









Eastern Shore of Virginia Climate Adaptation Working Group

March 2016 Newsletter

The Eastern Shore of Virginia CAWG is a partnership between over 30 local, state, and federal government agencies and non-government organizations that meets quarterly to develop informational materials and planning tools to enhance our region's ability to prepare for changes resulting from sea level rise and climate change.

Below is a compilation of recent news, information, resources, and events pertaining to the citizens of the Eastern Shore.

Please feel free to forward this email to anyone who may be interested and have them contact Shannon Alexander at salexander@a-npdc.org to be added to the distribution list. www.a-npdc.org A-NPDC on Facebook

CAWG "Top 10" - Top stories & resources handpicked by A-NPDC Staff. These links can also be found in the lists below.

- Coastal Resilience tool; Flooding & SLR and Future Habitat apps ready for use, more to come, more background here.
 February 2016
- 2. Climate Change and the Evolution and Fate of the Tangier Islands, Dr. Schultz, et. al. Scientific Reports 5 6/16/2015
- 1. <u>Management Plan Weighs Options for Assateague's Future as 'The Island is Moving Westward'</u> The Dispatch 2/11/2016
- Seawalls only a short-term solution to rising sea levels pushes and justifications for green infrastructure solutions. The
 Patriot Ledger 12/18/2015
- The surprising way that climate change could worsen East Coast blizzards 1/25/2016
- 5. USDOI, monitoring by VMRC Assateague Island National Seashore SB 643
- 6. VCPC Students Present TDR Plan to Mathews County Planning Commission VirginiaSeaGrant 2/4/2016
- 7. Assessing the Vulnerability of Transportation Infrastructure on the Eastern Shore NOAA
- 8. Five steps to address Climate Change in VA; and solar energy goals
- 9. Marshes more resilient to SLR than previously thought Phys Org 12/18/2015
- 10. Beach restoration; expedited permit SB 327











Upcoming Public Events

- March 2 7:30 p.m. VIMS Eastern Shore Lab Seminar: Where oh where will the (sea)grass grow? A global tale of seagrass restoration and the factors challenging it. Andrew Johnson Ph.D. candidate, VIMS
- ➤ March 7-9 2nd Virginia Marine Debris Summit at VIMS Gloucester Point
- March 10 6:00 p.m. Nassawadox Creek, Little Mosquito & Assowoman Creeks Final public meeting and public comment period on the draft TMDL report, A-NPDC Conference Room, Accomac. Notice for public comment period
- March 22-23 2016 Resilient Virginia Conference: Activating Communities and Businesses for a More Resilient Future". Richmond, VA. Registration here.
- March 31 4:00-7:00 p.m. National Park Service Assateague Island National Seashore General Management

 Plan/Environmental Impact Statement Public Open House. Chincoteague Center, 6155 Community Drive, Chincoteague,

 VA. More info here.
- April 4-6 Eastern Regional Climate Preparedness Conference: Local Solutions. Baltimore, MD. Registration here.
- Spring 2016 (Date TBD) ESVA Coastal Resilience Mapping & Decision Support Tool Phase II Workshops: Coastal Defense & Barrier Island Evolution Apps
- May 5 9:00 a.m.-3:00 p.m.- Tidal Wetlands Workshop at VIMS Gloucester Point

Adaptation Resources & Planning Tools

A. Local Resources/Tools

- 1. The Nature Conservancy Enhancing Coastal Resilience on Virginia's Eastern Shore
 - Coastal Resilience tool; Flooding & SLR and Future Habitat apps ready for use, more to come, more background here. February 2016
 - An easily navigable digital version of the Introductory Workshop & Training Manual that was provided to participants of the sessions offered February 11th & 12th is available upon request to vacoastalresilience@tnc.org
- 2. Accomack County/Wallops Island Joint Land Use Study
 - Final Report PDF May 2015
- 3. Chincoteague National Wildlife Refuge Comprehensive Conservation Plan
 - PDFs of all Plan Components available here
- 4. Assessing the Vulnerability of Transportation Infrastructure on the Eastern Shore NOAA

B. State & Regional Resources/Tools

- 1. Gov. McAuliffe & Virginia's Resiliency Plan: Virginia to receive more than \$120.5 million from National Disaster
 Resilience Competition 1/21/16
- 2. Virginia Joint Commission on Sea Level Rise and Recurrent Flooding
 - On November 9, 2015 the Commission met in House Room C, General Assembly Building, Richmond.

