community's ability to bounce back after a traumatic event. The group commented that the Community Health section of the Scorecard is not the most important section, however it has the most points.

## **Q: Could the RAFT Scorecard assist Portsmouth with obtaining grants?**

**A:** This is what The RAFT Team can assist with. Once we understand what the city wants to tackle, we can collaborate on issues and research appropriate grants.

# COMMUNITY IDENTIFIED

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## STRENGTHS & OPPORTUNITIES

Participants split into three groups to discuss strengths and opportunities. Many of the strengths centered around the geographic compactness and community spirit of the Portsmouth area. Groups emphasized how intact the historical district is, the size of the Naval presence as a major employer, and that compactness has resulted in flooding affecting all residents. One group also noted the receptiveness of Portsmouth's City Council and that the comprehensive plan has taken sea level rise into account in every aspect. Finally, groups noted as strengths the sustainable Community Rating System (CRS) score of 7 and the flood planning work completed thus far.

Groups went on to discuss opportunities and ideas. Many of these opportunities related to potential for communication with stakeholders. Groups proposed opportunities for real time monitoring of flooding, providing residents with ways to reduce risks and costs, working with insurance companies to provide better information (including disclosure of risks), holding annual workshops, asking other local governments how they communicate with their residents, and surveying the public with respect to how they obtain their information. Groups emphasized the need for more outreach, especially to those in denial about sea level rise, as well as a need for more warnings and tracking of flooded sites. Groups also expressed a need to update local plans and codes. More specifically, they identified a need to update zoning ordinances for resilience (including incentives); a need for a Green Infrastructure urban plan which would require creative approaches and coordination between departments (to help stormwater management, TMDL compliance, and quality of life); and a need for first floor elevations mapping of low-income areas. Finally, the groups noted some constraints including a limited staff and budget and the built-out nature of the community, which makes it difficult for the government to act without facing a potential legal eminent domain "taking" action.



# CREATING THE RESILIENCE ACTION CHECKLIST

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## CRITERIA

After workshop participants shared their perspectives on community strengths and opportunities, they used these strengths and opportunities as a beginning platform to create an action checklist for the next year. During the activity, The RAFT Team suggested that participants make their actions as SMART as possible: **S**pecific, **M**easurable, **A**chievable, **R**elevant, and **T**ime-based.

Specific criteria were then developed by participants for evaluating and prioritizing the actions they would develop for their one-year plan. Further refinements sought actions that were sustainable and doable, both financially (affordable) and acceptable by Portsmouth and its community. These goals were intended to make a significant difference in Portsmouth's resiliency, particularly with its vulnerable populations, with a reasonable cost-benefit ratio.

## PRIORITIZED ACTIONS & IMPLEMENTATION STEPS

Using the agreed-upon criteria, participants next brainstormed actions for improving community resilience in the next year. These strategies were written down and shared. Participants then discussed and organized the proposed resilience actions into specific categories: Training, Communication & Outreach, Data Collection, Planning, and Policy & State Legislation. In a final step, participants used sticky dots to prioritize the actions according to the group criteria, with an emphasis on what could either be accomplished or at least initiated in the next year. All of the actions contained in this report's Prioritized Actions as well as Additional Considerations are opportunities that participants want to eventually implement. Once priority actions were identified, participants then divided into small groups to create more detailed work plans for each priority action in one-year Resilience Action Checklist. What follows is the complete list of priority actions for the next year, the implementation steps for each prioritized action, and a final list of additional actions for future consideration.

# PRIORITIZED ACTIONS

## ONE-YEAR CHECKLIST

CATEGORY	PRIORITY RESILIENCE ACTION CHECKLIST	VOTES
TRAINING	Work closely with other departments and local non-profits to establish a uniform resilience goal	6
	Cross-department training on resilience	4
COMMUNICATION & OUTREACH	Expand emergency kit backpack distribution (e.g. at Sunset Thursdays)	6
	Provide residents with ways to reduce risk: cost for flooding insurance. Hold two community meetings next year	4
	More flood signage throughout city in low lying areas	1
DATA COLLECTION	Map: First floor side scan with LIDAR with US Army Corps of Engineers. Support for homeless in low income areas.	7
	Survey other cities to learn their methods of citizen outreach	1
PLANNING	Insert coastal resilience incentives during zoning ordinance rewrite (refer back to Scorecard for incentives to consider)	6
	Green infrastructure plan for urban areas (start study and look for funding)	5
	Incentivize citizen business installing green infrastructure projects on their properties	4
POLICY & STATE LEGISLATION	Seek recommendation by Joint Legislative Subcommittee on Coastal Flooding for legislation requiring flood disclosures	5

