

Colorado Basin River Forecast Center Stakeholder Forum

Welcome to the Colorado Basin RFC

Logistics & Introductions

Office layout

Breaks

Lunch (please fill out lunch order early)

Tuesday evening at Squatters

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Welcome to the Colorado Basin RFC

Introductions

Name

Agency

What you hope to get out of this meeting

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Overview of Meeting and Goals

Address responses to the questionnaire

Improve our understanding of your needs and operations

Improve your understanding of our abilities and services

Asking the proper questions to help the CBRFC:

- Identify where to focus future development activities

- Identify the best products and delivery method

- Identify where we can best improve our services

Opportunities:

- Meet with staff members

- View our operational procedures & model interaction

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Overview of Meeting and Goals Agenda

- Overview of Meeting and Goals
- Summary: recent changes and roadmap
- CBRFC Model Review
- CBRFC Product Review
- Forecast Product Dissemination/Accessibility
- Verification
- Customer Survey Results
- Stakeholder Presentations
- New Technologies / Wrap-Up

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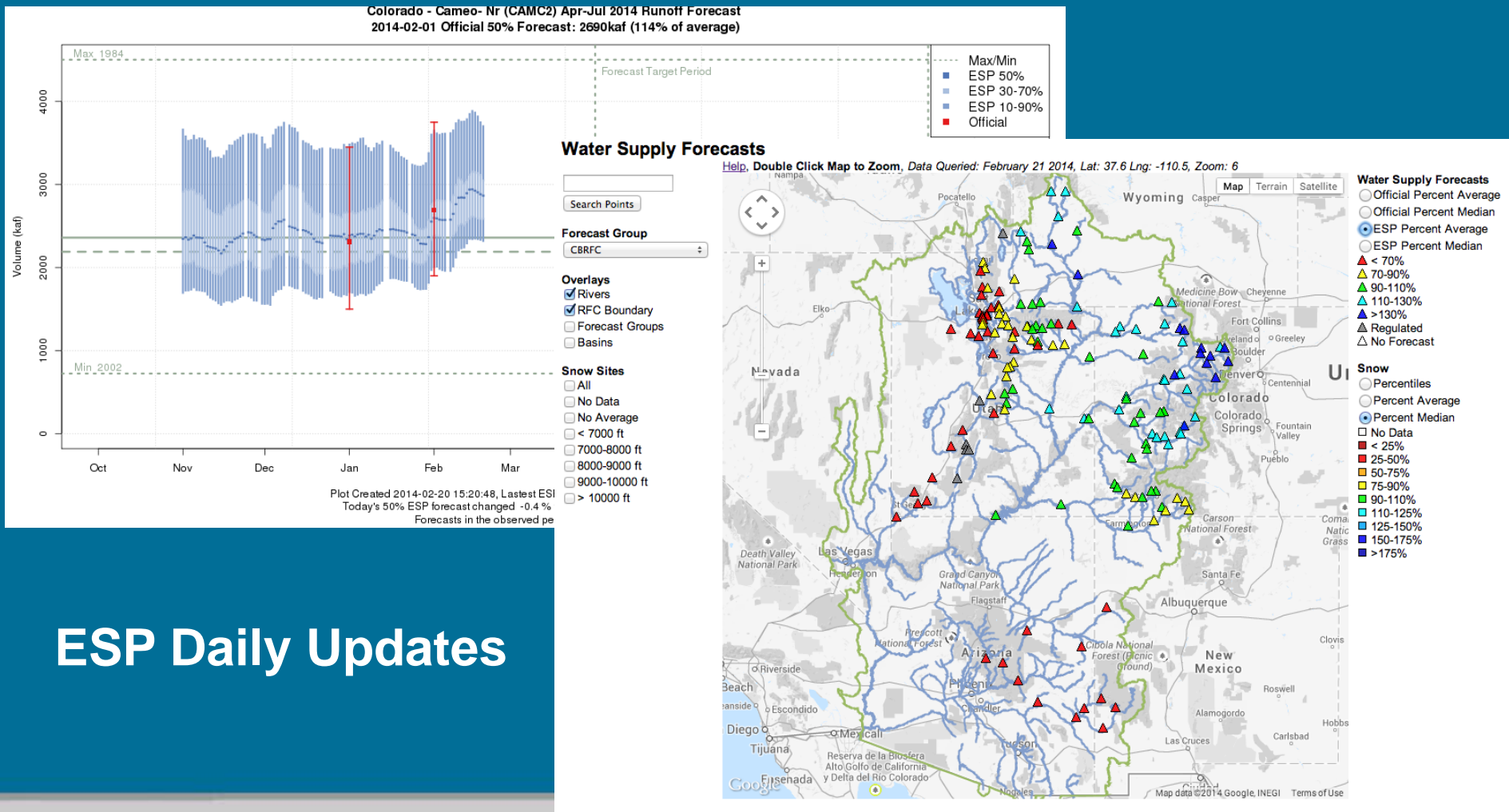
Overview of Meeting and Goals Shaping the Agenda

