

Colorado Water Quality Monitoring Council

& Our Keystone Project, the Colorado Data Sharing Network (CDSN)

Karl A. Hermann

EPA Region 8, Water Quality Unit

Monitoring and Assessment Coordinator

CWQMC History

Council started in 2000

CDSN Project Began in 2004 with EPA and Colorado Grants

***Today – New Structure and Organization with over 70 people and 30 organizations involved
Government (Local, State, and Federal), NGOs and Volunteers,
Special Districts, and Consultants***

CWQMC Organization

***Non-Profit Organization supported by
Participant Contributions and Grant Funding***

***EPA and Colorado Water Quality Control
Division Grants***

***Regional Geographic Initiative, 319, and 106
Monitoring Initiative Grants***

New Charter

Structure, Goals, Work plan, Costs, Funding

- ***Leadership Team***

Accountability, Direction, recruitment, funding, etc.

- ***Outreach***

Swaps, data calls, needs Assessments, webpage, presentations, training

- ***Mentoring***

data sets / gaps, analyses, interpretation, methods, monitoring designs, methods, data management, regulations, etc.

- ***Technical Advisory***

CDSN system updates, tracking, operation, National STORET uploads, etc.

CWQMC Website

<http://cwqmc.coloradowatershed.org>



Home | **About the Council** | **Meetings** | **Projects** | **Data Sharing Project** | **Data Swaps/Trainings** | **Membership** | **Other Links**

WHAT'S NEW

- Upcoming Meetings
- Outreach Strategy
- CO Data Sharing Network Tutorial
- GET INVOLVED with the CO Data Sharing Project!
- Register for upcoming DSN trainings

EVENTS

- Check out upcoming training dates

Note: Certain documents can only be viewed with Adobe Acrobat Reader which may be downloaded for free. Once installed, Acrobat Reader will allow you to view these documents or print them

Home

Purpose

The *Colorado Water Quality Monitoring Council* will serve as a statewide collaborative body, open to all, to help achieve effective collection, analysis and dissemination of water quality data, and monitoring information. The Council seeks to improve the linkage between information needs of policy and decision makers with efforts to collect and assess data. The Council promotes effective monitoring programs that include the components of goal identification, data collection, analysis, storage, retrieval, and reporting/dissemination of information. The Council shall address the full range of water quality information, including chemical, biological, and physical characteristics of surface and ground waters. The Council is a non-voting body that operates through consensus.

- Provide a forum for effective communication, cooperation, collaboration, and documentation among individuals and organizations involved in monitoring.
- Promote the development of collaborative and cost effective watershed-based monitoring strategies.
- Promote the use of quality assurance procedures and protocols related to sample collection, analytical methods, assessment, data management, and dissemination
- Provide strategic direction for a statewide structure for the acquisition, analysis, archiving, and dissemination of water-quality information

For more information about CWQMC contact:

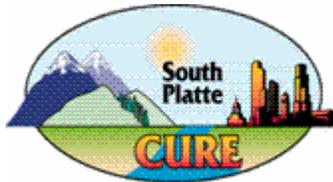
Vic Lucero, Co-Chair
vic.lucero@cityofthornton.net

Barb Horn , Co-Chair
barb.horn@state.co.us

What is the CDSN?

Colorado Data Sharing Network

- **Water quality data management system**
- **Web-based map**
- **Outreach**
- **Sustainable**
- **Useful**



Colorado Department
of Public Health
and Environment

CDSN will benefit Colorado by providing...

