

South Platte River Urban Waters Partnership (SPRUWP)
May 19, 2020
Quarterly Meeting Summary – FINAL

ATTENDANCE

Participants: Bill Battaglin, Rachel Crouch, John Davenport, Stacey Eriksen, Sherry Fountain, Kristin Hughes, Katie Keefe, Mike McHugh, Pat O’Connell, Jordan Parman, Lisa Pelstring, Steve Reeves, Donny Roush, Ian Schillinger-Brokaw, Kelly Shinn, Ryan Swartzentruber, Weston Toll, Travis Warziniack, Summer Waters, Scott Williamson, Alison Witheridge, Shane Wright.

Facilitation: Samantha Haas, Calley Schubert

ACTION ITEMS

Donny Roush	Send Sam 3 rd grade water quality public service announcements to share with the group.
Kristin Hughes	Send Sam information to access the Post-Wildfire Playbook to share with the group.
All Partners	<ul style="list-style-type: none"> • Share any information on events, conferences, etc., with Sam to distribute more widely in the monthly update email. • Send Sam any projects they would like highlighted on the Urban Waters Partnership website. • Reach out to Donny Roush if you have a way to get pet bag dispenser containers into pet owners’ hands; there are 4500 containers available. • Reach out to Groundwork Denver if you have any leads on a turbidity meter they can use for an extended period. • Members that need additional funding with projects related to vegetation and water management can reach out to Sherry Fountain. • Reach out to Ryan Swartzentruber to fill out the STEW-MAP survey if you believe your organization participates in stewardship of any form.

PARTNER UPDATES

Partners shared general updates as well as challenges and opportunities they have faced in the urban waters field related to COVID-19.

Denver Parks and Recreation

- Ian Schillinger-Brokaw works on the newly created team at Denver Parks and Recreation; he was excited to attend his first SPRUWP meeting.
- Denver Parks and Recreation is currently working on erosion control projects along the South Platte River’s Confluence Park in Denver.
- Management plans and strategies are being developed for parks along the South Platte River, such as Overland Pond, Overland Golf Course, Aqua Golf, and other similar waterways.

Colorado State Forest Service (CSFS)

- CSFS is currently working on the Forest Action Plan, a statewide assessment of the forest conditions and trends in our state. This is a process that happens every ten years in all 50 states and US territories. The US Forest Service (USFS) has extended the deadline to the end

of 2020 due to COVID-19. CSFS is currently on track to complete the Forest Action Plan by the end of August, but hard copies will not be available until later in 2020.

- The CSFS Golden field office submitted a grant application for the Restoration and Stewardship of Outdoor Resources and Environment (ReSToRE) Colorado Program, which is administered by the National Fish and Wildlife Foundation. Unfortunately, the grant went unfunded. However, CSFS will be moving forward with the projects using Denver Water's Forest to Faucets and CPW funding and matching it with other grant program funding.
- CSFS is developing a memorandum of understanding with Aurora Water, who will be providing money for forest health treatments.
- CSFS is part of Colorado State University (CSU) and is following CSU guidance on when they will be returning to work. CSFS can have some foresters out in the field while respecting social distancing. After the CSU Board of Governors meets in June, they will be able to clarify emerging budget issues.

Groundwork Denver

- Kelly Shinn was excited to be in attendance at her first SPRUWP meeting.
- Groundwork Denver does not currently have a water program manager; Andrea Savage changed to a different community-based position, and her position has not yet been filled.
- Groundwork Denver has a youth program that educates youth on water stewardship through water quality testing on the Lower Bear Creek.

City and County of Denver

- The City and County of Denver is typically busy March through May working with students in the field on stormwater education and outreach. This year, they are relying on virtual platforms to provide lessons to schools.
- This summer's urban bike tours that were initially scheduled for June 18 and June 23 will now be available virtually and will incorporate drone footage.
- One outreach tool used by the City and County of Denver is the distribution of dog waste bag dispensers at community events. Due to COVID-19 restrictions, there are still 4500 dispensers that need to be distributed. SPRUWP members can reach out to Donny Roush directly if they have creative ways of getting these into pet owners' hands.

