



ORD's Integrated Climate Sciences Division (ICSD)

December 2023



Catastrophic Flooding



NEW YORK POST

NEWS



59 Comments

Nearly 53 million under Flood Watch from Northeast to North Carolina as heavy rain eyes East Coast

By Steven Yablonski and Chris Oberholtz, FOX Weather

July 9, 2023 | 9:37am | Updated

July 2023



ORD's Integrated Climate Sciences Division

ORD's Integrated Climate Sciences Division is advancing two new climate-focused initiatives, an **Interdisciplinary Climate Assessment Program (ICAP)** and **Regional Climate Assistance Network (RCAN)**:

ICAP

- Quantitative assessments of climate damages
- Assessments of the costs of climate change and the benefits of national, state, and local actions to control GHGs
- Input to metrics, e.g., the Social Cost of Carbon

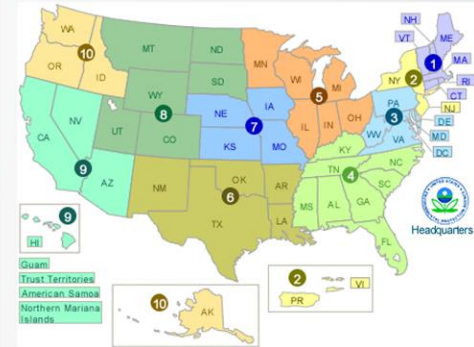
Integration and Evaluation

of products, processes, and outcomes to inform both ICAP and RCAN



RCAN

- Regionally-relevant assessments, technical support, capacity building for adaptation planning and resilience
- Special focus on frontline communities most vulnerable to climate impacts
- Technical support for mitigation actions



RCAN will enable a range of services to regional office partners, such as:



Providing climate information tailored to regional needs



Providing technical assistance to inform adaptation planning and resilience strategies



Facilitating connections to a network of experts



Hosting workshops and training opportunities



Developing Regionally-relevant assessments of climate-related impacts (e.g., on air, water, land, and human health) with a focus on environmental justice



Co-production of research for climate change adaptation and resilience in frontline communities



RCAN Co-production

Supporting states, local governments, tribes, and other partners' needs to adapt.

RCAN co-production includes multiple ORD research projects with goals of:

Advancing engagement with partners to address climate adaptation, resilience, and mitigation needs in **place-based context**



RCAN provides support with both the InfoHub and science co-production





RCAN Co-production



Co-development of Knowledge Approaches with R10 Alaska Native Villages

Rural communities' waste management in response to climate



Coastal Resilience and Climate Change Mitigation

Exploring nature-based climate adaptation in a community with flooding challenges





RCAN Co-production



Wildfire Advancing Science Partnerships for Indoor Reductions of Smoke Exposures (ASPIRE) Study

Addressing community and tribal partners' concerns that many people are not aware of the potential health impacts associated with wildland fire smoke exposures nor actions they can take to protect themselves.



Building Regional Capacity for Resilient and Sustainable Natural Resources: Organon for Adaptation Planning

System of logic and body of information for planning and decision-making that builds capacity of partners.





RCAN Co-production

Supporting states, local governments, tribes, and other partners' needs to adapt.

Co-production is:

- Deeply interdisciplinary in nature
- Based on relationships

What ICSD will contribute in this field going forward:

- Establishing best practices in co-production
- Learning from what we're doing (evaluation)





RCAN Needs Social Sciences

RCAN, at any level, can't happen without Social Sciences embedded within.





Social Sciences Capacity Building

Fundamentally, social science work is about building and maintaining relationships.



Relationships Require

Time and Presence
on-site



ICSD and the Climate Services Landscape

Why is ICSD involved in Climate Services?

One of the motivators for establishing ICSD was to improve the use of climate science in EPA, especially in the Regions, as stated in the 2021 EPA Climate Adaptation Action Plan

- The activities to translate and deliver climate information to meet user needs are often considered “climate services” and ICSD is working to meet that need
- Executive Order 14008, Section 211(d) expresses the need for “information products for the public,” which can be broadly defined as “climate services.” [1]
- The EO initiated several reports on climate services [2], leading to growing interest and activities across agencies

