

# **SOUTH PLATTE RIVER URBAN WATERS PARTNERSHIP**

**PHASE I: SYSTEMS NETWORK DIAGRAM DEVELOPMENT**

**REPORT COL30T I**

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# South Platte River Urban Waters Partnership

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In support of water quality management planning and nonpoint source activities, the Colorado Department of Public Health and Environment (CDPHE) Water Quality Control Division (WQCD) requested development of a systems network diagram, focused on projects and activities within the South Platte River Urban Waters Partnership (SPRUWP). LMI and Shadowcliff Associates formed a team (LMI team) in response to this request and completed the following three Phase 1 tasks:

- ◆ *Task 1.1.* Review publicly-available partner websites and interview 20 partners, using a set of questions developed with input from CDPHE, to gather partner information.
- ◆ *Task 1.2.* Develop a preliminary systems network diagram and analysis from the information gathered during Task 1.1.
- ◆ *Task 1.3.* Meet with the partners to review the diagram and analysis and facilitate consensus on SPRUWP priority activities.

The objective of this project was to initiate a dialogue among partners on the focus, priorities, and perceived “value added” of the SPRUWP. The information, analyses, and proposed priorities developed are preliminary, intended as a starting point for further discussion and refinement among the partnership as a whole.

This report, along with the mind-map and associated outline attached, constitute the second version of the preliminary systems network analysis, which is the primary deliverable for Task 1.3.

## APPROACH

### Task 1.1: Gather Partner Information

WQCD identified 20 partner organizations as the focus of this effort. To become familiar with these partners, we reviewed information on the U.S. Environmental Protection Agency’s (EPA’s) South Platte River webpage,<sup>1</sup> as well as the webpages available for the 20 partners. Next, we developed interview questions, in consultation with WQCD and an advisory group from the SPRUWP, and conducted one hour phone interviews with each of the 20 partners. We asked partners for background information on their organization, planned and current projects located near the South Platte River, funding sources for these projects, how they

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<sup>1</sup> EPA, “South Platte River,” *Urban Waters*, [www.urbanwaters.gov/splatte/index.html](http://www.urbanwaters.gov/splatte/index.html).

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collaborate with other organizations, how they use volunteers, and their opinions on SPRUWP priorities.

On August 19, 2013, we provided Ms. Tammy Allen from WQCD with a spreadsheet summarizing information obtained from telephone interviews, as well as a zip file containing more detailed information. Table A-1 shows the contact persons interviewed, their organizations, and information they furnished after the interviews.

## Task 1.2: Develop a Preliminary Systems Network Diagram

We used the information gathered during Task 1.1 to develop the first version of a preliminary systems network diagram. We summarized information on each partner interviewed, including contacts, web addresses, mission and objectives, structure (government, not-for-profit, etc.), collaborators, and focus areas. We categorized partner project information by the range of objectives identified, further categorizing projects into those current and planned, those that must be undertaken next year to avoid “opportunity loss,” “dream” projects, and those to be undertaken by others. We tracked and summarized information on funding sources, potential collaborators, and use of volunteers by project as well as by organization and presented it in spreadsheet format.

We used mind-mapping software to visually represent the results of the analysis. We roughly showed the relative locations of partner activities using a Google Earth map, including project locations and watershed organization boundaries. Finally, we developed a narrative in bullet form, summarizing potential leverage points, lessons learned, and best practices identified during the analysis, with a series of questions aimed at supporting discussion on SPWUWP priority activities. Collectively, these four documents constitute the first version of our preliminary systems network analysis.

On August 22, 2013, we provided Ms. Allen with the spreadsheet; mind-map, in pdf and native format (Xmind); Google Earth file; and narrative. Ms. Allen then sent this information to the 20 partners that participated in the phone interviews to review before the facilitated meeting (Task 1.3).

## Task 1.3: Meet with SPRUWP

On September 4, 2013, the LMI team facilitated an in-person meeting of the partners interviewed. Table B-1 lists meeting attendees.

