

Delaware River Basin Commission

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Steven J. Tambini, P.E. Executive Director

Advisory Committee on Climate Change MEETING SUMMARY

Tuesday, 3 August 2021 2:00 pm – 4:00 pm

MEETING ATTENDEES (31)

Members and Alternates (16):

Delaware - Robert Scarborough, Ph.D.; DNREC

New York - Mark Lowery; NYSDEC; and Alternate Riobart Breen; NYSDEC

United States Government - Amanda L. Babson, Ph.D.; NPS

United States Government - Arthur DeGaetano, Ph.D.; NOAA NRCC

New York City - Alan Cohn, NYC DEP

City of Philadelphia - Julia Rockwell, PWD

Partnership for the Deleware Estuary - Danielle Kreeger, Ph.D.

William Brady III, P.E.; Exelon Corporation

Elizabeth Koniers Brown; Audubon Pennsylvania

John Callahan; Delaware Geological Survey, University of Delaware

James J. Chelius, P.E.; American Water, Inc.

Marjorie B. Kaplan, Dr.P.H.; Rutgers Climate Institute, Rutgers University

Upmanu Lall, Ph.D.; Columbia Water Center, Columbia University

Christopher Linn, AICP; Delaware Valley Regional Planning Commission

Howard Neukrug, P.E.; The Water Center at Penn, University of Pennsylvania

David Velinsky, Ph.D.; Academy of Natural Sciences of Drexel University, Drexel University

Not Present: New Jersey - Nicholas A. Procopio, Ph.D., GISP; NJDEP; Pennsylvania - Scott R. Perry; PADEP

DRBC Staff (11):

Sarah Beganskas, Pamela Bush, Fanghui Chen, Patricia Hausler, Kristen Bowman Kavanagh, David Kovach, Kevin Pregent, Anthony Preucil, Amy Shallcross, Steve Tambini, Michael Thompson

Other Attendees (4):

Anna Smyslova, Christa Reeves, Preston Luitweiler, Colleen Walters

MEETING SUMMARY

Call to Order – Meeting was called to order at 2:02 pm by Howard Neukrug, The Water Center at Penn and Committee Chair, and held with remote attendance only using Zoom webinar and its callin capabilities.

Member Roll Call – Attendance was taken by Kristen Bowman Kavanagh, DRBC; two committee members were not in attendance as noted above.

Approve Meeting Minutes – Minutes of 12/17/20 were unanimously approved without discussion.

Election of Committee Chair – Kristen Bowman Kavanagh presided over the election of the committee Chair for the one-year term ending August 3, 2022. Beth Brown moved to nominate Howard Neukrug, The Water Center at Penn and current committee Chair. The motion was seconded by Art DeGaetano and unanimously approved.

Election of Committee Vice Chair – Howard Neukrug presided over the election of the committee Vice Chair for the one-year term ending August 3, 2022. Danielle Kreeger moved to nominate Marjorie Kaplan, Rutgers Climate Institute and current committee Vice Chair. The motion was seconded by Julia Rockwell and unanimously approved.

Climate Change Forum – Kristen Bowman Kavanagh provided a debrief on the successful March 2, 2021, Climate Change Forum co-hosted by the ACCC as part of PDE's biannual Science Summit. ACCC speakers and moderators recognized and thanked for their participation in the Forum included Howard Neukrug, Marjorie Kaplan, Danielle Kreeger, Julia Rockwell, Upmanu Lall, William Brady, Bob Scarborough, Nick Procopio and Beth Brown. DRBC staff proposed holding a scaled down forum or seminar in 2022 and invited committee members' input. Committee members were supportive of the idea of doing some type of annual event. Ideas and suggestions shared included: hold virtual or hybrid event; consider piggybacking with another event and inviting speakers from other parts of the country; get started soon and do not underestimate level of effort required; and make it topical/focused on one theme or on committee findings. Possible topics suggested included: environmental justice, urban aspects of climate change, future intersection energy/water/transportation, addressing committee charge of a comprehensive study, and emerging IPCC information (there might be new sea level rise numbers coming out soon). DRBC staff will explore options and report back.

