## Air and Climate Public Advisory Committee

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The Air and Climate Public Advisory Committee (AQPAC) is an advisory body to the Metropolitan Washington Air Quality Committee (MWAQC) and the Climate, Energy, and Environment Policy Committee (CEEPC)

Draft Meeting Minutes Monday, July 18, 2011 Room 4/5 5:30 P.M.-7:30 P.M.

**ACPAC members:** Beverly Fourier, Brian McFarland, Caroline Petti, Glenna Tinney, Linda Murphy, Sally Kane **Staff:** Joan Rohlfs, Jeannine Altavilla, Amanda Campbell

### 1. Call to Order, Adoption of Agenda, Approval of Minutes

The meeting was called to order at 5:37pm. The agenda and minutes from June 13, 2011 were approved with no changes.

**2. Sustainable Shorelines Climate Adaptation Project (Laura Grape, Northern Virginia Regional Commission)** *Background:* Climate adaptation involves identifying current and future impacts posed by climate change and implementing strategies to reduce those risks. The Northern Virginia Regional Commission (NVRC) chose to make climate adaptation a priority, and initiated this study on storm surge and sea level rise.

Methods: Using the Governor's Commission on Climate Change data estimates, three scenarios were projected to 2100 including 1. Steady state (1ft.), 2. Average projections (3.8 ft.) and 3. Worst case (5.2ft.). The worst-case scenario storm surge used was about 5ft. beyond the highest tide due to storm surge from a hurricane. The SLOSH (Sea, Lake and Overland Surges from Hurricanes) Model was used to identify flood prone areas. SLOSH uses fine-grained remote sensing data to determine land elevation, called LIDAR, and overlays the possible flooding scenarios along the shoreline.

Results: Outcomes included maps, quantification of vulnerability to natural and man-made structures, and a set of adaptation strategies. The resulting maps (see presentation) illustrate where flooding might occur under the various scenarios in the Northern Virginia Region. Our region would actually experience a heightened amount of storm surge as compared with communities along the entrance to the Chesapeake Bay due to a funneling effect—water stacks up as it is squeezed from the wider mouth of the bay to the narrow Potomac River channel in our area.

Most policies to adapt to climate change impacts along the coast from sea level rise and storm surge fall in the categories 'Protect' (i.e. build a flood wall), 'Accommodate' (i.e. retrofit buildings with floodproof design), or 'Retreat' (i.e. move buildings back from shore, or discourage development near shore). The policy inventory and strategy analysis identified best management practices that apply to public health, hazard mitigation, and land use, reflecting local governments' responsibility for health, safety, and welfare. Several NVRC member jurisdictions are incorporating some form of hazard planning in their policies and programs.

Laura Grape's team has begun providing a forum for discussion and feedback from landowners along threatened shoreline areas.

Discussion: Laura responded to questions about flood insurance as a tool for reducing climate change risks along shorelines by clarifying that FEMA's National Flood Insurance Program handles flood insurance policy nationwide, and applies certain requirements to buildings located in hazardous areas. She noted that the insurance industry has taken notice of climate change forecasting and is including it in their planning. Ms. Grape added that another tool for 'Retreat' is transfer of development rights.

Finally, one ACPAC member asked about the purpose of adapting to climate change in regards to the overall goal of reducing greenhouse gas emissions—is it not admitting defeat? Laura commented that this is an important and often-discussed issue, and that she has found that both should go hand in hand. Adaptation is required due to the time lag between greenhouse gas mitigation efforts and when benefits are realized in the form of climate change risk reduction. It will be several years or decades before risks from climate change are reduced, even if drastic emissions reduction took place today.

# 3. Air Quality Update, Feedback, MWAQC and CEEPC Update (Joan Rohlfs, COG DEP Staff) Air Quality Update and MWAQC Update

- The region has already seen 10 days of code orange and 2 days of code red air quality up until the MWAQC meeting on June 13.
- Overall, emissions of NOx, SO2, and PM2.5 are expected to see minor or moderate increases in VA, DC and MD from 2017 to 2025.
- Ozone along the 1-95 Corridor comes from both regional sources and local sources: Regional is 50-70% of the problem, Local is 30-50% of the problem. Need to pursue more stringent tailpipe and fuel standards to further reduce mobile emissions. Proposal to establish lower conformity budgets in the 2013/2016 SIP to reduce NOx emissions from vehicles.
- NASA is collaborating with UMD and MDE to collect satellite data along the I-95 corridor in MD, improving the understanding of the movement and extent of ozone and aerosol pollution.
- A Regional Tree Canopy Management Plan is being proposed to meet a commitment in the 8-hour ozone SIP and to respond to a goal in the Climate and Energy Action Plan and National Capital Region Climate Change Report. Mike Knapp, Fairfax County Forester, will work with COG staff to create a workgroup to develop a regional plan framework and recommendations, with anticipated completion October 2012.

The group had many questions about the technical aspects of AQI forecasting, current measurements, and how AQI is communicated. Joan clarified that if any of the 17 or so monitors in the Washington Metropolitan region reaches a code orange rating, then the alert goes out for the entire region. ACPAC members suggested that individuals with health concerns could look up their local monitors to help with planning activities for the day—it could be code green at their local monitor, even if the region has issued a code orange.

Joan pointed out the challenge of air quality measurement and reporting—for the last several years, an 8-hour average ozone reading was needed to confirm that a code orange level was reached on any given day, resulting in a several hour delay in communicating that information to the public. A code orange, for example, would only be confirmed later in the day after several hours of compromised air quality had already passed.

In order to help further explain the air quality index process, Joan suggested that COG staff set up a miniworkshop to explain AQI forecasting and demonstrating website materials. The meeting was proposed to be held in August since there is no ACPAC meeting that month.

One ACPAC member pointed out that free parking for federal employees was ending sometime in the next month or so, according to the member's understanding. Joan responded that she will pass this information on to MWAQC to include in modeling and forecasting.

#### **CEEPC Update**

Joan briefly described key topics that will be discussed at the upcoming meeting of CEEPC on Wednesday, July 27, 2011 at 9:45-12pm in the COG Board Room (see CEEPC agenda). The COG board will actually be studying community energy districts during their retreat next week, and Jay Fisette will be reporting on the outcomes. The Energy Outreach and Education Campaign (formerly "We Can") has an enthusiastic work group that is examining options for going forward, supporting local programs with shared regional resources.

### 4. Jeopardy Game

The six members present played a lively and enjoyable game of Air Quality Jeopardy, or Jeop-Air-dy, learning new facts in the process.

#### 5. Adjourn

The meeting was adjourned at 7:25pm.

Next meeting: September 19, 2011 – 5:30pm – Room 4/5 Note: Tentative Air Quality Index mini-workshop plus website tour in August