Summary of comments from questionnaire:

- Discuss the methods used to generate forecasts
- Soil moisture, precipitation impacts in the model
- Discuss new products (Daily ESP, etc.)
- Verification statistics availability
- Website changes, simplification, consistency
- How are others using forecasts (stakeholder presentations)
- Update on new technologies / forecast tools

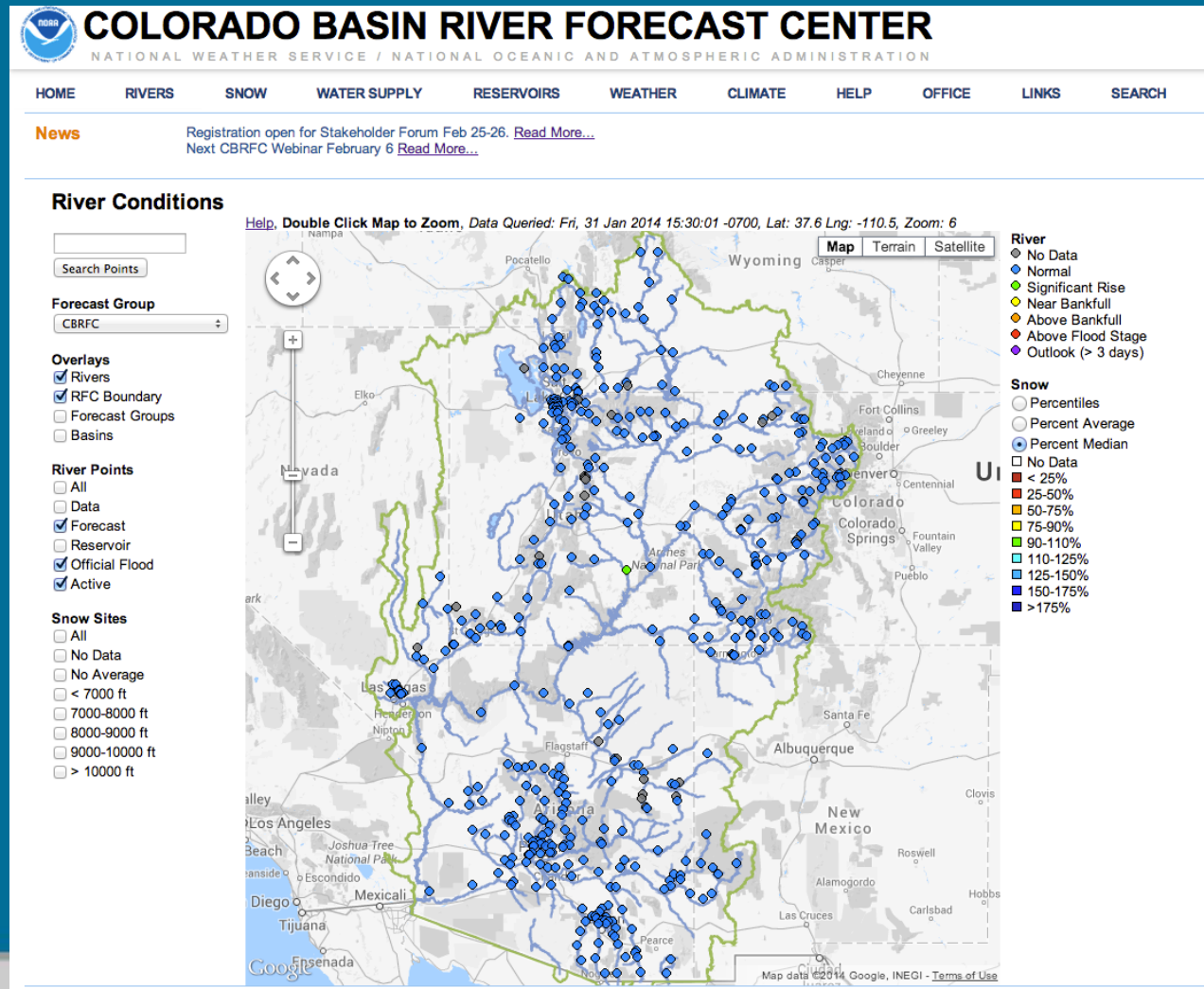
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Summary of product and web page changes



