

**Public Education Workgroup**  
**Governor's Climate Change and Resiliency Update Commission**  
**August 27, 2015**

**I. Introduction and Background**

The Public Education Workgroup of the Climate Change and Resiliency Update Commission was established to “focus on the available and the needed state mechanisms for effective education of the public on the issue of climate change impacts and responses”. The charge to the Workgroup included “*identifying key issues and messages, outreach opportunities and resources, and agency outreach responsibilities*”. It was anticipated that the Workgroup would develop an evaluation process to determine the success of outreach efforts using measurable and verifiable metrics and, if possible, to provide cost estimates for outreach implementation.

The Workgroup met twice (March and July 2015) outside of the three meetings of the full Commission (September 2014, December 2014 and April 2015). In addition to the formal meetings, the Workgroup Chair had informal discussions about climate-change education with faculty and staff at the Virginia Institute of Marine Science, faculty members in the Center for Climate Change Communication at George Mason University, the Director of the Office of Science and Health Education at the Virginia Department of Education, and leadership at Resilient Virginia, a not-for-profit organization that promotes resiliency education as one of its goals.

During the two Workgroup meetings, discussions were wide ranging but centered primarily on (1) the challenge of how to effectively engage the public in climate-change education, (2) identifying key messages that were deemed to be of highest priority, and (3) strategies for how best to convey those messages to diverse audiences. It was clear from the discussion that simply bringing up the topic of climate change can lead to polarization, misunderstanding, confusion, and even suspicion. It was noted that the public may be wary of actions that cost money, and that climate-change education should not take an alarmist approach. The Workgroup felt that, while sea-level rise in Hampton Roads was a compelling example of climate-change impact, public education should communicate impacts in a way that resonates with audiences throughout the entire state.

There was widespread agreement among Workgroup members that a tremendous amount of information is already available on climate change education, both in print form and on various websites. Examples at the international and national level include education resource sites at *UNESCO*, *NOAA*, and the *National Center for Science Education (NCSE)*, and at the state level include *Virginia Naturally* and *Resilient Virginia*. Many more exist. Information from these resources covers strategies for raising awareness, resiliency planning, identification of health and economic impacts, and links to recent publications, sources of data, and public policy. On the single topic of adaptation to sea-level rise and flooding, there are at least 25 programs and initiatives in Virginia within academia, NGOs, Commonwealth agencies, and Federal agencies that address these issues. What became clear, however, is that, despite the high level of interest

and number of ongoing activities, there currently is no single authoritative and comprehensive website that is devoted specifically to public education on climate change in Virginia.

Considerable discussion focused on this point. The Workgroup concluded that there would be benefit in establishing an online clearinghouse that could provide a wide range of information about climate change on one easy-to-use site pertinent to key issues in Virginia. This site could include, but not be limited to, technical advice, practical information for businesses and citizens, links to educational materials for all ages, information on current programs underway and new programs being proposed, high resolution maps, financial incentives, and tools and resources for sharing information. The Workgroup recognized and discussed the overarching issues of funding, staffing, information delivery, and marketing the information.

## **II. Recommendation #1: *Establish a Climate Change Clearinghouse***

- A) Goal:** Provide a central location for dissemination of climate change and resiliency information for Virginia from government and academic sources.
- B) Action Items:** Determine how the site will be housed/hosted, the level of information to be included, the best way to ensure objectivity, and the critical links to other sites. Questions include: (i) Should the site be organized as a consortium? (ii) Will an academic institution(s) offer stability and insulation from politics? (iii) How will the clearinghouse be marketed to reach people who would not otherwise seek it out? (iv) How should the content and breadth of information be established and structured (e.g. for citizens, homeowners, business owners)? (v) Is there value in establishing an interactive section with a blog, discussion board, or listserv?
- C) Cost Assumptions:** Unable to quantify at present but will likely require a modest level of new funds. Funding from endowed private support should be explored, as well as long-term education and outreach grants. Academic institutions may already have some of the necessary infrastructure, and may be able to move more quickly to implementation.
- D) Implementation Period:** 1 year.
- E) End Result:** A comprehensive and trusted source of climate change information focused on Virginia that will help educate the public, increase their awareness and stewardship, and serve as the most authoritative and up-to-date site for the science of climate change with special emphasis on practical information for citizens and businesses.

## **III. Recommendation #2: *Develop a Strategy for Enhancing Environmental Literacy***

- A) Goal:** Provide a strategy for dissemination of public information relative to Virginia climate change and resilience through strategic partnerships to promote environmental literacy.
- B) Action Items:** Establish stories that feature certain locales, businesses, and examples of specific impacts that will be readily understood and appreciated by the public; explore the possibility of information dissemination analogous to PBS's "A Moment in Time"; direct audiences to existing programs at, for example, Community Colleges

or Master Naturalists functions; develop materials for specific high-volume delivery points such as state parks and through carefully-crafted messages delivered by TV weathercasters, as well as through community centers, local festivals, and other public gatherings; consider developing public service announcements that include, for example, tips on how to save money.

- C) **Cost Assumptions:** Unable to quantify at present but will likely require a modest level of new funds. Funding from endowed private support should be explored, as well as long-term education and outreach grants.
- D) **Implementation Period:** 1-2 years.
- E) **End Result:** A more fully educated public that understands and appreciates the implications of climate change in their lives, who will in turn educate others.

#### IV. Recommendation #3: *Promote Hands-on K-12 Learning Experiences*

- A) **Goal:** Engage young people through hands-on experiences to become more climate literate.
- B) **Action Items:** Utilize Executive Order 42 (“Establishing the Virginia Environmental Literacy Challenge”) as a framework for action; engage church and scout groups, the Department of Forestry, *Virginia Naturally* partners, and Department of Conservation and Recreation fourth grade state park experience opportunities; coordinate with the Secretary of Education and the Virginia Science Teachers Association to determine what is currently being done; develop a menu of options for teachers and other educators, mapping information to Virginia science Standards of Learning when they are next updated.
- C) **Cost Assumptions:** Unable to quantify at present but will likely require a modest level of new funds. Funding from endowed private support should be explored.
- D) **Implementation Period:** 1-2 years.
- E) **End Result:** Every K-12 student statewide receives a hands-on experience through their school that has a basis in the science of climate change.

#### V. Concluding Remarks

The Public Education Workgroup concludes that the above recommendations will advance the public’s understanding of climate change and are worthy of consideration by the full Commission. If implemented, they will lead to better access of information that is accurate and unbiased, and targeted for a public as opposed to scientific audience. Citizens and businesses will be better able to make informed decisions; students will have a more robust learning environment; adaptation and resiliency will be enhanced; and, natural resources will be used more effectively. Evaluation of success should incorporate SMART objectives (Specific, Measurable, Achievable, Results-focused, Time-bound) as described in [http://www.cdc.gov/phcommunities/resourcekit/evaluate/smart\\_objectives.html](http://www.cdc.gov/phcommunities/resourcekit/evaluate/smart_objectives.html).