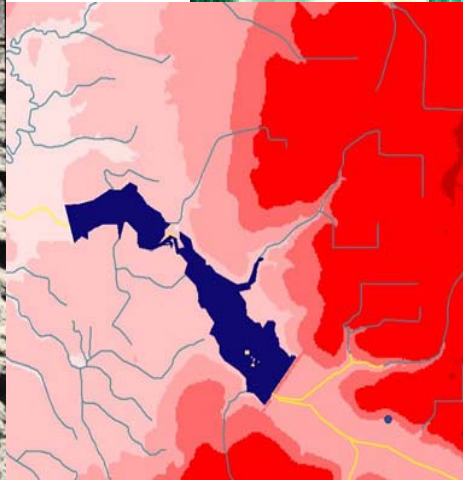
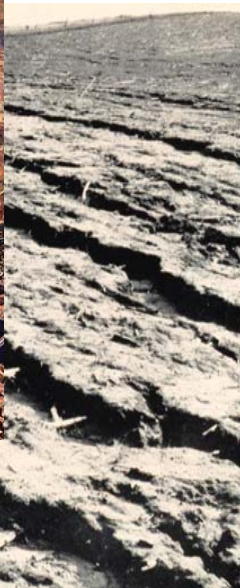
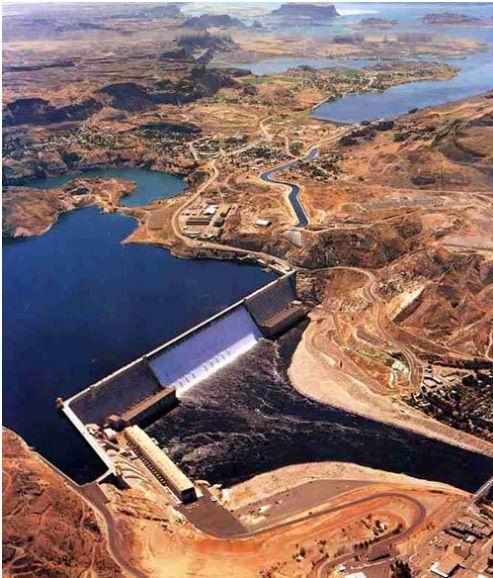




Hydrologic Forecasting for Critical Water Resource Decisions



Meeting Human Demands
Supporting Ecosystem Management
Providing Opportunities for Recreation
Enhancing River Commerce
Increasing Agricultural Production



Gary Carter

NOAA's Hydrology Program Manager

November 15, 2005



Water Resources Forecasts

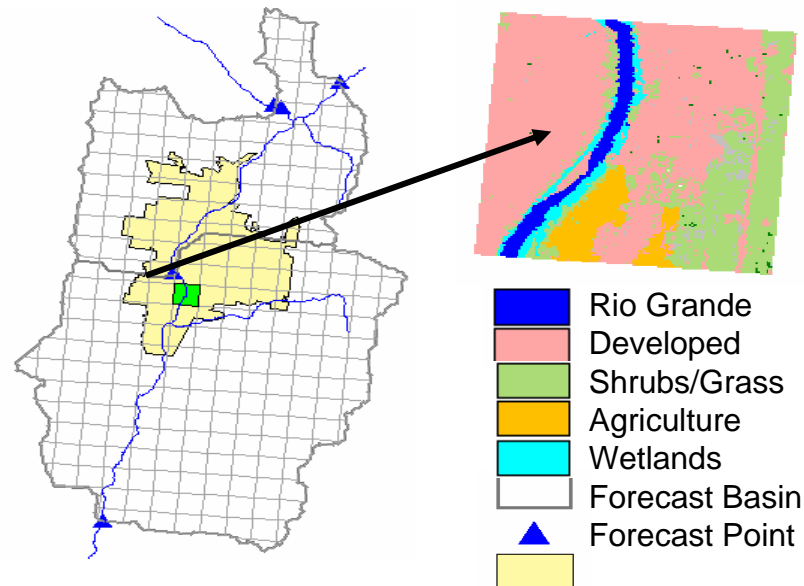
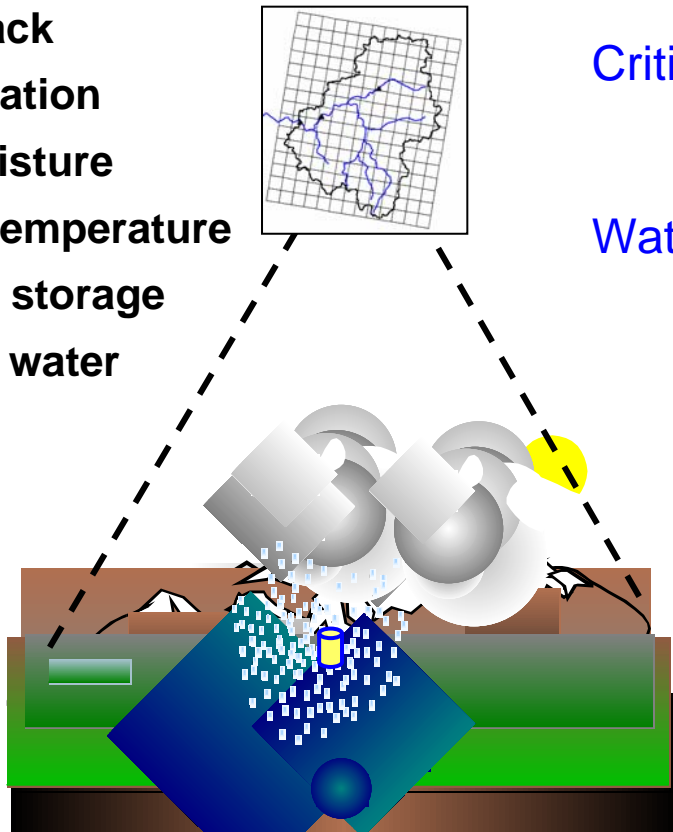


