To: Bob Stacey, Metro Councilor From: Mike Houck Re: Climate Smart Communities

Bob,

I noted that you will be presenting Metro's Climate Smart Communities reports at tomorrows PSC briefing. I'd love to be at the PSC briefing so we could have a conversation about next steps, particularly when Metro anticipates starting work on Climate Adaptation. Ironically, I will not be there tomorrow, because I'm in Phildadelphia at a Climate Leadership Academy with city of Portland staffers from BES and Alan Yeakley, PSU's School of the Environment for a three day workshop on Climate Adaptation and Resilience. I have attached an agenda to give you an idea what 10 cities from around the U. S. are doing with regard to Climate Adaptation. With regard to Metro's documents, is climate adaptation is not even referenced. As you may know, Portland has a draft Climate Adaptation (They are using the term Preparation) Strategy document which will be one element of the city's Climate Action Plan update, to my knowledge Metro has yet to begin Climate Adaptation planning. My question, if I were at the PSC briefing, is:

Metro has a central role as regional convener around issues of regional significance. The Climate Smart Communities is excellent work on one element on the Mitigation side of the Climate Change ledger. When can we expect Metro to bring the region's jurisdictions, natural resource agencies, and NGOs to begin planning for Climate Adaptation? As was noted in the Regional Conservation Strategy, a product of The Intertwine Alliance, "climate change is already occurring has been well documented; the Pacific Northwest has already seen a change in climate over the last century..and....there is strong evidence that climate change is already impacting our natural systems, such as documented shifts in habitat, migration and timing. It is also clear that climate change will likely exacerbate existing stressors on natural systems. This will also apply to the human and built systems that depend on the natural environment, including public health, infrastructure, the economy and ecosystem services."

The RCS goes on, utilizing some excellent work at the state level and recommendations on climate change experts from around the metropolitan region, to make specific recommendations regarding Climate Adaptation. I noticed that Metro does not have a representative on the city's Climate Action Plan update. Does Metro anticipate working with the city and other partners to develop a regional climate adaptation and resilience strategy in the near future?

I have attached a copy of an excellent opinion piece by Dana Milbank (Washington Post) that appeared recently in The Oregonian, "Activists now prepare for climate change instead of stopping it" Without minimizing the importance of developing robust mitigation policies he makes the important point that it's past to start on the adaptation front. I included several references to climate adaptation resources from around the U. S. and locally for your information as well at the end of Milbank's piece.

Regards and sorry to miss the opportunity to exchange information on next steps with regard to climate adaptation and resilience in the

region. I look forward to hearing what may be afoot in that regard from Metro's perspective.

Houck, Commissioner, PSC cc Planning and Sustainability Commission

Activists now prepare for climate change instead of stopping it: Dana Milbank http://www.oregonlive.com/opinion/index.ssf/2013/06/activists_now_prepa re for clim.html

The National Mall has monuments to heroism, freedom and sacrifice. Pretty soon it will also have a monument to failure. Drive on 17th Street NW, just south of Constitution Avenue, and you'll see concrete footings, a mound of dirt and jersey barriers -- all part of an oft-delayed project to build a flood wall to protect downtown Washington from a rising Potomac River.

The flood wall, and similar initiatives elsewhere, amount to tacit acknowledgments that the fight against climate change, the cause célèbre of the environmental movement for more than a decade, has failed in its primary purpose. In the race to prevent disaster, it's already too late.

Among climate-change activists, the realization is spreading that the combination of political inaction on greenhouse gases, plentiful new petroleum supplies and accelerating changes in weather patterns means there is no escaping more life-altering floods, droughts and fires. Although ongoing efforts to reduce carbon emissions could mitigate even worse catastrophe, momentum has shifted in part to preparing for the inevitable consequences of a warmer planet.

Perhaps the most vivid example of this came Tuesday afternoon, when New York Mayor Michael Bloomberg rolled out his \$19.5 billion plan to "prepare for the impacts of a changing climate," with proposals ranging from coastal levees to the protection of hospitals. Last year, Bloomberg cited climate change as his main reason for endorsing President Obama's re-election, praising Obama's "major steps to reduce our carbon consumption." But speaking Tuesday from a Brooklyn greenhouse damaged last fall by Hurricane Sandy, Bloomberg addressed the inevitability that rising temperatures and sea levels would bring even worse.

