

~~CBRFC Open House~~ CBRFC Stakeholder Forum

August 18,
2010

Kevin Werner
Service Coordination Hydrologist
Colorado Basin RFC



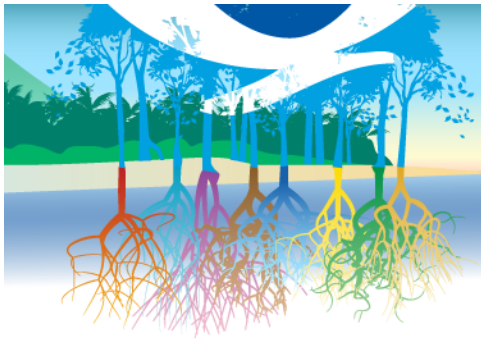


Goals:

- ✔ Update stakeholders on CBRFC forecast methods and development projects
- ✔ Inventory / Assess stakeholder requirements
- ✔ Facilitate discussion and collaboration between CBRFC staff and stakeholders

Agenda:

- ✔ **Two way discussion is critical (times are approximate; we will extend for discussion as required)**
- ✔ CBRFC overview (Programmatic = Michelle; Modeling = Craig)
- ✔ Forecast demonstration
- ✔ Forecast evaluation
- ✔ Developmental activities



Logistics

Lunch – menus going around

Happy Hour – afterwards at the Bayou (645 S State St)

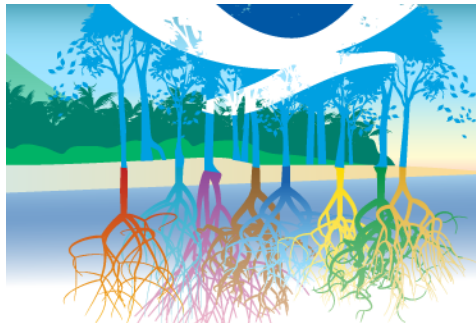
Operations Area – Please stop by

Wireless – Santacruz (passcode: NWS\$Ic-1nternet)

Presentations – Online (

www.cbrfc.noaa.gov/present/2010_openhouse.cgi)

CBRFC staff – Sidebar meetings are encouraged



Who we are...

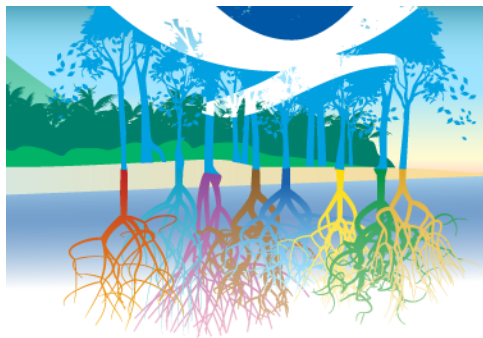


Mission: To understand and predict changes in the Earth's environment ... to meet our Nation's economic, social, and environmental needs

Mission: The NWS provides weather, hydrologic, and climate forecasts and warnings ... for the protection of life and property and the enhancement of the national economy



The Colorado Basin River Forecast Center generates streamflow forecasts and related datasets for the Colorado and eastern Great Basins