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Summary of product and web page changes



Web Page
Changes:
Google map
Search
Easy zoom
Reorganized header
Still lots to do....

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Roadmap: Incorporating New Science and Improving Services

Development work done through:

- Collaborations
- National Resources
- Local resources

Main goals are to meet stakeholder needs and improve our forecasts and services.

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Roadmap: Incorporating New Science and Improving
Services

Collaborations - Goals:

1. Improve CBRFC forecast skill for water supply and snow melt through focused work on areas of our forecast process that have been shown to be deficient (e.g. Werner and Yeager, 2013). These include:
 - Snow modeling
 - Incorporating ensemble weather and climate forecasts
2. Improve decision support including connectivity with reservoir decision support systems

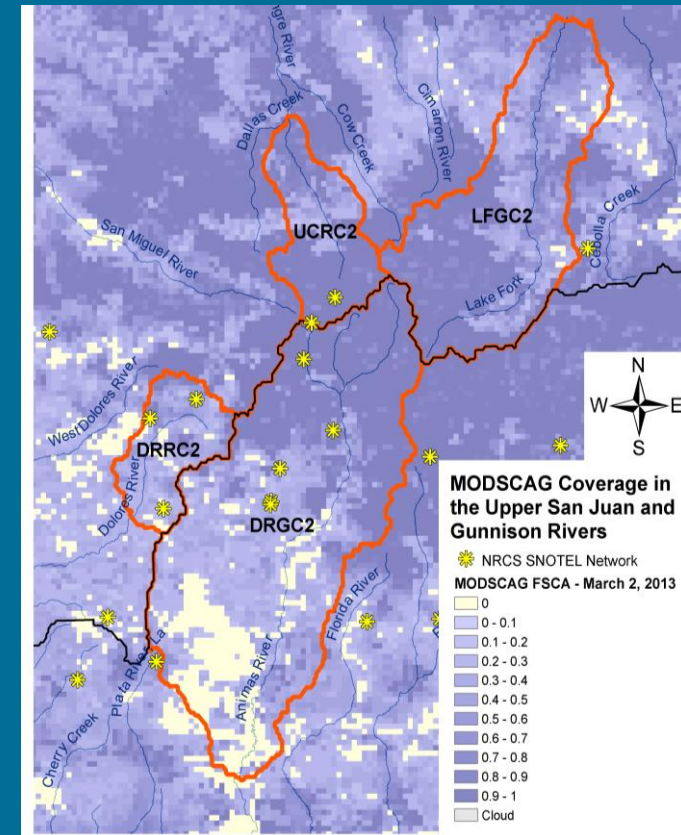
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Incorporating New Science - Collaborations

NASA JPL

Remote sensed snow information (MODIS)

Investigate how remote sensed
gridded snow covered area and
snow contamination can be used to
improve our forecasts



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Incorporating New Science - Collaborations

Western Water Assessment (WWA) –

- Impacts of dust on snow and beetle kill on forecast water supply
- Analysis of Information Use by Stakeholders of the CBRFC

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Incorporating New Science - Collaborations

Utah State University – Dr Tarboton

Evaluate Utah Energy Balance Snow Model within
CHPS to improve streamflow prediction

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Incorporating New Science - Collaborations

University of Massachusetts – SARP funded

Integrating Climate Forecasts and Reforecasts into Decision Making – Demonstrate potential usefulness of climate forecasts for Public utility planning and create an appropriate framework for their applications.