# ONE-YEAR IMPLEMENTATION STEPS

## TRAINING

<b>Work with NGOs and other Groups on Resilience</b>  <i>Working collaboratively to do resilience projects, leverage strengths of partner groups</i>  Meg Pittenger Joe Rieger	LEAD	WITH WHOM	WHERE	SPECIAL CONSIDERATIONS
	<ul style="list-style-type: none"> <li>Elizabeth River Project (ERP)</li> <li>Wetlands Watch</li> <li>City of Portsmouth (Meg &amp; Brian)</li> <li>Explore non-environmental NGOs that might have interest in resilience</li> </ul>	<ul style="list-style-type: none"> <li>Old Dominion University (ODU)</li> <li>U.S. Army Corps of Engineers (USACE)</li> </ul>	<ul style="list-style-type: none"> <li>ERP or Wetlands Watch or on site as appropriate</li> </ul>	<ul style="list-style-type: none"> <li>Consider underserved populations</li> </ul>
	TIMELINE/ MILESTONES		RESOURCES AVAILABLE/NEEDED	
	<ul style="list-style-type: none"> <li>Fall bimonthly (more frequent as needed)</li> </ul>		<ul style="list-style-type: none"> <li>Funding for projects</li> <li>Management support</li> <li>Buy-in from partners</li> </ul>	

<b>Cross Train City Staff/ Collaborate on Resilience</b>  <i>Watershed Action Team/ Resilience Team meeting regularly to review &amp; collaborate on projects and implementation and understanding needs and requirements</i>  Meg Pittenger Joe Rieger	LEAD	WITH WHOM	WHERE	SPECIAL CONSIDERATIONS
	Meg Pittenger	<ul style="list-style-type: none"> <li>Other City Depts</li> <li>Planning</li> <li>Engineering</li> <li>Public Works</li> <li>Public Utilities</li> <li>Parks &amp; Recreation</li> <li>ERP</li> <li>Wetlands Watch</li> </ul>	<ul style="list-style-type: none"> <li>City Hall but on-site as appropriate</li> </ul>	N/A
	TIMELINE/ MILESTONES		RESOURCES AVAILABLE/NEEDED	
	<b>Fall 2017</b> <ul style="list-style-type: none"> <li>Monthly/bimonthly</li> </ul>		<ul style="list-style-type: none"> <li>Training resources</li> <li>Management support</li> <li>Buy-in from partners</li> </ul>	

# ONE-YEAR IMPLEMENTATION STEPS

## COMMUNICATION & OUTREACH

<b>Emergency Kit Backpacks</b>  <i>Provide emergency kit backpacks to residents</i>  Mark Geduldig-Yatrofsky Richard Neeffe	LEAD	WITH WHOM	WHERE	SPECIAL CONSIDERATIONS
	Health Department	<ul style="list-style-type: none"> <li>· Social Services</li> <li>· Church groups</li> <li>· Hospitals</li> <li>· Emergency manager</li> <li>· Community Emergency Response Team (CERT)</li> <li>· Parent Teacher Association (PTA)</li> </ul>	<ul style="list-style-type: none"> <li>· Drive through flu vaccinations</li> <li>· Retail stores</li> <li>· Community day events</li> <li>· Wellness events</li> <li>· Sunset Thursdays</li> </ul>	<ul style="list-style-type: none"> <li>· Low-income housing residents</li> <li>· PTAs</li> <li>· Portsmouth Redevelopment &amp; Housing Authority (PRHA)</li> </ul>
	TIMELINE/ MILESTONES		RESOURCES AVAILABLE/NEEDED	
	<ul style="list-style-type: none"> <li>· Begin immediately</li> <li>· Checkpoint: September-October 2017</li> </ul>		<ul style="list-style-type: none"> <li>· Lowes, Walmart, Kroger, Wavy</li> </ul>	