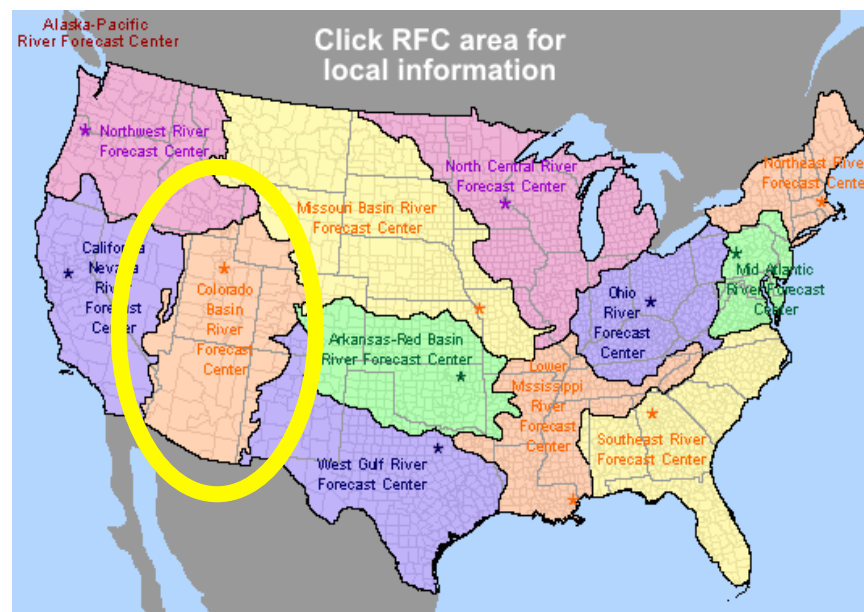
Colorado Basin River Forecast Center

One of 13 River Forecast Centers

Established in the 1940s for water supply forecasting

Three primary missions:

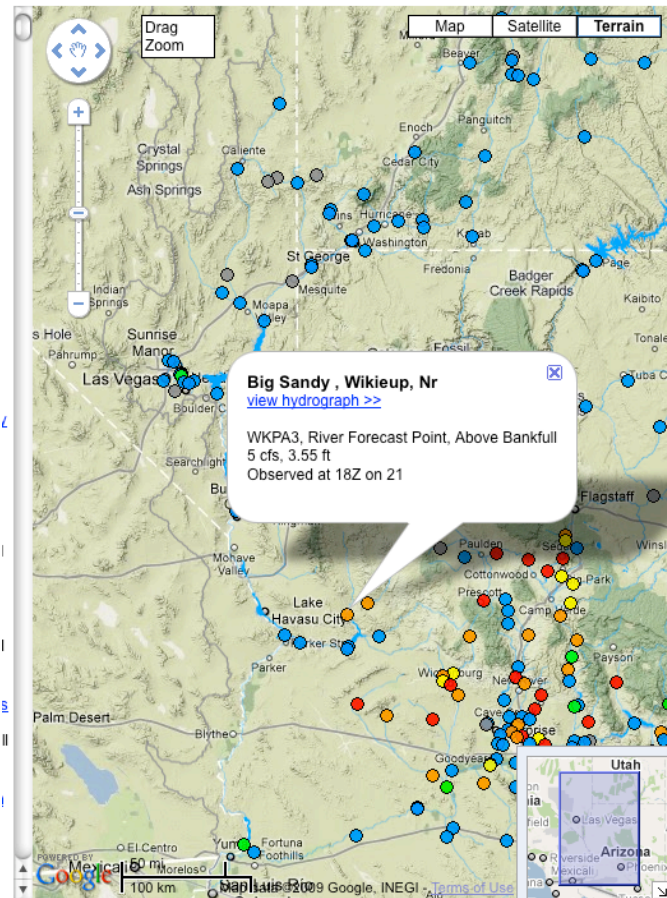
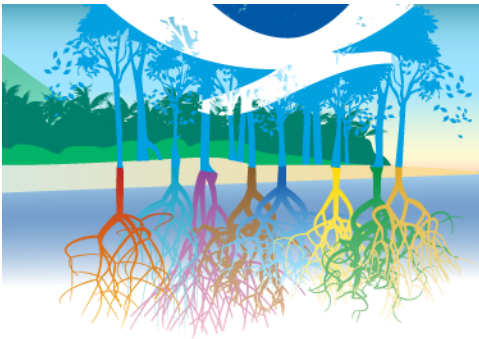
1. Seasonal **Water supply forecasts** for water management
2. **Daily forecasts** for flood, recreation, water management
3. **Flash flood warning support**



