
2 Introduction

Version 4.02.00, 2011-07-15

StateView and the Colorado Water Rights Administration Tool (CWRAT) are interactive data-viewing tools for the State of Colorado's HydroBase database. Both tools offer the same data viewing features; however, CWRAT additionally provides water administration tools, for use by State of Colorado water commissioners and others who play a role in daily water delivery. CWRAT differs in functionality from StateView only in that CWRAT provides an **Administration** menu.

Because most of the features of StateView and CWRAT are the same, much of the documentation for the two programs is shared. Where documentation is shared, the software is referred to as StateView/CWRAT. As much as possible, discussion of CWRAT-specific features is confined to **Chapter 5 – Administration Tools**.

StateView/CWRAT include the following useful features:

- Displays for real-time data from the State of Colorado's Satellite Monitoring System
- Displays for administrative data including water rights, structure information, and call chronology
- Displays for historical data including flow and diversion time series
- Tools to create, edit, and use WIS (water information sheets) to perform water accounting within a water district (CWRAT only)

The following chapters are available in this document:

Chapter 2 - Introduction provides background information about StateView, HydroBase, and other CDSS tools.

Chapter 3 – Getting Started provides an overview of the StateView/CWRAT interface features.

Chapter 4 – Viewing Data provides information about the primary data viewing features.

Chapter 5 – Administration Tools provides information about the administration features.

Chapter 6 – Tools Menu provides information about additional tools for data analysis and viewing.

Chapter 7 – Help Menu provides information about displaying StateView/CWRAT version information and viewing on-line documentation.

Chapter 8 - Examples of Use provides examples of how StateView/CWRAT is commonly used, including use of the map interface.

Chapter 9 - Troubleshooting provides information to resolve run-time problems.

The **Installation and Configuration Appendix** provides information about installing and configuring StateView/CWRAT.

The **Query Guidelines Appendix** provides information about using the query by example HydroBase views.

The **TSView Time Series Viewing Tools Appendix** provides a general reference for time series viewing features. These features are used throughout StateView/CWRAT.

The **GeoView Mapping Tools Appendix** provides a general reference for the GeoView map interface.

See also the self-paced training materials, which can be accessed using the **Help...View Training Materials** menu and are located in the *doc\Training* folder under the software installation.

2.1 The HydroBase Database

The State of Colorado's HydroBase database contains extensive data that are important for the management of water within Colorado, including:

- Station data and related time series, including climate and streamflow data
- Structure data, including headgates, reservoirs, well, and dams
- Diversion, well, and reservoir time series data
- Instream flow locations
- Irrigated lands, corresponding to spatial data layers that are also available in CDSS
- Water rights and well permits
- Administrative and real-time streamflow data used by State of Colorado staff
- Data to support models

StateView's primary purpose is to provide display features for HydroBase data, allowing users to query, view, export, and print data.

HydroBase, spatial data, and StateView can be obtained from the State of Colorado on a DVD and can be installed on a single computer or network. Spatial data layers enhance the query and display capabilities of StateView/CWRAT and if installed from the DVD will be available in the C:\CDSS\GIS folder. The data layers also are available from the CDSS website (<http://cdss.state.co.us>).

Whereas previously it may have been necessary to receive water-related data on diskette or review printed data records, most data can now be retrieved from HydroBase, using StateView. Because data are updated over time, HydroBase is updated one or more times per year. Data products (e.g., reports and graphs) will also change over time – a water rights tabulation report printed in 1997 is appropriate for a study done at that time; however, the report if printed today would be slightly different, reflecting new water rights and corrections to data in the database. To help account for changes over time, HydroBase is distributed with a date stamp. When comparing HydroBase contents and StateView/CWRAT output, it is important to take into consideration the database version.

Although efforts have been made to present data in understandable terms, some terminology is inherently technical and has historic basis. Refer to the **State of Colorado's Water Commissioner Manual**, HydroBase documentation, and other information for background information. Where appropriate, explanations are provided in this document. Many displays also contain "tool tips", which will display helpful information when the mouse is stationary over a component.

2.2 Using StateView/CWRAT with other CDSS Tools

StateView/CWRAT serves well as a general data-viewing tool and may therefore be the only CDSS tool that some users will ever need. It is designed for:

- HydroBase queries (i.e., finding data based on criteria)
- Selective viewing of data in tabular and detail views
- Export of data for other tools

However, StateView/CWRAT is not well suited for batch processing and analysis of data or preparing data for models such as the State of Colorado's consumptive use model (StateCU) or basin planning model (StateMod). StateView/CWRAT can support these efforts by helping users find specific information; however, other tools such as TSTool and StateDMI should be used to prepare data for models. In many cases, users will start with StateView/CWRAT to gain an understanding of the data in a basin and will then transition to other tools for modeling.

Additionally, the State of Colorado's Division of Water Resources (DWR) has developed a number of online data applications that are available at the CDSS website: <http://cdss.state.co.us>.

To facilitate the exchange of information between tools, a number of standards have been adopted in StateView/CWRAT:

- The general menu organization and software features are similar to other CDSS tools.
- The mapping tools and data formats used in StateView/CWRAT are the same as those used in other CDSS tools. Mapping tools are described in the **GeoView Mapping Tools Appendix**.
- The graphing tools and data formats used in StateView/CWRAT are the same as those used in other CDSS tools. Graphing tools are described in the **TSView Time Series Viewing Tools Appendix**.
- Tabular data display tools and formats used in StateView/CWRAT are the same as those used in other CDSS tools. Display tools are described further in **Chapter 3 – Getting Started**.
- The nomenclature specific to the State of Colorado's data has been implemented consistently, as much as possible, in various CDSS tools.

Consequently, it is possible to start using CDSS with only StateView/CWRAT and then transition to other tools.

This page is intentionally blank.