International Erosion Control Association
Mountain States Regional Conference
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Revitalizing the South Platte River from the Source to the City: Transformation through Collaboration.

https://www.urbanwaters.gov/splatte/index.html
Partnerships

Partnership for Sustainable Communities
https://www.epa.gov/smartgrowth/partnership-sustainable-communities-five-years-learning-communities-and-coordinating

National Drought Resilience Partnership
http://www.drought.gov/drought/content/ndrp

EPA/FEMA MOA
http://www.epa.gov/smartgrowth/fema_moa.htm

Urban Waters Federal Partnership
https://www.epa.gov/urbanwaterspartners

Green Infrastructure Collaborative
https://www.epa.gov/green-infrastructure/green-infrastructure-collaborative

Silver Jackets-USCOE supports state-led teams through Flood Risk Management Program
https://silverjackets.nfrmp.us/
EPA Region 8 Resources

- **Climate Adaptation/Sustainable Communities**
  Laura Farris

- **Disaster Recovery/Resiliency**
  Rebecca Geyer

- **Green Infrastructure**
  Stacey Eriksen

- **WaterSense**
  Melissa Payan

- **Energy Star**
  Amanda Hong

- **Green Building/Renewable Energy**
  Tim Rehder
WaterSense

https://www.epa.gov/watersense

- Promote water efficiency, including landscape irrigation
- Label qualifying products
- Encourage product innovation
- Decrease water use
- Water-Smart Landscapes Guide
Clean Water Act

Objective: “restore and maintain the chemical, physical and biological integrity of the Nation’s waters.”

Interim goal: At the very least, make our waters “fishable and swimmable”
Clean Water Act 101

- The CWA has a holistic, ecological objective
- Is a problem-solving framework
- Partnerships are key to restoring and maintaining water quality
Partnerships are key for meeting the goals of the CWA
Water in the West: A Single Resource

Ground Water

Streams & Lakes

Provides > 50% of base flow

Wetlands
14 Agencies, Mission & Vision

“The Urban Waters Federal Partnership will help urban and metropolitan areas, particularly those that are underserved or economically distressed, connect with their waterways and work to improve them.”

“We will revitalize urban waters and the communities that surround them, transforming overlooked assets into treasured centerpieces and drivers of urban revival.”
One Big Happy Family!

14 Federal Partners + individual agencies
Why Urban Waters?

Right now in cities across the nation, urban waters are being threatened like never before. New and different environmental challenges are appearing everywhere. The range of challenges we face are going to require both traditional and innovative strategies — and broad partnerships to address the local issues in our communities, and the national issues we all share.

- Lisa P. Jackson, EPA Administrator
Urban Waters Program

- Help communities, especially underserved ones
- Align fed government programs and investments
- Expand partnerships
- Build local capacity
- Find innovative ways to communicate environmental & economic potential of safe & clean urban waters
Working with Communities

- Get out in the community, show up, & create relationships
- Get to know the community and the partners in order to assess their needs
- Work with other EPA programs to leverage EPA resources-integrate EPA’s programs
- Work with other Federal, State, local governments, nonprofits, educational institutions
- Introduce groups that don’t know each other to create synergies and minimize competition
Small Impacts Add Up

- Environmental impacts are concentrated in urban areas.

- Urban waters receive large amounts of pollution that affect drinking water quality and safety.

- Urban development often make waterways inaccessible to neighborhoods.
Sammie Award

- The UWFP Team were the 2017 Winner of the Samuel J. Heyman Service to America Medal in the People’s Choice Category

- The “Sammies” are known as the “Oscars” of government service
Urban Waters Umbrella

- Urban Waters coordinator
- Source water protection program
- Volunteer monitoring coordinator
- Water quality standards program
- Total Maximum Daily Loads
- Monitoring coordinator
- Non point source pollution program
- Wetlands program
- Stormwater coordinator
- Environmental Justice program
- Laboratory
- Environmental Education program
- USFS, USGS, ATSDR, NPS
South Platte River Urban Waters Partnership

