South Platte River Urban Waters Partnership (SPRUWP) QUARTERLY MEETING November 19, 2019, 12:30 PM- 3:30 pm Pedelfo "Corlar" Congales Prench Library

Rodolfo "Corky" Gonzales Branch Library Meeting Summary - FINAL

Attendance: Tom Arnold, John Davenport, Austin Duncan, Stacey Erickson, Brad Evans, Monique Fair, Reed Gerberick, Emily Hertz, Peter Ismert, Mike McHugh, Jordan Parman, Emily Patterson, Donny Roush, Andrea Savage, Mike Smith, Weston Toll, Travis Warziniak, Scott Williamson, Alison Witheridge

Facilitation: Sam Haas and Samuel Wallace

ACTION ITEMS

Sam Haas	Add Tom Arnold's email contact to the SPRUWP listserv.
Donny Roush	Send macroinvertebrate education document to EPA to put on their website.
SPRUWP Members	 Contact Scott Williams for those who are interested learning more about the Statewide Water Education Action Plan.
	 Contact Stacey Erickson for those interested in using the PowerPoint she developed about SPRUWP.
	 Contact Andrea Savage for those with access to a black light, incubator, and sealer for Groundwork Denver's lab space.
	 Migrate any water quality data that has been submitted exclusively to the Colorado Data Sharing Network to the National Water Quality Portal.
	 Fill out the Google Spreadsheet with thoughts about potential speakers and topics for 2020.

SPRUWP PARTNER UPDATES

SPRUWP partners provided updates on their roles and current work priorities. Their comments are summarized below.

Monique Fair - Sand Creek Regional Greenway

Sand Creek Regional Greenway once had a presence at the SPRUWP meetings but not recently. Fair is new to the Sand Creek Regional Greenway and is attending the SPRUWP meeting to make connections and reestablish a Sand Creek Regional Greenway presence at SPRUWP meetings.

Scott Williams - Water Education Colorado

- The fall edition of the Headwaters magazine is available, and it focuses on the Colorado River Basin Drought Contingency Plan. Through transmountain diversions, the South Platte River Basin is connected to the Colorado River drainage system.
- Water Education Colorado is redesigning and rewriting their citizen's guides series. They released
 the Where Your Water Comes From edition, and they will be releasing the Water Quality edition
 by the end of 2020 and the Groundwater edition by the first quarter of 2020. The Groundwater
 edition will expand the geographic scope of the article from Denver to the whole state of Colorado.
 Water Education Colorado is appreciative of those in SPRUWP who helped write some of the
 sections for these articles.
- Applications for the Water Leader Program are open. The program is more related to leadership development than education on specific water related content. It is a good opportunity for those interested in taking the next step in their career.
- Water Education Colorado has been working on the Statewide Water Education Action Plan (SWEAP). The Colorado Water Plan identified the need for SWEAP, and Water Education Colorado has been gathering input from their water educator network to develop the plan. They are planning to release it in January. They will be going to the Colorado Water Conservation Board

(CWCB) to discuss how implement the plan. For those interested in learning more, contact Scott Williams.

- There will be a training on January 24 and 25 at the Keystone Science Center on the Project WET curriculum.
- Water Education Colorado is setting a date for the tour of the Lower Arkansas River in early June.

Alison Witheridge - Denver Water

- Denver Water continues their work on source water protection planning to address high intensity wildfire and others threats to water supply. Their focus has been on the Upper South Platte and Blue River. They started with an internal education effort and an update to internal geographic information systems (GIS) layer. They have also been working with their public affairs team to develop an internal and external communications plan. The communications plan may still take time to develop as the public affairs team is focused on other projects as well, including the Gross Reservoir Expansion and lead variance.
- Denver Water is still waiting for a decision from the Environmental Protection Agency (EPA) on Denver Water's Lead Reduction Program Plan.
- Denver Water is moving into their new building. It is a LEED platinum building, and they have their own on-site blackwater system. The building will have meeting space, and they can host meetings once that becomes available in the spring.

Stacey Erickson - EPA

- EPA helped review Water Education Colorado Citizen's Guide to water quality. They submitted pictures to the articles.
- EPA recently gave a presentation on SPRUWP at a conference and have updated the PowerPoint slides. If anyone is interested in reviewing or using them, contact Stacey Erickson.

Jordan Parman - Metro Wastewater Reclamation District

Metro Wastewater Reclamation District monitors the water to Platteville and sometimes to the Nebraska-Colorado border. They are monitoring water downstream of Denver at $64^{\rm th}$ Avenue. They completed the last fish survey of the year and will be starting to analyze the data.

Peter Ismert - EPA

Applications for the 319 grant funding are now open. EPA provides the funding for the 319 grant program which the Colorado Department of Public Health and the Environment (CDPHE) then administers. There is still time to apply. More information is on the CDPHE non-point source webpage.

Travis Warziniak - US Forest Service

Warziniak is the lead for the Denver Urban Field Station.

Andrea Savage - Groundwork Denver

Groundwork Denver is continuing to monitor water quality on Bear Creek. They are currently searching for an incubator, black light, and sealer as they transition their lab space. If anyone has access to these supplies, please contact Andrea Savage.