<b>Resident Risk Reduction</b>  <i>Reduce flood insurance premiums by providing residents with ways to reduce risk &amp; hold two community meetings in the following year</i>  Mark Geduldig-Yatrofsky Richard Neeffe	LEAD	WITH WHOM	WHERE	SPECIAL CONSIDERATIONS
	Flood Plain Program	<ul style="list-style-type: none"> <li>· Civics Leagues</li> <li>· Neighborhood Watches</li> <li>· Churches</li> <li>· Insurance agents</li> <li>· Rental inspections</li> <li>· Contractor consultant</li> <li>· Neighborhood/community summit in conjunction with comprehensive plan</li> </ul>	<ul style="list-style-type: none"> <li>· PTAs</li> </ul>	<ul style="list-style-type: none"> <li>· Landlord outreach</li> <li>· Military</li> </ul>
	TIMELINE/ MILESTONES		RESOURCES AVAILABLE/NEEDED	
	<ul style="list-style-type: none"> <li>· September 2017</li> <li>· Ongoing</li> <li>· May 2018 event</li> </ul>		<ul style="list-style-type: none"> <li>· Insurance agents</li> <li>· Realty</li> <li>· Use postcard as a method of communication</li> </ul>	



# ONE-YEAR IMPLEMENTATION STEPS

## COMMUNICATION & OUTREACH

<b>Install Flood Signs</b>  <i>Install more flood signs in City</i>  Fred Brusso Cyndi Wyskiewicz	LEAD	WITH WHOM	WHERE	SPECIAL CONSIDERATIONS
	Meg Pittenger	· James Wright	· To be determined by May review	· Sign shop
	TIMELINE/ MILESTONES		RESOURCES AVAILABLE/NEEDED	
	At once <b>Nov. '17</b> · Include in 2018-19 budget <b>May '18</b> · Approve budget <b>July '18</b> · Submit contract <b>Sept. '18</b> · Install		· Funds for available signs	

# ONE-YEAR IMPLEMENTATION STEPS

## DATA COLLECTION

<b>Mapping of 1st Floor Elevation</b>  <i>Develop a dataset of first floor elevations for homes in areas vulnerable to flooding</i>  Ashley Gordon Ben McFarlane	LEAD	WITH WHOM	WHERE	SPECIAL CONSIDERATIONS
	Hampton Roads Planning District Commission (HRPDC)	<ul style="list-style-type: none"> <li>· Army Corps</li> <li>· ODU</li> <li>· Cities/counties</li> </ul>	<ul style="list-style-type: none"> <li>· Special Flood Hazard Areas (SFHA)</li> <li>· Areas with recurrent flooding</li> </ul>	<ul style="list-style-type: none"> <li>· Flood insurance policy holders</li> <li>· Critical infrastructure</li> <li>· Data application</li> </ul>
	TIMELINE/ MILESTONES		RESOURCES AVAILABLE/NEEDED	
	<b>Oct. 1, 2017 - Sept. 30, 2020</b> <ul style="list-style-type: none"> <li>· Collect data</li> <li>· Select methods for new data</li> <li>· Quality assurance/quality control (QA/QC)</li> <li>· Finished dataset</li> </ul>		<ul style="list-style-type: none"> <li>· Elevation certificates</li> <li>· Equipment</li> <li>· Funding</li> <li>· CZM</li> <li>· Corps</li> </ul>	

<b>Survey Other Cities on Outreach</b>  <i>Survey and report on best practices from cities and counties communicating info to residents on flooding/resilience</i>  Ashley Gordon Ben McFarlane	LEAD	WITH WHOM	WHERE	SPECIAL CONSIDERATIONS
	HRPDC or ODU  Commonwealth Center for Recurrent Flooding Resiliency (CCRFR)	<ul style="list-style-type: none"> <li>· HRPDC or ODU</li> <li>· 3Q 2017</li> </ul>	<ul style="list-style-type: none"> <li>· Localities without strong outreach programs</li> <li>· Vulnerable/hard to reach communities that flood</li> </ul>	<ul style="list-style-type: none"> <li>· Resource differences</li> <li>· Robust communications methods</li> <li>· Special needs populations</li> <li>· Emergency situation vs. normal day-to-day</li> <li>· Other systems in place for communications within city as well</li> </ul>
	TIMELINE/ MILESTONES		RESOURCES AVAILABLE/NEEDED	
	<ul style="list-style-type: none"> <li>· Initial outreach</li> <li>· Information request</li> <li>· Data collection, assessment, and synthesis</li> </ul>		<ul style="list-style-type: none"> <li>· Money</li> <li>· Time</li> <li>· People's contact information</li> </ul>	

