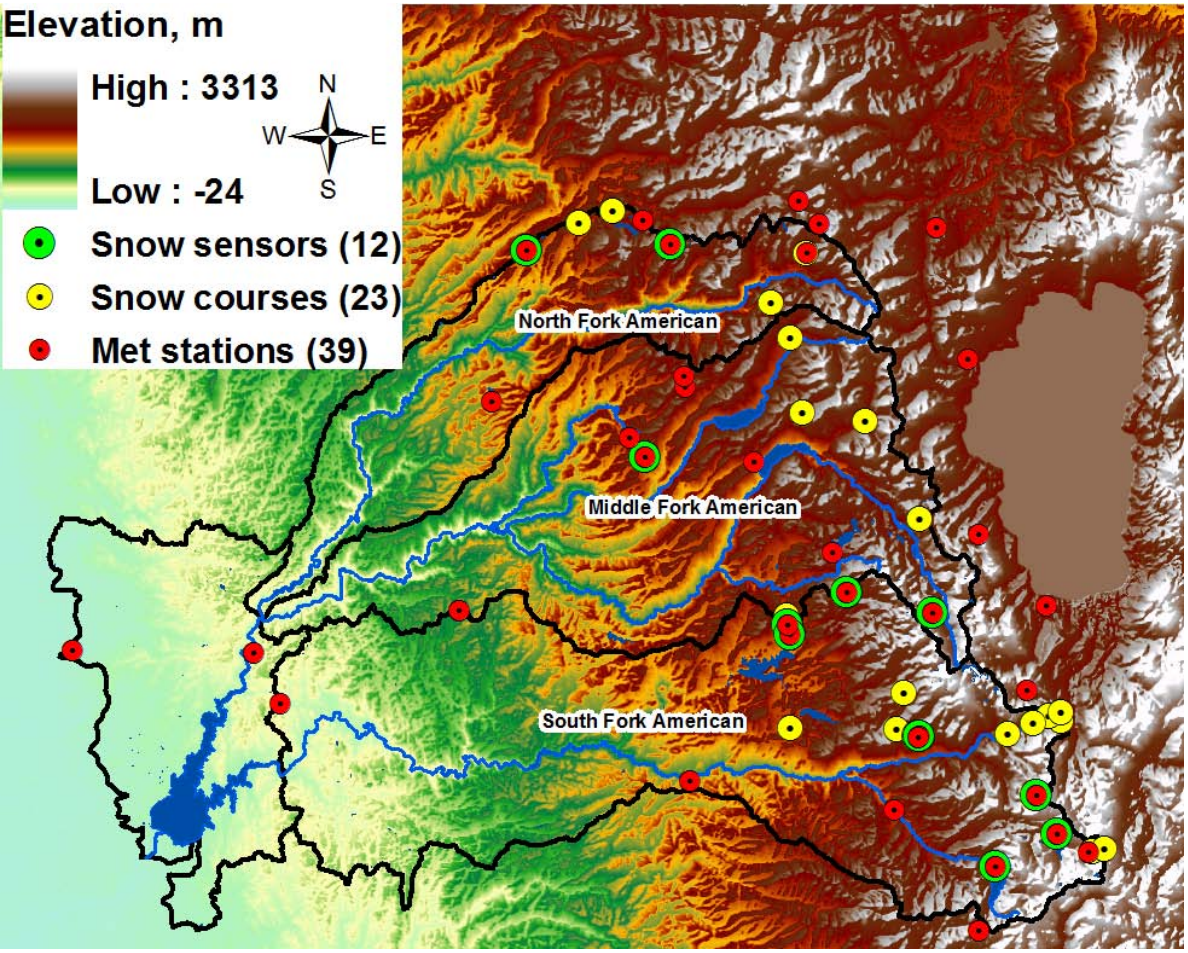
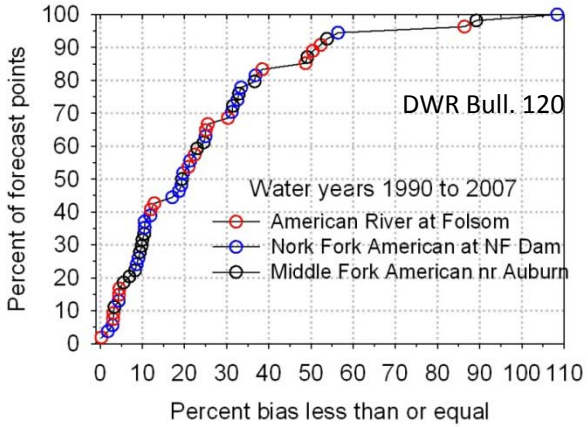
H2O v2. American River prototype



Value of better information for decision making w/ billion-dollar implications



Improve water supply outlooks.: Seasonal forecasts are within ±20% half of the time. Physical measurements will help most in years that depart from the long-term mean.

Other interests: drought planning, flood forecasting, hydropower, reservoir operations, forest management

Scope

Establishing a network of instrument clusters to measure snow, snowmelt, rainfall, energy balance and soil moisture throughout the river basin. Network will build on existing infrastructure.

Blending ground measurements with satellite snow-covered area data to estimate basin-wide snow water content and more accurately predict runoff.

Generating real-time data that will reduce key uncertainties, make snowmelt runoff forecasts more reliable, and inform water resource management decision making.

Products

Weekly, distributed snow covered area and snowpack water content estimates

Weekly snowmelt and runoff forecasts

Cyberinfrastructure for information management and delivery

Decision-support tools using the new information

Contact: Roger Bales, SNRI, UC Merced