- River flow
- Snowpack
- Precipitation
- Soil moisture
- Water Temperature
- Surface storage
- Ground water

Flood warnings for local communities

Critical hydrologic information for watersheds

Water supply and soil condition forecasts for drought risk management

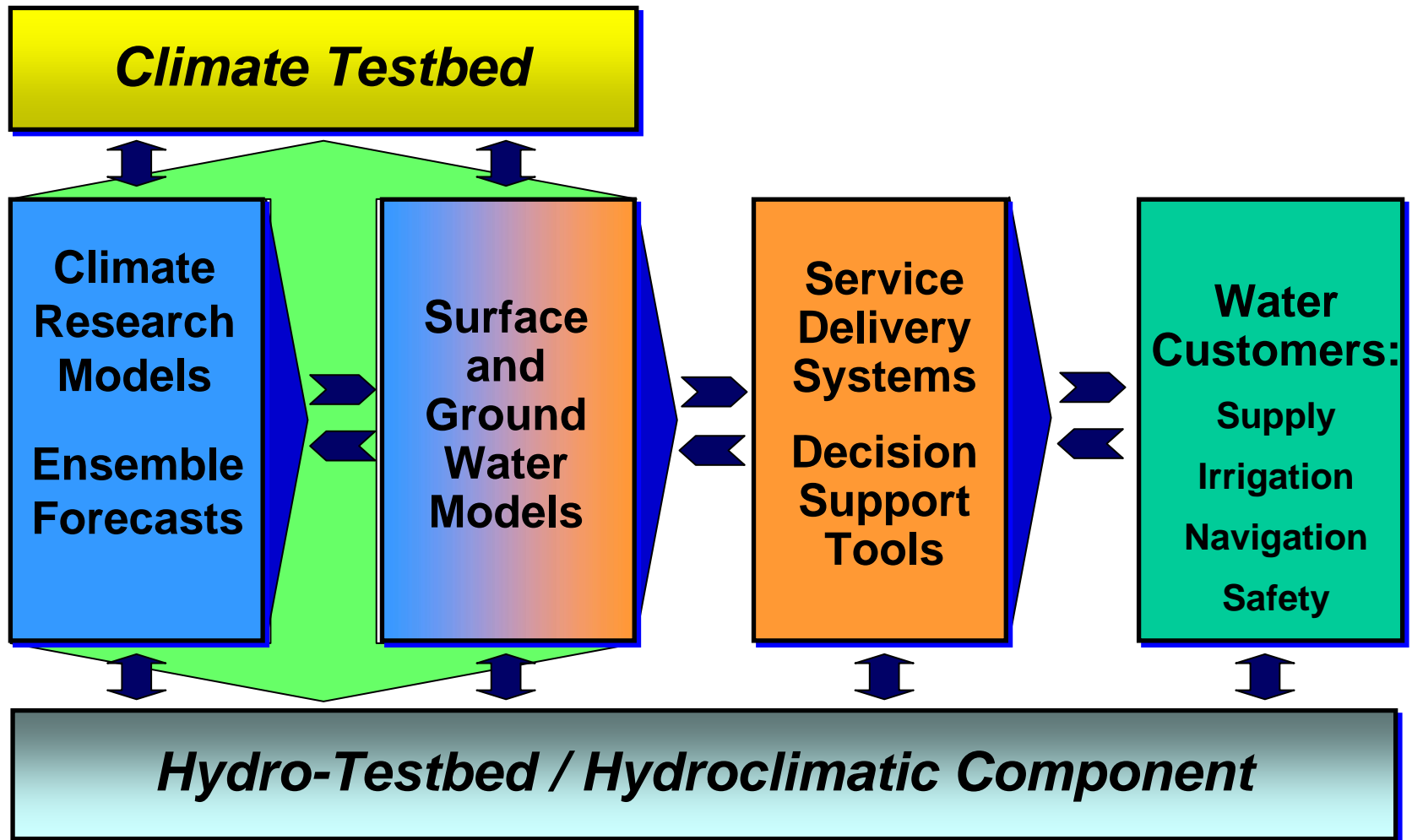


Working Together:

Federal, Tribal, State, and Local Agencies
