Colorado's Decision Support Systems (CDSS) was

developed to provide credible information so water users can make timely decisions regarding historical and future management of Colorado's water resources.

CDSS is data-centered around a central database (HydroBase) containing real-time and administrative water resources data.

CDSS tools have been developed to access historic and current data stored in HydroBase and include:

- StateCU Consumptive Uses (CU) and Losses modeling and reporting
- StateMod Water Resources planning model
- StateView Interface with userfriendly query options
- GIS Coverages

The combined CDSS products provide information regarding historical and current water management and tools to investigate future changes in water use.

HydroBase, GIS Coverages, and planning tools can be viewed and accessed directly from the CDSS website without the need for special software.

http://cdss.state.co.us



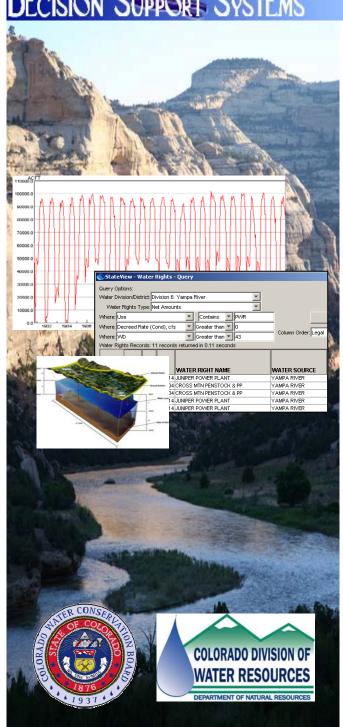


Colorado's Decision Support Systems

Colorado Water Conservation Board 1313 Sherman Street, Room 721 Denver, CO 80203

Phone: 303-866-3441 Fax: 303-866-4474 http://cdss.state.co.us

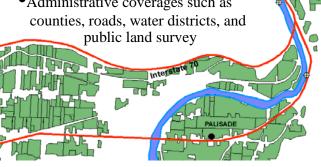
COLORADO'S DECISION SUPPORT SYSTEMS



GIS Coverages

- •Irrigated acreage coverages with water supply and crop types
- •Physical coverages such as hydrology, stream gages, topography, reservoirs, diversions, and soil information

•Administrative coverages such as counties, roads, water districts, and



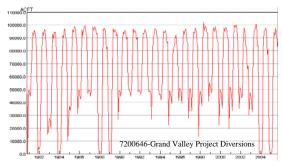
StateCU - CU & Losses **Report and Model**



- Historical consumptive use by use category reported every five years
- Monthly crop CU by basin, water district, and ditch
- Shortages and efficiency information

StateCU can address questions about crop acreage, demands, shortages, and delivery efficiencies from basin to ditch level.

HydroBase



- •Real-time streamflow and call data
- •Historical data: streamflows, storage, diversions, and climate data
- •Water rights information: appropriation dates, absolute and conditional decreed rates, uses, and transactions



A Few of the Ouestions CDSS Can Answer

- Where is flow available for development in the San Juan basin? How much?
- What is the average annual crop consumptive use in the Upper Colorado basin senior and junior to Shoshone's junior right?
- What conditional rights for power generation exist in the Yampa Basin?

StateMod - Water Resources **Planning Model**

- •Represents 100% of basin CU and water rights
- •Operates based on prior appropriation doctrine
- •Historical depletions by basin, water district, and river reach
- •Detailed project operations
- Available flow for future development
- Model to analyze proposed projects, changes in water use

Elkhead Creek	
	Elkhead Ck nr Elkhead
0	440699
0	440700
	Elkhead Reservoir
0	440770
0	440763
0	440724
H_0	44_ADY12

Portion of a model diagram for Elkhead Creek in the Yampa River Basin

Basin Information Report

- •Basin water resource development
- •Water rights administration such as Compact requirements specific to a Basin.

Date	Description
1939	Stillwater Reservoir
1956	Fish Creek Reservoir
1963	Craig Station Ditch and Pipeline
1965	Steamboat Lake
1968	Morrow Point Reservoir
1974	Elkhead Reservoir

- •Key diversion structures in the basin and water commissioner meeting notes
- Operations for reservoirs