TESTIMONY OF VALERIE NURR'ARAALUK DAVIDSON INTERIM PRESIDENT, ALASKA NATIVE TRIBAL HEALTH CONSORTIUM

SENATE COMMITTEE ON INDIAN AFFAIRS Oversight Hearing "Build Back Better: Water Infrastructure Needs for Native Communities"

March 24, 2021

My name is Valerie Nurr'araaluk Davidson. I serve as the Interim President of the Alaska Native Tribal Health Consortium (ANTHC), a statewide tribal health organization that serves all 229 tribes and all Alaska Native and American Indian people in Alaska. ANTHC and Southcentral Foundation co-manage the Alaska Native Medical Center, the tertiary care hospital for all Alaska Native and American Indian people in the state.

I commend this Committee for holding this hearing, so that the water infrastructure needs for Native communities can be properly heard and addressed in this 117th Congress.

My testimony will focus on three aspects of sanitation infrastructure in Native communities: (1) the impact that lack of sanitation infrastructure has on health; (2) the overall unmet sanitation need; and (3) the impacts of climate change.

Impact on Health

The lack of available sanitation infrastructure and services in many Alaska Native communities has long been lacking. The pandemic has highlighted these inequities.

Adequate sanitation infrastructure has never been more critical than it is now. As we've heard constantly, during this pandemic, COVID-19 can be prevented by hand washing, avoiding close contact with others, and cleaning/disinfecting surfaces. The lack of water service in many rural Alaska villages creates extreme challenges in practicing two of these three basic prevention techniques, and overcrowded housing in these communities makes the third prevention technique—avoiding close contact—equally challenging.

An August 2020 Centers for Disease Control and Prevention (CDC) study showed that Alaska Natives and American Indians were among the highest risk groups for COVID-19 with an incidence rate that is 3.5-times greater than that of non-Hispanic whites. Further, additional State of Alaska data indicate that Alaska Native and American Indian people are 5-times as likely to be hospitalized due to COVID-19 and have a mortality rate nearly 4-times that of the white population in Alaska.

The importance of adequate water and sewer to prevent skin and respiratory infections is very clear. A 2008 CDC study found that "the hospitalization rates in rural Alaska showed a typical dose-response group relation in which lower rates were related to progressively higher levels of

in-home water service." Showing that the more sanitation services that are available in Native communities, the lower hospitalizations are likely to be for respiratory and skin infections.

The study also found that infants in low-water service rural Alaska villages were 5-times more likely to be hospitalized for lower respiratory tract infections and 11-times more likely to be hospitalized for pneumonia compared to the general U.S. population. Many of these children are likely to have ongoing health problems due to these infections.

It's easy to get lost in these statistics, so let me put it another way: we expect that one out of every 3 infants will be hospitalized every year, due to lack of running water. Our average village size is 300-350 people, so that means that baby must be medevaced to the nearest hospital.

My youngest daughter contracted respiratory syncytial virus (RSV) when she was 8-months-old and was hospitalized for 9 days. She now has a compromised respiratory system, has asthma and was hospitalized 8 additional times for pneumonia by the time she was 7-years-old.

Sanitation Infrastructure Needs

Dramatic improvemnts have been made to the sanitation infrastructure of rural Alaska over the past 40 years, but roughly 20 percent of rural Alaska Native homes still lack in-home piped water. Thirty-two of the 190 rural Alaska Native communities are still unserved, lacking access to in-home water and sewer. These communities typically have a washeteria building (a combination water treatment plant, laundromat, with toilets and showers) that the entire community uses. Most of these communities haul their water from the washeteria to their home in a 5-gallon bucket, and haul their sewage from their home in a different 5-gallon bucket.

Many communities are unserved due to the high construction costs. The Indian Health Service (IHS) has established cost caps per home that, when approached, both decreases the priority of the project in the scoring system and limits the amount of project funding available, effectively limiting the community from accessing in-home water and sanitation services. We recommend that the IHS eliminate cost caps for projects that would provide piped water and sewer for these unserved communities. Otherwise, these communities may never be served.

