

Data & Tools to Support Flood Resilience for PA Communities

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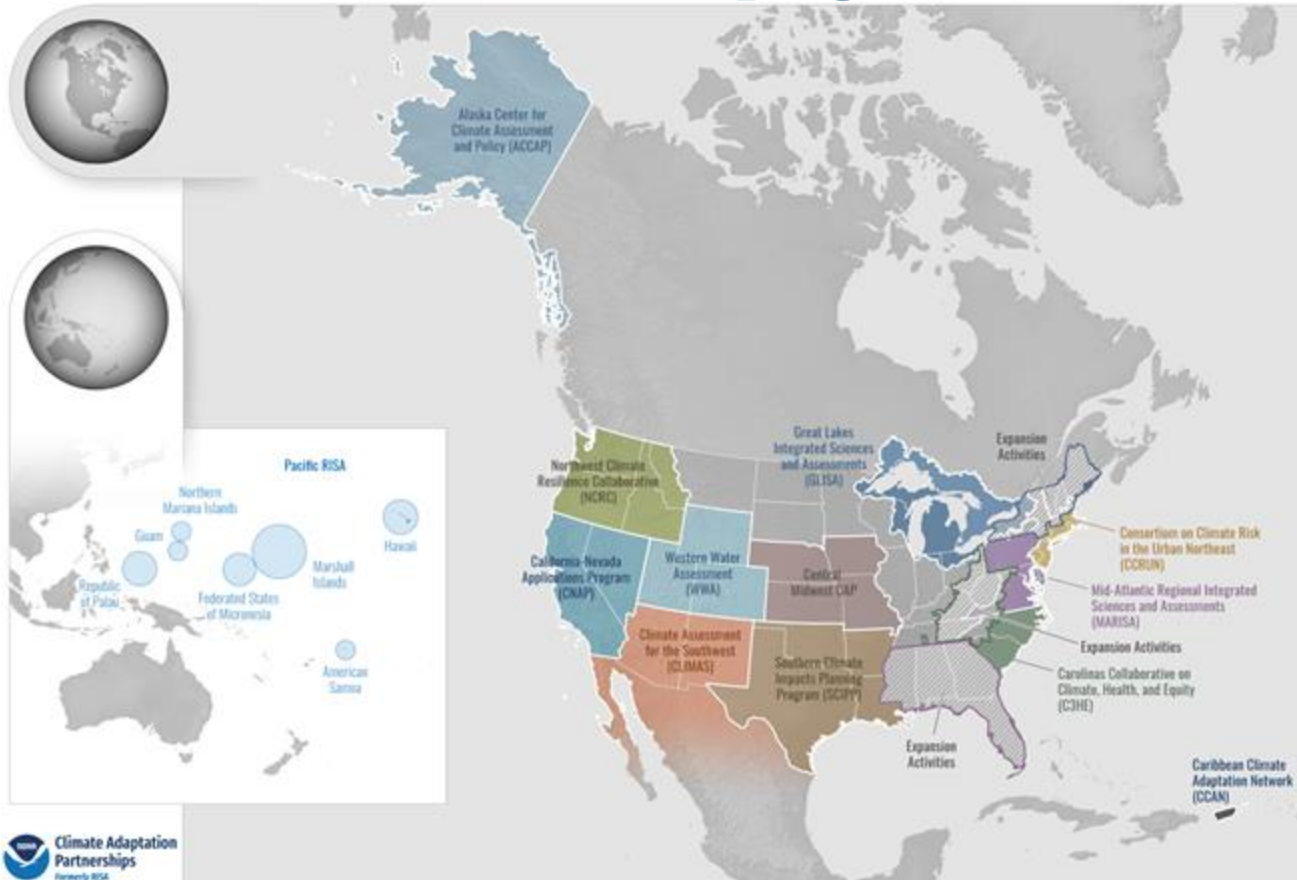
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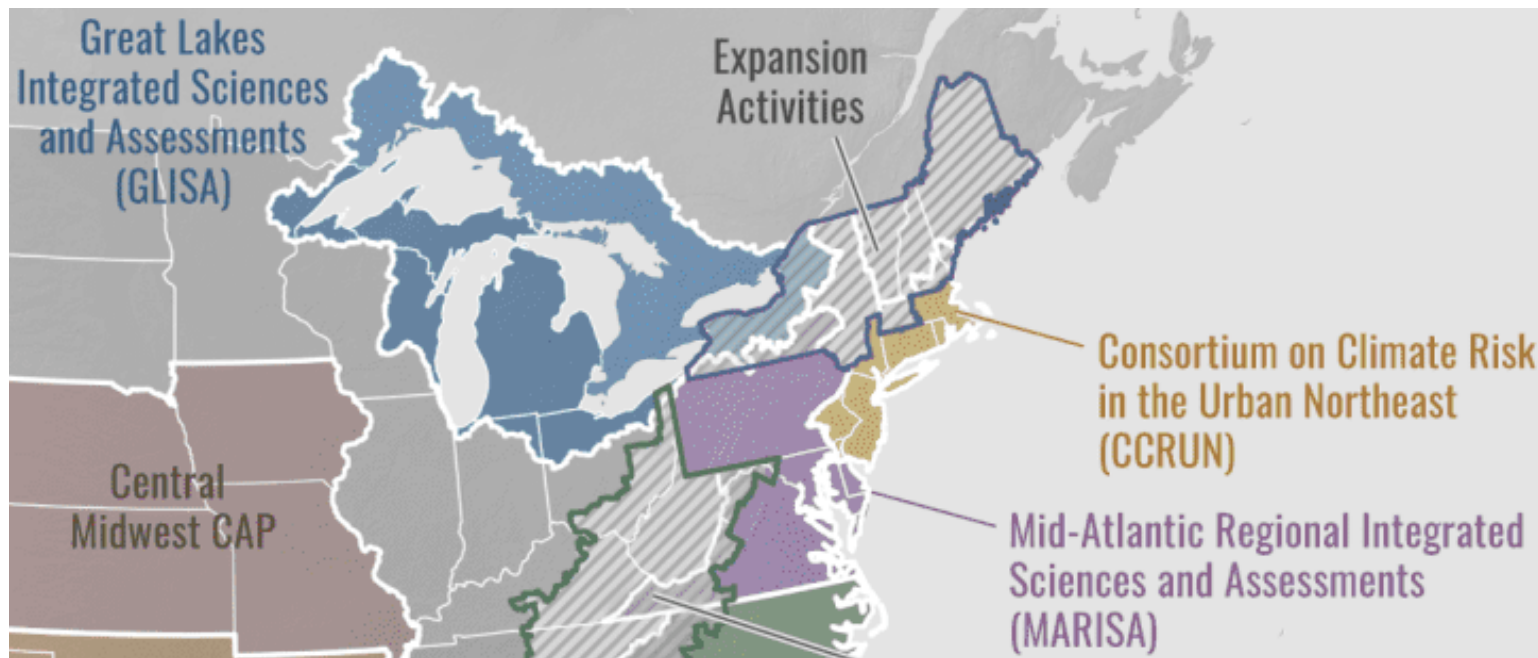
NOAA Climate Adaptation Partnerships (aka CAP/RISA program)