Collaborative effort of over 70 partners:
- Local, state, and federal agencies
- Non-profits
- Watershed groups
- Other stakeholders including businesses and academia
- Collective impact

Protecting/restoring lands and waters in the South Platte River Watershed
- From the Headwaters → Denver Metro Area → Eastern Plains
- One of seven original pilots launched in 2011

https://www.urbanwaters.gov/splatte/index.html
Leadership

Ambassador/Coordinator:
Sam Haas, Peak Facilitation  Sam@peakfacilitation.com

Advisory Committee:
Stacey Eriksen, USEPA  Eriksen.Stacey@epa.gov
Sherry Fountain, USFS  Sherry.Fountain@usda.gov
Weston Toll, CSFS  Weston.Toll@colostate.edu
Focus Area
Why and How

Why: Environmental and Economic Health of the River

- Restore and protect urban waters
- Improve access to urban waters
- Increase awareness of the benefits of urban waters - public health, economic growth and quality of life
- Promote community revitalization

How: Collaboration, Collective Impact

- Increase communication and share expertise
- Look for resource efficiencies of all kinds
- Facilitate project funding
- Make the most of our economic tools and incentives
- Engage and serve the local communities
The South Platte River Urban Waters Partnership collaborates across jurisdictions and disciplines to engage communities, and to protect and restore the South Platte River from the headwaters to the Denver metropolitan area and watershed.
Our Goals

- Collaborate, educate and engage
- Connect people with water
- Protect and restore through leveraging resources
- Communicate achievements and share technical information
Strategies

- Developing Regional Information Resources (best management practices; water quality data, green infrastructure, and ecosystem benefits and services related to South Platte River and tributaries)

- Regional messaging for behavioral change

- Advance an interconnected network of ecological and green infrastructure for healthier waterways and for social and economic gains to adjacent communities

- Protect forests that provide drinking water supply
Benefits to Partners

- Access to technical resources and expertise
- Expanded and strengthened capabilities through networking and partnership opportunities
- Competitive edge through partnering for funding
- Learning through diverse perspectives on shared issues
EPA Resources

- Urban Waters Small Grants
- Targeted Brownfields Assessments
- Brownfields Revitalization Funding contract support
- Brownfields Assessment, Cleanup, RLF, AWP, & job training grants
- EJ Small Grants, and funding support
- Regional discretionary, EOY funding
- Monitoring & Assessment Staff
- Laboratory Analysis
- Nonpoint source 319 funding to States
- SRF funding-green reserve projects
- Region 8 Coaching Network
- Toxicologist
- Other technical support
- Superfund and Site Assessment
- ATSDR
Issues of Concern

- Water Quality
  - E. Coli
  - Nutrients
  - Trash

- Stormwater
  - Green Infrastructure
  - Messaging to Change Behaviors

- Source Water Protection
  - Forest Treatment
  - Watershed Protection Projects
Geomapping
Urban Waters Mapper Project Categories

- Water access, trails, recreation, parks, open space
- Education, outreach, training, green jobs
- Research and monitoring
- Water quality improvements
- Forest restoration/protection
- River/stream/wetlands restoration/conservation/flood protection
- Green infrastructure/low impact development for stormwater
- Trash cleanup and invasive species removal
- Other projects
Component parts of a system can be best understood in the context of relationships with each other & with other systems, rather than in isolation (ecosystems, organizations)

- Evaluation of partner expertise and projects
  - ID leverage points
  - ID gaps, duplications and opportunities for synergies
  - Assist in establishing priorities and focus areas

- Feed into Strategic Planning
The South Platte Urban Waters Partnership is excited to present the updated water quality assessment tool for exploring the health of rivers and streams in the Denver metro area. This online tool combines data from 2009 through 2015 for pollutants including *E. coli*, contaminants of emerging concern, total dissolved and suspended solids, selenium, and nutrients. Use maps, graphs and narratives to explore water quality in the South Platte River basin. Take the tool into the field with the new mobile application and learn how you can protect water quality!
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"
What is the Metro Denver Water Quality Assessment Tool (WQAT)?

