Written Testimony of Kristen Bowman Kavanagh, Deputy Executive Director, Delaware River Basin Commission, for the Virtual Pennsylvania House Majority Policy Committee Meeting on March 18, 2021

Advance Submission of March 12, 2021.

My name is Kristen Bowman Kavanagh, and I am the Deputy Executive Director of the Delaware River Basin Commission (DRBC). I and our Executive Director, Mr. Steven Tambini, thank you for the opportunity to provide testimony on DRBC's role in the F.E. Walter Dam Re-evaluation Study.

The DRBC, along with New York City, is a non-federal sponsor of this important study that is now underway by the U.S. Army Corps of Engineers (Corps), Philadelphia District. The objectives of the Corps study are to determine whether or not modifications to reservoir operations or alterations to the F.E. Walter Dam structure can be made to improve water supply for drought relief, enhance fisheries and recreation, and reduce life loss and economic damages from flooding *without* adversely impacting the existing congressionally designated purposes of the reservoir, which are flood risk management and recreation.

The Corps estimates that F.E. Walter Reservoir has prevented over \$222 million dollars in flood damages since 1960 and provides an important economic benefit to the region. The Corps estimated that recreation directly at F.E. Walter Reservoir in 2014 resulted in over 246,000 visitor days with an additional 75,000 people participating in whitewater rafting. The resulting total recreational unit day value experience is over \$1.6 million excluding regional benefits to the whitewater rafting companies, suppliers, and other businesses supplying ancillary services. Estimates by local outfitters and the Pocono Mountains Visitors Bureau suggest that the total economic impact of the whitewater industry on the local economy is as high as \$11 million to \$30 million annually.

Downstream recreation opportunities depend upon releases from the dam that support aquatic habitat for fishing and whitewater flows for boating. In 2020, reservoir releases were made on 22 weekend days between March and May (11 weekends in total) to improve fishing conditions on the Lehigh River. From mid-May, releases were made on 24 weekend days to support whitewater boating activities. I, myself, enjoyed the benefits of the whitewater releases with my family last summer and can bear witness to the economic value that visitors bring to local businesses such as outfitters, hotels, restaurants, and shops. These planned releases are part of the Corps' annual F.E. Walter Reservoir Recreation Operations Plan, which is developed annually in partnership with the Pennsylvania Fish and Boat Commission and Department of Conservation and Natural Resources, as well as input received through stakeholders. The DRBC recognizes the importance of the F.E. Walter Recreation Plan, supports it, and wants to ensure that this study in no way negatively impacts its congressionally designated purposes.

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F.E. Walter Reservoir is also an important component of the drought management program for the Delaware River Basin (Basin). The program is complementary to Pennsylvania's drought management actions and involves coordinated reservoir operations, releases from the New York City upper Delaware Reservoirs and the Corps' Blue Marsh and Beltzville Reservoirs to increase low Delaware River flows, water conservation, consumptive use replacement, and water allocation. In accordance with the plan, if drought conditions occur and persist through the fall, the Corps would be asked to store water to a higher elevation than normal over the winter, when seasonal flows are high. As a result, more water would be available for use the following spring, summer, and fall to augment low flows in the river during the second year of a major drought. Although drought is not a frequent occurrence in the Basin, significant ones do happen. Since 1960 F.E. Walter Reservoir has been instrumental in storing water 13 different times for mitigating drought conditions for downstream users in Pennsylvania, New Jersey, and Delaware. Under the drought management program, every drop of water released from F.E. Walter Reservoir flows downstream to the benefit of Pennsylvanians who live in the Lehigh Valley to Philadelphia. The timing of storage operations under the program would just be different in that additional water would be saved during the winter, when it is not required to satisfy downstream needs, and instead released during the summer and fall, when it can be used for low flow augmentation and recreation. Thus, the Corps study will be evaluating the potential to increase or optimize water availability for droughts and low flow conditions, while protecting or enhancing existing authorized recreational and flood loss protection uses that directly benefit the Lehigh River and its residents and economy.

The DRBC was formed in 1961 and was given authority under federal and state laws, including those of the Commonwealth of Pennsylvania, to provide for the management and utilization of the water resources of the Delaware River Basin. This includes the Lehigh River and its tributaries, which flow into the Delaware River and are located within the Basin.

The Commissioners of the DRBC include a federal representative and the governors of the four basin states, including Governor Wolf here in Pennsylvania. The Commissioner for the federal government is the Commander of the North Atlantic Division of the Army Corps of Engineers, Brigadier General Thomas Tickner. In his role as DRBC Commissioner, B.G. Tickner represents all federal agencies.

