THE SUMMARY OF THE MEETING OF THE
HRPDC REGIONAL ENVIRONMENTAL COMMITTEE
October 5, 2017

1. **Summary of the September 7, 2017 Meeting of the Hampton Roads Regional Environmental Committee.**
   There were no comments on the September meeting summary.

2. **Public Comments**
   There were no public comments.

3. **Resilient Best Management Practices (BMPs)**
   Mr. Tim Hare, P.E. (ARCADIS), participated in the Chesapeake Bay Scientific and Technical Advisory Committee (STAC) Workshop entitled, "Monitoring and Assessing Impacts of Changes in Weather Patterns and Extreme Events on BMP Siting and Design." The Workshop was held September 7-8, 2017 in Annapolis, MD. It was attended by federal agencies, MD state agencies, localities, academics, and consultants.

   The purpose of the Workshop was to discuss resilience planning for BMPs and develop guidance for the jurisdictions to account for climate change in the Phase III Watershed Implementation Plans (WIP). The STAC assessed the state of knowledge and compiled siting and design guidelines that make BMPs more resistant to climate change. Then, the Committee identified the gaps in research and the highest research priorities.

   The STAC was focused on siting and designing BMPs to accommodate higher storm intensities and greater runoff volumes. Agricultural BMPs are generally more adaptable since many crops are annually removed. In contrast, plants are not often removed from urban BMPs. VIMS presented the challenges of accounting for sea level rise in designing living shorelines, as most urban shorelines lack the space for migration. Predicting rainfall presents another challenge, as the STAC was considering rainfall patterns throughout the entire Bay watershed. Throughout the piedmont region, it is expected that winters are wetter and summers are drier; however, in Hampton Roads winter and summer are typically wetter.

   A draft STAC report will be released for public review in early December.

   Mr. Swets asked if planning solutions such as land use patterns and ordinance changes were also considered. Mr. Hare responded that they were, but the STAC is driven by the Bay model numerical outputs.

   Ms. Katchmark asked if they recommended BMPs that are well-suited to extreme rainfall events, and Mr. Hare replied that specific BMP adaptations such as plants and soil mixes were not mentioned.

Dr. Filippino added that not all climate change impacts adversely affect the Bay. For example, using 0.3 and 1.7 meter sea level rise scenarios, the bottom dissolved oxygen levels in the main stem of the Bay increases because the rising seas increase the circulation.

4. **askHRgreen Annual Report**

Ms. Cullipher presented the askHRgreen FY17 Annual Report, which is available here: http://askhrgreen.org/wpcontent/uploads/2011/06/askHRgreenFY17AnnualReport_final.pdf.

The askHRgreen committees ran nine media campaigns throughout FY17. The topics included proper leaf and pet waste disposal, holiday fats, oils, and greases disposal, recycling, water conservation, etc. The messages were delivered via radio ads, television spots, and online posts.

They continued their outreach efforts at 29 local events, including farmer's markets, fairs, festivals, and school events throughout Hampton Roads.

The Bay Star Homes program continues to expand. At the end of FY17, there were 2,409 Bay Star Homes across the region.

The partnership with Coastal Virginia magazine produced articles and infographics from all four committees' messages throughout FY17.

New in FY17 was the "Write as Rain" sidewalk messaging campaign, which was launched in eleven localities. The messages included saying such as: "Only Rain down the Storm Drain" and "Cigarette Butts are Litter, Too".

All four committees have been working on the new askHRgreen website, which will present content in a way that is easier to read and will be optimized for handheld devices. The new website is scheduled to be launched at the end of October.

Dr. Surita asked if the Annual Report includes the numbers of students receiving the Green Learning Guide. Ms. Cullipher replied that hardcopies of the guide were distributed to every sixth grade student in Hampton Roads, including those who attend public and private schools, in 2012. There are no hardcopies remaining; however, the guide is available for download. Ms. Katchmark asked if school administrators promote the guide, and Ms. Cullipher said they collaborated with the Science Coordinator for Chesapeake Public Schools during the development of the guide.

5. **City of Suffolk Green Infrastructure Study**

Ms. Amy Thurston, City of Suffolk, presented an overview of their new plan, "Green Infrastructure in the Nansemond River Watershed," which was funded with a Green Infrastructure Community Planning Grant through the Green Infrastructure Center, Inc. (GIC). Several civic leagues expressed an interest in conserving open space and

protecting natural resources, which led to the development of the plan. The City held two public forums to collect input from residents. The goals of the study were to inform future planning initiatives, guide responsible resource management within the watershed, and guide the integration of green infrastructure into other plans.

