

South Platte River Urban Waters Partnership (SPRUWP)
August 15, 2023, 1:00 PM to 3:00 PM
Quarterly Meeting
Meeting Summary – FINAL

ATTENDANCE

Participants: Ryan Aids, Matt Ashley, Lauren Berent Burgess, Chelsea Campbell, Amy Conklin, John Davenport, Stacey Eriksen, Skip Feeney, Nolan Hann, Greg McGrath, Jordan Parman, Tess Robeson, Donny Roush, Nona Shipman, Katie Spahr, Jessica Stevens, and Sabrina White

Facilitation Team: Dominique Ashe and Samuel Wallace

ACTION ITEMS

Jordan Parman	Share Confluence at the Confluence event details with Samuel Wallace.
Greg McGrath	Share information on the upcoming American Water Resources Association (AWRA) webinar on the South Platte River with Samuel to distribute to SPRUWP members.
Samuel Wallace	Share the CDM Smith presentation and AWRA webinar with SPRUWP members.

PARTNERSHIP UPDATES

SPRUWP members shared updates from their respective organizations. Those updates are summarized below.

SPRUWP Partnership

The South Platte Water Quality Assessment Tool (WQAT) is officially updated. The update improves the tool’s functionality by allowing it to continuously vet and upload new data from the Environmental Protection Agency (EPA) Water Quality Portal and Colorado Data Sharing Network to keep the tool up to date. It also expands the geography of the tool to include data from the Upper South Platte Watershed. Denver Water, the U.S. Forest Service (USFS), and the EPA funded the update to the tool. The tool also received in-kind support and input from SPRUWP Science and Data Committee members, which include partners from the EPA, USFS, US Geological Survey, Metro Water Recovery, Denver Department of Public Health and Environment, Denver Water, Rocky Mountain Research Station, Trout Unlimited, Mile High Flood District, River Network, and CDM Smith. A tutorial session will likely be hosted at the next SPRUWP meeting for partners to understand and maximize the tool’s use.

Aurora Water

Aurora Water is working on projects to mitigate wildfire risk in the Upper South Platte Watershed and seeking opportunities to engage in urban watershed protection programs. They are also installing a new well on their north campus through the prairie water programs. Additionally, all the agency’s reservoirs are full.

One World One Water Center

The organization recently launched a statewide interdisciplinary education program where students can participate in multi-media contests (e.g., photography, poetry, or landscape design) to showcase the impact of water in their lives. The program is called Your Water Your Life. SPRUWP members are encouraged to share this contest with any interns or students they know.

Water Education Colorado (WeCO)

WeCO hired a new program director, Sabrina White. The organization is co-hosting the Sustaining Colorado Watersheds Conference in Avon, Colorado, on Oct. 3-5, 2023. Registration is required.

Colorado Dept. of Public Health & Environment (CDPHE) Water Quality Control Division (WQCD)

- The WQCD is hosting a data call for the South Platte Region. SPRUWP members with data available to include as part of the state water quality assessment program should send their resources to Skip Feeney at skip.feeney@state.co.us.
- The CDPHE program development grants should be released soon, and the agency is considering starting a wetland permitting program.

City of Littleton / South Metro Land Conservancy

- The City of Littleton has an environmental stewardship plan and is writing a climate action plan to be finished by the end of this year.
- South Metro Land Conservancy has been hosting numerous projects to restore parks in the Littleton area.

Metro Water Recovery (formerly the Metro Wastewater Reclamation District)

Metro Water Recovery is initiating an in-stream habitat improvement project on the South Platte near Thornton, where they will install habitat features to the river to increase the native fish species population.

Trout Unlimited

This year, the entity's Trout-In-The-Classroom program expanded from 54 to 78 tanks. Their program received a Colorado Parks & Wildlife (CPW) exemption from testing classroom tanks before releasing fish as long as they followed four rules set by CPW. As part of the program, student teams conducted eDNA sampling on multiple tanks and river locations. The program is looking for sponsors to fund school testing kits.

EPA

The agency is finishing work on a SPRUWP-related video, celebrating over ten years of the partnership. Additionally, the EPA hosted an intern this summer who is working on a couple of updates that will be shared in future SPRUWP meetings.

Upcoming Events

- The Rocky Mountain Water Environment Association is hosting a Communication Seminar for skills-building on October 19. Donny Roush will present on public outreach, and his session is called "*Why Educate When You Don't Need To?*".
- AWRA is hosting an open webinar on the South Platte River Corridor Needs Assessment on Tuesday, August 29, from 12 PM to 1 PM.
- South Platte Coalition for Urban River Evaluation is planning its annual Confluence at the Confluence event, scheduled for October 17.