- *Easy & Comprehensive data compilation and access*
- *Encouraging vertical and horizontal communication and collaboration*
 - *Monitoring Coordination*
- *Measuring results of restoration efforts*
 - *Effectiveness Determination*
- *Watershed Management, Planning, and Assessment*
 - *Colorado Round Tables*
 - *208 Planning*
 - *Water Quality Control Commission (WQCC) Rulemakings (Standards and 303(d) Listings)*
 - *NPS projects*

CDSN Deliverables

- ***Watershed SWAPS***
 - ***(Data Exchanges and Basin Coordination)***
- ***Water Monitoring Directory***
- ***Sustainability Plan***
- ***Minimum Data Elements***
- ***Data Templates and Formatting Appendices***
- ***Tutorials & Guidance Documents***
- ***Statewide Database***
- ***Interactive Map***

Core CDSN Criteria

- *Use existing applications*
- *Relatively Cheap & Easy Data Management*
- *Everyone using the same system*
- *STORET/WQX Compatible*
- *GIS (map) component*
- *Gap / Duplicate Data*
- *Training / Outreach*
- *Long-term support*
- *Data security*



SWAPS

- *Place-based (Basin) collaboration*
- *Who, what, where, when, why of monitoring*
- *Water monitoring directory*
- *Free Lunch*



CDSN Technical Structure



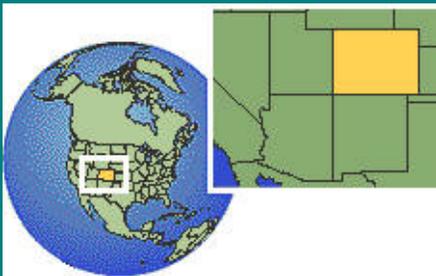
WebSIM



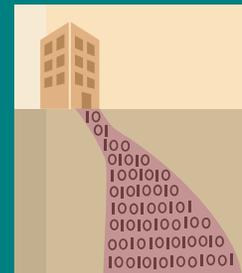
STORET Regional Warehouse



EPA National STORET Warehouse



ArcIMS



Query

Colorado Data Sharing Network Website

<http://co.goldsystems.com/>



CO Data Sharing Network



**Guidance
Documentation**

Map

Home

CO Data Sharing Network

Select one of the following to access the corresponding STORET application:

- [WebSIM](#)
- [Regional STORET Warehouse](#)
- [Web Registration](#)
- [Tutorial](#)
- [Map](#)

WebSIM

1. Upload Data
2. Choose Import Configuration

Home Projects Stations Results Advanced Site Help

WebSIM - v2.0.2- STORET Import Module

STORET Results

Insert Measurements and Non-Biological Samples [Page Help](#)

Import Configuration: [Dropdown Menu]

Import File Name: [Text Field]

Skip Header: [Text Field]

Import File

- BTWTRFRM--BTWTRFRM - Field Measurements
- COLO319 --CDSN - Field Measurements
- DEMOTEST--Example - Chemical Results with Characteristic Groups and Rows
- DEMOTEST--Example - Chemical Results with Characteristic Names
- DEMOTEST--Example - Field Measurements
- DEMOTEST--Example - Grain Size Analysis
- DEMOTEST--Example - Portable Data Logger with Characteristic Names
- DEMOTEST--Example - Portable Data Logger with Groups and Rows
- NCWCD --NCWCD_Chem
- NCWCD --NCWCD_Field

WebSIM Tutorial



Demo STORET Migration Site



[Resource Files](#)

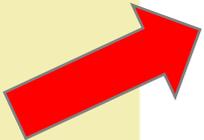
Welcome to the Demo STORET Migration Site

To download a WebSIM Tutorial, click the "Resource Files" link on the left, then click on one of the Tutorial documents to open/save it.

[WebSIM](#)

[Regional STORET Warehouse](#)

[Web Registration](#)



Colorado 'Regional' Data Warehouse



Welcome to the Colorado Data Sharing Network STORET Data Warehouse v2.0.5

CWQMC

STORET Station Descriptions

- [Stations by Geographic Location](#)
- [Stations by Organization and Station ID](#)

STORET Regular Results

(Non-Biological Physical and Chemical Result Data)

- [Regular Results by Geographic Location](#)
- [Regular Results by Station](#)
- [Regular Results by Project](#)