MARISA

a NOAA Mid-Atlantic CAP team





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MARISA collaborates with Mid-Atlantic communities to enhance their resilience to a changing climate through improved data and tools, place-based decision support, capacity-building, and public engagement.



PennState



JOHNS HOPKINS
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VIRGINIA INSTITUTE OF MARINE SCIENCE

Carnegie
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University



To learn more, visit:

<https://MidAtlanticRISA.org>

Data & Tool Demos

Climate and Hazard Mitigation Planning Tool (CHaMP): <https://champ.rcc-acis.org/>

- developed in collaboration with the Urban Sustainability Directors Network
- generate locality-specific graphics and data for key climate variables
- intended for inclusion in Hazard Mitigation Plans

Local Hazard Outlooks: <https://www.marisa.psu.edu/outlooks/>

- localized climate projections and information on climate impacts for all Mid-Atlantic counties
- intended for a general audience
- new version 2.0 includes mobile-friendly web interface plus printable, one-sheet handout

IDF Curve Tool: <https://midatlantic-idf.rcc-acis.org/>

- generate locality-specific Intensity-Duration-Frequency (IDF) curves for extreme precipitation
- forward looking, using IPCC/CMIP climate projections
- intended for engineering design work for infrastructure such as roads, bridges, and drainage systems
- alternative to NOAA Atlas 14/15

MARISA Realtime Data Map: <https://www.marisa.psu.edu/rtdatamap/>

- provides access to Mid-Atlantic weather, tides, stream gages, and hazards data for the entire Mid-Atlantic
- most data is updated every 15 minutes from NOAA, USGS, and other sources

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[MARISA Data & Tools](#)
[NOAA Resources](#)
[Other Resources](#)
[MARISA](#)


MARISA Data & Tools

Mid-Atlantic communities are facing a changing climate with increasing hazards from extreme heat, heavy downpours, rising sea levels, and storm surge. Listed here are a variety of resources developed by the MARISA team that can help users understand, plan, and prepare for these and other hazards.




Chesapeake Bay Climate Adaptation Toolbox (CBCAT)

A tool focusing on Mid-Atlantic climate adaptation that is designed to help users identify the most appropriate and relevant decision-support tools for their needs.




Climate and Hazard Mitigation Planning (CHaMP)

A tool designed specifically to address the substantive and communications needs of individuals developing hazard mitigation plans as required by FEMA.




Local Hazard Outlooks


An outreach product that provides information on extreme weather and its associated impacts for counties and selected cities in Delaware, Maryland, Pennsylvania, Virginia, and Washington, DC.




IDF Curve Tool

An interactive tool that makes climate-change informed intensity-duration-frequency (IDF) curves available to view and download for counties across the Chesapeake Bay Watershed and Virginia.







marisa.psu.edu

Science to Advance Freshwater Ecosystem and Community Resilience in the Appalachians (SAFER Apps)

an NSF CHIRRP planning grant



<https://www.nsf.gov/funding/opportunities/chirrp-confronting-hazards-impacts-risks-resilient-planet>

SAFER Apps goal: Develop capacity for the integration of flood risk prediction science and NBS deployment that is responsive to community needs and builds resilience for highly vulnerable, rural communities of mountain regions, using the Appalachians as a model mountain system.



SAFER Apps