

25 Massachusetts Ave NW, Suite 500 Washington D.C., 20001 (202) 789.7850 main = www.ASCE.org

May 6, 2021

United States Army Corps of Engineers 3F91, 441 G St. NW Washington, DC 20314 ATTN: Ms. Amy Frantz, CEW–P

Subject: Docket ID No. COE–2021–0002 WRDA 2020 Sections 113 and 152 Implementation Guidance Via Email: <u>WRDA2020@usace.army.mil</u>

Dear Ms. Frantz:

We are writing to urge the U.S. Army Corps of Engineers ("USACE" or "the Corps") to update its regulations, policies, and practices quickly to ensure that its rising sea level forecasts are based on best available science, and to ensure that studies in seismically active regions are no longer disadvantaged in their benefit-costs analyses (BCA), as required by Sections 113 and 152 of the Water Resources Development Act of 2020 (WRDA 2020), respectively.

Section 113: For its flood modeling, USACE currently uses climate science from the Intergovernmental Panel on Climate Change (IPCC) that was published in 2007, based on scientific research and modeling completed between 2000 and 2005.

Since 2007, the global scientific community changed the way they develop and model greenhouse gas emissions scenarios. IPCC published its latest science in 2014, which advanced sea level rise science by including factors such as the melting of global ice sheets – **leading to higher projections for sea level rise**.

As jurisdictions work with USACE to make 50-year or longer infrastructure decisions, use of older science runs the risk of underestimating sea level rise, ultimately resulting in coastal flood protection infrastructure and habitat improvements with a shorter lifespan than the assumptions upon which USACE made its funding decisions.

In areas dominated by rainfall, snow melt and runoff, climate extremes are also often underpredicted using historical information. Utilizing the best available science, climate forecasts and paleo hydrology to define the full spectrum of potential flood risk is imperative for proper plan formulation.

We urge USACE to:

1. Use IPPC 2014, IPCC 2019 and other relevant sea level rise science published since NRC 2012 to update USACE Engineer's Regulation ER 1100-2-8162 and supporting USACE Sea Level Change Curves; and

2. For the purposes of calculating National Economic Development benefits, calculate all forms of flooding that arise from sea level rise, including loss of habitat, damages to infrastructure and buildings from daily and periodic tidal flooding, and groundwater rise.

3. For the purposes of riverine and inland flood damage reduction plan formulation, utilize the best available science, climate forecasts and paleo hydrology to define the full spectrum of potential flood risk.

<u>Section 152</u>: Under pre-WRDA 2020 policy, jurisdictions around the nation in regions of moderate to high seismic activity have been faced with a substantial disadvantage both in federal interest findings and funding. While flood protection *benefits* are calculated in essentially the same manner across the nation, the *cost* of flood protection infrastructure in seismically active regions is substantially higher due to the requirement for more robust construction. This disparity has the effect of significantly suppressing the benefit-cost ratios in these regions—the most critical metric USACE uses for evaluating federal interest.

The language enacted into law through WRDA 2020 Section 152 is unambiguous in its intent. However, implementation of this provision is complex, with implications throughout the Corps study process. Clear guidance is necessary so that all flood damage reduction projects are evaluated on a level playing field.

Thank you for your consideration of our comments, and please do not hesitate to reach out with questions.