

# The Western Consortium for Watershed Analysis, Visualization and Exploration (WC-WAVE)

Dr. Gayle Dana, Nevada EPSCoR (Lead PI); Dr. William Michener, New Mexico EPSCoR (Co-PI); Dr. Peter Goodwin, Idaho EPSCoR (Co-PI)

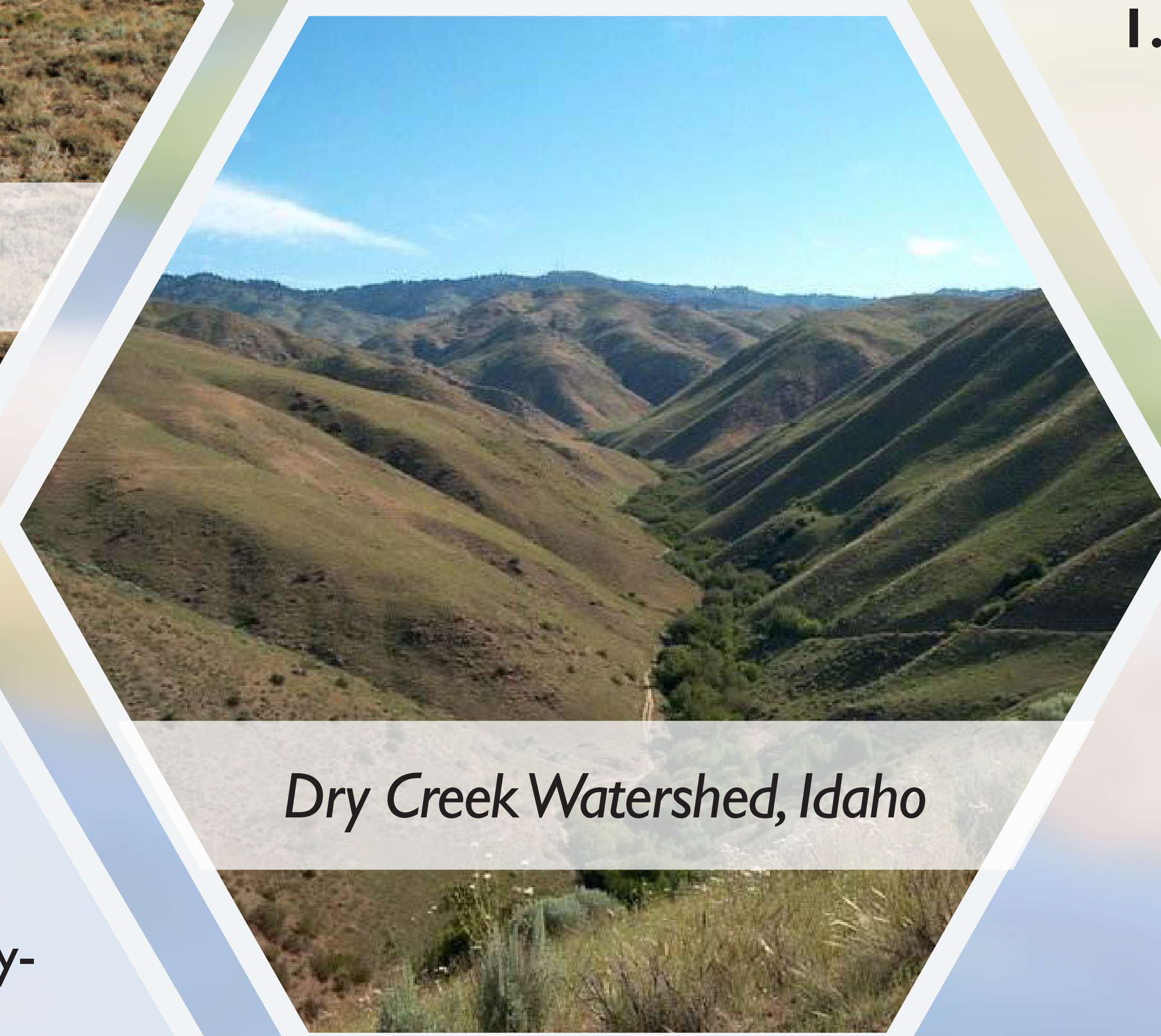
## Primary WC-WAVE Research Institutions