DRBC's responsibilities as outlined in Pennsylvania's law that established the Commission include the management of the water resources of the Basin for diverse uses that include drinking water, sanitation, industry, recreation, and fisheries. We also have responsibility to coordinate flood loss reduction, manage streamflow during drought periods, help prevent excessive salinity in the Delaware River Estuary to support drinking water providers, industry, power utilities and refineries, and protect and improve water quality. We work with the public to attempt to meet and balance diverse and competing water resource needs throughout the Basin. We also assist the Parties to the 1954 Supreme Court Decree authorizing out-of-basin diversions to New York

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City and New Jersey by providing technical evaluations of alternative flow management options. New York City is a party to the 1954 Supreme Court Decree but not a member of the DRBC.

The DRBC is participating in this study as a non-federal sponsor for several reasons.

- 1. The F.E. Walter Reservoir is a part of the DRBC Comprehensive Plan for the Delaware River Basin. Any modification to the structure or operations plan would require Commission approval.
- 2. DRBC is responsible for the development and implementation of the drought management plans for the Delaware River Basin. Any modifications to flow management requirements and reservoir releases could impact those plans.
- 3. As I mentioned earlier, DRBC has responsibility for managing diverse uses while protecting and improving water quality.
- 4. As a study sponsor, DRBC is representing the four Basin states that serve on the Commission. While DRBC does not speak on behalf of the Commonwealth, we are aware of its interests in the use of F.E. Walter Reservoir. The Pennsylvania Fish and Boat Commission has expressed to the Corps and to the DRBC its goal for improved fisheries on the Lehigh River that may be facilitated by structural or operational improvements at F.E. Walter Dam. In addition, the Commonwealth has an interest in sustainable drought management for the Lehigh Valley and for downstream water users in Pennsylvania, New Jersey, and Delaware. Millions of people in Pennsylvania and in the region rely upon engineered management of a complex reservoir system to address low flow and drought conditions. Public water supply, always a priority, is a matter of heightened attention in the near-term as several drinking water systems in the Basin have recently switched or are considering switching from groundwater to surface water sources due to contamination from PFAS (per- and poly-fluoroalkyl substances). The DRBC will continue to work with the Commonwealth and all the DRBC Commissioners to plan for and support a range of water resources interests during this study.

In addition to our role as a non-federal sponsor in the Corps' current study, DRBC has initiated or requested several other studies that look beyond F.E. Walter Reservoir for potential solutions to these complex issues:

• We are currently conducting flow modeling of climate change impacts throughout the Basin, as well as a water supply planning study to examine water demands and water availability with an early focus on the Lehigh River.

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- The DRBC solicited proposals from engineering consultants and will soon be initiating a study to examine the feasibility of additional water storage throughout the Basin—not exclusively at F.E. Walter Reservoir.
- DRBC has requested two other studies from the Corps: first, a study to look at optimizing storage in *all* federal reservoirs in the Basin; and second, a Comprehensive Flood Mitigation Study of the Basin.
- We have offered support for a Comprehensive Watershed Study by the Corps.

We believe these evaluations should also be prioritized with support from the public and its elected representatives.

As one of the two non-federal sponsors, the DRBC supports the F.E. Walter Dam Re-evaluation Study. We always should be willing to consider ways to optimize, improve, and balance multiple water needs. In addition, short-term weather patterns and longer-term climate patterns are changing and affecting the water cycle in the Basin. It is prudent to begin to evaluate and plan for the impacts the Basin may experience in the future as a result of these changes. At the same time, DRBC supports maintaining the *existing* uses of the reservoir for flood risk management and recreation and recognizes their value to the region. These uses should be protected.

Before any authorized uses of the reservoir could change, the recommendations that emerge from the study must undergo additional review at multiple government levels. As I stated earlier, any changes to the structure or operation of the reservoir would require DRBC's approval for changes to the Comprehensive Plan for the water resources of the Basin. Congressional approval would also be required to add or change any authorized uses.

Finally, and most importantly, DRBC supports a robust public process for this project. The public has significant interest in the existing and potential use and management of the reservoir as was evidenced by the high attendance and passion on display at the initial public meeting in January 2020. It is critical that the study team understand the local water resources needs in the Lehigh Valley.

We know how much this water and this reservoir mean to the region, to Pennsylvania, and its residents, and we look forward to working with the Commonwealth and all stakeholders to sustainably manage, protect and improve our critical water resources – including F.E. Walter Reservoir – for our residents, public safety, and a healthy environment.

Thank you.