This meeting focused on the narrative bullets of the preliminary systems analysis. Partners participating in the meeting came to a consensus in a number of areas, including proposed priorities and the perceived value added of the partnership as a whole. In the next section, we present our findings from the facilitated meeting and interviews.

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Immediately following the meeting, we were asked to further analyze and filter the information through the proposed priority areas identified at the meeting. We summarize that analysis and visually represent it in a mind-map and an associated outline (South Platte River Urban Waters Partnership Systems Analysis—Filtered with Draft Priorities). This report, along with the mind-map and associated outline, comprise the second version of the preliminary systems network analysis, which is the primary deliverable for Task 1.3.

## FINDINGS

### SPRUWP Priorities

#### 1. PARTNER SUPPORT: QUARTERLY MEETINGS

SPRUWP currently holds quarterly meetings. These meetings were identified as an opportunity for partners to learn the projects and activities that are underway, access technical expertise within the SPRUWP by identifying areas where help is needed, identify geographic synergies, and find opportunities to expand collaboration.

The partners agreed that some quarterly meetings could be used to focus on particular topics, possibly inviting stakeholders outside the partnership to participate for the purposes of education and message building. Quarterly meetings could also be used to develop and support other SPRUWP priorities, including identification of feature projects (2) and preparation of the annual accomplishments report (6).

#### 2. FEATURE PROJECTS

Projects can be an effective way of highlighting issues and opportunities shared throughout the watershed. The partners agreed that the SPRUWP should select “feature projects” from among projects and activities partners have undertaken or will undertake. These feature projects should reflect multiple benefits, have high visibility, and, collectively, span the entire watershed. Additional criteria to consider include possible synergies from geographic proximity, stormwater (3), and opportunities to use the feature projects as part of educational and funding activities (7, 8) and the annual accomplishments report (6). Partners noted that up to five feature projects could be used as a target to keep workload manageable.

#### 3. STORMWATER

Stormwater was perceived as a synergistic leverage point, with multiple benefits likely from stormwater projects, including recreation, education, and increased accessibility, in addition to improved water quality. Multiple-objective stormwater projects could be targets for feature projects (2) and might serve as useful example projects in SPRUWP education and funding activities (7, 8). (We show

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some current or planned partner projects with stormwater objectives in the mind-map and associated outline.)

#### 4. WATER QUALITY DATA MAPPING AND ANALYSIS

One area of opportunity for the SPRUWP to prioritize was through collection and analysis of existing water quality data. WQCD and EPA have extensive water quality data for all reaches of the South Platte River, and other partner organizations have additional data relating to reaches in which they are engaged. The partners agreed that collecting, mapping, and analyzing these water quality data would offer great value in better understanding high priority issues or areas, especially in the urban corridor.

They also discussed the need to engage local governments and water supply and water treatment organizations in some aspects of the SPRUWP work; mapping and identification of “hot spots” and priorities could be an area for effective collaboration with these stakeholders. Feature projects (2) might be identified on the basis of this analysis, and progress in addressing these priority areas could inform the annual accomplishments report (6). Finally, information developed from this analysis could inform discussions in the state water planning exercise now underway (5), relating water supply projects (and proposed mitigation) to identified water quality needs. The final outcomes of watershed plans currently under development on several tributaries may help in this effort. (We show those watershed plans on the mind-map and associated outline.)

#### 5. STATE WATER PLANNING

The Colorado Water Conservation Board has been directed to develop a comprehensive, state-wide water plan to be delivered to the governor’s office in draft form by December 10, 2014. This planning process is now underway, focused on nine basin roundtables spanning the state. Because water supply and water quality issues are directly connected, partners proposed participation in this basin roundtable planning process as an SPRUWP priority. They also agreed to seek regular participation by a staff member from the Colorado Water Conservation Board in SPRUWP quarterly meetings and other ongoing activities. As noted, linking priority water quality areas identified through data mapping and analysis (4) could help in the state water planning process.