Jemez Watershed, New Mexico



Snake Range Watershed, Nevada



Dry Creek Watershed, Idaho

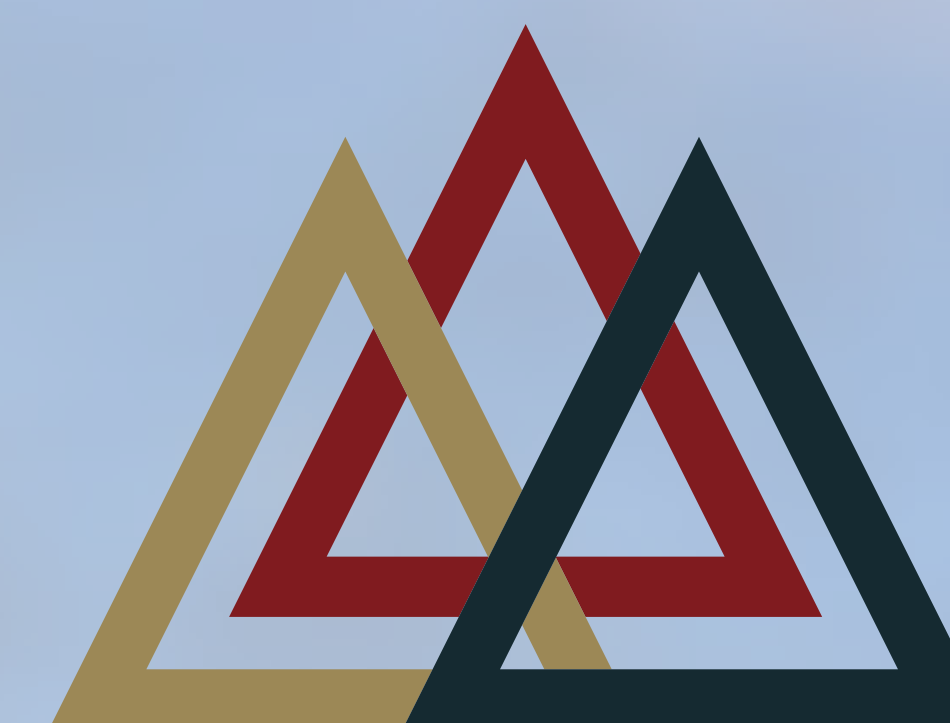
In order to address the challenge of understanding hydrologic change in high-elevation watersheds, the EPSCoR jurisdictions of Idaho, Nevada, and New Mexico have collaborated to create the Western Consortium for Watershed Analysis, Visualization and Exploration (WC-WAVE). The WC-WAVE grant will enable researchers to create better models to understand water resource processes at high elevations that bring water to communities, and how climate change impacts water storage, flow moderation and water quality.

## WC-WAVE has three integrated components:

- 1. Watershed Science:** Advance understanding of hydrologic interactions and their impact on ecosystem services using a virtual watershed (VW) framework;
- 2. Visualization & Data CI:** Accelerate collaborative, interdisciplinary watershed research & discovery through innovative visualization environments and through streamlined data management, discovery, and access;
- 3. Workforce Development & Education:** Engage university faculty & graduate students in interdisciplinary team-based watershed research, and broaden undergraduate participation in STEM through modeling and visualization.

## Impacts of WC-WAVE beyond the award:

- Collaboration of interdisciplinary teams that address complex scientific issues;
- Incorporation of data and models into open-community-based data centers and code repositories;
- New discoveries in watershed science resulting from integrating experimental and observed data, models, and visualization capabilities; and
- Preparation of undergraduates for futures in STEM.



# WC-WAVE

IDAHO EPSCoR • NEVADA EPSCoR • NEW MEXICO EPSCoR