

## Citizens Advisory Committee

Kent Island, MD

May 30-31, 2013

FINAL Minutes

**Members Present:** Bill Achor, Nancy Alexander, John Dawes (Chair), Jim Elliott, Matt Ehrhart, Christy Everett, Scott Fickbohm, Victor Funk, Verna Harrison, Jeff Holland (Thurs.), Stella Koch, Bill Martin, Karen McJunkin (Thurs.), Dan Milstein, Angana Shah (Thurs.), Charlie Stek (Vice-Chair), Nikki Tinsley, Victor Ukpolo, Neil Wilkie, and staff- Jessica Blackburn and Amy Robins.

**Guests:** Carin Bisland (CBP), Frank Dawson (Dinner), Nick DiPasquale (CBP), Dave Dunmyer (Thurs.), Jim Edward (CBP), Matt Ellis (Chesapeake Research Consortium/STAC – Thurs.), Natalie Gardner (Chesapeake Research Consortium/STAC -Thurs.), Mary Gattis (Alliance – LGAC), Karl Blankenship (Bay Journal- Thurs.), Scott Hymes (MD DNR), Susan Julius (Thurs.), Lee Karrh (Thurs.), Lew Linker (Thurs.), Scott Phillips (Thurs.), Fred Pinkney (Fri.), Chris Pyke (Thurs.), Shannon Sprague (Fri.), Skip Stiles (Thurs.), Al Todd (Alliance), Julie Winters (CBP).

**Meeting presentations and material are located:**

<http://www.chesapeakebay.net/S=0/calendar/event/19066/>

### **Thursday, May 30, 2013**

Chair John Dawes called the meeting to order at 11:00am. Members and guests introduced themselves.

#### **Chesapeake Bay Program (CBP) Updates**

*Nick DiPasquale, Director, EPA Chesapeake Bay Program*

Nick discussed the latest thinking on the development of a new Chesapeake Bay Agreement. The partnership wants to have the agreement signed by October this year at the annual Executive Council meeting. Nick acknowledged that there is a different climate for this agreement than when others were signed. Factors like the TMDL, political climate, economy and technology make the negotiations of this agreement different. Section 117 of the Clean Water Act authorizes the Chesapeake Bay Program, by calling for a voluntary effort, so this agreement will be voluntary like the others. The agreement will not impose new requirements nor will it relieve the jurisdictions of the obligations on the Clean Water Act, like the TMDL. What is different is that the management strategies become the accountability vehicle for the agreement because they require specific objectives, listing of resources and timeframes. Additionally, there is a drive to have all the jurisdictions including the headwaters become full signatories to the agreement. Partners are discussing how to add provisions to the agreement that can accelerate implementation, for example finding ways to eliminate obstacles to restoration like onerous permitting requirements for stream restoration projects. Members discussed the structure of the agreement, concern for the timing for the development and public participation process and the difficulties in ensuring that all jurisdictions participate in the management strategies.

#### **Panel Discussion: Climate Change**

*Carl Hershner, Virginia Institute of Marine Science*

Research and data collection show an increase in temperatures, storm frequency, changes in precipitation, sea level rise, natural resource impacts and human system risks. With melting ice caps and warming (expanding) ocean water Virginia's relative sea level rise is expected to be around 2-4mm/yr. Current anticipated changes by 2100 suggests a 2°C to 5°C increase in temperature; increase in intensity and frequency of storms; increase in Fall precipitation and decrease in Summer

precipitation; increased affect of CO<sub>2</sub> on water acidity; and a 3 to 5 foot increase in sea level rise. The consequences of climate change for the fisheries show major decreases in certain fisheries yet increases in others. The consequences to marshes could be major since we have hardened the landscape preventing wetlands from moving inland as the water rises. More frequent Hazardous Algal Blooms (HABs) are expected due to high nutrient loads, increased temperature (global warming), higher salinities (sea level rise), reduced flushing times (summer droughts), and greater water temperature stratification.

*Skip Stiles, Executive Director, Wetlands Watch*

Outside of New Orleans, Hampton Roads is largest population area at the highest risk from Sea Level Rise in the United States. Wetlands can keep up with modest sea level rise, however, rapid sea level rise may require landward migration. Unfortunately, once the wetland hits a barrier like a housing development or flood water it is unable to move and dies. Currently, the regulatory system does not recognize sea level rise and the “Bay Act” Buffer Protections will only do so much for wetlands. Sea level rise impacts can be observed by looking at the millions FEMA spent to raise houses after hurricane Isabel in Norfolk, VA. It cost the taxpayers \$1.23 million to raise one block 18” but still floods a little more each year. Not counting environmental losses, business losses, cost to maintain infrastructure, ect... the economic cost to Hampton Roads runs from \$~12.6 to \$~87.1 million just from property losses.