Agenda

Materials:

- I. Potential Recommendations for Discussion Purposes
- II. How Naval Facilities in Hampton Roads Are Coping With Rising Relative Sea Levels



- III. Commonwealth Center for Recurrent Flooding Resiliency
- IV. Joint Subcommittee to Study Recurrent Flooding
- 3. Secure Commonwealth Panel Recurrent Flooding Subpanel
 - No new updates
- 4. Virginia Climate Change & Resiliency Update Commission
 - Report and Final Recommendations to the Governor December 21, 2015 PDF
- 5. VIMS Center for Coastal Resources Management
 - Living Shorelines Technology Transfer and Regional Workshops 12/1-2/2015 Agenda & Presentations
 - Shellfish Aquaculture in the Chesapeake Bay, Information and Resources
 - Rives & Coasts Newsletter, Marine Debris & Microplastics: Sources & Solutions for Coastal Virginia Summer 2015
 - Scientific Reports 6 The Dilemma of Derelict Gear A.M. Scheld, et. al PDF 10/01/2015
 - SAGE (Systems Approach to Geomorphic Engineering) Report PDF Summer 2015
 - Center for Coastal Resources Management Quarterly e-Newsletter February 2016
- 6. <u>The Hampton Roads SLR Preparedness and Resilience Intergovernmental Pilot Project Phase 1 Report:</u>
 <u>Accomplishments and Lessons Learned; ODU The Center for SLR 11/17/2015</u>
- 7. Legislative Bills
 - ➤ VA Shoreline Resiliency Fund SB 282
 - Beach restoration; expedited permit HB 327
 - Recurrent Flooding Resiliency HB 903
 - ▶ USDOI, monitoring by VMRC Assateague Island National Seashore SB 643
 - Beach restoration; expedited permit SB 327
 - Offshore waters and submerged lands; HB 813
- 8. Five steps to address Climate Change in VA; and solar energy goals DelmarvaNow 12/21/2016
- 9. Northeast Habitat Map tool
- 10. NorEast: Stream Temperature Data Inventory tool

C. National Resources/Tools

- 1. <u>America's Preparedness Report Card; Explores the preparedness actions that each of the 50 states are taking in</u> relation to their current and future changes in climate threats
- 2. Short Answers to Hard Questions about Climate Change The New York Times 1/28/2015

D. Global Resources/Tools

1. NASA: Jason-3 launches to monitor global sea level rise 1/19/2016

Adaptation Research Articles & News Items

A. Sea Level Research Articles & News Items

- 1. Decade of rising seas slowed by land soaking up extra water, UCI and NASA find 2/11/2016
- 2. The Marshall Islands Are Disappearing The New York Times 12/2/2015
- 3. Groundwater depletion adding to global SLR The Desert Sun 12/19/2015
- 4. The days are getting longer; Scientists reveal that the rotation of the Earth's core holds a clue to understanding global SLR EurekAlert! University of Alberta 12/11/2015











- 5. Why the U.S. East Coast could be a major 'hotspot' for rising seas The Washington Post 2/1/2016
- 6. Enhanced Atlantic sea-level rise relative to the Pacific under high carbon emission rates Nature Geoscience 2/1/2016

B. Climate Change Research Articles & News Items

Atmospheric Warming and Impacts to Terrestrial and Aerial Ecology

- 1. Phragmites vs. Climate Change: Invasive Reed Better at Taking Up Carbon 12/22/2015
- 2. The surprising way that climate change could worsen East Coast blizzards 1/25/2016