The COVID-19 pandemic highlights the need for community wide response and protection. The current IHS guidelines require contributions for projects that serve any non-Native households or other public buildings, such as a school. Without contributions, even communities with almost 100 percent Native populations could have essential infrastructure projects needlessly delayed or cancelled if a pro rata contribution cannot be made. This is contrary to the objectives of the program and will be a major barrier to serving these communities should funding become available through the IHS.

Once built, sustainable operation of rural water and sewer systems is critical to fully provide the public health benefit to the community. On a positive note, for the first time IHS has been provided funding specifically for technical assistance, training and guidance for sanitation

operators and families. The \$3 million provided in the FY2021 appropriation will be very helpful in establishing culturally relevant training of operators and users of sanitation systems, but as this funding is distributed nationwide, it is likely additional funding will be needed.

The latest IHS Sanitation Deficiency System data identifies a need of nearly \$3 billion for sanitation construction projects in Indian Country, with \$1.8 billion of that need in Alaska. Despite this need, the IHS sanitation facilities construction appropriation for fiscal year 2021 was only \$196.6 million. IHS sanitation facilities construction funding needs to be greatly increased to address the inadequate sanitation infrastructure in Alaska Native and American Indian communities

The expected upcoming infrastructure bill may be a once-in-a-generation opportunity to address the sanitation infrastructure needs in Indian Country. Fully funding the entire IHS sanitation need in the infrastructure bill is a reasonable ask given the importance of sanitation infrastructure in combating the current pandemic.

Impacts of Climate Change on Sanitation Infrastructure

Throughout Alaska, environmental threats such as flooding, erosion, and permafrost thaw pose an imminent risk to tribal infrastructure, including homes, schools, clinics, and sanitation facilities. For example, in May of 2020, a family had to abandon their home in Chefornak, Alaska because thawing permafrost created a large pit beneath the structure, forcing the family to move in with relatives, resulting in 16 people sharing two small homes—without running water or flush toilets— all of this during the COVID-19 pandemic. In Shishmaref, Alaska, a November 2020 storm eroded between 30 to 80 feet of land along approximately 5,000 feet of coastline, causing \$6.5 million of damage to the only access road to the community landfill. These are just two of many similar, and increasing, impacts.

Despite the dire need, most federal programs and policies relevant to climate change adaptation inadvertently disadvantage Alaska's small tribal communities. Adequate funding to prevent the destruction of infrastructure is simply not accessible to these small and impoverished communities.

Statewide, approximately \$4.3 billion will be required to proactively mitigate damage to existing infrastructure in 144 environmentally threatened Alaska communities over the coming decades. An \$80 million annual funding gap exists over the next 10 years to mitigate acute infrastructure threats and to avoid more expensive disaster response. We recommend that Congress increase support to the two federal programs proven to be most effective in supporting tribal communities in Alaska with climate change adaptation: (1) the Denali Commission Village Infrastructure Protection Program has been the single most effective financial mechanism for supporting environmentally threatened communities in Alaska. Support for the Denali Commission should be increased to support protect-in-place, managed retreat, and community-led relocation project; and (2) the BIA Tribal Climate Resilience Program is currently the only national grant program

readily accessible to our tribes for climate adaptation and resiliency planning. The funding for this program should be significantly increased to adequately address the needs.

Conclusion

It is clear that health equity in our Native communities can never be achieved without adequate sanitation facilities and access to basic water and sanitation services. To address this, I urge support for the inclusion of at least \$1 billion in any future infrastructure bill for the IHS Sanitation Facilities Construction program, and that such funding be prioritized to tribal communities that are in the greatest need of sanitation services. Additionally, IHS cost caps need to be waived for this new funding so that unserved communities can access the sanitation funding.

Further, additional increased support for programs to mitigate climate change impacts is crucial to protect infrastructure in Native communities.