Presentation by Amy Shallcross, P.E., DRBC Manager of Water Resource Operations on "Sea Level Rise Scenarios for Water Supply Planning and Modeling" – Ms. Shallcross gave a presentation that summarized a draft technical memorandum shared in advance with committee members on "Sea Level Rise Scenarios for Water Supply Planning and Modeling," including an inventory of sea level rise (SLR) estimates from various sources through 2100 (e.g., NOAA, IPCC, USACE, Rutgers U., etc.) and selection of a range of SLR estimates for DRBC drought and flow management planning purposes, and estimated impacts to the salt front during average and drought periods using SLR estimates. Input was solicited on the proposed SLR values and range of values, as well as in what context committee members have used SLR projections and what other expressions of risk can be used to convey context to decision makers.

Input and suggestions shared included: flooding and SLR estimates have been used to determine how much to elevate aerial infrastructure with risk expressed as a metric of number of people impacted intermittently or permanently; SLR projections used as main driver of marsh mitigation modeling and habitat restoration work (welands and mussels), not just with respect to flood protection but also since SLR is tied to salinity increases; suggestion to include confidence intevals in the table in the associated technical memorandum (TM) where probabilities are presented and to

better/quantitatively define terms such as "likely"; noted differences in the projections compared to NYC Panel on Climate Change especially for scenarios further out in time; shared lesson learned – consider not connecting increments to years so reports do not have to be rewritten in future when new estimates come out; helpful to think about likely uses of information and the risk tolerance of specific applications of SLR projections and modeling; look at likelihood and consequences of failure (e.g., if consequences are big then there is less tolerance for risk) – likes Table 6 of TM; suggest making it clear in the TM for what DRBC will use the range of SLR projections (water supply planning? regulatory purposes?); and NSPACT numbers will drive planning on the NJ side and it may be helpful to talk further with NJDEP committee member. DRBC requested any written feedback by August 17. The presentation is on the DRBC website at the following link:

https://www.nj.gov/drbc/library/documents/ACCC/080321/shallcross SLR Assumptions.pdf

Presentation by Kristen Bowman Kavanagh, P.E., Pamela Bush, M.R.P., J.D. (Commission Secretary and Assistant General Counsel) and Kevin Pregent, Esq. (Associate General Counsel) on "Developing Climate Change Priorities for the Delaware River Basin" — DRBC staff gave a presentation on the authority and regulatory framework of the DRBC, elements of the Water Resources Program, current climate change planning efforts, and an overview of basin state climate change regulatory actions. The committee was then asked for their input on climate change priorities and additional actions for the Commission to consider, as well as whether climate change should be recognized in the DRBC Comprehensive Plan (CP).

Committee members provided feedback that the focus of the DRBC should be on resilience and adaptation (not mitigation), as there is plenty to tackle in this regard related to water resource management, for example: water/wastewater reuse and the water/energy nexus; better integrating water, wastewater, and stormwater management; and improved coordination between states. Committee members who commented on whether climate change should be recognized in the CP agreed that it should be. It was noted that including climate change in the PA State Water Plan is currently being considered. A question was asked about what authority the Commissioners have when they consider projects, to which Pam Bush answered that the Commissioners determine whether or not the project impairs or conflicts with the CP in accordance with Section 3.8 of the Compact, and that climate change is not currently recognized in the CP. It was also suggested that a climate change plan of action is needed for the Delaware River Basin, along with a suggestion to consider recognizing environmental justice considerations in the CP in resilience and adaptation planning. The presentation is on the DRBC website at the following link:

https://www.nj.gov/drbc/library/documents/ACCC/080321/drbc ClimateChangePriorities.pdf

Adjournment – The meeting was adjourned by Howard Neukrug at approximately 4:00 pm.