STORET Biological Results

- [Biological Results by Geographic Location](#)
- [Biological Results by Station](#)
- [Biological Results by Project](#)

STORET Habitat Results



Demo STORET Migration Site



Demo STORET Data Warehouse v2.0.5

STORET Station Descriptions

- [Stations by Geographic Location](#)
- [Stations by Organization and Station ID](#)

STORET Regular Results

(Non-Biological Physical and Chemical Result Data)

- 
- [Regular Results by Geographic Location](#)
 - [Regular Results by Station](#)
 - [Regular Results by Project](#)

STORET Biological Results

- [Biological Results by Geographic Location](#)
- [Biological Results by Station](#)
- [Biological Results by Project](#)

STORET Habitat Results

- [Habitat Results by Geographic Location](#)
- [Habitat Results by Station](#)
- [Habitat Results by Project](#)

Targeted Data Query Options



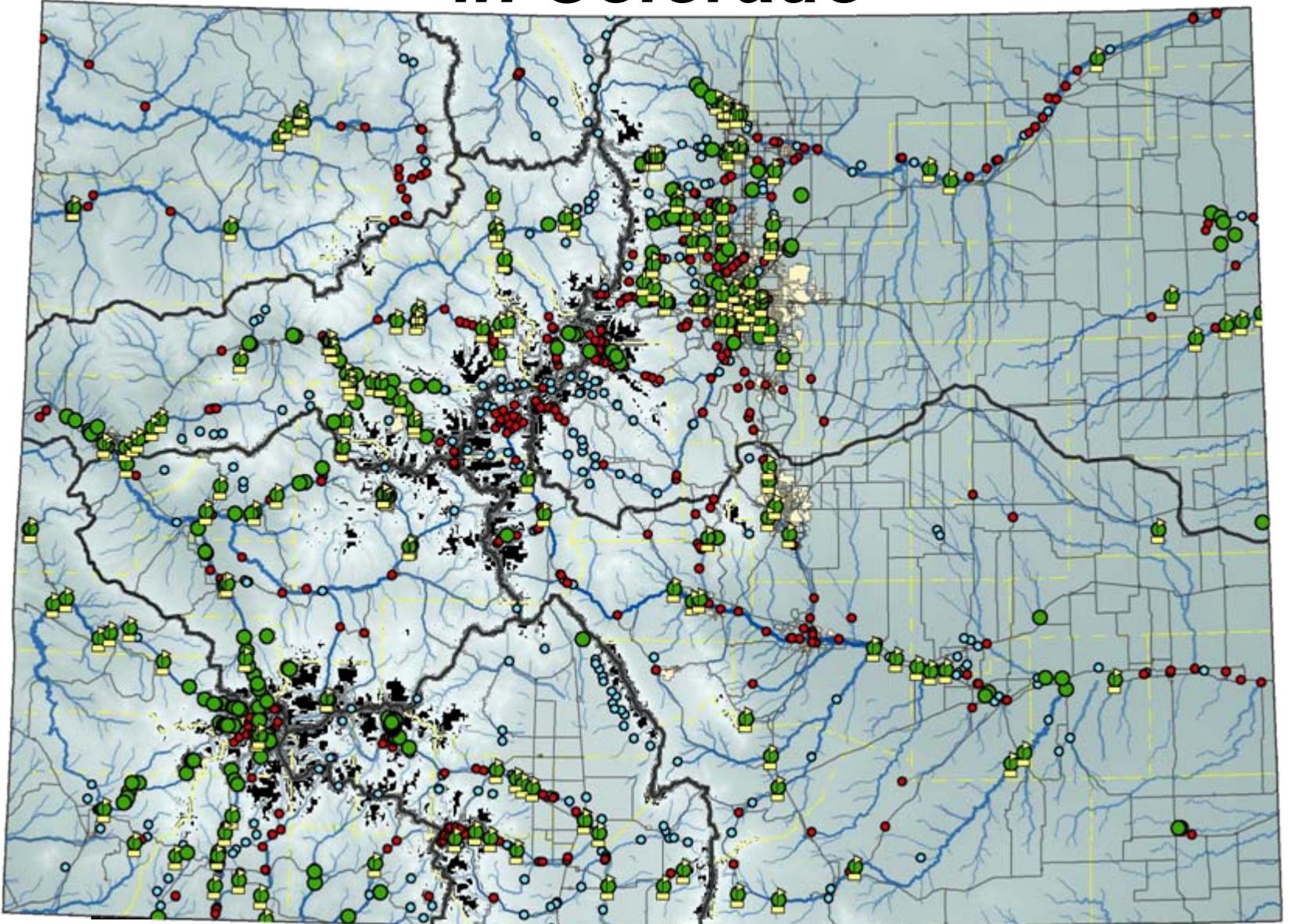
Stations by Organization and Station ID

Select an Organization and a Search Type, then enter a Search String and click "Search Stations".

ORG ID	ORGANIZATION NAME
Select an Organization _____	
Select an Organization	
AURORA	City of Aurora
BRIGHTON	City of Brighton
COL0319	Colorado Watershed Network (CO)
CWSD	Centennial Water and Sanitation District
DDEH	Denver Department of Environmental Health
GLENDALE	City of Glendale
LEWWTP	Littleton/Englewood Wastewater Treatment Plant
MWRD	Metro Waste Water Reclamation District
SACWSD	South Adams County Water and Sanitation District
THORNTON	City of Thornton