Metro Wastewater Reclamation District

- Metro Wastewater Reclamation District has cut back on monitoring and is only conducting monitoring that is essential for regulatory purposes.
- They are hoping to move forward with planned fish surveys and macroinvertebrate sampling of the South Platte River in the fall.

Environmental Protection Agency (EPA)

- Stacey Erikson has been working on updating the Urban Waters Partnership website (urbanwaters.gov). SPRUWP members should send Sam any projects they would like highlighted on the site.
- Additionally, she has been working on the inter-agency agreement with Sherry Fountain, USFS, and Weston Toll, CSFS, to secure funding for Peak Facilitation Group's services.
- The SPRUWP Science and Data Subcommittee has been working on an update to the water quality assessment tool (WQAT). So that data is pulled from the water quality portal.

Denver Water

- Denver Water employees will be working from home through August 2020 and will not attend meetings in person through the rest of the year.
- Denver Water has completed its draft South Platte Collection System inventory, assessment, and prioritization. They have focused on incorporating data and looking at water quality in the Upper South Platte, Upper Blue River, Bear Creek, and Chatfield supplies. This work product is internal but is being reviewed by Denver Water's legal team, who will provide more information on what can be publicly shared.
- Denver Water has been working with CDPHE, the City of Boulder, and others, on the Post-Wildfire Playbook as a statewide resource for post-fire recovery. The Playbook is geared toward municipalities, water providers, and tribes; it will be posted on CDPHE's websites on June 5.
- Steve Reeves was onboarded as a summer intern from a graduate program at the Colorado School of Mines. He is helping in Grand County with Denver Water's Learning by Doing Program as well as supplementing with help on water quality assessments and water planning in general.

Bluff Lake Nature Center

- As a result of COVID-19, Bluff Lake Nature Center has switched from field trips to distance learning programming. They have created a virtual water field trip that focuses on water testing and water at Bluff Lake. It includes experiments youth can conduct at home.
- Bluff Lake Nature Center will still be hosting their summer camp programs.
- Volunteer groups that were scheduled to work on-site doing weed management and beaver protection for trees have been canceled.

Denver Trout Unlimited

- Denver Trout Unlimited is investigating fish blockages at the Bear Creek and Clear Creek confluence of the South Platte River.
- Many classroom programs had to euthanize trout across the nation as schools closed due to COVID-19. However, Littleton School District's security staff took over managing, feeding, and monitoring their tanks. The 36 trout from Littleton School District will be moved to a 100-gallon water tank located in the Greenway Foundation's Executive Director's office.
- Denver Trout Unlimited had two river clean-ups scheduled for the summer, one of which was canceled due to COVID-19. Denver Trout Unlimited was able to keep the second scheduled clean-up along The River Mile with the help of Denver Parks and Odell Brewing.

Lincoln Hills Cares

- Lincoln Hills Cares will be running programs for youth and community on The South Platte River that focus on partnerships with Metro DNA, CSU, The National Western Center, youth from the surrounding Front Range communities, youth from North and Northeast Denver, and others. Their programs focus on youth, food, water, and natural resources. Current water programs are focused on ensuring that the South Platte River is a resource that is a fishable, swimmable, clean, recreational river for all people in the Denver Corridor and beyond.
- Lincoln Hills Cares is hiring youth from North and Northeast Denver, Globeville-Elyria Swansea, and surrounding Front Range communities to sit on a youth advisory council for the South Platte River to give input and find potential solutions to water quality issues in the Denver South Platte River and to participate in a community health program in the

North/Northeast Denver corridor. If you know of any youth who may be interested, reach out to Shane Wright directly.

Water Education Colorado

- Water Education Colorado just launched its statewide Water Education Action Plan website. The Action Plan demonstrates water education's role in getting to sustainable water in the state by 2050.
- Water Education Colorado is releasing its water educator network directory, a searchable database of water educators throughout the state.
- Three Citizen's Guides were released in the last few months; the most recent was the Colorado Groundwater Guide, which is available on the Water Education Colorado website.
- The most recent Headwaters Magazine was on environmental justice and is available on the Water Education Colorado website.