#### 6. ACCOMPLISHMENTS REPORT

The interviews showed that the SPRUWP needs to identify specific accomplishments that could be shared with political leaders and funding organizations. Partners at the meeting agreed that it would be useful to develop and distribute an annual SPRUWP accomplishments report as part of a bigger educational and messaging campaign.

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This report would describe the benefits and positive impacts of the SPRUWP as a whole, using “triple bottom line” information, including jobs and small business opportunities generated, outreach to disadvantaged neighborhoods and students, and water quality improvements. Partners discussed the metrics and information currently collected or used by individual partners that could be used in development of the accomplishments report. (See “Potential Metrics” below and the mind-map and associated outline.) The “co-aligned theme” identified as an educational priority (8) should be integrated with this report. The accomplishments report could be a valuable tool in support of funding activities identified as potential SPRUWP priorities (7).

## 7. FUNDING

Partners identified two areas as potential SPRUWP priorities.

- a. *Capacity funding for SPRUWP.* Current funding for SPRUWP activities—including the coordinator position—is based on government grants that are time limited. The partners agreed that finding sustainable “capacity” funding should be a priority. They also discussed limitations on coordinator activities based on the source of funding and where the position is housed, noting that a position funded with government dollars cannot undertake grant writing or lobbying for funds and a position housed at CSU cannot directly seek funding for SPRUWP. Several partners are 501(c)(3) organizations, established for the specific purpose of seeking and processing multiple sources of funding. They agreed that the SPRUWP should explore potential 501(c)(3) opportunities (either through existing partners or a new organization) as one possible approach to sustained capacity funding and should investigate other structural and funding options for the ongoing success of the organization. Apart from grant writing and lobbying, the coordinator position as currently funded can engage in activities aimed at convening, educating, and developing messages directed to potential funding organizations.
- b. *Project funding.* Interviewees identified seeking sources of funding for collaborative projects as a potential priority area for the SPRUWP. Experience with funders suggests that broad-based, multiple-objective projects are more likely to be funded than smaller-scale, single-purpose ones. As discussed (7a), on the basis of the limitation of current funding sources, the SPRUWP role currently would be limited to convening, educating, and developing messages directed to potential funding organizations. However, many of the other potential priorities identified could be used in this outreach effort, including feature and stormwater projects (2, 3), the accomplishments report (6), and the co-aligned educational theme (8). (We show the organizations presently funding partner projects and activities in the mind-map and associated outline. This information was derived from partner webpages and interview data and may include in-kind contributions as well as direct funding.)

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## 8. EDUCATION: CO-ALIGNED THEME

During interviews, partners identified education (for partners and external stakeholders) as a high priority; organizations whose primary work is “on the ground” (restoration or construction) tended to give education a lower priority. At the meeting, the partners agreed that the partnership should create a “co-aligned theme” that could serve as a central message for the entire watershed. Each partner could then tailor this “theme” to its audiences and individual needs. Potential audiences identified at the meeting include children, residents, and foundations/funders. Education is a primary focus for a number of partners. (We list these partners in the mind-map and associated outline.)

### Other Organizations Needed

During interviews, we asked whether any organizations not presently involved with the SPRUWP are critical to its success and therefore should be involved. Partners at the meeting identified the following as organizations that should be engaged, either on an ongoing or topic-specific basis:

- ◆ Ongoing engagement
  - Urban Drainage and Flood Control District
  - Colorado Water Conservation Board
- ◆ Topic specific
  - Water suppliers/ditch companies
  - Wastewater treatment plants
  - Private developers and big water users, such as Coors and other big industry (engage only as needed—maybe one meeting per year)
  - Local governments with multiple small but related programs (engage for one meeting per year or go to meetings they already attend)
  - Alliance for Sustainable Colorado.

A number of partners are engaged in other collaborations or discussions focused on issues of interest to the topic-specific organizations. The partners agreed that an effective way to engage these topical organizations would be through partner representation in these other venues, with direct engagement as needed, either by SPRUWP attendance at another venue or through an SPRUWP convening.

