## WASHINGTON



Flood-related disasters are the costliest and most frequent type of disaster facing the United States. From 2000 to 2018, flood-related events cost more than \$830 billion in economic losses,<sup>1</sup> accounted for 73% of presidential disaster declarations,<sup>2</sup> and caused more than 6,200 deaths.<sup>1</sup> Floods are an immediate threat to 53 military installations across the nation.<sup>3</sup>

These numbers reflect what Americans and people across the globe already know: **floods are affecting our way of life.** Addressing the challenges posed by flooding and other extreme weather impacts will require individuals, communities, and state and federal governments to work collaboratively to build a more sustainable future for us all.

Surging Waters: Science Empowering Communities in the Face of Flooding is a report produced by AGU that shows how science is essential to finding solutions to mitigate flooding now and in the future. For more information, visit www.scienceisessential.org.

## TO EMPOWER COMMUNITIES TO UNDERSTAND AND ADDRESS THEIR FLOOD RISK, POLICY MAKERS CAN:

- Support robust and steadily increasing funding to science-based federal agencies.
- Support science centers and programs that research region-specific flooding concerns and incentivize scientists working within their communities.
- Support legislation that ensures science can be conducted and inform policy freely and openly.
- Support policies to manage flooding and its impacts that account for a changing world.



Between 2000 and 2018, floods caused **\$500 million** in property damages.<sup>4</sup>



Between 2000 and 2018, floods accounted for **7 out of 10 presidential disaster declarations** in Washington State.<sup>2</sup>



Flooding is an **immediate threat** to the **US Navy's Naval Magazine Indian Island** in Port Hadlock, WA.<sup>3</sup>

The **U.S. Geological Service Water Science Centers** fund and conduct water research and monitoring **driven by state priorities** 

## **CONTACT THE WASHINGTON OFFICE:**

Tacoma, WA: 253-552-1600 Ferndale, WA: 360-312-8155 x2001 Kennewick, WA: 509-735-3739 Spokane, WA: 509-353-2649

The NOAA National Sea Grant College Program supports coastal communities through research and extension programs shaped by local needs.

**CONTACT THE MAIN OFFICE:** 

UW, Seattle, WA: 206-543-6600; seagrant@uw.edu

**BETWEEN 2010 AND 2019...** 

The Washington Water Science Center<sup>5</sup> spent

\$32 MILLION

Washington Sea Grant<sup>6</sup> spent

\$2.4 MILLION

...on Washington's flood research and education priorities.

PREPARE YOUR DISTRICT FOR FLOODS: ready.gov/floods. Assess your home or office's flood risk: msc.fema.gov. NEED HELP NOW? Contact Washington Emergency Management Division: 253-512-7000

1. NOAA. U.S. Billion-Dollar Weather and Climate Disasters. National Centers for Environmental Information (NCEI) (2019). Available at: https://www.ncdc.noaa.gov/billions/. (Accessed: 23rd July 2019) 2. The Pew Charitable Trusts. Infrastructure Upgrades Can Help U.S. Businesses Better Withstand Disasters (2019). Available at: https://www.pewtrusts.org/en/research-and-analysis/articles/2019/05/15/infrastructure-upgrades-canhelp-us-businesses-better-withstand-disasters. (Accessed: 5th July 2019) 3. US Department of Defense. Report on effects of a changing climate. (2019). 4. NOAA National Centers for Environmental Information. Storm Events Database. Available at: https://www.ncdc.noaa.gov/stormevents/. (Accessed: 14th August 2019) 5. Barton, C; Washington Water Science Center. Personal communication. (2019). 6. Callender, R; Washington Sea Grant. Personal communication. (2019).