
The NRCS Water Supply Forecasting Operations

Issue Area **Snow, Water and Climate Products for Natural Resource Management**

What's the Challenge?

- Providing timely and accurate water supply forecasts for the Western United States, utilizing the information from the SNOTEL system, NOAA and National Weather Service data sets.
- Timely dissemination of public information utilizing Internet-based tools and technologies.
- Education of Field Office personnel in an understanding of these products, and how to use them in their daily operations.
- Coordinate all forecasting analysis with the National Weather Services (NWS) to deliver the best possible products to the water user community.
- Mature the art and science of hydrologic modeling and water supply forecasting.

What Are We Doing?

- Continual updating and re-analysis of watershed and basin conditions throughout the winter and spring months to provide forewarning of snowmelt runoff conditions.
- Intergrating Internet accessible datasets into the analysis process on a more real-time basis.
- Conducting training for NRCS Water Supply Specialists (in the 13 Western states) and others who will be using and interpreting this information.
- Supporting the development of spatial hydrologic modelling techniques in all NRCS resource models.
- Conduct technical exchanges with NWS River Forecast Center personnel to insure technical excellence in water supply operations.

Status

- Public release of an expanded menu of water supply products via the NWCC Home Page during 1998 forecast season.
- Integration of El Nino conditions into the 1998 operational water supply forecasts, including advanced forecasts in the fall of 1997.
- Cooperative efforts with ARS, USGS and EPA on spatial hydrologic modelling.
- Development of requirements for an advanced water supply forecasting information system, drawing on GIS, spatial analysis and Internet-based tools and techniques.
- Placement of a Water Supply and Climate Liasion in NHQ during FY98 to promote and coordinate the activities of the NWCC within NRCS and cooperating USDA Agencies.

What's Left?

- Expansion of water supply products and services over the Internet.
- Development of integrated information system for all Air, Water, and Climate datasets at the NWCC.
- Development of advanced spatial hydrologic models for operational water supply forecasting.
- Exploration of delivering NRCS lead snow survey and water supply forecasting services into the upper mid-west and northeast US.