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## Potential Metrics

The SPRUWP could use the following metrics partners use in their organizations to measure progress:

- ◆ Number of funds leveraged
- ◆ Number of people reached
- ◆ Changes in pre- or post-project surveys
- ◆ Acres treated
- ◆ Risk reduction
- ◆ Education—socioeconomic diversity of audience
- ◆ Education—number of children/family reached
- ◆ Water quality improvements (based on data)
- ◆ Events—number of individuals that attended
- ◆ Enhancements—how much money raised.

SPRUWP could also use other metrics:

- ◆ Number of priorities
- ◆ Number of partners engaged
- ◆ Water quality improvements—measured through data or individual projects
- ◆ Jobs, economic metrics, and small business metrics, such as the number of full-time employees created through projects.

## SPRUWP Value

At the end of the meeting, the partners were asked to reflect on the day's discussions and identify the "value added" potential of the SPRUWP as a whole. The following outline reflects the group's consensus and could serve as a starting point for development of the co-aligned educational theme:

- ◆ Raise awareness
  - Bigger, broader—public
  - Regional/river long view

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- ◆ Collaborate
    - Ensuring partners don't "reinvent the wheel"
    - Finding synergies
  - ◆ Coalesce river advocates, from the general public and organizations focused on river issues
  - ◆ Engage entities (private and public) that can create river benefits through the SPRUWP
  - ◆ Integrate opportunities to access funding
  - ◆ Identify priorities in the watershed from top to bottom (correlates with proposed priorities 2–4)
    - Pick mutually beneficial projects
    - Support advocacy.

## POTENTIAL NEXT STEPS

If additional funding becomes available, the LMI team could complete the following in Phase 2:

- ◆ Validate and refine the proposed SPRUWP priorities through discussions among the full partnership.
- ◆ Further examine certain proposed priorities, including criteria for selection of feature projects, identification of stormwater project attributes, and educational messages and themes for specific audiences, including funders, political representatives, and the general public.
- ◆ Interview an additional set of partners and follow up interviews with partners to gather information on partner activities related to the proposed priorities (adding detail on educational campaigns, the projects meeting the criteria for feature projects and stormwater, and funding opportunities).
- ◆ Perform a gap analysis.
- ◆ Finalize the systems analysis on the basis of current and proposed activities, with analysis of gaps and opportunities.
- ◆ Visually enhance the systems analysis using LMI's graphics department.

