

**NOAA**

# 20<sup>TH</sup> CPASW SUMMARY

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# MANY THANKS TO 20th CPASW ORGANIZERS and CONTRIBUTORS

- **Tami Houston** (NCEI) - Co-Host & Master of all!
  - **Jenny Dissen** (NCICS) - instrumental in organizing events & engaging stakeholders, agenda development
  - **Veronica Crane-Lindsey, Molly Hylemon, Liz Tarquin, and Marjorie McGuirk** (CASE Consultants International) - Collider site event coordinators, logistics, and behind-the-scenes support!
  - **Chris Stachelski** (NWS ERH), **Sharon Mesick** (NCEI) & **Valerie Were** (CIRA) - abstract reviews, agenda development, stakeholders engagement and workshop delivery
  - **David Dewitt** (CPC), **Jeff Taylor** (NWS Greenville/Spartanburg), **Samantha Borisoff** (NRCC), **Ryan Boyles** (USGS /CASC), **Kathie Dello** (NCSU / NC SCO) - agenda development, stakeholder engagement, subject matter expertise
  - **Jenna Meyers, Stephen Baxter** (NWS Climate Services Branch) - organization, logistics planning, agenda development, workshop delivery, etc
  - **Sandra Rayne** (NCEI) - help with on-site logistics and coordination
  - **Jim Zdrojewski** (NWS Climate Services Branch) - graphic designer, agenda and badge creator
  - **Ko Barrett, Deke Arndt, & David DeWitt** (NOAA), **Dawn Chávez** (Asheville GreenWorks), **Michelle Ragland** (Pratt & Whitney), and **Bill Danyluk** (14th Weather Squadron), **Sarah Fraser** (New Belgium)- Keynote, Invited, and Special Guest Speakers
- All moderators and speakers**





# THIS WEEK WE HEARD...

What's the 'Ready Nation' of the WRN? What skillsets are needed to implement  
-Gina Eosco

The use of the thing you are providing is what drives the value  
-Gina Eosco

Working together requires an open mind  
-Melissa Kenney

Risk Communication provides adequate information about hazards, potential risk and mitigation steps - ZhiQiang Chen

CRN requires all partners (including public) playing their part in building resilience  
Ko Barrett

Authoritative means science, service, and stewardship  
Deke Arndt

Co-produce products that allow partners to tailor forecasts to their decisions  
Dave DeWitt

NOAA is our strongest state climate partner  
Hope Mizzell

Increasing action and adding value to weather and climate data  
Clyde Friaissie

The new toolbox give users a new modern experience to zoom in and out with ease between regional maps and local charts  
Melissa Widhalm

Give a chance for decision makers to play with the climate data  
Bruce Ford

Collect... Protect.. and Exploit [in a good way] authoritative climate data  
Lt Col Bill Danyuluk

Inspire, equip, and mobilize communities for equitable and climate resilient future  
Dawn Chávez, Asheville Greenworks

Future goals include formalization of procedures, continued communication with regional partners, and iterative improvements to KM -  
Jon Gottschalck

Let's stop working in silos, and reach out and make connections.  
Steve Baxter NWS

Local NWS offices add value to climate outlooks by interfacing with their partners  
-Tim Armstrong

The Week-2 outlook helps the transportation dept make the right decisions and get their equipments ready.  
- Brandon Hoving, NWS Grand Rapids

Pinpoint what the issues are, and take action on the biggest one first  
-Ron Jarvis, Home Depot

How the outlooks are used are highly-context dependent ( location, user type, timing of decisions)  
Melissa Kenney

If we work together to merge socioeconomic data and climate data, we can be a CRN  
-Jared Rennie NESDIS | NCEI

Don't ask users what they want, ask them what they do. The 'general public' is not a user  
-Dave Michelson

Partnerships are core to the Applied Sciences Program  
-Allison Leidner, NASA

Facility designed to contribute zero waste water discharge into the French Broad river.  
-Michelle Ragland

We want a future where human ambitions are in sync with a thriving planet  
-Michelle Ragland

Value chains [for climate services] are not linear and complicated  
-Vanessa Escobar

Hi-res coastal reanalysis enables better coastal preparedness and resilience  
-Taylor Asher

