

# Climate Program Office Review May 24-26, 2022

Overview of Activity Area #3:

# Communication, Education, & Engagement (CEE) Division

David Herring, Chief OAR / CPO / CEE Division

#### Overview



- Introduce CEE Division Staff
- Overview Activity Area & Pre-Recorded Presentations
- Current State-of-Play Affecting Activity Area
- Key Questions & Challenges

#### CEE Division Personnel (permanent staff)



#### **CEE Division Chief & Fed Staff Members**



Frank Niepold



David Herring

**Todd Christenson** 

**Supporting CPO Communications** 





**NOAA** Climate.gov











**Toolkit / Promoting** Resilience



**Ned Gardiner** 

Web Design & **Development** 

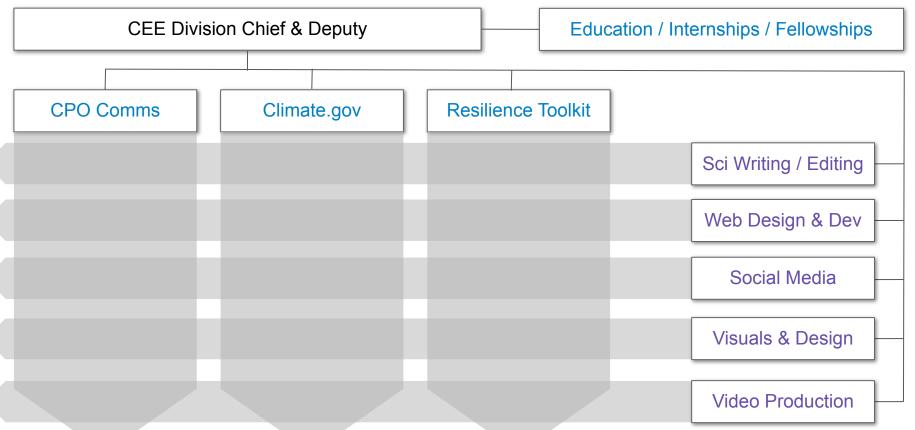






#### CEE Division's Portfolios and Functions





#### CEE Division's Annual Budget



- Annual Budget: \$3.2M (4% of CPO total budget)
  - Fed Salaries: \$0.422M (2 personnel)
  - Contractor Salaries: \$1.72M (11.5 personnel)
  - Grants, contracts & procurements: \$1.06M
- Apportionments in priority areas: (shown as % of \$3.2M)
  - 1. CPO Communications = 13%
  - 2. NOAA Climate.gov = 48% (includes lines a,b,c below)
    - a. News & Features (28%)
    - b. Maps & Data (5%)
    - c. Teaching Climate / CLEAN (15%)
  - 3. Promoting Resilience / Toolkit = 24%
  - 4. Web Design & Development = 15%

#### CEE Division's Pre-Recorded Presentations



- 1. CEE Division Overview David Herring
- 2. **CPO Communications** John Coggin, Amber Liggett, Mike Myers, & Richard Glupker
- 3. **NOAA Climate.gov** Rebecca Lindsey, Mary Lindsey, Frank Niepold, & Tom Di Liberto
- 4. Promoting Resilience LuAnn Dahlman & Ned Gardiner

#### Success Measures (Output & Outcome)



- User feedback via email, focus groups, & listening sessions
- Monitoring growth in page views over time
- Syndication / reuse of our content in other prominent publications & websites
- 'Quality of Relationship' includes awareness, trust, satisfaction, usability / use, and control mutuality
- Awards & accolades (e.g., Webby Awards, NOAA Awards)

#### **CPO Communications**



## Communications to promote awareness, appreciation, and support for CPO's investments in climate science & services

#### Target audiences:

- Peer Communities in NOAA, other agencies, academia & NGOs
- Executive & Senior Leaders in Dept of Commerce and NOAA
- Policy Leaders on Capitol Hill (Congressional Reps, White House)

#### Sample products:



**CPO** Website



Weekly Hot Items



**Program Briefing Sheets** 



State-focused Briefing Sheets

## Current State-of-Play: CPO Comms



- Fielding requests for Climate and related presentations
- Managing & maintaining CPO website
- Producing CPO Weekly Hot Items reports
- Actively supporting CPO's Risk Areas Initiatives
  - Recently built the new Heat.gov website
- Supporting divisions'/programs' public rollout plans & web stories
- Developing state-specific climate resources sheets
- Supporting CPO staff and professional development