SOUTH PLATTE RIVER: HEALTHY RIVER CORRIDOR STUDY PRESENTATION

Jessica Stevens, City of Denver, presented the conclusions from the City of Denver's South Platte River: Healthy River Corridor Study. Her presentation is summarized below.

- The study examined the city's vision for a healthy river corridor that focuses on restoring and enhancing natural beneficial functions and improving the user experience along the river's waterways. Historically, water management has been handled in silos, where separate entities focused on individual aspects of the system. However, in recent years, these agencies have continuously faced challenges associated with climate change and re-

development. Together, the agencies along the South Platte created the One Water Plan. The plan encourages agency coordination and collaboration in water planning and implementation to develop policies that promote healthy watersheds in an equitable, economically, and environmentally beneficial manner. The One Water Plan identifies five primary goals: promoting institutional collaboration, implementing multi-benefit projects and programs, fostering community support, increasing resilience and climate change preparedness, and implementing an integrated water management solution.

- The One Water Plan contains several high-priority actions. The plan identifies the need to create regulations in alignment with its goals and policies. The plan suggests a recurring meeting for management representatives to collaborate on ongoing projects, policy development, and other initiatives to reach One Water’s goals. Another priority area is to develop a framework to evaluate and prioritize projects in alignment with the One Water goals. The plan directs One Water leaders to collaboratively develop and implement enforceable policies that support and align with existing recommendations and comprehensive plans for preserving and restoring riparian corridors. Another priority area is assessing alternative water supplies and evaluating recycling water opportunities near existing infrastructure.
- The Healthy River Corridor Study stemmed from the priority action of creating enforceable policies. The study focused on restoring functional ecosystems and emphasizing healthy water. The study’s overall goals include:
 - Protect Denver’s waterways from the encroachment of urbanization and recognize the waterway corridors as critical assets that safely convey water and sediment.
 - Protect and enhance the diversity of wildlife and ecological health along Denver’s waterways.
 - Provide equitable access and space for active and passive recreation, parks and open space, and mobility options.
 - Enhance Denver’s waterways equitably and sensitively by integrating the built environment and future land use.
- Based on the South Platte Needs Assessment, the Healthy Rivers Corridor Study found four unique human-to-environment regions: City North, Downtown, Mid City, and South City. The analysis identified these four regions based on an assessment of river health, mobility, and human experiences. As a result, the study developed metrics for floodplains, urban quality, mobility, access and recreation, land use, and heat island impacts for each of the four regions. The study determined that 200 feet from the edge of the South Platte River channel would be an adequate distance to focus projects. This 200-foot buffer is known as the “influence zone,” and it can be further split between 50 feet of riparian priority area and the remaining 150 feet as human health and access areas.
- The study began in Spring 2022 and was completed in June 2023. The executive directors of the Climate Action, Sustainability, Resiliency, Transportation and Infrastructure, Community Planning and Development, and Parks and Recreation Departments signed the policy statement. In July 2023, project team meetings began to develop rules and regulations to regulate the influence areas, guide development and redevelopment within the influence zone, and protect and enhance the river corridor.

Questions Regarding the Healthy River Corridor Study

SPRUWP partners had the opportunity to ask follow-up questions about the Healthy River Corridor study. Their questions are indicated below in italics, with the corresponding responses in plain text.

Given the different property ownership, how will the implementation secure 200 feet along the river corridor?

The Healthy River Corridor Study assessed ownership. Within the influence areas, 63% of the land is publicly owned. The plan intends not to acquire land but to regulate re-development and new development. Any existing development would be grandfathered in.

Were carbon offsets incorporated into the plan, rules, or regulations?

Likely not.

How do the Healthy River Corridor Study and One Water Plan coordinate with the US Army Corps of Engineering (USACE) restoration projects?

There is coordination occurring on the planning side. There is also mutual work with the South Platte Restoration Projects Water Resiliency Program.

For real estate developers, is there an option to pay out of the regulations?

The One Water leaders are currently drafting the regulation. Ideally, no payouts will be possible. The agency will emphasize that re-developing the river is an amenity, not just a maintenance expense or impact on the developer's bottom line.

Who will enforce the rules and regulations? Will they be more guidelines than rules?

- The rules and regulations will be co-adopted by the Department of Parks and Recreation, Community Planning and Development, and the Department of Transportation and Infrastructure. Each will have slightly different degrees of enforcement capabilities.
- There will be enforceable rules and regulations in addition to design guidelines, which will provide more narrative.

