The Water Connection / South Platte Urban Waters Partnership’s Water Quality Visualization Tool:

A Tool to Increase Accessibility of Water Quality Data in the Denver Metro Area

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What are The Water Connection and the South Platte Urban Waters Partnership?

- Collaborative effort of:
  - Local, state, and federal agencies
  - Non-profits
  - Watershed groups
  - Other stakeholders

- Protecting/restoring lands and waters in the South Platte Watershed
  - From the Headwaters → Denver Metro Area → Eastern Plains
Assessment Boundary
Key Objectives

"create a streamlined and intuitive web application that makes water quality data accessible to both decision makers and the general public"

Integrate multiple data sources

Intuitive web application

Multiple audiences
What is the Denver Metro Water Quality Assessment Tool (WQAT)?

- Exploration of E. coli in the Denver Metro area
  - Assessment period: 2009 - 2014
- Open source technologies
- Main components
  - Storyline
  - Interactive Map
  - Data Explorer
WQAT: Video Demo

http://thewaterconnection.org/wq_tool
Acknowledgements

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Questions?

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Welcome to The Denver Metro Water Quality Assessment Tool

The Urban Waters Partnership/The Water Connection are excited to present a robust water quality assessment tool for the Denver metro area. Currently, the tool offers a thorough look at E. coli, but will be expanding to incorporate other water quality constituents in the near future. A desktop version of the application is available via the button below. A mobile version is forthcoming so stay tuned and enjoy!

Launch the desktop viewer
What is Water Quality?

Water is essential to human life and the health of the environment. It has two dimensions that are closely linked: quantity and quality. Water quality is defined by its physical, chemical, biological and aesthetic (appearance and smell) characteristics. A healthy environment is one in which the water quality supports a rich and varied community of organisms and protects public health.

Water quality influences the way communities use the water for activities such as:
- supplying drinking water
- irrigating crops and watering livestock
- industrial processes
- protection of aquatic ecosystems
- wildlife habitats
- scientific study and education
- recreation

Application Overview

The Denver Metro Water Quality Assessment Tool combines data from 2009 through 2014 with maps, graphs and narrative to provide a picture of water quality in the South Platte River basin. Water quality is an important topic in a state where population and water use habits continue to grow. This tool can be useful to decision makers, educators and the general public to explore water-quality issues that impact us all. Have a suggestion or need help troubleshooting? Please use the feedback button below to get in touch.

Provide feedback
E. coli Storyline

E. COLI STORYLINE

Don't know much about E. coli? The storyline is the perfect place to start. Learn not only what E. coli are, but additionally what can be done to reduce its pollutant load in the South Platte River and its tributaries.

Learn more
How does *E. coli* get into the South Platte River?

*E. coli* and other fecal contaminants can enter the river from broken sewer lines, on-site septic systems, direct discharge of waste from domestic and wild animals, and storm runoff.

Denver Metro-area lakes and streams receive runoff from city streets, yards, and parks as well as discharges from industry and wastewater treatment plants. Some agricultural practices such as spreading manure on fields and allowing livestock watering in streams can contribute to *E. coli* contamination.

More information

- EPA, Non point source pollution
The Denver Metro Water Quality Assessment Tool combines existing data from 2009 through 2014 with maps, graphs, and narrative to provide a picture of water quality in the South Platte River basin. Water quality is an important topic in a state where population and water use habits continue to grow. This tool can be useful to decision makers, educators, and the general public to explore water quality issues that impact us all.

Have a suggestion or need help troubleshooting? Please use the feedback button below to get in touch.

Provide feedback

Photo credits: Tom Rice Photography
Site credits: Ben Tyler, Lost Creek Designs, LLC
E. Coli Data Exploration

Data Selection

location type: Site
location: BD-1
season: Annual
Submit

How to use this tool

This dataset represents over 5000 sampling events between 2009 and 2014. Get started by selecting a sampling location or river reach from the map to the left and a season. Locations can alternatively be selected using the dropdown menus. Results are displayed in graph and table form below. Not interested in exploring the data more? Just download the entire dataset by sites or river reaches using the button below (will download as a CSV file).

Learn about the data  Download full dataset

Selected Results

Download selection