Private Sector and Academia



Vision for Climate-Water Research-to-Operations





Hydrologic Modeling



Meteorological inputs

Physical, Institutional,
& Legal Features

Topography

Vegetation, land use

Lakes, glaciers

Dams, locks, levees

Reservoir operations

Soil properties

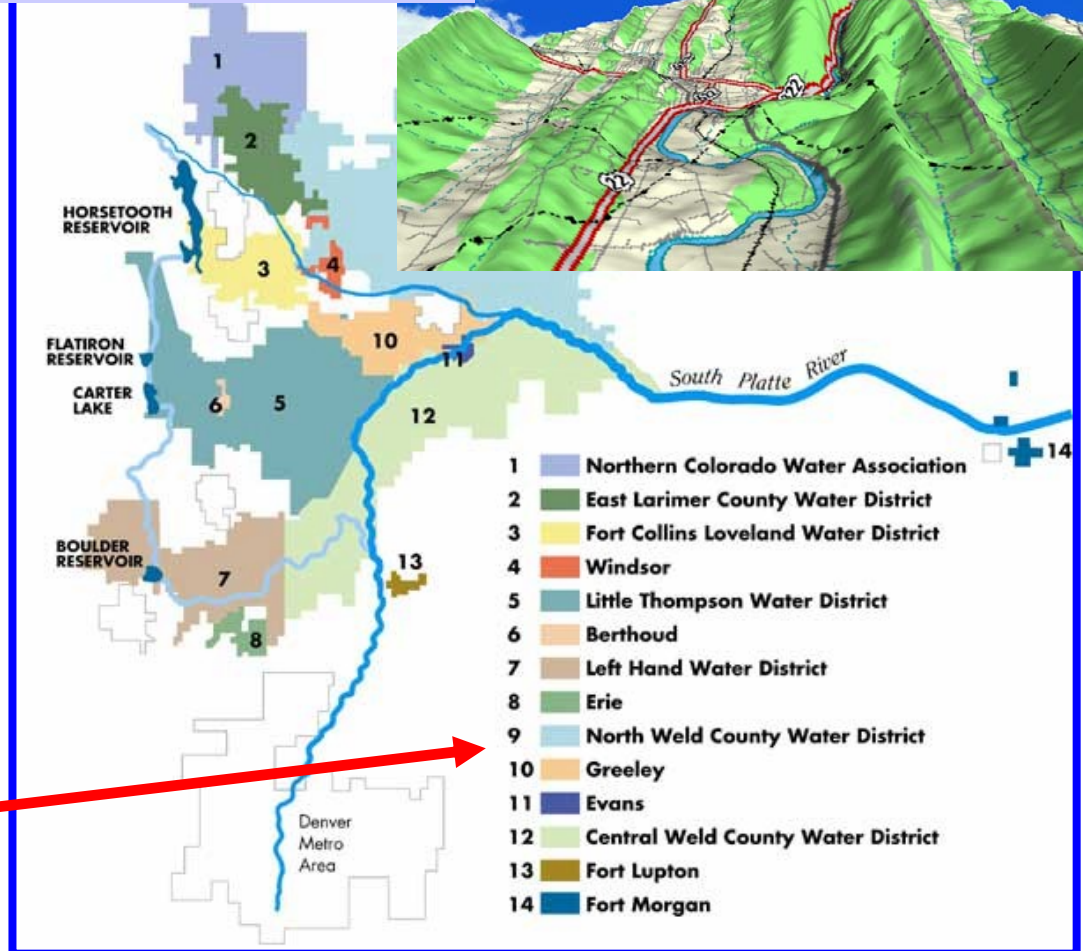
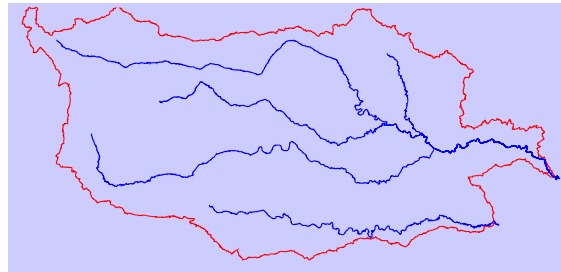
Irrigation, drains