US Geological Survey (USGS)

- The USGS is currently looking for potential support for OP monitoring work, as well as support conducting continuous monitoring for hazardous algae blooms and bloom conditions.
- Bill Battaglin recently published two reports; the first report was on the influence of emerging contaminants on Asian Carp spawning in the Illinois River; the second report was related to climate change in all national parks in the US.

Colorado Department of Public Health and Environment (CDPHE)

- Kristin Hughes was excited to be in attendance at her first SPRUWP meeting.
- CDPHE is working on a data-sharing site that provides information on source water protection plans.

US Department of the Interior

- The Urban Waters Partnership is launching the 20th designated urban waters location on September 1, 2020. The site will be Phoenix, AZ, and will focus on the Salt and Gila Rivers.

US Forest Service (USFS)

- The USFS is looking at projects that are ready for additional funding; projects can involve vegetation and watershed management. SPRUWP members interested in additional funding can send project information to Sherry Fountain.

Metro Denver Nature Alliance (Metro DNA)

- Metro DNA is working on moving the Safe Summer Kick-Off on Get Outdoors Day to a virtual format.
- They are continuing to refine the Regional Conservation Assessment.

STEWARDSHIP NETWORKS: WORKING TOGETHER

Ryan Swartzentruber, coordinator for the Denver Urban Field Station (DUFFS), presented on the Denver Environment Stewardship Mapping (STEW-MAP) survey and initial results.

- DUFFS is a collaborative research practice unit of the USFS Rocky Mountain Research Station (RMRS) in Fort Collins exploring connections between people, nature, and the role of vegetation in semi-arid cities, towns, and developing regions in the intermountain west and great plains.

- DUFSS' general area of focus includes urban ecosystems, stewardship, civic engagement, ecosystem services, and resilient health and well-being.
- The core team at DUFSS consists of economists, foresters, planners, and ecologists with experience in issues related to water, urban trees and ecosystem services research.
- DUFSS is part of a larger urban field station network across the US that emphasizes place-based research and science. Lessons can be applied across this network, and DUFSS brings the unique perspective of a semi-arid city to this more extensive network.
- Urban field stations are an extension of the USFS, and therefore have a mission already established. Given that the majority of the nation's population lives in urban areas, DUFSS is extending the USFS mission to many people that might not interact with national forests.
- DUFSS' vision is to be an integrated part of Denver's science community by serving as a repository of relevant data and a connection between agencies. They aim to produce meaningful research with real applications and engage urban residents and organizations that can then participate in this science and steward their resources, thus bridging the gap between and among science producers and users.
- DUFSS leads original research on critical urban issues, socioecological systems, and natural resource management. Through their most recent project, STEW-MAP, DUFSS is documenting and building a directory of the environmental stewardship community in the Front Range. In the future, this directory will be extended to the research community.
- On the Front Range, where we are not far removed from the wild and urban interface (WUI), large populations in cities fundamentally change the ecosystems and nature they displace. As cities grow larger, they lose what makes them unique, and we see homogenization of economies, cultures, and biodiversity. DUFSS challenge as community developers, scientists, and local leaders is to provide environmental stewardship in a way that strengthens neighborhoods and builds on cultural identity. One of the primary tools to help reach that goal is the STEW-MAP project.
- STEW-MAP is a collection of projects around the world that take an in-depth look at stewardship and allows us to compare stewardship networks across cities. Each city tweaks the STEW-MAP framework to accomplish specific needs and improve upon previous iterations.
- Denver's participation in STEW-MAP will help put our city in a context across the world. The resulting publicly available map allows organizations to connect and see who is working nearby, find others doing similar work, share expertise, and bounce ideas off of other organizations by collecting geographic locations of stewardship activities.
- DUFSS began the Denver STEW-MAP project by first building a core team based on capacity, needs, interests, and geographic area. Next, they tweaked the survey and questions based on interests. The study's scope consists of the nine counties in the Denver metro area: Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, Gilpin, and Jefferson counties.
- After identifying the geographic area, DUFSS conducted a census of the environmental stewardship community. They created a list of groups to distribute surveys to by looking at IRS 501(c3) filings and connected with Metro DNA, which provided them with a starting point and a contact list. DUFSS then identified key people who were likely to respond for their entire organization, sent surveys to 209 organizations in February 2020, and followed up with reminders to complete the survey. DUFSS distributed the second wave of surveys and reminders to new organizations identified by respondents. After cleaning and analyzing datasets, DUFSS shared reporting results so organizations can identify any potential gaps in stewardship activity and expand their reach to underserved areas.