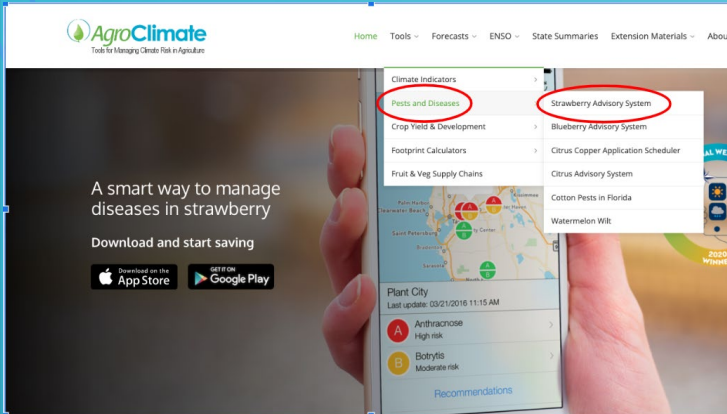
Education vs. Training: What to do vs. how to do it  
-Jim Fox

Increasing risk highlights the need for rapid attention to equitable, resilient communities  
-Jim Fox



# GOOD PRACTICES for CS APPLICATIONS

## AgroClimate by Clyde Fraisse

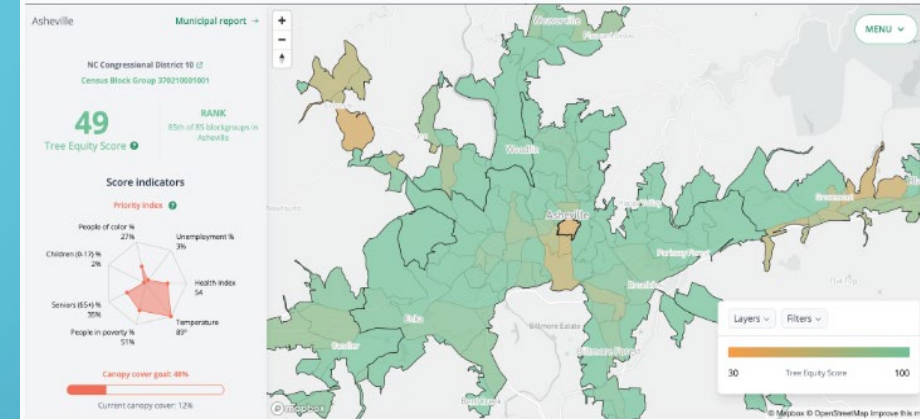


## USAF Decision Making Process by Bill Danyuluk

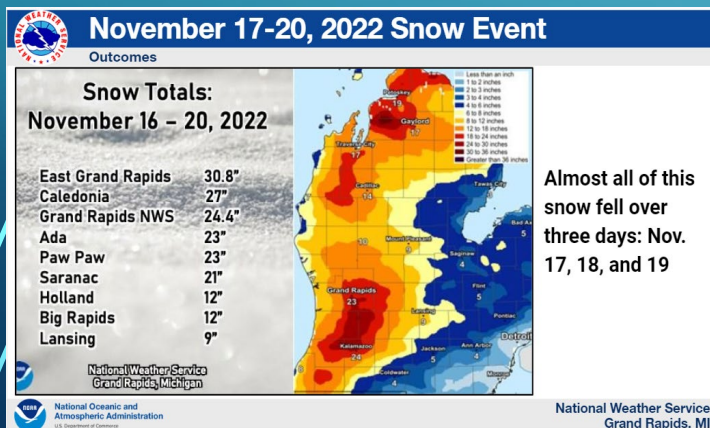
### Decision-Making

	Data:	Information:	Knowledge:	Wisdom:
<b>Monitoring:</b>	It rained 4" in Red/Blue location in January 2023	Rainfall is more/less than normal and by how much	Verification of claims by foreign actors that climate has caused some effect	Contribute to IO campaigns supporting Blue and countering Red narratives
<b>Prediction:</b>	The temp in Red/Blue area will be 3 degrees above normal	Winter thaw in AOR will occur earlier this year	Muddy conditions will impact Red/Blue ops at this time/location	When/where will/should Red/Blue attack in 3 months?
<b>Historical Climatology:</b>	The average high for Red/Blue location in January is 54F	Averages, Extremes valid 1 to 10 yrs out	Time of year environmental impacts have least/greatest impacts to Red/Blue operations	When/where will/should Red/Blue attack in two years?
<b>Projection:</b>	Scenarios indicate that Red/Blue location will be 1.2 degrees warmer in 2035	Tropical cyclones will occur in different locations and at different strengths	By 2035, Red/Blue Naval Station will be at risk of significant damage due to hurricane impacts	Planning in 2022 for a relocation of Red/Blue pier-side ops by 2035