*Susan Julius, EPA, Office of Research and Development, Global Impacts and Adaptation Programs*

Overview of adaptation requiring two pathways for persistence and change. Managing for persistence is prevent systems from crossing thresholds of major change. Managing for change is anticipating unavoidable thresholds and preparing for/guiding the transition to a different state. Multiple adaptation approaches were listed: reduce non-climate stresses, protect key ecosystem features, restore structure and function, support evolutionary potential, protect refugia, or relocate organisms. U.S. East Coast Salt Marshes and Alligator River were discussed on how the different approaches were used. Her office is currently running simulations and exploring data to understand which strategies are most robust across the greatest variety of climate scenarios.

*Lew Linker, Modeling Coordinator, EPA Chesapeake Bay Program Office*

Reviewed several orders, commitments, and strategies in the rationale and motivations for an analysis of climate change influences on the Chesapeake TMDL. Use of CBP integrated models of the airshed, watershed, tidal Bay, and living resources are needed to assess the influence climate change will have on the Chesapeake TMDL. Collaboration with other climate change assessments are taking place with Penn State, USGS, EPA’s Global Change Research Program and the University of Maryland. Objective for the Bay Program 2017 Midpoint Assessment is to provide decision makers the best assessment of the influence climate change will have the Chesapeake TMDL.

*Chris Pyke, V.P. Research, U.S. Green Building Council*

Discussed Climate Resilience scenarios focusing on stormwater and current building designs holding up to future conditions they were not designed for. Excess energy demand will lead to increased human health risks, increased air pollution and lower passive survivability. With increases in storm intensity and frequency stormwater runoff will produce excess runoff volumes, excess nutrient pollution, impacts of aquatic ecosystems, increasing human health risk and increasing risks to property. Climate resilience is a new dimension to everyday decision, an opportunity to prepare for future conditions, and is needed to meet performance targets across the lifetime of investments. Implications for restoration include: pollution inputs are sensitive to climate; restoration strategies rely on

assumptions about current and future climate; sensitivity of individual practices varying; and some restoration practices offering immediate opportunities to increase resilience. We cannot plan for future changes by basing decisions on how systems and climate has behaved in the past.

### **Adaptive Management in the Chesapeake Bay Program**

*Carin Bisland, Associate Director EPA Chesapeake Bay Program*

Adaptive management is an approach to ecological management; based upon the premise that managed ecosystems are complex and inherently unpredictable; and accepts the uncertainty that exist in the real world rather than ignoring it. It views management actions as experiments rather than solutions and is a structured process that reduces the cost of management experiments while increasing opportunities for social learning. It also allows for better articulation of goals and outcomes; more rigorous focus on management strategies based on all major factors that can influence our ability to meet our goals; more accountable system of tracking our progress; and a better understanding of when we need to change our approaches based on system response. CBP does some aspects of this now but will be doing more once all of their tools are further refined. Influencing factors include: pollutant loads, natural and human mitigating factoring, ecosystem responses to change in pollutant loads, and climate change.

*Lee Karrh, MD Department of Natural Resources*

Adaptive Management was used to determine the next steps for Submerged Aquatic Vegetation (SAV) management based on success of overall strategy. The importance of SAV should not be underestimated as it provides habitat, food, and improves water quality in the Chesapeake Bay. SAV is sensitive to both improvements and degradation in water quality and is used as a water quality indicator. The SAV Strategy and Decision Framework using adaptive management created a circle with its steps. Once the circle was completed successes and failures were measured and the plan was adjusted. Based on the first round of results that were not favorable STAC was asked to do a performance assessment to support or reject SAV restoration efforts. The revised SAV Strategy goals and actions were adjusted.

### **Friday, May 31, 2013**

#### **Chesapeake Bay Program Updates**

*Jim Edward, Deputy Director, EPA Chesapeake Bay Program*

Overall EPA Interim Progress Assessment finding: no change to oversight levels; 2012 progress run indicates most jurisdictions have met or are on track to meet their Nitrogen, Phosphorus, and Sediment 2013 milestone targets. The assessment finds the 2014-2015 milestones would need more aggressive pollutant reduction targets and suggests targeted programmatic strategies to support increased implementation of priority practices. Reducing Pollution Indicator Results reveal nitrogen loads to the bay have decreased 18.5 million pounds; phosphorus loads to the bay have decreased 1.3 million pounds; and sediment loads to the bay have decreased 431 million pounds.

Maryland has revised agricultural nutrient management regulations and is currently behind WIP schedule for re-issuing Phase I MS4 permits and their initial response to EPA's trading/offset recommendations did not provide requested information.

Pennsylvania has revised delegation agreements with county conservation districts to implement manure management requirements; missed 2012 milestones for some stormwater actions; and is expected to continue working with EPA to address trading and offset recommendations.

Virginia has finalized their resource management plan legislation and regulation to provide agricultural certainty and has made progress with MS4 permit backlog.

Delaware has issued a public notice for their first CAFO permit in 2012; expected issuance of Sediment and Stormwater Regulations; and suggested new milestones to address permit backlogs in multiple sectors.

