1. **Summary of the December 8, 2017 Meeting of the Hampton Roads Coastal Resiliency Committee**

   The summary and attendance record for the December 8, 2017 meeting of the Hampton Roads Coastal Resiliency Committee were approved as distributed.

2. **Public Comments**

   There were no public comments.

3. **Regional Priorities for Coastal Resiliency**

   Mr. Ben McFarlane, HRPDC, briefed the Committee on discussions with the Chief Administrative Officers (CAOs) regarding priorities for the Coastal Resiliency Program. The CAOs designated representatives from the cities of Hampton, Newport News, Norfolk, Portsmouth, and Virginia Beach to a subcommittee focused specifically on coastal resiliency. The main topics identified as priorities thus far include:

   (1) Developing a regional flood insurance outreach campaign.
   (2) Building political support to revise FEMA policies for elevating homes and mitigation reconstruction.
   (3) Improve the collection of observational flooding data by expanding the sensor network.

   Mr. McFarlane reviewed the letter from FEMA to VDEM regarding property owners obtaining contractors to perform Hazard Mitigation Assistance (HMA) project work and receiving reimbursement. FEMA stated in the letter that there are currently no plans to provide interim guidance concerning this issue. The City of Virginia Beach will be the first locality in the region to permit property owners to use pre-qualified contractors for mitigation projects and seek reimbursement through HMA funds awarded to the City. The City of Virginia Beach will be invited to brief the committee on their implementation approach.

   Regarding expanding the flooding sensor network, Mr. McFarlane proposed a future working group meeting to discuss a strategy for the implementation of various sensors. This would include sensors to support the Storm Sense initiative, as well as the issuance of public flooding alerts.
4. Flood Insurance Outreach

The CAOs identified a regional flood insurance outreach campaign as a priority action for the Coastal Resiliency Program. In collaboration with askHRgreen program staff, HRPDC staff are developing a proposal for this campaign. The primary goal of this campaign is to encourage residents of Hampton Roads to purchase flood insurance, regardless of their flood zone location.

Ms. Ashley Gordon, HRPDC, summarized the existing data sources to measure the success of the campaign, including the number of policies by community, flood zone, and occupancy type. The annual Life in Hampton Roads survey, conducted by Old Dominion University, has also previously included questions that provide insight into public knowledge of flood insurance.

Ms. Katie Cullipher, HRPDC askHRgreen, reviewed the costs and impacts of previous environmental campaigns conducted under contract with Red Chalk Studios/Cahoon & Cross. Ms. Cullipher presented low ($26,255) and high ($59,175) cost estimates from Red Chalk Studios for the flood insurance campaign. The primary differences in costs are related to the extent of the media buy and the creation of a custom campaign website. Both packages include the development of a homeowner testimonial video.

Ms. Whitney Katchmark, HRPDC, presented the portion of the costs each locality would be responsible for under both campaign scenarios. Ms. Katchmark asked that each Committee voting member review the FY18 budget for their locality and reply via email what they will be willing to contribute.

Ms. Mary-Carson Stiff, Wetlands Watch, asked if this project is eligible for Virginia Department of Conservation and Recreation (DCR) Floodplain Dam Safety Funds. Mr. Charley Banks, DCR, indicated that outreach is eligible and the qualification details will be discussed at an upcoming staff meeting.

Group discussion following the flood insurance presentation focused on messaging and target audiences. Mr. Brian Lewis, City of Hampton, emphasized the need to reach people who no longer have a mortgage in the Special Flood Hazard Area (SFHA), or live outside the SFHA. Mr. Speaker Pollard, Williams Mullen, also suggested considering messaging for the business community. Ms. Shanda Davenport, City of Virginia Beach, recommended the slogan, “If you can see water, buy insurance”, and supported creating a message specific to Hampton Roads. Mr. Eric Martin, City of Chesapeake, suggested using Hurricane Matthew as an example to convey the risk of rainfall flooding. Mr.
Lewis stated an unnamed heavy rainfall event may be more relatable for residents on both the Peninsula and Southside.

Mr. Martin also stated that he does not think it is necessary to create a new custom website when flood insurance information exists on other federal and local websites. Ms. Meg Pittenger, City of Portsmouth, commented that it is important to note FEMA’s Flood Smart website is currently under construction. Mr. Vincent Jones, City of Portsmouth, suggested verifying the capacity of locality websites to host additional flood insurance materials. Ms. Michelle Hamor, U.S. Army Corps of Engineers, stated she would be able to promote flood insurance campaign materials on the USACE and Silver Jackets websites.

Mr. McFarlane also briefed the committee on the flood insurance calculator available at FloodHelpNY.org. The flood insurance calculator initiative could be replicated for the Hampton Roads region as an additional phase of flood insurance outreach.

5. Precipitation Changes and Design Storms

Mr. Greg Johnson, City of Virginia Beach, introduced Mr. Brian Batten, Dewberry, to present an overview of their Analysis of Historical and Future Heavy Precipitation report. Mr. Batten stated that the heavy rainfall events during 2016, including Hurricane Matthew, provided motivation for the City of Virginia Beach to change their Public Works Design Standards. Mr. Batten reviewed Dewberry’s analysis of historical rainfall trends, as well as projected precipitation trends, to illustrate the trend of increasing heavy precipitation. Mr. Batted reported that current Atlas 14 guidance may be underestimating the local 10-year rainfall amount by 7-10%. Based on these findings, the City of Virginia Beach is planning to apply a 20% increase to the design rainfall guidance across the entire precipitation-frequency curve.