# ONE-YEAR IMPLEMENTATION STEPS

## PLANNING

<b>Insert Coastal Resilience Incentives During Zoning Ordinance Rewrites</b>  <i>Maintain/modify incentives in zoning ordinance and Chesapeake Bay Preservation Act ordinance</i>  Fred Brusso Cyndi Wyskiewicz	LEAD	WITH WHOM	WHERE	SPECIAL CONSIDERATIONS
	Bob Baldwin (Director of Planning)	<ul style="list-style-type: none"> <li>· Brian Swets</li> <li>· John Hartley</li> </ul>	<ul style="list-style-type: none"> <li>· City Hall</li> <li>· Bide-A-Wee Golf Course</li> <li>· Churches</li> <li>· Libraries</li> <li>· 3 high schools</li> <li>· Special email/website to show meetings</li> </ul>	<ul style="list-style-type: none"> <li>· Realtors</li> <li>· Developers</li> <li>· Contractors (TBA)</li> <li>· Hampton Roads Architecture Program</li> <li>· Attorneys mandate city follow regulations</li> <li>· Elizabeth River</li> </ul>
	TIMELINE/ MILESTONES		RESOURCES AVAILABLE/NEEDED	
	<b>Aug. '17</b> <b>Oct. '17</b> · Organize meeting <b>Feb. '18</b> · Progress meeting <b>Jun. '18</b> · Progress meeting <b>Dec. '18</b> · Progress meeting <b>May '19</b> · Adopt through Planning Commission <b>Aug. '19</b> · Adopt through City Council		<ul style="list-style-type: none"> <li>· Staff</li> <li>· Consultant (contract needed)</li> <li>· Mailing (general mailing with incentives)</li> </ul>	

<b>Green Infrastructure Plan</b>  <i>Write Green Infrastructure Plan, with emphasis on urban areas</i>  Brian Swets Doug Taylor	LEAD	WITH WHOM	WHERE	SPECIAL CONSIDERATIONS
	Portsmouth Planning	<ul style="list-style-type: none"> <li>· ODU</li> <li>· VIMS</li> <li>· GI Institute</li> <li>· PDC</li> <li>· Engineering &amp; public works</li> <li>· ERP</li> </ul>	<ul style="list-style-type: none"> <li>· Impervious areas</li> <li>· Flood prone areas</li> <li>· Downtown areas</li> <li>· Tidal Coastline</li> </ul>	<ul style="list-style-type: none"> <li>· Staff buy-in (engineering &amp; public works)</li> <li>· Natural conditions</li> <li>· Incentives</li> <li>· Proximity to industrial areas</li> <li>· Quantity benefits</li> </ul>
	TIMELINE/ MILESTONES		RESOURCES AVAILABLE/NEEDED	
	<b>June 1, 2018-January 1, 2019</b> <ul style="list-style-type: none"> <li>· Start</li> <li>· Interoffice collaboration</li> <li>· Data collection</li> <li>· Drafts</li> <li>· Review</li> <li>· ERP</li> </ul>		<ul style="list-style-type: none"> <li>· Stormwater handbook</li> <li>· Local cities</li> <li>· LEED specialists</li> <li>· Funding</li> </ul>	