Exploration of select contaminants in the Denver Metro area from 2009 - 2014

Open source technologies

Main components
- Storyline
- Interactive Map
- Data Explorer
Denver Metro WQAT

- Goals and Requirements
  - Combine several data sources into a central database
    - Variety of water quality parameters (nutrients, CECs, *E. coli*)
    - Data across lots of monitoring locations
  - Suite of Interactive tools
    - Interactive map and graphs
    - Interactive storylines
  - Tool equally useful to water quality experts and non-experts alike
  - Ability to explore a variety of questions from a single tool
## Sun Valley GI Options Study

### Description

<table>
<thead>
<tr>
<th>Description</th>
<th>Capital Cost</th>
<th>Annual Operating Cost</th>
<th>Total NPV Costs (20-YR)</th>
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<tbody>
<tr>
<td><strong>OPTION 2.5</strong> - Integrated Ultra-Urban Green Infrastructure, Off-Site Detention and Water Quality</td>
<td>$11,492,700</td>
<td>$425,300</td>
<td>$18,485,700</td>
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<tr>
<td><strong>OPTION 1</strong> - Conventional Conveyance and Site Retention/Detention</td>
<td>$11,217,600</td>
<td>$617,600</td>
<td>$21,374,300</td>
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<tr>
<td><strong>OPTION 2</strong> - Green Infrastructure with Centralized Site Retention/Detention</td>
<td>$12,525,400</td>
<td>$752,700</td>
<td>$24,902,500</td>
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<tr>
<td><strong>OPTION 3</strong> - Green Infrastructure with De-Centralized Site Retention/Detention</td>
<td>$15,870,100</td>
<td>$1,621,300</td>
<td>$42,530,700</td>
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</tbody>
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[https://www.epa.gov/urbanwaterspartners/sun-valley-stormwater-options](https://www.epa.gov/urbanwaterspartners/sun-valley-stormwater-options)
Lower Bear Creek

- Watershed plan
- Water quality monitoring and EJ youth blue team training
- Septic system and stormwater outreach
- Draft alternate to a TMDL for e-Coli
- Created with 2 UWSG and NPS funding and EPA and NPS RTCA staff support to Groundwork Denver
- [https://groundworkcolorado.org/programs/water/](https://groundworkcolorado.org/programs/water/)
H20nly Water Quality Messaging

- Subset of partnership developed unified and comprehensive messages about water quality and stormwater including dog waste, algae, and phosphorus fertilizer.

- Funded by EPA UWSG to Barr Milton Watershed Association.

https://barr-milton.org/resources/messages/
Think About Your Drink
Attack of the Algae

Town unknowingly feeds the monster harmful fertilizers. Only you can stop it. Buy phosphorus-free fertilizer.

Don’t Feed Algae

PLEASE DO NOT FEED THE ALGAE
Pick up After Dog

Spread the Love
KIC-NET Stormwater

- **Keep It Clean-Neighborhood Environmental Trios**
- **An innovative, hyperlocal urban stormwater education program**
- **STEM, Stormwater, MS4 permits, and Environmental Citizenship**
- **CAEE 2014 Award for Environmental Education**
- **Funded with 3 EPA Urban Waters Small Grants across 2 EPA Regions**

- [http://earthforce.org/KICNET/](http://earthforce.org/KICNET/)
- [https://www.denvergov.org/content/dam/denvergov/Portals/711/documents/KeepItClean/KICNETeducatorbrochure.pdf](https://www.denvergov.org/content/dam/denvergov/Portals/711/documents/KeepItClean/KICNETeducatorbrochure.pdf)
Collaborations and Spin Offs

- CSU Water Building at the Redeveloped National Western Center [https://nwc.colostate.edu/csu-water-building/](https://nwc.colostate.edu/csu-water-building/)

- Denver Urban Field Station [https://www.nrs.fs.fed.us/STEW-MAP/denver/](https://www.nrs.fs.fed.us/STEW-MAP/denver/)

- Metro Denver Nature Alliance [https://www.metrodna.org/](https://www.metrodna.org/)
Reduce Runoff - Slow it Down, Spread it Out, Soak it in