Ocean/Water Resources and Impacts to Aquatic Ecology

- 1. Marshes more resilient to SLR than previously thought Phys Org 12/18/2015
- 2. Consequences of building a wall across the mouth of the Chesapeake Bay Bay Journal 12/21/2015
- 3. Ancient ocean under meteor impact area USA Today 11/22/2013
- 4. Carbon in Water must be Accounted for in Projections of Future Climate USGS 12/21/2015
- 5. Greenland ice sheet, more SLR than imagined The Washington Post 1/4/2016
- 6. Greenland Is Melting Away The New York Times 10/27/2015
- 7. CC altering Greenland ice sheet and accelerating SLR York University 1/4/2016
- 8. Ocean warming from CC increasing rates of SLR and Making Floods Worse Climate Central 1/25/2016

C. Hazard Mitigation & Climate Adaptation Planning & Policy Items (information on impacts to economies & the built environment)

- 2. Climate Change and the Evolution and Fate of the Tangier Islands Dr. Schultz, et. al. Scientific Reports 5 6/16/2015
- 3. Seawalls only a short-term solution to rising sea levels pushes and justifications for green infrastructure solutions. The Patriot Ledger 12/18/2015
- 4. New Study Encourages Inclusion of Adaptive Capacity when Assessing Vulnerability USGS & NE CSC 8/10/2015
- 5. Hardened shorelines negatively impacting SAV in CB watershed The Washington Post 12/26/2015
- 6. NE CSC Report Helps State Wildlife Managers in the Northeast and Midwest Alleviate Impacts of Climate Change NE CSC 7/20/2015
- 7. OBX SLR effects (septics, new inlets, etc.) Outer Banks Sentinel 1/6/2016
- 8. <u>Management Plan Weighs Options for Assateague's Future as 'The Island is Moving Westward'</u> The Dispatch 2/11/2016
- 9. <u>Student Resilience Design Work Awarded \$120 MILLION! (Implementation to be on the ground in Chesterfield Heights, Norfolk) Wetlands Watch 1/26/2016</u>
- 10. Snowzilla (winter storm Jonas) storm surge intensity The Washington Post 1/24/2016
- 11. Repairing what Jonas has washed away USFWS 2/2/2016
- 12. Optimism; US coastal cities adapt to SLR Harvard Business Review 1/20/2016
- 13. <u>National parks seek to beat back the tide of climate change, sea level rise (Fort Monroe & Colonial Historic National Parks)</u> Daily Press 12/2/2015
- 14. <u>Hampton Roads Transportation Planning Organization; 30 year road projection planning Emergency Management 1/18/2016</u>
- 15. HUD NDRC awardees for CC mitigation projects RealEstateRama 2/24/2016
- 16. ODU Collaborations for Community Resilience Event ODU 12/16/2015











- 17. ODU Collaborations for Community Resilience Event News (video & text) ODU 12/16/2015
- 18. VCPC Students Present TDR Plan to Mathews County Planning Commission VirginiaSeaGrant 2/4/2016
- 19. Scientists trying to harness immense power of Gulf Stream off Hatteras The Virginia-Pilot 2/16/2016
- 20. Shore Thing: UVA Scientists Develop New Way to Fund Coastal Restoration UVA Today 12/17/2015

Tangier Articles

- 1. <u>Tangier Receives Update Jetty</u> DelmarvaNow 12/22/2015
- 2. Tangier residents could have to abandon the island in 50 years... DelmarvaNow 12/10/2015
- 3. Bay Islanders Receive Status Update on Needed Jetty USACE 12/16/2015
- 4. Chesapeake Bay island residents fight economics and erosion to prolong their homeland E&E Publishing 11/17/2015
- 5. Tangier Jetty; Public Radio audio clip Virginia Public Radio 12/25/2015
- 6. The long and short view of Chesapeake Bay's inhabited islands (Tangier and Smith Islands) Bay Journal 1/26/2016