#### Key Questions & Challenges: CPO Comms



- 1. How to effectively convey CPO's big, open-ended, multidecadal research stories?
- 2. How do we balance the competing priorities of branding CPO's divisions & programs vs. branding CPO vs. branding NOAA vs taking an all-of-government approach?
  - a. How do we get buy-in to the audience-focused approach? For example, CPO divisions & programs are hiring their own comms specialists (scientists asked to perform comms tasks) and executing their own comms program-focused comms strategies.
  - b. CPO demands for web design & dev exceed our current capacity.
- 3. Climate science and services work occurs in all NOAA Line Offices—how do we optimally coordinate and work inclusively with our comms peers across the agency?

## NOAA Climate.gov



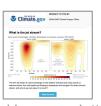
#### Fostering public climate literacy and helping people find & use **NOAA's climate maps & data**

#### Target audiences:

- Climate science-interested public (people seeking 'edutainment')
- Reporters & public media (seeking visuals & reference resources)
- Researchers, application-oriented professionals, and advanced students (seeking climate maps & data to support their work)
- Educators (seeking high-quality, easy-to-use, learning-ready resources to support climate-related education goals & requirements)

#### Sample products:





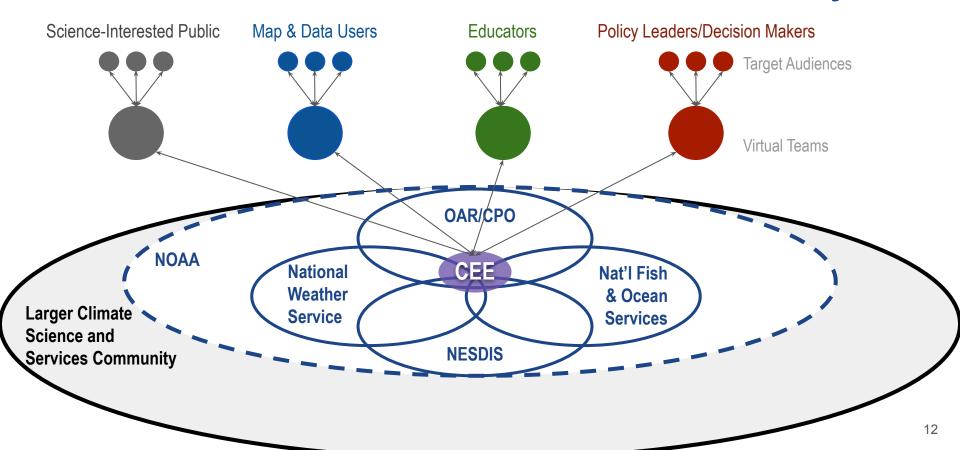




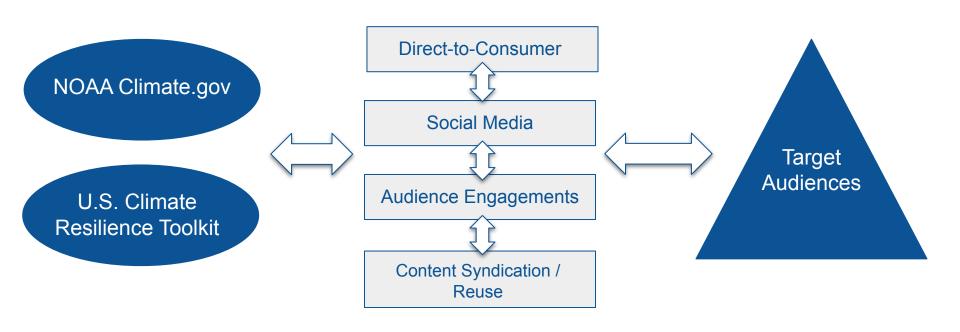


Museum Programs

# Climate.gov starts at the audience interface & works backward from there into climate science community

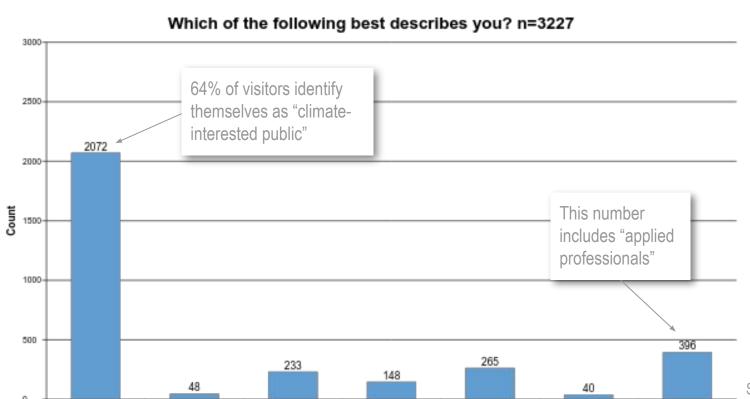


#### 4-pronged strategy for building relationships with audiences



#### QoR Evaluation of Climate.gov - Sample Results





Decision maker for

business, academia or NGO

Selection

Climate-interested

Individual

Government policy maker Climate science data user

Source: CIRES, 2015

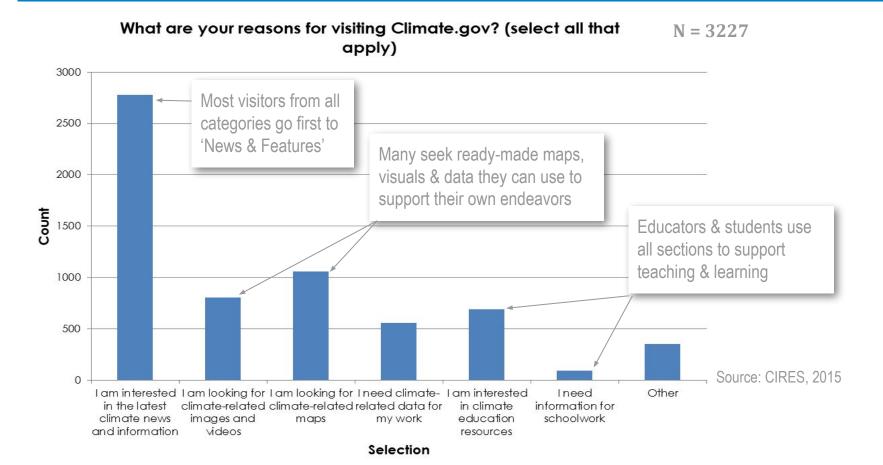
Journalist

Science educator

Other

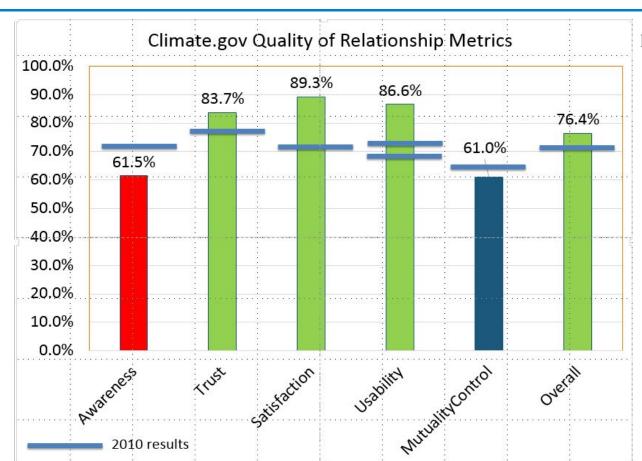
#### QoR Evaluation of Climate.gov - Sample Results





## QoR Evaluation of Climate.gov - Sample Results





N = 3227

Source: CIRES, 2015

## Current State-of-Play: Climate.gov



- Redesigned & rebuilt Climate.gov, but significant web development tasks remain...
  - Global Climate Dashboard
  - Data Snapshots
  - Syndicated News Department
  - Teaching Climate ⇔ CLEAN Sync
- Actively moderating a public forum on Facebook page
- Curating the CLEAN collection and promoting its use

- Publishing new content:
  - weekly articles and visuals
  - annual support of major NOAA products

