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Thursday February 11, 2021

TO: Kumar Barve, Chair of House Environment & Transportation Committee; Dereck Davis, Chair of House Economic Matters Committee; and Committee Members

FROM: Caitlin Kerr, The Nature Conservancy, Conservation & Climate Policy Analyst

POSITION: Support HB 583 Climate Solutions Now Act of 2021

The Nature Conservancy (the Conservancy) supports HB 583 offered by Delegate Stein. HB 583 seeks to increase Maryland's emissions reduction goals to 60% by 2030 and sets the target of a carbon-neutral economy by 2045, presenting us with an opportunity to once again demonstrate our state's ambition and strong commitment when it comes to approaching the threat of climate change head-on. The legislation also creates a goal of planting 5 million native sustainable trees by 2030, with 500,000 of those trees to be planted in urban areas on the frontlines of climate change and impacted by systemic injustices. This goal will be accomplished through state agency programs and nonprofit efforts. Co-benefits of trees, forests, and canopy include economically valuable services like carbon dioxide sequestration, water filtration, flood mitigation, recreational spaces, heat reduction, air quality improvement, and wildlife habitat.

Nature is the climate solution hiding in plain sight. By sustainably managing, restoring and protecting forests and other lands worldwide, we can cost-effectively capture up to 11 billion metric tons of greenhouse gas (CO₂e) emissions globally per year by 2030. These natural climate solutions (NCS) also protect biodiversity, restore watersheds, and provide sustainable livelihoods. The Conservancy led the foundational science on NCS¹ and we know that intense collaboration between frontline communities, governments, large and small non-governmental organizations (NGOs), and corporations is essential to achieve the transformational change that is necessary to combat climate change. The Conservancy has shown that natural climate solutions, including sustainably managing, restoring, and protecting forests and other lands, can provide a third of the global solution to climate change by 2030.²

In addition to carbon sequestration, urban trees also provide important public health benefits. In Baltimore City, temperatures reach up to 21°F hotter than in surrounding rural areas. By 2050, the city is estimated to experience five times as many dangerous heat days with a heat index over 105°F as we did at the start of the century. These impacts are not limited to cities; across Maryland, we average ten days a year when heat exceeds dangerous levels. This number is predicted to rise to forty days annually by 2050. Extreme heat can worsen existing illnesses, posing severe threats to vulnerable individuals. It can also cause mental and physical stress, heat-related illnesses, and sometimes deaths. Shaded surfaces can be up to 20-45°F cooler than peak temperatures of unshaded surfaces. Evaporation and transpiration processes in plants can reduce peak temperatures in the area by 2-9°F.

The Conservancy commends Delegate Stein for continuing to raise the bar for Maryland's climate commitments and advancing natural climate solutions that can provide valuable environmental, economic, and public health cobenefits for years to come.

Therefore, we urge a favorable report on HB 583.

¹ https://www.pnas.org/content/114/44/11645

² https://www.nature.org/en-us/what-we-do/our-insights/perspectives/natural-climate-solutions/