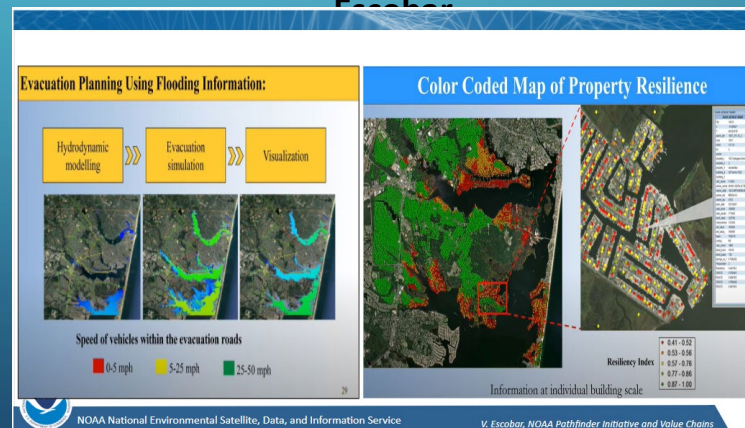
## Asheville GreenWorks Tool by Dawn Chavez



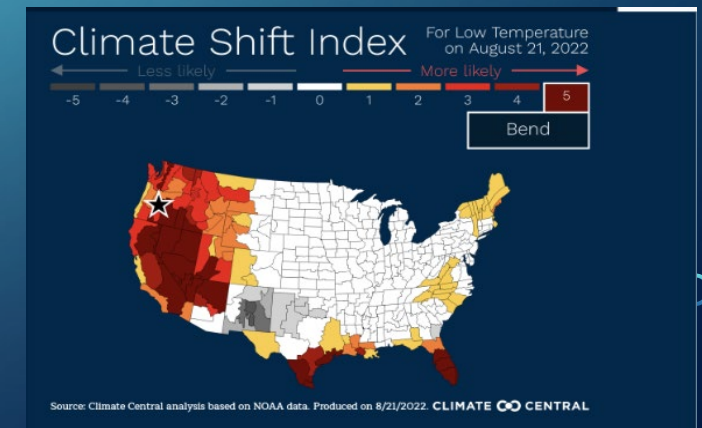
## 8-14 Day IDSS for DOT by Brandon Hoving



## NOAA's Pathfinder Initiative by Vanessa Escobar



## Climate Shift Index by Andy Pershing



# USER NEEDS FOR CLIMATE SERVICES

- Models to translate humidity/temp data to farmers to make decisions about their crops/farms
- Local climate outlook and climatological risks supporting local governments, transportation, media, and public among other users
- Understand user preferences for forecast categories of climate outlooks (2/3/more)
- Modern world demands advanced way of projecting user needs
  - explore option for AI use to assess future user demands
  - invest in service that is centric on data rather than on products
  - provide services that make user dependable (Apple's approach)
- Improve options for climate data access
- Rapid attribution in terms of change in likelihood and magnitude due to climate change

# OPPORTUNITIES FOR COLLABORATION

- NWS Training resources can benefit broader climate services community
- Understanding user preferences for climatic thresholds is critical for product and service development
- Leveraging SBES to understand what users do and how we can provide actionable climate services
- Explore Task Force for Climate-related Financial Disclosure (TCFD) resources to evaluate NOAA climate product suite usability in retail sector
- Engage with a community of practice
- NWS-NCEI collaboration on integration of socioeconomic and NWS products to improve weather, water, and climate service equity
- Strengthen community of climate services providers to minimize service redundancy and maximize service effectiveness

# HOW WILL WE MAKE IT HAPPEN?

## National

- Science, Service, and Stewardship
- CS focus on societal challenges
- Interagency coordination and public-private partnerships
- CS usability, translation, and relevance
- Core science capabilities
- Improve data access options
- Incorporate socioeconomic data to improve service equity.
- Foster infusion of new technologies and innovative practices in understanding user needs and services dissemination

## Regional

- Data and tools for Wet-Bulb Globe Temp,
- Useful new products: Heat Risk, Week-2 Extreme Heat/Heat Waves Outlooks, CPC regional Week-2 products
- Operationalize new services developed in partnership with research community such NIHHIS
- Creating the environment where there is no “wrong door” for users to obtain climate information and decision support services

## Local

- Supporting user communities including public health, labor, agriculture, infrastructure, etc.
- Using various formats for dissemination of climate messaging
- Applying climate guidance from NOAA centers to produce services for local users
- Provide enhanced outreach to underserved users including heat-equity mapper, CPC key messages, and other resources

# THANK YOU! SEE YOU NEXT YEAR!

- We thank our partners and participants of the 20<sup>th</sup> CPASW!
- Looking forward to 21st CPASW
- Potential discussion topics may include:
  - Foreseeing future climate services using past, present, and future data and products
  - Providing actionable climate information for impactful weather and water events
  - Supporting climate decisions in various sectors including national and environmental security
  - Including new technologies in delivering climate services to users and public
  - Maximizing effectiveness of climate services value chain