# APPENDIX A. SPRUWP ORGANIZATIONS INTERVIEWED

Table A-1. SPRUWP Partner Organizations Interviewed

<p>National Park Service (NPS)</p> <p>Alan Ragins  <a href="mailto:alan_ragins@nps.gov">alan_ragins@nps.gov</a>            303-969-2855            Regional Manager, River Trails and Conservation Assistance Program</p> <p>Following the interview, Alan sent additional information listing groups involved in the South Platte Connections Project and potential partners.</p>	<p>Colorado State Forest Service (CSFS)  <a href="http://csfs.colostate.edu">http://csfs.colostate.edu</a></p> <p>Keith Wood  <a href="mailto:Keith.Wood@colostate.edu">Keith.Wood@colostate.edu</a>            303-438-9338            Urban and community forestry program manager for CSFS. Supervises Devon Buckels, the SPRUWP Coordinator.</p>	<p>US Forest Service (USFS)  <a href="http://www.fs.usda.gov/r2/">http://www.fs.usda.gov/r2/</a></p> <p>Sara Mayben  <a href="mailto:smayben@fs.fed.us">smayben@fs.fed.us</a>            719-553-1418            Renewable Resource Staff Officer            Oversees watershed and forestry programs, partnerships for public lands in the South Platte River headwaters.</p>	<p>National Forest Foundation (NFF)  <a href="http://www.nationalforests.org/">http://www.nationalforests.org/</a></p> <p>Marcus Selig  <a href="mailto:mselig@nationalforests.org">mselig@nationalforests.org</a>            720-437-0290            Director, Colorado Programs</p>
<p>Chatfield Watershed Authority (CWA)  <a href="http://chatfieldwatershedauthority.org">http://chatfieldwatershedauthority.org</a></p> <p>Julie Vlier  <a href="mailto:Julie.Vlier@tetrattech.com">Julie.Vlier@tetrattech.com</a>            303-522-8091            Manager of the watershed authority</p>	<p>Coalition for the Upper South Platte (CUSP)  <a href="http://www.upperrouthplatte.org">http://www.upperrouthplatte.org</a></p> <p>Carol Ekarius  <a href="mailto:carol@upperrouthplatte.org">carol@upperrouthplatte.org</a>            719-748-0033            Executive Director</p>	<p>Cherry Creek Stewardship Partners (CCSP)  <a href="http://www.cherry-creek.org">http://www.cherry-creek.org</a></p> <p>Casey Davenhill  <a href="mailto:casey@cherry-creek.org">casey@cherry-creek.org</a>            303-345-1675            Coordinator, Cherry Creek Stewardship partners.</p>	<p>The Greenway Foundation (TGF)  <a href="http://www.greenwayfoundation.org/web/">http://www.greenwayfoundation.org/web/</a></p> <p>Jeff Shoemaker  <a href="mailto:jeff.shoemaker@greenwayfoundation.org">jeff.shoemaker@greenwayfoundation.org</a>            303-818-8078            Executive Director</p>
<p>EPA  <a href="http://www.urbanwaters.gov/splatte/index.html">http://www.urbanwaters.gov/splatte/index.html</a>  <a href="http://www2.epa.gov/urbanwaters/what-communities-are-doing#region8">http://www2.epa.gov/urbanwaters/what-communities-are-doing#region8</a>  <a href="http://www.urbanwaters.gov/splatte/accomplishments.html">http://www.urbanwaters.gov/splatte/accomplishments.html</a></p> <p>Cindy Cody  <a href="mailto:cody.cynthia@epa.gov">cody.cynthia@epa.gov</a>            303-312-6228            Sustainability Program</p> <p>Stacey Eriksen  <a href="mailto:eriksen.stacey@epa.gov">eriksen.stacey@epa.gov</a>            303-312-6692            Brownfields Program, Watershed Program, Urban Waters partnership</p> <p>EPA provided the following information after the interview: weblink to SPRUWP Accomplishments report; locations for EarthForce schools participating in the KIC-NET program; locations of the</p>	<p>Denver Water  <a href="http://www.denverwater.org">http://www.denverwater.org</a></p> <p>Sarah Dominick  <a href="mailto:sarah.dominick@denverwater.org">sarah.dominick@denverwater.org</a>            303-628-6446            Water resource engineer, long-range planning division</p>	<p>City and County of Denver (CCD)  <a href="http://www.denvergov.org/">www.denvergov.org/</a></p> <p>Mark Bernstein  <a href="mailto:mark.bernstein@denvergov.org">mark.bernstein@denvergov.org</a></p> <p>Michael Bouchard  <a href="mailto:michael.bouchard@denvergov.org">michael.bouchard@denvergov.org</a>            720-913-0632            Department of Parks and Recreation, Division of Planning, Design, and Construction</p>	<p>City of Aurora  <a href="https://www.auroragov.org/">https://www.auroragov.org/</a></p> <p>Greg Baker  <a href="mailto:gbaker@auroragov.org">gbaker@auroragov.org</a>            303-739-7081            Public Relations Manager, Aurora Water</p> <p>Additional information was identified in the interview, but not submitted.</p>