District of Columbia has proposed stormwater regulations and Blue Plains continues to substantially reduce discharges due to system upgrades.

New York despite proposed changes to CAFO permit threshold is expected to still meet WIP implementation targets to account for growth in the dairy industry and is suggesting milestones for developing and issuing bubble permits.

West Virginia provided resources for local governments to adopt provision of the model stormwater ordinance; expected to finalize CAFO Permit and Compliance Strategies; and will work the EPA to report erosion and sediment controls on mining lands.

More details on the assessments are located

<http://www.epa.gov/reg3wapd/tmdl/ChesapeakeBay/SuccessStories.html>

### **Options for Developing a Bay Program Toxics Goal**

*Fred Pinkney, US Fish & Wildlife Service*

Reviewed contaminate effects on fish and wildlife led to the Toxics 2000. The assessment approach defines extent, severity and uncertain. Widespread extent equals that it is found throughout the watershed and localized extent equals that is limited to certain watersheds. Widespread severity has impairments listed as many locations and localized severity only have a few location. The uncertain category lack monitoring or standards, an example is pharmaceuticals. 72% of 90 tidal segments have some level of impairment due to toxic chemicals. Three quarters of the impairments in the tidal waters are due to PCBs resulting in fish consumption advisories. The biological effects are seen with degraded fish health: fish kills and diseases; feminization (intersex); reduced reproduction and tumors.

*Scott Phillips, US Geological Survey*

Potential outcomes from the new Bay Agreement should include reducing contaminants that “bio-accumulate, persist, and are toxic”; reducing herbicides and other groups; improving knowledge of pharmaceuticals, care products, flame retardants, some pesticides and hormones; fish advisories and impairments; and other challenges. Next steps are to propose goal and outcomes to the Management Board and feedback and to interact with Water Quality and Fisheries Goal Implementation Teams (GITs) and get PSC discussion/feedback. Benefits to CBP include: improved fish and wildlife conditions and consumption for people; learning from different management approaches; and enhanced science to address gaps in monitoring and research.

### **Federal Programs for Environmental Education in the Chesapeake Bay**

*Shannon Sprague, NOAA Chesapeake Bay Office*

CAC recommendations on Environmental Literacy: state endorsement of the Mid Atlantic Environmental Literacy Strategy has new CBP goals and outcomes based on Environmental Literacy Strategy with education workgroups members from MD, PA, VA, DE and DC expressing support; development of two-year milestones has metrics in development; and adoption of a graduation requirement by every state current status is that the Education Workgroup does not have a formal position on this. Current federal programs that support Environmental Education are: NOAA B-WET,

NOAA ELG, NSF Climate Change and EPA Environmental Education. The Administration's FY 14 Budget is proposing a comprehensive reorganization to facilitate a cohesive national strategy of STEM education programs to increase the impact of Federal investments. More than 114 programs across 11 agencies proposed to be consolidated or restructured as part of this initiative. Six NOAA education programs will be terminated in this proposal. The President's current FY 14 Budget does not include funding for any of the above mentioned federal programs currently supporting CBP education priorities. The finding from the STAC workshop for environmental education affirmed that all elements of the current definition of the MWEE are essential to the student environmental education experiences. Recommendations were made for students, teachers and the training of the teachers, and school certification programs. Currently a disconnect between Environmental Education and STEM.

Charlie Stek motion to write two letters. First, write to the Chair and Executive Council over concerns about Obama Administration's fiscal 2014 budget terminating funding for NOAA's Chesapeake Bay Watershed Education and Training (B-WET) Program. Second, write to Secretary of U.S. Department of Education regarding the Obama Administration's proposed STEM education restructuring plan and environmental literacy urging DOE becoming a formal member of the Chesapeake Bay Program. Seconded by Nikki Tinsley.

### **Business Meeting**

February 2013 minutes were approved.

Delegations gave updates on recent legislative activity.

Members expressed concern over the public commenting period on the agreement was not enough time. The last agreement had close to a year's worth of public comment.

Charlie Stek motioned to request a minimum 30 day extension for CAC to be able to comment on the new Bay Agreement. Mary Gattis agreed that LGAC would like more time to digest the presentation to be given by the CBP next week. Members mentioned contacting STAC to see if they needed additional time too. Seconded by Neil Wilkie.

Committee to read through the draft agreement: Scott Fickbohm, Matt Ehrhart, Verna Harrison, John Dawes, Neil Wilkie, Christy Everett, and Dan Milstein.

Verna Harrison commented on the cramming the New Agreement with the Thirty Anniversary of the Original Chesapeake Bay Agreement may take away from creating a solid new agreement.

Possible future topics for next meeting include: continuing climate change- hearing from the private sector to consider business impacts, potentially NAACP; Bay Agreement; toxics – pesticide/ pharmaceutical expert; nutrient trading; BMP Verification; brief update on Conowingo Dam; and Environmental Education. Members to submit additional suggestions to Jessica.

Meeting adjourned at 1pm.