Mr. Johnson stated that he would like to build regional support for approaching DEQ about design storm standards and specifications. Mr. Martin supported revising the City of Chesapeake’s design standards, but noted that the City encounters resistance from the building community because of increased compliance costs. Mr. Lewis recommended involving the Transportation Planning Organization in these discussions as well. Counties will have difficulty revising their standards if the Virginia Department of Transportation does not adopt the same standards. Ms. Katchmark stated that the HRPDC is also working to better align regional constructional standards with resilient design standards.

Mr. McFarlane recommended that each locality identify a contact to review the Dewberry Analysis of Historical and Future Heavy Precipitation Report. The report is
accessible on the HRPDC website at [https://www.hrpdcva.gov/events/index/view/id/801](https://www.hrpdcva.gov/events/index/view/id/801). HRPDC staff will relay this information to HRTPO staff and plan to revisit this topic at a working group meeting.

6. **Regional Resiliency Action Plan**

Discussion of this agenda item was postponed due to limited time.

7. **Regional Benchmarking Project Update**

Mr. Russ Lotspeich, U.S. Geological Survey (USGS), briefed the committee on the progress to date regarding the Hampton Roads Benchmark Monitoring Network for measuring land subsidence. On September 1, 2017, the regional benchmarking project was initiated to assess relative land movement across the Hampton Roads region. The network of high-accuracy benchmarks will also be used to calibrate satellite data used for mapping future land elevation changes.

Mr. Lotspeich stated that the network is comprised of 27 benchmarks, dating from 1932 to the present. This includes 9 new deep rod benchmarks installed by USGS and co-located with extensometers and tide gages. USGS completed the initial 24-hour GNSS observations for 21 of the marks between January 23 and February 8, 2018. Remaining surveys were conducted by NASA Langley, NGS, and NOAA CO-OPS. With the exception of two marks, all initial surveys have been completed. The OPUS-Static survey results have been compiled, and upon completion of the remaining two surveys, USGS will begin processing the network. Annual GNSS surveys will continue for the next 5 years during the winter months.

Mr. Johnson asked if variation in temperature is accounted for through the monitoring. Mr. Lotspeich explained that the measurements are designed to avoid sensitivity to temperature. Mr. Larry Atkinson, Old Dominion University, stated that the InSAR analysis conducted by the NASA Jet Propulsion Laboratory will also continue.

8. **Tracking Resiliency Projects in Hampton Roads**

Mr. McFarlane informed the Committee that the CAO’s Coastal Resiliency subcommittee approved a resiliency project tracking template. The template will be distributed to the Committee within the next month for completion by local government staff.
9. First Floor Elevation Data – CZM Grant

The Virginia CZM program awarded the HRPDC a grant in October 2017 to develop a regional dataset of first floor elevations (FFE). Mr. McFarlane stated that the purpose of this database is to support modeling efforts that improve the accuracy of flooding damage assessments. Ms. Gordon provided a summary of responses from local government staff regarding the availability of FFE data. Of the 13 localities that have responded to data inquiries, 7 localities have elevation certificates available electronically as PDFs. Only 2 localities, the City of Hampton and City of Virginia Beach, have FFE information available in a format other than elevation certificates. Ms. Gordon stated that the elevation certificates will be used to create a regional database that will be shared with each locality.

Mr. Scott Smith, City of Norfolk, indicated that the United States Army Corps of Engineers should have FFE information available for the City of Norfolk. Ms. Hamor verified that the U.S. ACOE has survey and elevation certificate data available for the City of Norfolk. Ms. Hamor also emphasized the value of comparing multiple methods of estimating first floor elevation data. Mr. Smith asked if the data produced through this project would meet Corps standards. Ms. Hamor responded that, in general, the Corps uses the best available data, but that it would be reviewed on a project-by-project basis.

10. Update on Federal and State Efforts Related to Sea Level Rise and Recurrent Flooding

Mr. McFarlane reported that the authorization of the National Flood Insurance Program (NFIP) was extended to July 31, 2018. There were no amendments to the language of the NFIP.

Mr. McFarlane also provided a state legislative update. The Virginia General Assembly established a Special Assistant to the Governor for Coastal Adaptation and Protection (Code of Virginia, Section §2.2-435.11). The Special Assistant will serve as the primary point of contact for resources regarding coastal adaptation and flood mitigation.

Although the bill (SB 397) championed by Senator Lewis to create a Hampton Roads Coastal Resiliency Authority failed in the House, the bill will likely re-appear in 2019. Given that that regional and state level resiliency planning appeared in a number of bills in the 2018 legislative session, Mr. McFarlane proposed that Committee members consider regional coastal resilience priorities prior to the next meeting. Future
Committee discussion could help achieve a regional consensus for proposed state level action.

11. Updates on PDC and Local Efforts Related to Sea Level Rise and Recurrent Flooding

Ms. Meg Pittenger reported that the City of Portsmouth received a grant from the Virginia Department of Emergency Management to fund half of their proposed flood sensor project.

Ms. Michelle Covi, Old Dominion University and Virginia Sea Grant, informed the Committee that the next Adaptation Forum will be held on May 11, 2018, at the Virginia Modeling, Analysis, and Simulation Center in Suffolk. The Forum topic will be Adaptation Policy.

Ms. Shanda Davenport shared that the City of Virginia Beach will be hosting an afternoon of games and a showing of the documentary Tidewater for the community. The event begins at 1:30pm on March 24, 2018 at the Virginia Beach Central Library.

12. Other Matters

The next meeting of the Coastal Resiliency Committee will be held in June 2018.