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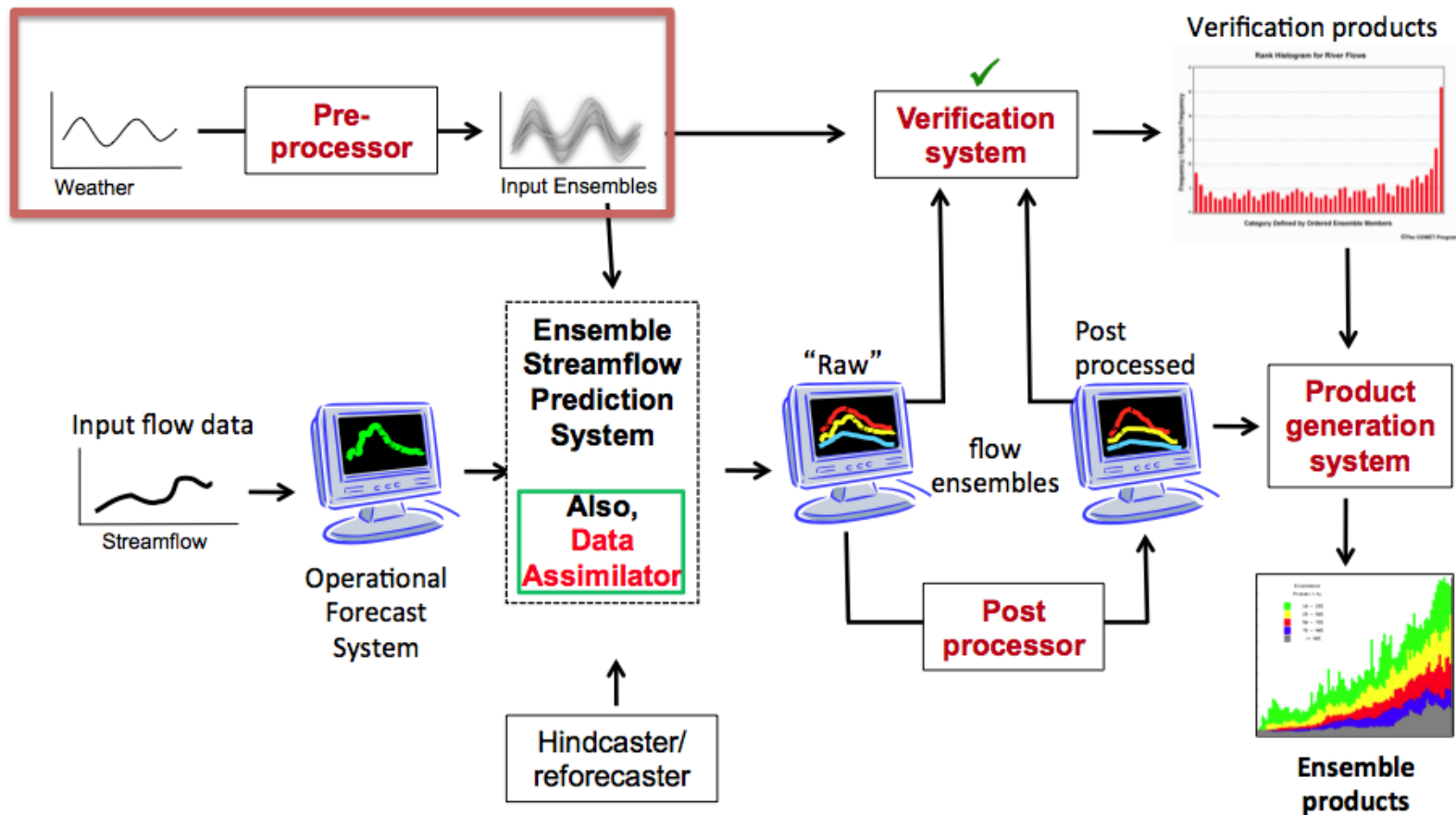
Incorporating New Science – NWS Efforts

Hydrologic Ensemble Forecast System, HEFS

Provides short to long term probabilistic forecasts by incorporating climate and weather forecast information.

CBRFC is one of 5 test sites nationwide.

An ESP Upgrade: The NWS Hydrologic Ensemble Forecast Service (HEFS)



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Incorporating New Science and Improving Services – CBRFC local efforts

Web page improvements

New products, new ways to display information and
forecasts

*****Based on your feedback*****

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Questions To Consider

What are 2-3 key products and services you wish you had but don't from the CBRFC ?

Where would you like to see CBRFC invest its development and operational energies ?

What key upcoming decisions points do you have that you would like the CBRFC to be aware of ?