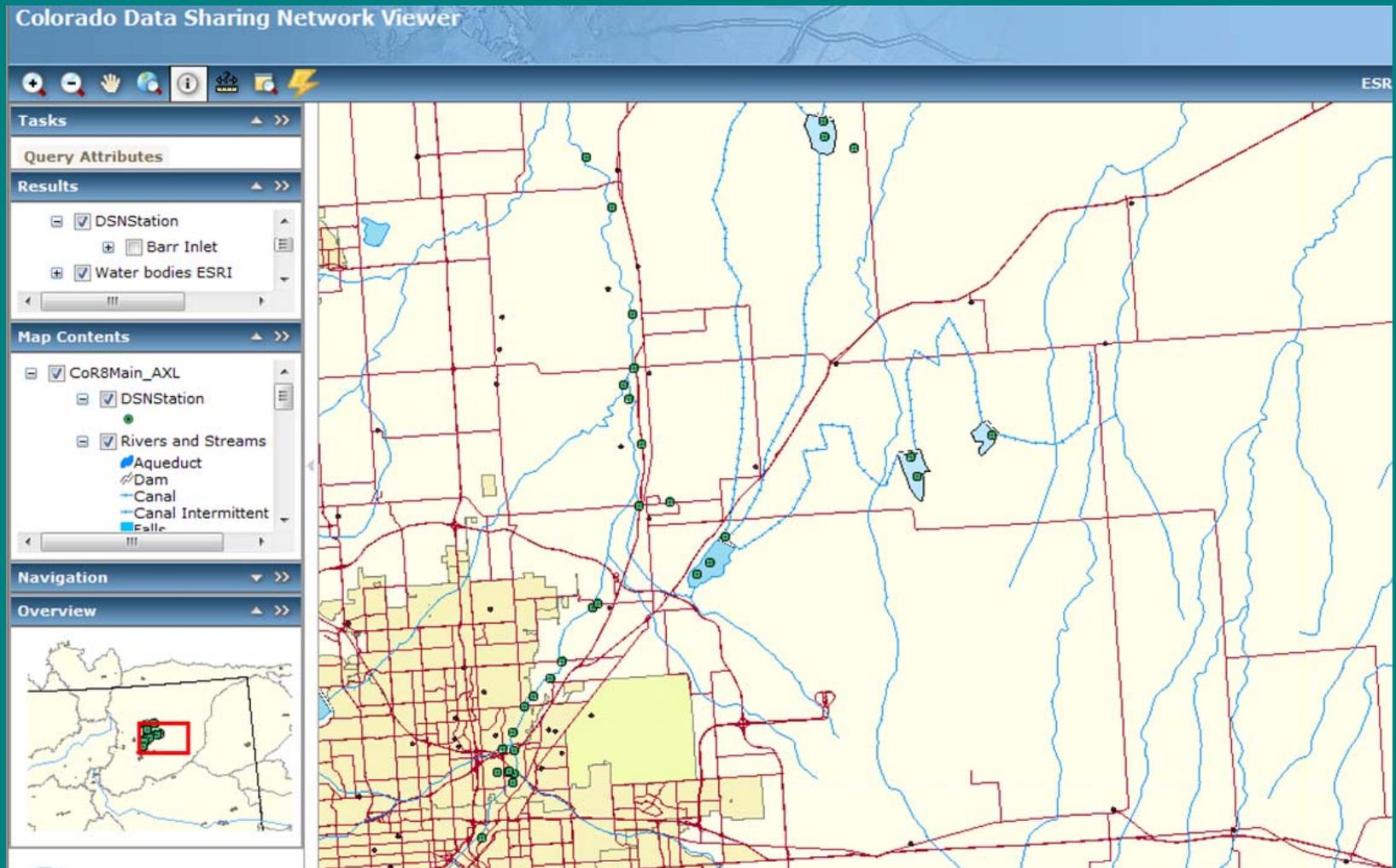
Search String

River Watch Monitoring Locations in Colorado



CDSN Spatial View

ArcIMS application



How keep this Council going?

A Group To Provide

- **Leadership, Accountability**
- **Structure to serve function – way to determine and evaluate function at least annually**
- **PLAN that integrates these elements**

Products/Services

- **Currency – the NAG factor**
- **Inclusive**
- **Relevance to Monitoring and Assessment needs, priorities and concerns**

Users

- **Resources**
- **Critical mass using, providing data, supporting**

CWQMC Websites

- **Colorado Water Quality Monitoring Council**

- <http://cwqmc.coloradowatershed.org/>

- **WebSIM and Regional Warehouse**

- <http://co.goldsystems.com/>

- **Tutorial**

- **Username & Password**

- **Demouser**

CWQMC COLORADO WATER QUALITY MONITORING COUNCIL

Home About the Council Meetings Projects Data Sharing Project Data Swaps/Trainings Membership Other Links

WHAT'S NEW

- Upcoming Meetings
- Outreach Strategy
- CO Data Sharing Network Tutorial
- GET INVOLVED with the CO Data Sharing Project!
- Register for upcoming DSN trainings

EVENTS

- Check out upcoming training dates

Note: Certain documents can only be viewed with Adobe Acrobat Reader which may be downloaded for free. Once installed, Acrobat Reader will allow you to view these documents or print them

Purpose

The Colorado Water Quality Monitoring Council will serve as a statewide collaborative body, open to all, to help achieve effective collection, analysis and dissemination of water quality data, and monitoring information. The Council seeks to improve the linkage between information needs of policy and decision makers with efforts to collect and assess data. The Council promotes effective monitoring programs that include the components of goal identification, data collection, analysis, storage, retrieval, and reporting/dissemination of information. The Council shall address the full range of water quality information, including chemical, biological, and physical characteristics of surface and ground waters. The Council is a non-voting body that operates through consensus.

- Provide a forum for effective communication, cooperation, collaboration, and documentation among individuals and organizations involved in monitoring.
- Promote the development of collaborative and cost effective watershed-based monitoring strategies.
- Promote the use of quality assurance procedures and protocols related to sample collection, analytical methods, assessment, data management, and dissemination
- Provide strategic direction for a statewide structure for the acquisition, analysis, archiving, and dissemination of water-quality information

For more information about CWQMC contact:

Vic Lucero, Co-Chair
vic.lucero@cityofthornton.net

Barb Horn, Co-Chair