# ONE-YEAR IMPLEMENTATION STEPS

## PLANNING

<p><b>Provide Incentives for Installing Green Infrastructure Projects</b></p> <p><i>Incentivize private property owners to install green infrastructure in flood prone areas</i></p> <p>Brian Swets Doug Taylor</p>	LEAD	WITH WHOM	WHERE	SPECIAL CONSIDERATIONS
	Portsmouth Planning	<ul style="list-style-type: none"> <li>Private property owners</li> <li>Other communities</li> <li>Academia</li> <li>Zoning Ordinance Consultant</li> <li>ERP</li> </ul>	<ul style="list-style-type: none"> <li>Impervious areas</li> <li>Flood prone areas</li> <li>Downtown areas</li> <li>Tidal</li> </ul>	<ul style="list-style-type: none"> <li>Staff buy in</li> <li>Cost benefit analysis compliance</li> <li>Identify what projects will actually work in Portsmouth</li> <li>Monitoring/maintaining</li> <li>Cost sharing</li> </ul>
	TIMELINE/MILESTONES		RESOURCES AVAILABLE /NEEDED	
	<p><b>7/5/2017</b></p> <ul style="list-style-type: none"> <li>Public outreach</li> <li>Draft findings/recommendations</li> <li>Adopt</li> </ul>		<p><b>Available</b></p> <ul style="list-style-type: none"> <li>Stormwater</li> <li>LEED candidate</li> <li>Track/monitor progress program</li> </ul> <p><b>Need</b></p> <ul style="list-style-type: none"> <li>Best practices from other communities</li> <li>Identify cost to fund incentives</li> <li>Lessons learned from others</li> </ul>	



# ONE-YEAR IMPLEMENTATION STEPS

## POLICY & STATE LEGISLATION

<b>Modify State Legislation</b>  <i>To require disclosure of flood damage and location in Flood Hazard Zone when selling a property</i>  Fred Brusso Cyndi Wyskiewicz	LEAD	WITH WHOM	WHERE	SPECIAL CONSIDERATIONS
	Meg Pittenger, City Floodplain Manager	<ul style="list-style-type: none"> <li>· Sherri Neil, Intergovernmental Affairs Manager</li> <li>· Ben McFarlane (HRPDC)</li> </ul>	<ul style="list-style-type: none"> <li>· City Hall</li> </ul>	<ul style="list-style-type: none"> <li>· Realtors</li> <li>· What costs occur when nondisclosure occurs</li> <li>· Research costs of disclosure impacts</li> <li>· Banks' data</li> <li>· Foreclosure</li> </ul>
<b>MILESTONES</b>			RESOURCES AVAILABLE/NEEDED	
<b>At once</b> <b>July '17</b> · HRPDC Board introduction <b>Aug. '17</b> · Introduce to City Council <b>Oct. '17</b> · Include in legislative package			<ul style="list-style-type: none"> <li>· Staff</li> </ul>	

# ADDITIONAL CONSIDERATIONS

CATEGORY	SECONDARY RESILIENCE ACTION CHECKLIST	VOTES
TRAINING	Train volunteers (Master Gardeners, Master Naturalists, etc.) and participants in local LefCoe Leadership Foundation 3-month leadership program in resilience	1
COMMUNICATION & OUTREACH	Increased outreach/communication (survey citizens to find out how they get information/news)	3
	Increase ways of communicating what to do in an emergency (use all media, including but not limited to Youtube, Facebook, Twitter, posters)	2
	Create list of "out of the box" stakeholders	1
	Increase public meetings with insurance etc. to every 6 months	1
DATA COLLECTION	Partner with GreenSteam and install monitoring sensors	1
PLANNING	Develop "CAN DO" list for the Joint Land Use Study (JLUS) draft: Recommendations for City and Navy; start in phase 3 of 5 (study September 2017 through HRPDC); and identify access problems in St. Julien's Creek Annex and S. Gate Norfolk Naval Shipyard to identify resilience needs and address tenure rights and longterm viability of facilities	1

# NEXT STEPS

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With the workshop coming to a close, participants organized “Next Steps” for moving forward with their Resilience Action Checklist. It was emphasized that The RAFT Team would be able to provide research and information throughout this process. Participants suggested that quarterly calls with The RAFT Team or meetings through HRPDC Coastal Resiliency Working Group for the three pilot community leaders could be an avenue for collaboration.

HRPDC would be willing to host a meeting in either August or January for the three pilot communities. The RAFT Team and Ben McFarlane will contact Gloucester and Cape Charles to explore their interest in meeting together.