- The survey broadly defines stewardship as the conserving, managing, transforming, monitoring, advocating for, and educating the public about the environment.
- Data were collected on three basic components: organizational characteristics, geographic turf, and the organization's actual network. Organizations were asked questions on the number of employees, number of volunteers, legal classification, characterization of work, specific projects, and approximate locations of projects. Additionally, they are asked a series of questions on their work with other organizations including the nature of their collaboration with other organizations, whether they share data or speak to specific people for expertise, if they primarily offer assistance to the other organization, and if their relationship is reciprocal or one-sided.
- One of DUFFS goals with STEW-MAP is to broaden the understanding of stewardship and build on important relationships to get the work done; organizations might not think to collaborate with other environmental groups because they do not believe they have complementary goals. Asking organizations to map where they are conducting stewardship activities allows DUFFS to see what organizations are working in the same location, and eventually see if they are collaborating.
- The survey asks organizations to list other groups with whom they collaborate. The response averages eight additional organizations; the most frequently listed are the City and County of Denver, USFS, Colorado Parks and Wildlife (CPW), and Denver Water. A total of 377 different groups were named in this open-ended question, depicting the vastness of the network. DUFFS can identify what types of organizations are working together through a more complex analysis.
- An important outcome of the STEW-MAP project will be a database and a map of current stewardship organizations. Other STEW-MAP locations are developing an interactive online map where anyone can look for groups in specific neighborhoods or groups conducting particular types of work. Individuals can use the interactive map to explore possible connections.
- DUFFS hopes to conduct additional spatial analyses to determine any gaps in specific neighborhoods or certain types of work; this type of analysis can have a real impact on Denver's environmental quality. Spatial data can be tied into other types of spatial data to look at conservation outcomes.
- DUFFS is starting to look at demographics, neighborhood income levels, and access to open space to answer environmental justice questions and to address equity issues. By layering this multi-dimensional data, the network can leverage their power with others and ensure groups of people and nature aren't being neglected.
- DUFFS has been in conversation with the Denver Zoo and the National Western Center about the possibility of having living labs on their premises. Living labs are a physical space or plot of land that offers the opportunity to connect with individuals through Citizen Science initiatives, collect data on the biodiversity within Denver, and explore experimental plots.
- Contact Ryan Swartzentruber to fill out the survey if you believe your organization is participating in environmental stewardship in any form.

Clarifying Questions

Meeting participants asked Ryan Swartzentruber questions regarding his presentation. Questions are indicated in italics with responses below in plain text.

Many people collect their data, will DUFFS be developing a database for collective data sharing?

Yes, DUFFS is hoping to create a central place that you can access all types of data from partners.

Would data be cleaned so that there is no overlap of what is shared?

Based on DUFFS' current bandwidth, the data provided would not likely be cleaned, but they would take measures to guide proper documentation.

What program did you use for the mapping?

A free program called R Studio with a social network analysis package.

Some centers, such as the National Western Center, have laboratories attached that monitor water with an underwater camera, real-time temperature, and water composition that could be shown to visitors. Is that a possibility?

DUFFS has been in conversation with the National Western Center but has not gotten into specifics just yet.

NEXT STEPS

- The next SPRUWP meeting will be August 18 and will include a presentation from the Rocky Mountain Land Library.
- New group members should reach out to Sam with any questions at sam@peakfacilitation.com.