www.cbrfc.noaa.gov

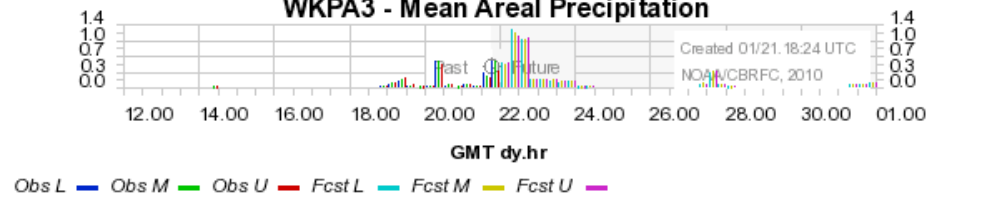


Flood and Daily Forecasts

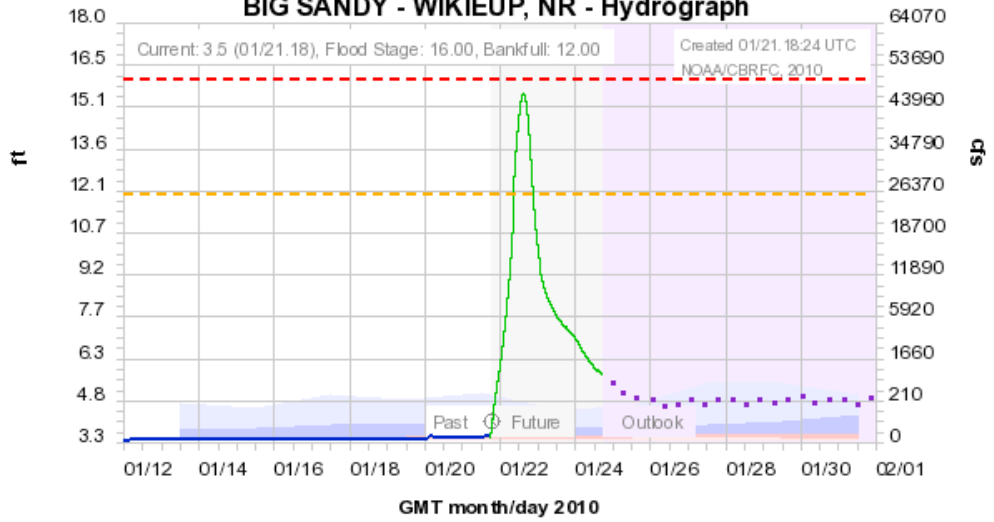


- Overlays**
- Rivers
 - RFC
 - Basins
 - Grids (Precip. etc.)
- Display Options**
- Show NWS ID
 - Show Data
- River Point Condition**
- No Data
 - Normal
 - Significant Rise
 - Near Bankfull
 - Above Bankfull
 - Above Flood Stage
 - Outlook (> 3 days)
- River Point Options**
- All
 - Basins Above Normal
 - Data Points
 - Forecast Points
 - Reservoir Points
 - Active Points

Colorado Basin River Forecast Center
WKP3 - Mean Areal Precipitation



Colorado Basin River Forecast Center
BIG SANDY - WIKIEUP, NR - Hydrograph



Observed — Forecast (01/21, 12:00) — Outlook (increasing uncertainty) — Bankfull 12.00 — Flood 16.0 —

Historical Exceedance Probability (USGS): 90-75% 75-50% 50-25% 25-10%

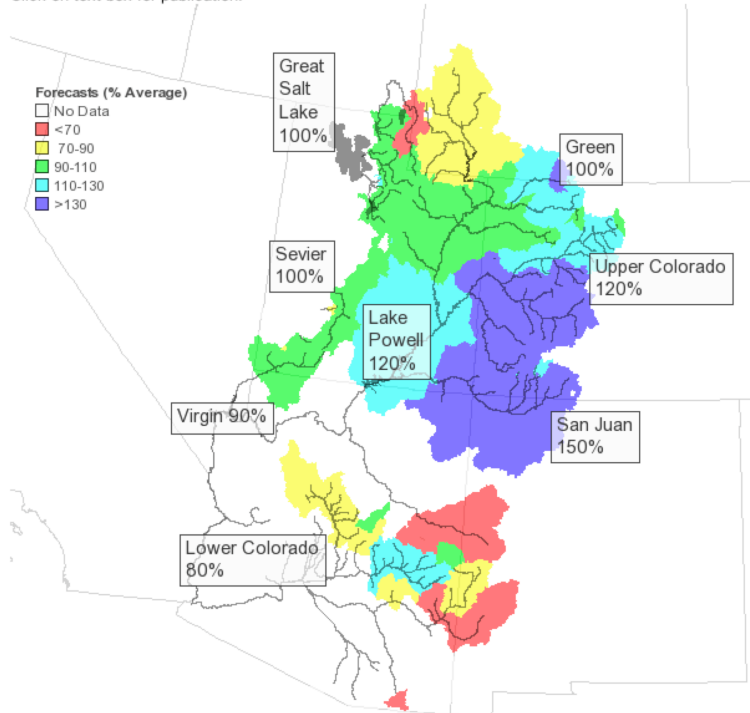
Observed=QRIRGZZ, Simulated=QRIPAZZ, Forecast=QRIFEZZ H (01/21, 12:00)
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lat: 35.59 lng: -113.58, 7
 Goto the [Old Map](#) or [Give Feedback](#) on New Map.

