



Testimony of **Phetmano Phannavong, Senior Project Manager, Atkins North America** before the Committee on House Administration, United States House of Representatives, Washington, D.C.

December 16, 2021

Good afternoon, Chairperson Lofgren, Ranking Member Davis, and Members of the Committee. My name is Phetmano Phannavong. I am a senior project manager at Atkins North America, former DC National Flood Insurance Program coordinator and floodplain manager. Atkins is a member of the [SNC-Lavalin](#) Group, one of the world's leading professional services and project management organizations with more than 30,000 employees worldwide. Our primary focus is on the build and natural environment as we provide services in sectors such as clean power and renewables and water. I would like to thank you for the opportunity to talk about climate resilience that I am passionate about and to discuss how the Smithsonian might enhance their facilities against the effects of climate change.

I will divide my testimony into three distinct sections: first, Federal Triangle flooding in 2006; second, an interagency flood risk management team in DC; and lastly, collaborative governance and comprehensive solutions that are needed.

### **Part 1: Federal Triangle Flooding in 2006**

Washington, DC, particularly the [Federal Triangle](#) area is vulnerable to three types of flooding: (1) Riverine flooding, where flood water overflows the Potomac and Anacostia Rivers; (2) Coastal flooding, where hurricane storm surge pushes flood water from the Atlantic Ocean; and lastly, (3) Interior flooding that is caused by heavy rainfall that cannot be absorbed by the ground and then overwhelms the drainage system. Floods of each type have occurred in the recent past, including [interior flooding](#) in Federal Triangle in 2006 and recently in 2019.

These floods can have a significant impact on buildings and infrastructure. The 2006 Federal Triangle flood destroyed critical parts of the Internal Revenue Service (IRS) headquarters' electrical and mechanical equipment and submerged the basement level under five feet of water. The 2006 flood exposed the collections of Smithsonian museums, the National Gallery of Art, and National Archives as these facilities are vulnerable to water damage.

Future flood risk in Federal Triangle is expected to increase because of climate change, including changes in precipitation and sea level rise. According to [Climate Ready DC](#), developed by the District of Columbia Department of Energy and Environment (DOEE), the [climate projections](#) indicated annual rainfall and the frequency and severity of storms will change over time. Sea level rise is expected to make DC flooding more frequent and severe.

## **Part 2: Interagency Flood Risk Management Team – DC Silver Jackets**

In the past decade, DC has implemented multiple initiatives and maintained interagency collaboration and coordination to enhance climate resilience. Established in 2014, the [DC Silver Jackets](#) is an interagency team that coordinates and collaborates among many federal, regional and DC agencies and is co-led by DC DOEE, the U.S. Army Corps of Engineers, and the National Park Service. The Smithsonian is an active member of the DC Silver Jackets.

Following the 2006 flood, there was significant interest in mitigating Federal Triangle’s flood risk. Several studies were conducted, and various actions were taken. Some entities with facilities and infrastructure in the area implemented flood-proofing measures specific to their own facilities. The 2011 Federal Triangle Stormwater Drainage [Study](#) identified several system-wide solutions such as constructing storage tanks under the National Mall, pumping stations, and new tunnels that would reduce the impacts of flooding. In 2018, the DC Silver Jackets re-[engaged stakeholders](#), reviewed new strategies, and identified barriers to implement system-wide solutions—lack of ownership and authority, and funding and financing for projects.

## **Part 3: Collaborative Flood Risk Management Governance and Comprehensive Solutions**

Managing DC flood risks, particularly in Federal Triangle requires integrated approaches in terms of (1) governance in developing policies and (2) comprehensive solutions that serve multiple purposes. Despite multiple efforts so far, there is a need for a single agency or body that has the authority needed to coordinate, manage, and implement flood risk projects in Federal Triangle. Managing flood risk falls not only under floodplain and emergency management, but also stormwater management, land-use planning, and many other programs within federal and DC agencies. In addition to individual measures, system-wide solutions are required to manage different types and the complexity of flooding in Federal Triangle.

Thank you again for affording me the opportunity to speak with you today about enhancing climate resilient Federal Triangle and Smithsonian facilities. I look forward to answering any questions you may have.

## Biography

### **Phetmano Phannavong, Senior Project Manager, Atkins North America**

Phetmano Phannavong has 20 years of experience in water resources engineering, project and program management, and national flood resilience policies. As a senior project manager at Atkins North America, a member of the SNC-Lavalin Group, Mr. Phannavong provides technical support as a subject matter expert to federal, state, and local government, particularly FEMA on future-conditions and climate-science approach in flood hazard mapping, nationwide building codes strategy, and resilience policy in flood risk management. He has been promoting new concepts and approaches that leverage current science and technology in flood hazard and risk identification in the revision of the current national floodplain management standards. Mr. Phannavong was a former District of Columbia (DC) National Flood Insurance Program coordinator and floodplain manager and a co-founder of the DC Silver Jackets, an interagency flood risk management team. His other accomplishments include institutionalizing comprehensive flood risk management and climate resilience through integrated planning and strong partnerships among public and private sectors at all levels of government. Mr. Phannavong received engineering and legal education. He is a DC and Virginia registered Professional Engineer and admitted to the Minnesota State Bar, a certified Project Management Professional by the Project Management Institute, and a Certified Floodplain Manager by the Association of State Floodplain Managers.