The most prominent part of the report is the inventory of natural assets, which was divided into four categories: 1) habitats, 2) water quality, 3) parks, trails, and access to nature, and 4) culture and heritage.

While mapping the habitats in the watershed, the partners identified 52,000 acres of habitat core that was 100 acres or greater. They found a substantial amount of fragmentation, which presents an opportunity to create linkages between habitats. The partners also highlighted the benefits of trees. The City collaborated with UVA graduate students to develop a map of tree canopy coverage in the central growth district (28%) and the northern growth area (21%). A five percent increase in tree canopy coverage would require planting approximately 12,000 trees.

The water quality category included stormwater management and flood mitigation concerns. The study emphasizes the importance of vegetated buffers in improving water quality. They also included an analysis of the most flood-prone areas that should be evaluated for the appropriateness of the zoning districts, permitted land uses, and setbacks.

An important element of a healthy community is parks, trails, and access to nature. The mapping exercises indicated that all of the public water access points on the Nansemond River are located in the northeastern or central areas of the City, where most residents live. The City aims to create more access points in the other parts of the City. The City is also focused on trails and just adopted a Bicycle and Pedestrian Plan last month.

The fourth category is preserving the culture and heritage of the City. The partners proposed using GIS to overlay historically significant sites with habitat cores to prioritize parcels that should be protected.

The study provided valuable information to guide future development in the City. The plan represents a significant milestone in starting the conversation about how to preserve natural resources as the City continues to grow and develop.

Mr. Swets asked how the study will inform future planning efforts. Ms. Thurston said t the City is currently revising their open space requirements, specifically working to reclassify active and passive open space. Ms. Claire Jones (City of Suffolk) added that the study is informing the Downtown Plan update.

Ms. Gordon asked whether land trusts were available to support easements, but Ms. Jones indicated that there are no active land trusts in the City.

Ms. Katchmark asked if the Department of Utilities was involved with the plan and asked specifically about protecting drinking water reservoirs. Ms. Jones indicated that the City already has a policy in the Comprehensive Plan to protect the drinking water reservoirs.

Ms. Katchmark asked if they would recommend working with GIC. Ms. Thurston said it was helpful to have a third party to go between the City and the public. GIC was able to provide the City with several new data layers using the grant funds. Mr. McFarlane mentioned that HA plans to brief the Committee on their project with the GIC.

The Committee also discussed the legislative proposals from the Roanoke River Basin Committee. Of particular interest is their proposal to exclude federal lands from the population density calculation that limits the adoption of a tree replacement ordinance to those localities with population densities of at least 75 persons per square mile. Committee members suggested including all localities within the Bay watershed regardless of population or tying the population density to the Census Urbanized Area. HRPDC staff will draft a proposal that emphasizes tree plantings in the Bay watershed.

6. **Coastal Zone Program Updates**
   Mr. McFarlane announced that the HRPDC is partnering with the Richmond PDC to develop a conservation study for the Lower Chickahominy watershed under the 309 grant program.

   PO and GL are pilot communities for the Resilience and Adaptation Feasibility Tool (RAFT) project, which is a framework for coastal communities in evaluating risks to coastal flooding, prioritizing action to increase resilience, and identifying sources of technical assistance and funding.

   The eight Virginia coastal PDCs meet with the Coastal Zone Management Program staff quarterly. The next meeting is scheduled for November 8, 2017. Mr. McFarlane will provide an update at the December Regional Environmental Committee meeting.

7. **MARCO Data Portal**
   Ms. Kidd and Ms. Gordon attended a training workshop on the Mid-Atlantic Regional Council on the Ocean (MARCO) Data Portal on September 29, 2017. MARCO was established in 2009 by the Governors of DE, MD, NJ, NY, and VA to serve as a regional hub for marine spatial planning. Four regional priorities were established in the 2016 Action Plan: 1) climate change adaptation, 2) renewable energy, 3) marine habitats, and 4) water quality.

   The Data Portal allows users to create, save, and share maps of the marine environment. The portal is available here: http://portal.midatlanticocean.org. There are 3,000 data layers available, which are divided into eleven categories. Ms. Kidd

demonstrated how to access the data. Ms. Kidd is impressed with the portal and has found it fairly easy to use. In addition to using their data, users can also pull in their own GIS layers. The portal is currently run with open source technology but they are considering moving to an ESRI platform.

8. **Status Reports**

PO – Mr. Swets announced that VIMS has developed a city-wide flood model for PO. He also said that the City will have a draft of their Comprehensive Plan updates by late November. He anticipates finalizing the new Comprehensive Plan early next year.

The next meeting of the Regional Environmental Committee will be held on November 2, 2017.