River channel shape

River depth/flow

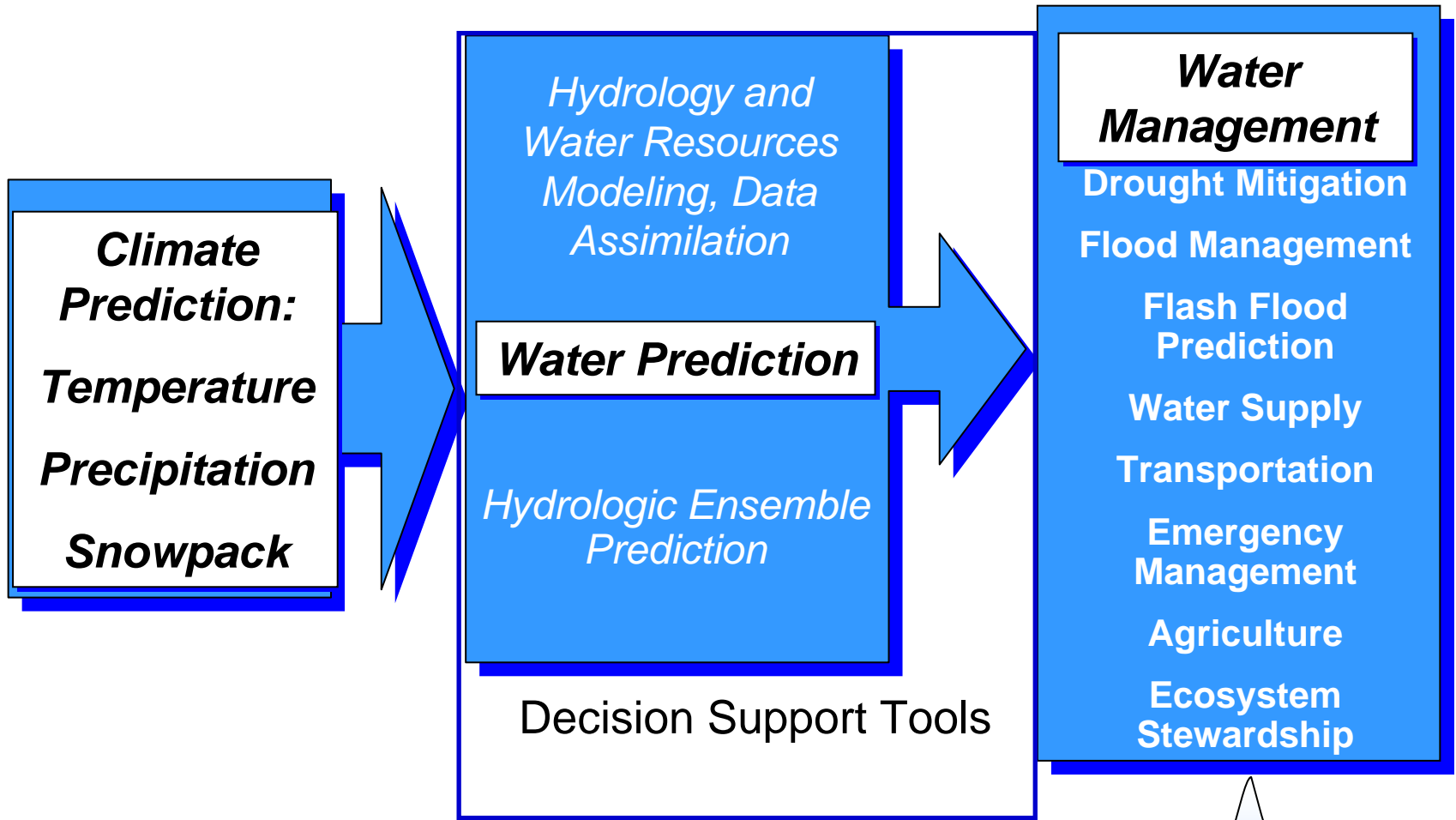
Water rights

Ground water





From Climate Predictions to Water Management



Water Predictions
for
Life Decisions