"By midcentury, up to a quarter of all New York City's land area, where 800,000 residents live today, will be in the flood plain," he said, and "40 miles of our waterfront could see flooding on a regular basis just during normal high tides." We no longer have the luxury of ideological debate, he said. "The bottom line is, we can't run the risk." Andrew Light, a global-warming specialist at the liberal Center for American Progress, explained to me the recent shift toward efforts to adapt to climate change rather than merely seeking to prevent it. "We're starting to see very strong evidence of climate-related extreme events happening sooner than we thought with only a 1-degree (Celsius) rise in temperature," he said, "and a more refined science saying now that we will more than likely edge up to or cross the 2-degree threshold."

Climate activists had long sought to limit the temperature rise to 2 degrees, but this now seems both impractical and insufficient. "Our

best-case scenario now is we could delay by a couple of decades the point at which we cross the threshold," Light said. This means that cutting carbon emissions is still important, but that it's also time to prepare for what's coming.

Among the needed adaptations: flood walls and expanded coastal wetlands, fortified subway systems, buried power lines, houses with detachable foundations, roads rebuilt on higher ground, droughtresistant crops, and changes to hydroelectric facilities and nuclear power-plant cooling systems. States in the Southwest may need pipelines and desalination plants for drinking water. Low-lying and poorer parts of the world will have it much worse. But even in the United States, vast coastal areas -- New Orleans, the Florida Keys and elsewhere along the Gulf of Mexico, North Carolina's Outer Banks, parts of Long Island -- eventually may need to be abandoned to higher seas. As a start toward depopulating those areas, the federal government may need to cut off disaster insurance.

Obama created an "Interagency Climate Change Adaptation Task Force" in 2009 to examine everything from agriculture to sewer system failures and public-health consequences, but much of the work remains theoretical.

Bloomberg's new plan, with 250 specific recommendations and a hefty price tag, puts climate-change adaptation into a more concrete realm. The businessman-mayor called it "a battle that may well define our future for generations to come" and outlined changes to building standards, telecommunications, transportation and a dozen other areas. "Waves that do reach our shore will find a strong line of coastal defenses, reinforced dunes and widened beaches, levees, flood walls and bulkheads, and tide gates and surge barriers," Bloomberg said. "New grade infrastructure will absorb water, it will divert it into highercapacity sewers, and our critical systems will operate with less interruption throughout the storm and bounce back quicker if they do go down." Bloomberg spoke confidently, as if he were a general laying out a military plan. But he was really talking about limiting casualties. Dana Milbank writes for The Washington Post Writers Group.

Other Resources:

1). Federal Actions for a Climate Resilient Nation: http://www.whitehouse.gov/sites/default/files/microsites/ceq/2011_adapt ation_progress_report.pdf

2). Climate Change Adaptation Task Force http://www.whitehouse.gov/administration/eop/ceq/initiatives/adaptation

3). Regional Conservation Strategy, The Intertwine Alliance http://theintertwine.org/sites/theintertwine.org/files/file_attachments /Regional%20Conservation%20Strategy%20for%20the%20Greater%20Portland-Vancouver%20Region.pdf Climate Change Chapter:

4). Building Climate Resiliency in the Lower Willamette Region of Western Oregon (Climate Leadership Initiative, 2011)

http://www.theresourceinnovationgroup.org/storage/Lower%20Will%20Rep%20 Summary%20Final%201-26-11%20HiRes.pdf 5). Projected Future Conditions in the Lower Willamette River Subbasin of Northwest Oregon: Clackamas, Multnomah & Washington Counties (Hamilton et al. 2009).

6). Oregon Climate Assessment Report (Oregon Climate Change Research Institute, 2010). http://library.state.or.us/repository/2010/201012011104133/summaries.pd f

7). "Terrestrial Carbon Stocks Across a Gradient of Urbanization: A study of the Seattle, WA Region" (Hutyra et al. in Global Change Biology , 2010) <u>http://onlinelibrary.wiley.com/doi/10.1111/j.1365-</u>2486.2010.02238.x/abstract

8). Linking Urbanization and Vegetation Carbon Patterns, (Marina Alberti, 2010). http://urbaneco.washington.edu/wp/research/linking-urbanization-and-vegetation-carbon-patterns/