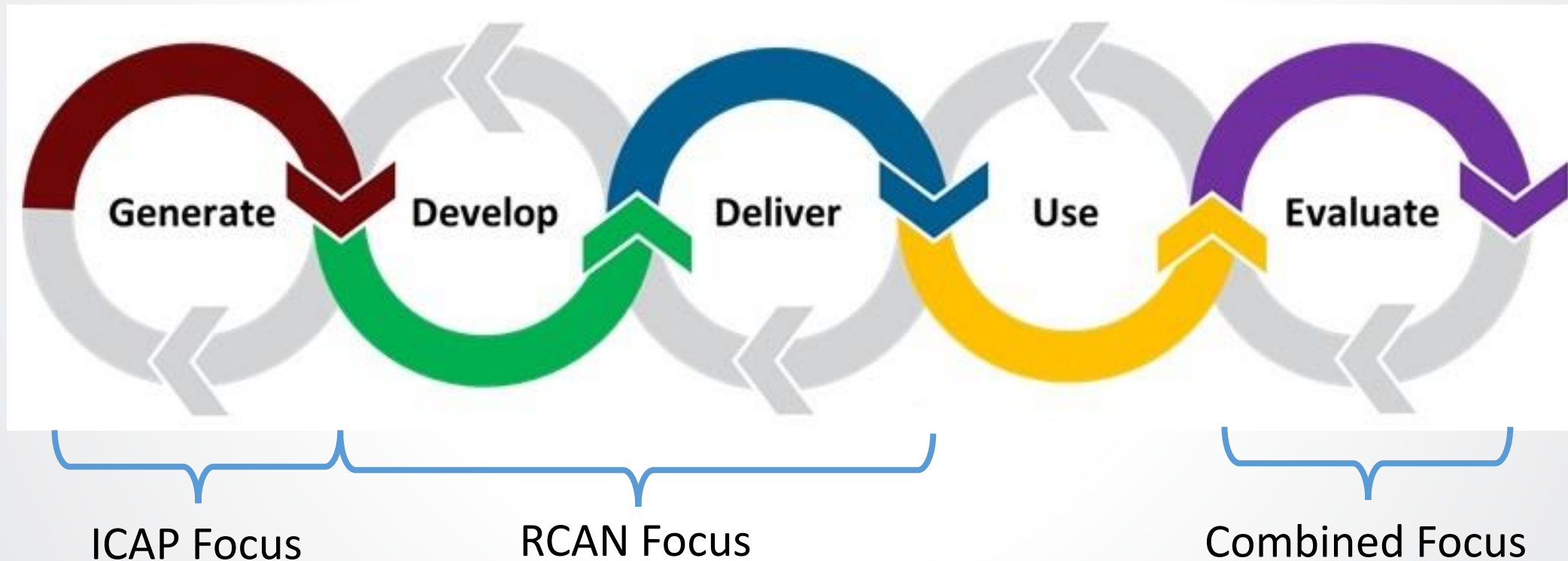
These reports provide a framework for federal climate sciences that will guide ICSD efforts

1. Tackling the Climate Crisis at Home and Abroad.” 86 Federal Register 7619, 2021-02177, January 27, 2021, <https://go.usa.gov/xMpDb>
2. Opportunities for Expanding and Improving Climate Information and Services for the Public,” <https://toolkit.climate.gov/reports/opportunities-expanding-and-improving-climate-information-and-services-public>



ICSD and the Climate Services Landscape

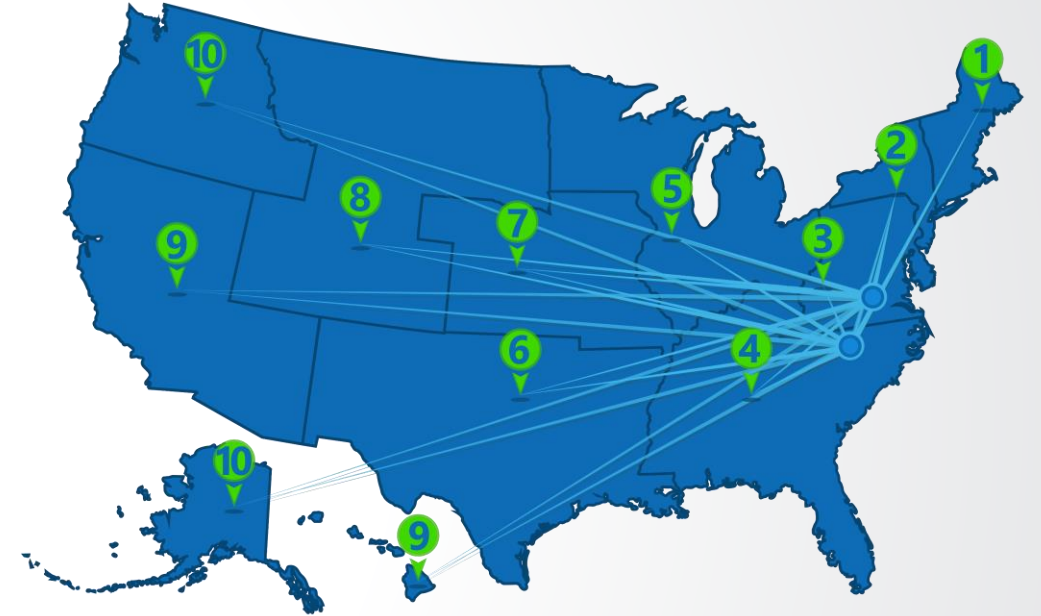
Climate Services Value Chain





Connections

- ICSD provides a channel for facilitating EPA connections to the broad range of climate science, information, and services provided by other federal agencies and external experts
- ICSD is leading EPA efforts to develop the interagency approach to coordinating federal climate services
- ICSD is also working closely with OP to further strengthen connections between ORD and EPA's climate adaptation efforts, especially in the Regions
 - These efforts include connecting with experts across ORD and across EPA's Program and Regional Offices





Questions and Contacts

Please direct feedback and questions to: RCAN@epa.gov

Megan Fleming: fleming.megan@epa.gov

Jenna Hartley: hartley.jenna@epa.gov

Darrell Winner: winner.darrell@epa.gov

Andy Miller: miller.andy@epa.gov