Participants realized that funding is a key need; sources of funding and assistance needed to be identified. With communication identified as a prioritized category, participants discussed a possible presentation of the Scorecard results to City Council. They also remarked that senior leadership communication should be further developed. Participants also focused on the need to think regionally, especially with the Navy, the HRPDC, and the Hampton Roads Transportation Planning Organization (TPO).

Cross-department training opportunities, included on the Resilience Action Checklist, should be implemented soon. The Hampton Roads Sanitation District SWIFT project should be undertaken as well as proactive action at the Naval base. Participants agreed that another step could be to improve road access during flood events. Additionally, further research could be done on St. Juliens Creek Annex and South Gate. Overall, participants agreed that they should ensure all projects work to improve Portsmouth’s resilience and economy.

# **APPENDIX**

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## **WORKSHOP ATTENDEES**

**Fred Brusso**, *Citizen*

**Mark Geduldig-Yatrofsky**, *Portsmouth City Watch*

**Ashley Gordon**, *Hampton Roads Planning District Commission*

**Ben McFarlane**, *Hampton Roads Planning District Commission*

**Richard Neefe**, *Portsmouth Public Schools*

**Meg Pittenger**, *City of Portsmouth*

**Joe Rieger**, *Elizabeth River Project*

**Brian Swets**, *City of Portsmouth*

**Doug Taylor**, *Norfolk Naval Shipyard*

**Erin Trimyer**, *Director of Public Utilities*

**Christina VanLear**, *Erosion Control Specialist*

**Cyndi Wyskiewicz**, *Virginia Cooperative Extension*

# APPENDIX

## BIG PICTURE IDEAS FROM THE RAFT WORKSHOP

Topic	Description
<b>"Town Crier" Concept</b>	1-page announcements posted on where to find services and plastered everywhere
	Notices to download and print in advance of storm event

Opportunities/Ideas	
Topic	Description
Public Information	Application for flooding
	Real-time monitoring
Flood Insurance	Expand flood insurance to vulnerable non-SFHA districts
	Provide residents with ways to reduce risks & costs (insurance)
	Invitation to companies to be on website
	Work with insurance companies so <u>they</u> provide better information
Elevation Mapping	1st floor elevations mapping of low-income areas (side scan LIDAR)
	ACOE will do at no cost
Annual Workshops	Workshops with vulnerable communities
	Include insurance companies
	Possibly every quarter - 6 months
Historic District	Both a strength and opportunity
	<b>Strength:</b> most intact historic district
	<b>Opportunity:</b> how to adapt & protect/preserve asset

Opportunities/Ideas	
Topic	Description
Area: Major Employer	Both a strength and opportunity
	<b>Strength:</b> major employer
	<b>Opportunity:</b> joint land-use study -- work with Navy to increase access and transportation
Zoning Ordinance	Update zoning ordinances for resilience
	Should include incentives
Real Estate	Disclosure of risks is vital
	Work with Joint Subcommittee
	<b>Opportunity:</b> if disclosure required, it would help improve the market by removing uncertainty in the process
	Helps buyers and investors, not sellers
Green Infrastructure	Need green infrastructure urban plan
	Requires creative approaches
	Frame as relevant to quality of life
	Needs coordination and collaboration between departments
Retreat & Raise	Need to develop plans ~6 years - part of Comprehensive Plan conversation
	What to do for abandonment & prevention/mitigation incentives

GROUP 2

# APPENDIX

## BIG PICTURE IDEAS FROM THE RAFT WORKSHOP

Strengths	
Geographic compactness	Strong community spirit & engagement/support of each other
Flood planning work (Floodplain Management Plan + Hazard Mitigation Plan)	All residents are affected by flooding; no convincing necessary
CRS score of 7 (sustainable)	Receptive council (willing to discuss)
Public information	Comprehensive Plan - taking SLR into account in every aspect (~15 more months until completion)

Opportunities
Limited staff/limited budget
Some people still in denial
More outreach needed to those who don't use internet/newspapers
Built-out community (~90%) - less options, can't take property easily

Potential One-Year Projects	
Increase Communication	Ask other local governments about their practices/methods
	Survey how people get messages and information
More Tracking of Flooded Sites	More water level sensors
	This could lead to more warning alerts (text messages, signage)