Table A-1. SPRUWP Partner Organizations Interviewed

<p>Brownfields AWP Catalytic sites; and monitoring locations for South Platte River water quality monitoring. The tables listing South Platte River monitoring locations were provided to the WCQD, but not included in the summary materials.</p>			
<p>EarthForce <a href="http://www.earthforce.org">www.earthforce.org</a></p> <p>Donny Roush <a href="mailto:droush@earthforce.org">droush@earthforce.org</a> 303-870-4690 Senior Program Manager</p>	<p>Groundwork Colorado (GrCO) <a href="http://www.groundworkcolorado.org">http://www.groundworkcolorado.org</a></p> <p>Rachel Hansgen <a href="mailto:rachel@groundworkcolorado.org">rachel@groundworkcolorado.org</a> 303-455-5600 Program manager, watershed planning process for the Lower Bear Creek tributary.</p>	<p>Jefferson Conservation District (JCD) <a href="http://www.jeffersonconservationdistrict.org">http://www.jeffersonconservationdistrict.org</a></p> <p>Don Moore <a href="mailto:dmconifer@gmail.com">dmconifer@gmail.com</a> 303-816-0907 President JCC, Chair SPRUWP</p>	<p>Natural Resources Conservation Service (NRCS) <a href="http://www.co.nrcs.usda.gov/programs/eqip/2013EQIP/2013LowerSouthPlatteRiver.html">http://www.co.nrcs.usda.gov/programs/eqip/2013EQIP/2013LowerSouthPlatteRiver.html</a></p> <p>Boyd Byelich <a href="mailto:boyd.byelich@co.usda.gov">boyd.byelich@co.usda.gov</a> 303-776-1242 ext 3 District Conservationist, Longmont and Lakewood Field Offices (Denver metro area)</p>
<p>Sand Creek Regional Greenway (SCRG) <a href="http://sandcreekgreenway.org">http://sandcreekgreenway.org</a></p> <p>Kate Kramer <a href="mailto:kkramer@sandcreekgreenway.org">kkramer@sandcreekgreenway.org</a> Executive director</p> <p>Katie Lampe <a href="mailto:klampe@sandcreekgreenway.org">klampe@sandcreekgreenway.org</a> Fundraising, volunteer and outreach manager 303-468-3263</p>	<p>Barr Lake and Milton Reservoir Watershed Association (BMWBA) <a href="http://www.barr-milton.org/">http://www.barr-milton.org/</a></p> <p>Amy Conklin <a href="mailto:amy.conklin@comcast.net">amy.conklin@comcast.net</a> 303-525-5038 Coordinator</p>	<p>Adams County <a href="http://www.co.adams.co.us/">http://www.co.adams.co.us/</a></p> <p>Adrienne Dorsey <a href="mailto:adorsey@adcogov.org">adorsey@adcogov.org</a> 720-523-6287 Sustainability Program</p> <p>Additional information identified in the interview but not submitted.</p>	<p>Colorado Dept. of Public Health and Environment (CDPHE) <a href="http://www.colorado.gov/cs/Satellite/CDPHE-Main/CBON/1251583470000">http://www.colorado.gov/cs/Satellite/CDPHE-Main/CBON/1251583470000</a></p> <p>Tammy Allen <a href="mailto:tamara.allen@state.co.us">tamara.allen@state.co.us</a> 303-692-3554</p>

## APPENDIX B. MEETING ATTENDEES

Table B-1 lists those who attended the meeting on September 4, 2013.

*Table B-1. Meeting Attendees*

<b>Attendee</b>	<b>Organization</b>
Amy Conklin	Barr Milton Watershed Association
Carol Ekarius	Coalition for the Upper South Platte
Devon Buckels	SPRUWP Coordinator
Alan Ragins	National Park Service
Jeff Shoemaker	the Greenway Foundation
Tammy Allen	Colorado Water Quality Control Division
Stacey Eriksen	U.S. Environmental Protection Agency (EPA)
Cindy Cody	U.S. EPA
Don Moore	Jefferson Conservation District
Rachel Hansgen	Groundwork Denver
Boyd Byelich	Natural Resources Conservation Service
Sara Dominick	Denver Water
Adrienne Dorsey	Adams County
Keith Wood	Colorado State Forest Service
Katie Lampe	Sand Creek Regional Greenway
Marcus Selig	National Forest Foundation
Claire Harper	U.S. Forest Service
Julie Vlier	Chatfield Watershed Authority
Karen Munson	LMI
Joni Teter	Shadowcliff Associates