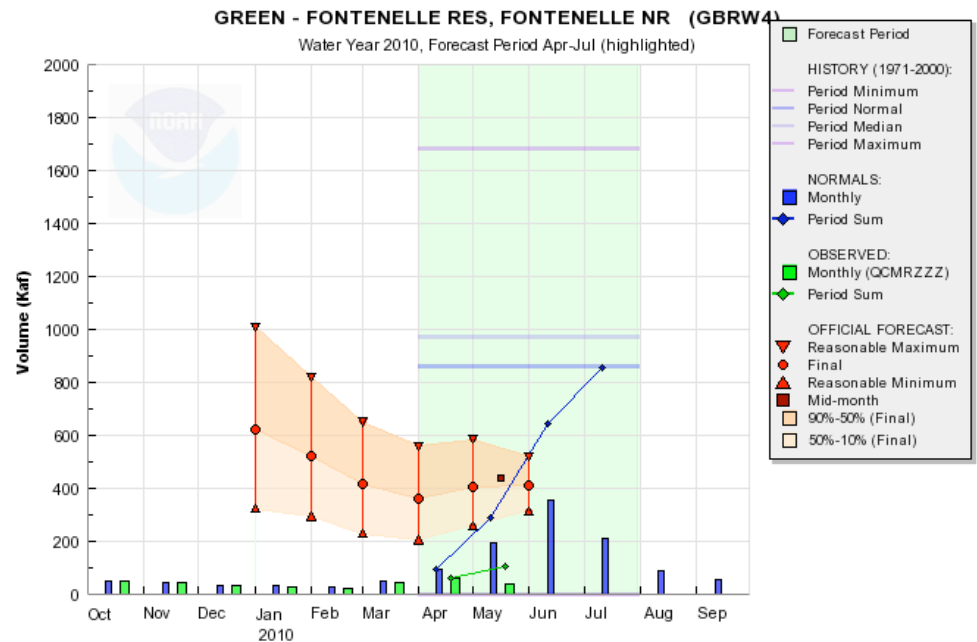
Water Supply

Water Supply Outlook, April 1, 2008

Click on text box for publication.



Monthly water supply forecasts generated January – June for seasonal volumes during spring/summer snow melt seasons





CBRFC Staff

Michelle Schmidt

Kevin Werner

Andy Wood

Craig Peterson

Brenda Alcorn

Greg Smith

Bill Reed

Cass Goodman

John Lhotak

Brent Bernard

Tracy Cox

Ashley Nielson

Mike Hobbins

Valerie Offutt

VACANT Hydrologist

Hydrologist In Charge

Service Coordination Hydrologist

Development and Operations Hydrologist

Calibrations, Operations, etc

Upper Colorado Basin, NWSRFS and database

Lower Colorado Basin, water supply

Dam break program, Diversity, Safety

IT

CHPS, HEFS, and GFE

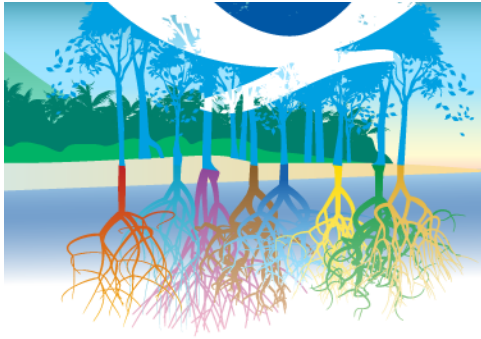
Great Basin, GIS

Gunnison/San Juan Basin and MPE

Green River Basin, Verification

CPC/OHD/CBRFC post-doc

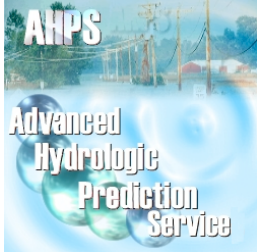
Administrative and Support Assistant



Introductions

Please share your most critical forecast challenge(s) and what existing or future toolset would most effectively address it.