     (e.g., Arctic Report Card, NOAA Sea Level Rise report)
  - Additions/updates to the dataset catalog
  - Adding products to Data Snapshots collection

## Key Questions & Challenges: Climate.gov



- Climate.gov is underfunded and understaffed, compared to scope, especially web development.
  - Where/how should we scale back if this remains true?
- Should we abandon the idea of becoming an all-federal climate portal? If not, is there a viable, recommended pathway forward?
  - If the recommendation is to become an all-federal portal, then is it so important that we should scale back in other areas in order to meet that goal?
- Our success to date has largely been built on our custom content.
  - How can we become a content clearinghouse without diluting our site's main draw?

## Promoting Resilience



## Help U.S. communities & businesses understand and manage their climate-related risks & opportunities

#### Target audiences:

- Climate Adaptation Practitioners ("last-mile service providers")
- Federal, State, Tribal and Local Government Managers ("Champions")
- Managers of natural resources & built environments (public & private)

#### Sample products:



U.S. Climate Resilience Toolkit



Climate Explorer



Training & Engagements



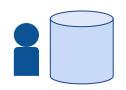
Resilience Ecosystem Workshops

## Current State-of-Play: Promoting Resilience



- Supporting local / regional / federal government entities' resilience planning
- Gathering stakeholder feedback to assess Climate Resilience Toolkit's scope & design vs user needs
  - Planning a sitewide redesign and back-end rebuild
- Sponsoring and collaborating in annual Resilience Ecosystem Workshops and CCRE Program grants
- Preparing to launch the Climate-Smart Communities Initiative
- Co-led The Opportunity Project's 2021 climate challenge
- Build Climate Resilience Information System (CRIS) to underpin next-gen Climate Explorer, READI, and NCA5 Interactive Atlas

#### Coordination & Collaboration in the 'Resilience Ecosystem'



## FEDERAL SCIENCE & DATA EXPERTS

Provide research, data, modeling, analys & impact assessments of past & future climate



## CLOUD HOST SERVICES

Offer big data hosting, computation, & public browse, formatting, access services



## DESIGNERS OF GIS & ANALYTIC TOOLS

Bring data & analysis tools from federal & local sources together in geospatial context



## ADAPTATION PRACTITIONERS

Offer guidance and translation services to help communities & businesses plan & take action



#### **DECISION MAKERS**

In gov't, business, & resources mgmnt — responsible for local planning & action to protect people and property

## The USCRT's 5 'Steps to Resilience' (learn more»)



A co-production of knowledge process that synthesizes information from multiple sources to...





**EXPLORE HAZARDS** 

Identify & map exposure of all valued assets to climate-related hazards.

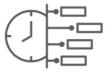


**VULNERABILITY** & RISK

Assess vulnerability & risk for all valued assets threatened by climate hazards. Rank most urgent threats to address.



Brainstorm & list all options for reducing risks.



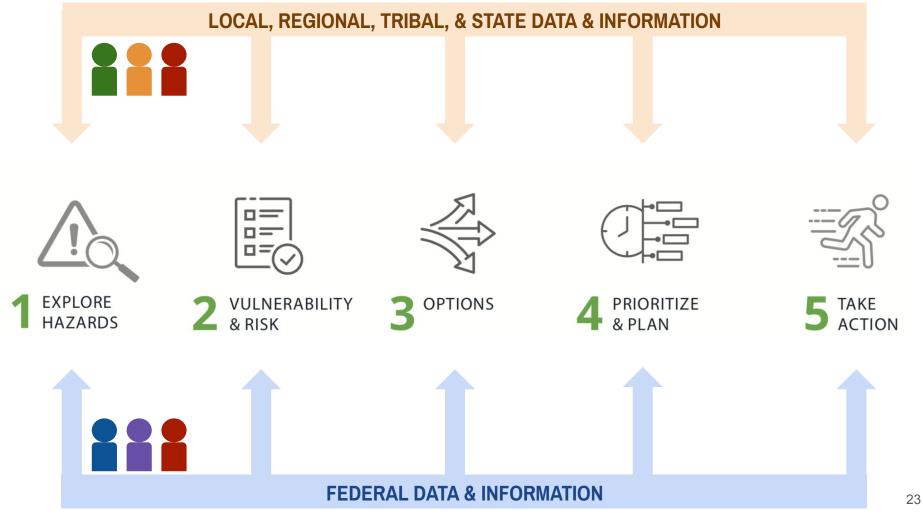
**PRIORITIZE** 

Rank options based on BCR assessment, select options to implement, define success metrics, & make an action plan.