U.S. ARMY CORPS OF ENGINEERS SOUTH PLATTE RESTORATION PROJECTS UPDATE

Greg McGrath, CDM Smith, provided a progress update on the USACE 1135 South Platte Restoration Projects in Southwest Denver. His presentation on the project's initial design concepts is summarized below.

- The Southwest Denver area is the first design reach of the overall Waterway Resiliency (WATR) Program, which will provide flood control, ecosystem enhancement, and public access to the river throughout Denver. For reference, the WATR Program was formerly known as the Urban Waterways Program.
- CDM Smith is a national engineering firm working with the USACE and the CCD on the first reach of this project. The South Platte Restoration Projects encompass the South Platte River, running through Denver and two major gulches (Harvard and Weir). The projects will focus on restoring aquatic systems over the next 30 years. An additional organization heavily involved in creating momentum for this project is the Greenway Foundation. The projects are based on a locally led agreement where the CCD leads the implementation process, and the USACE provides technical support where needed. Identified benefits of this project include ecosystem benefits, flood risk reduction, mobility and recreation access (e.g., trails program enhancements), ecosystem restoration, equity, and environmental justice.
- The South Platte Restoration Projects are an effort to remediate unintended consequences of previous actions related to water resources. For example, some reservoirs built near Denver are now understood to cause channelization and a lack of species habitat diversity. This project emerged from the 1986 Water Resources Development Act, which allows the USACE to modify previously impacted areas.

- Most of the project construction for the first reach will occur between the Harvard Gulch outfall and Grant-Frontier Park. Key features of the project include wetland benches, instream structures, invasive species removal, and a local trail relocation. Some features are fixed (e.g., wetland benches), while others will be improvised based on changing conditions. The project will reconnect three previously implemented projects by CCD.
- The project team will install a secondary channel in the wetlands where water will be diverted from the Harvard Gulch baseflow and filtered through a water quality separation device before entering the secondary channel to improve vegetation and habitat.
- The project team will improve two existing fish passage structures. The improvements will consider velocity and flow rates that impact between 12 and 15 target fish species that cannot pass through the current structures due to slope. Therefore, the team will extend the structure to reduce its steepness while enabling humans to float or tube down it. If successful, the project will pilot an in-stream structure to replicate at future reaches.
- The project team will use a series of LUNKER Pipe structures that increase the complexity of aquatic environments by increasing flow depth and velocity. The project team hopes to install channels where self-vegetated gravel bars now exist to provide additional environmental benefits. However, the USACE must approve the request, given that their modification scoring protocol is based on cost and environmental benefits.
- CDM Smith is considering adding woody debris to the project plan; however, the maintenance risk is considered high. Additionally, the project aims to add scour holes to help protect the river from erosion and protect fish habitat.
- The project will also relocate a trail and expand its width from 8 feet to a new “Denver Moves” standard of 12 feet. The trail will be built of crusher fine to improve mobility accessibility. Including vegetation maintenance, the total trail width will be 22 feet.
- The project’s design is 65% completed and was recently submitted for approval. The project team will go through a six-month pause to revise certain regulatory aspects, and construction will start in the dry season of 2024 and 2025. Post-construction monitoring and adaptive management are not yet funded but will likely continue for the following five years to inform future stream reaches. The CCD will choose a program manager, support staff, and a consulting firm in 3-4 months.

Comments on the Concept Design Presentation

Trout Unlimited previously helped in the original design, which has evolved significantly. Creating fishable habitat areas is difficult. Protecting fish from predators is one of the most challenging aspects of creating these structures.

Questions On the Concept Design Presentation

SPRUWP partners had the opportunity to ask follow-up questions about the South Platte Restoration projects. Their questions are indicated below in italics, with the corresponding responses in plain text.

Does the post-construction monitoring include biological monitoring?

Yes. The intention is to monitor biological factors. Potential monitoring partnerships could occur with the USACE, the U.S. Geological Survey, and the Mile High Flood District.

DENVER WATER'S RECYCLING SYSTEM TOUR

Meeting participants finished the meeting and took a tour of Denver Water's water recycling system, called Re-Use For Us (RUFUS). The system treats wastewater from the Administration Building through a multi-stage treatment system to meet the highest state standards for recycled water.

RESOURCES MENTIONED

- [South Platte WQAT Dashboard](#)
- [Your Water Your Life Metro State University of Denver contest](#)
- [Water Education Colorado Sustainable Watersheds October Conference](#)
- [Rocky Mountain Water Environment Association Communication Seminar registration](#)
- [Denver One Water Plan](#)
- [Denver South Platte Needs Assessment](#)