NOAA/NWS Programs



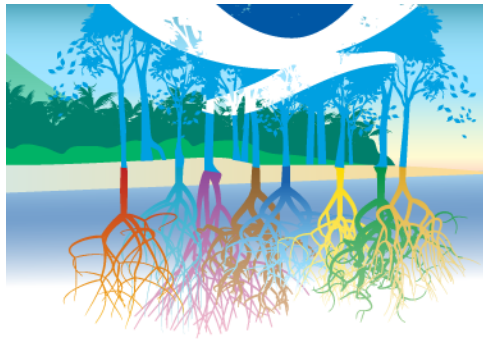
AHPS initiative has and is funding NWS hydrologic science and service developments. AHPS will wind down over the next few years

NOAA is increasingly prioritizing water resources in its strategic planning and funding initiatives.

Examples:

- Integrated Water Resources Science and Services
- National Water Science Center slated for University of Alabama
- National Climate Service in the works





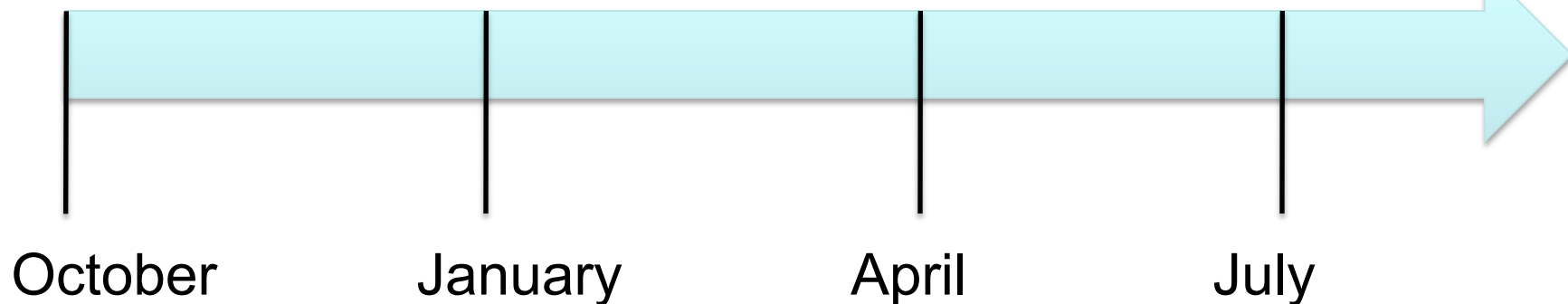
Typical CBRFC annual operations

Development work (focus in summer / fall)

Melt season

Water supply forecast season

Monsoon season





CBRFC 2010 Development Plan

Community Hydrology Prediction System

Improve daily operations:

- ✔ Develop tools to issue forecasts quicker
- ✔ Post-mortem study on June 2010 event

Water Supply:

- ✔ peak flow re-analysis
- ✔ Improvements to weekly ESP web display
- ✔ Study to relate snow and runoff for small basins
- ✔ Revamp pub