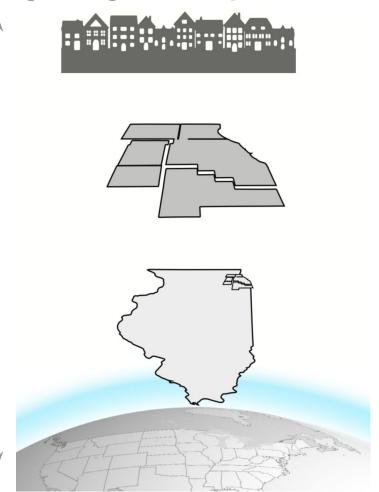
TAKE

Obtain funds, implement plan, monitor results, iterate as needed. & report progress & outcomes.



# Aligning the goals & objectives of decisionscales, from global to local makers

#### Aligning our goals, expertise, & resources from national to local



#### MUNICIPAL

Citizens & municipal leaders face climate-related hazards. Responsible for reducing vulnerability & risk, enhancing emergency response, & building resilience.

#### REGIONAL / TRIBAL

Regional & Tribal government entities focus on political efforts to lead & encourage local action, & enact relevant policies.

#### STATE

State governments can coordinate & support local resilience-building, provide funding and resources, align efforts, and coordinate with federal agencies.

#### NATIONAL / FEDERAL

Federal agencies provide science data & assessments, grant funding (FEMA/BRIC), the nation's GeoPlatform, & better coordination.

#### Climate Resilience Information System (CRIS)

Metadata & Data Services

Historical Observations

Downscaled Projections

**CMIP6 Outputs** 

OF DECISION-RELEVANT
FEDERAL DATA

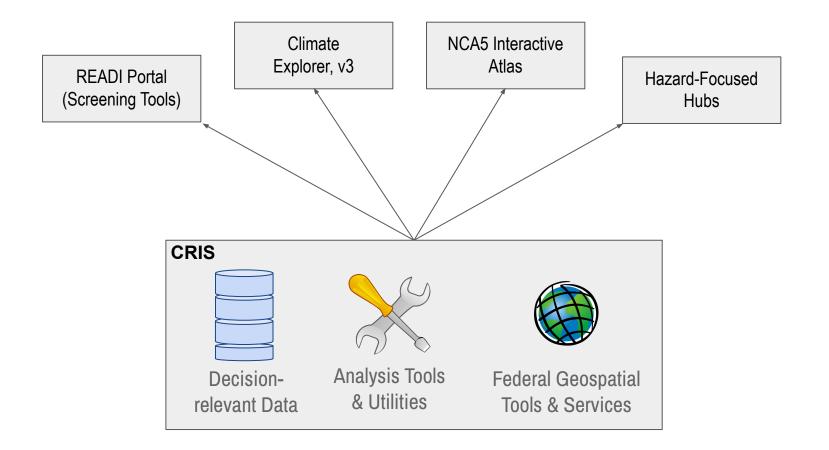


OPEN ACCESS / OPEN-SOURCE TOOL
DEVELOPERS WORKBENCH
(ANALYTICAL SERVICES)



FEDERAL GEOSPATIAL DATA & SERVICES

#### CRIS will provide foundational capabilities to 'lift all boats'



## Key Questions & Challenges: Promoting Resilience



- We have extended our capacity by obtaining matching funds via a non-profit (CCRE). How might this cost-sharing model optimally work in a federal context?
- We value and build collaborative partnerships. How can we best work with our collaborators to co-develop / evolve resilience tools, knowledge, and applications to facilitate provision of climate services?
- Climate Explorer was the first iteration for national access to vetted, downscaled climate data. Through interagency collaboration (READI and CRIS), we're poised to enhance this capacity to support the NCA, provide ready access to summarized information, and support decision-making. Are we pursuing the correct strategy?





# Thank you!