Dam failure program improvements

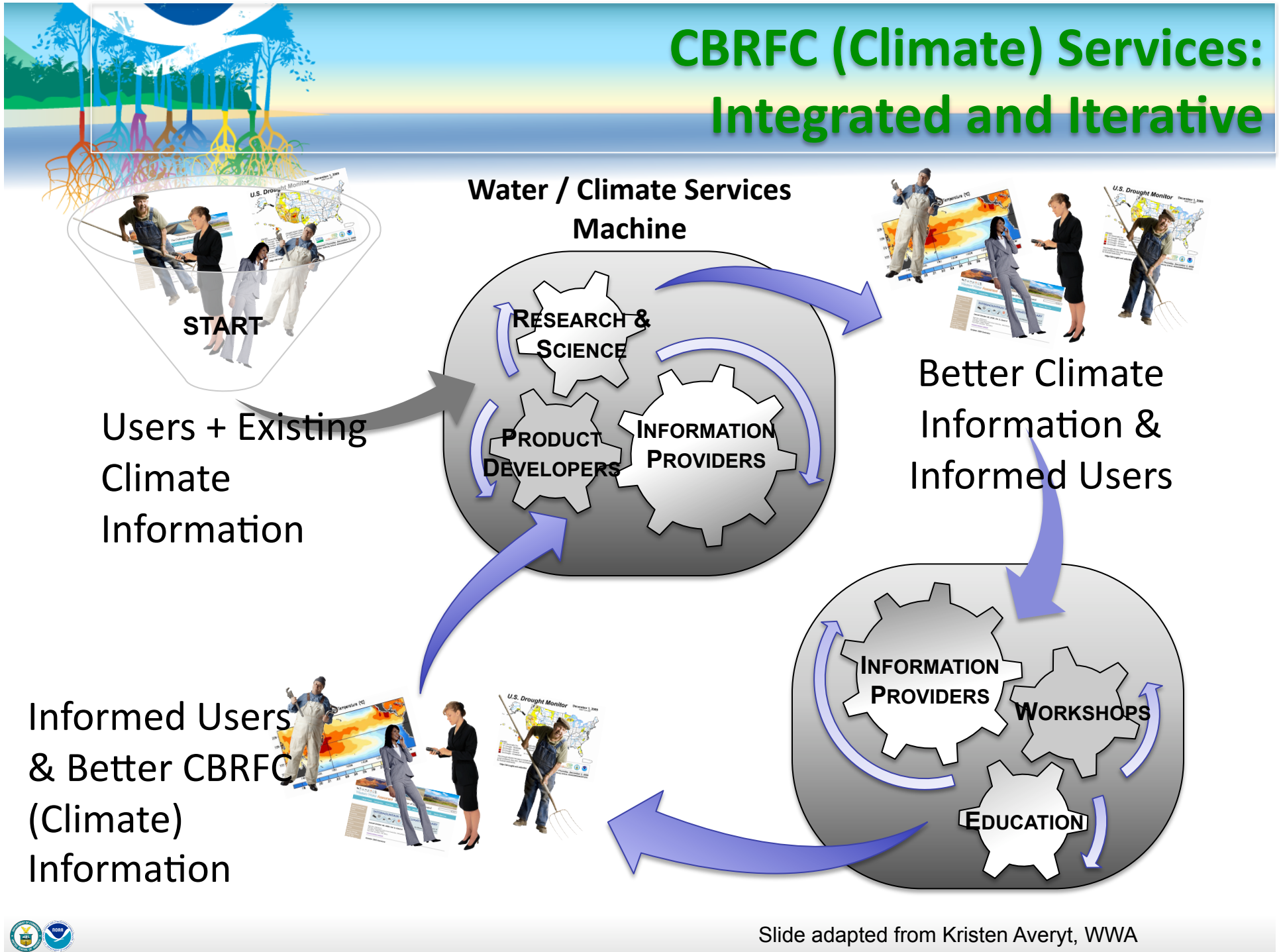
Outreach / Decision Support

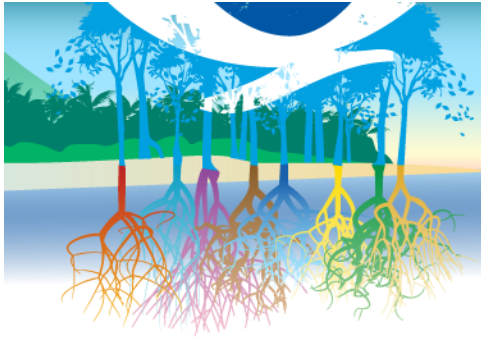
Improve web services

- ✔ Web speed

Calibrations

CBRFC (Climate) Services: Integrated and Iterative





We need your input!

- ☑ Our mission mandates us to provide information and predictions that “meet our Nation’s ... needs.”
- ☑ We want to ensure we’re providing sound science AND relevant services