Donny Roush - Denver Public Works

- Roush has updated an educational document on macroinvertebrates. He built a template for the exercise with clipart so that anyone in North American can use it.
- If anyone is interested in using this educational tool, contact Donny Roush. EPA was interested in receiving the macroinvertebrate document to put on their website.

Emily Hertz - Denver Audubon

Denver Audubon is running a new school program called Birds and Conversation. The program addresses topics around watershed and water quality program. In the program, students follow the EarthForce framework which has students identify issues they want to address. They then have to come up with solutions to solve the problem. It is a hands-on activity. There are students with interested in water quality, so contact Hertz if you are interested in providing resources for this program.

John Davenport - Denver Trout Unlimited

- Denver Trout Unlimited has two educational programs in elementary schools, two in middle schools, and one in an alternative high school.
- Denver Trout Unlimited estimates there will \$1 billion in stream improvement projects on the stretch of the river from Chatfield to 64th Avenue over the next 10 years.
- They are hosting a program at the Carson Nature Center at 6:30pm on December 10. At the meeting, there will be three other chapters of Trout Unlimited and Colorado Women Flyfishers Club to learn about sedimentation in the South Platte River. One of the goals is to educate on how the river is supposed to be transporting sediment and what groups should be looking and advocating for when it comes to making the South Platte a functional and healthy river.

Brad Evans - South Platte River Waterkeeper

The Waterkeeper Alliance is a global organization. The South Platte River Waterkeeper is a new organization and are looking to make new contacts and work with partners to improve the river.

Mike McHugh - Aurora Water

- The Watershed Wildfire Protection workgroup is meeting on December 9 in Aurora.
- The Forest Health Advisory Council is happening on December 6 in Frisco.
- Rocky Mountain Restoration Initiative (RMRI) recently held a meeting where groups gave presentations to apply for funding. More information on those rewards will be on December 9.
- The South Platte Enhancement Board is updating the South Platte Protection Plan.

Weston Toll - Colorado State Forest Service

- The Colorado State Forest Service has had a busy season working with the Upper South Platte Partnership and implementing the Forest-to-Faucet program. They have 7 approved projects, including one that is complete in Grand County.
- At the Restoring the West conference in Utah State, they highlighted the work of the Upper South Platte Partnership.

Tom Arnold - Retired Attorney

Arnold is a retired attorney from Boston where he worked on water conservation and river protection. He moved to Denver three years ago. He is also a professional photographer documenting the river. Arnold is not on the email list, but Sam Haas will add him.

UPDATES ON SPRUWP COMMITTEES

SPRWP partners shared updates on the SPRUWP committees. Their comments are summarized below.

- SPRUWP has two committees: one on science and data and the other on education and outreach.
- The science and data committee is working on updating the data in the Water Quality Assessment Tool. SPRUWP partners created the Water Quality Assessment tool, but the data is currently static and most recently from 2015.
- The SPRUWP Water Quality Assessment Tool is accessible. Educators in the past have used it with students.
- The science and data committee is updating the SPRUWP Water Quality Assessment Tool by populating the database with recent data from the National Water Quality Portal and the Colorado Data Sharing Network. SPRUWP partners are trying to set up web services so that the SPRUWP

Water Quality Assessment Tool will pull data from the National Water Quality Portal on a monthly basis. For partners that only submit data to the Colorado Data Sharing Network, it would be helpful to submit previous and new data to the National Water Quality Portal as well.

- Consolidating the data from these two databases into the SPRUWP Water Quality Assessment tool
 will create a single location for people to analyze data on the South Platte River in urban
 corridors. One task to creating the single database is to standardize the parameter list. Currently,
 the parameters of the SPRUWP water quality assessment tool includes data on selenium, total
 suspended solids, pesticide, e. coli, etc.
- The SPRUWP Water Quality Assessment Tool is currently housed on the web domain http://www.exploremetrodenverwaterquality.org/.
- SPRUWP partners are currently talking with Leonard Rice Engineers to perform the update.
 Partners are trying to find funding to complete this work. At this time, partners are finalizing priorities, the cost for each task, what funding SPRUWP is going to spend, and from where additional funds will come.
- There is the opportunity to broaden the geography to include more areas of the South Platte
 Watershed. The current Water Quality Assessment Tool starts in the output of Chatfield. The tool
 does not currently but could include parts of the Upper South Platte and tributaries, such as Bear
 Creek. Expanding the geographic scope of the Water Quality Assessment Tool will depend on the
 funding and resources available.
- Another goal is to make the tool accessible as other water quality databases, like the National Water Quality Portal, are not accessible to the layperson.
- Some SPRUWP partners said that they supported expanding and updating the Water Quality Assessment Tool.

Clarifying Questions

SPRUWP members asked clarifying questions following about the Water Quality Assessment Tool update. Questions are indicated in italics.

Will the Water Quality Data Assessment Tool include data from Colorado River Watch? Since Colorado River Watch data is uploaded to the National Water Quality Portal and Colorado Data Sharing Network, it will include Colorado River Watch data.

Do any of the databases include data on pesticides, cosmetics, or microplastics?

Data on pesticide and contaminants from cosmetic products is in the National Water Quality Assessment tool but not in the National Water Quality Portal. The databases do not contain information on microplastics, but more information on microplastics can be found on EPA's trash-free waters webpage.

Does the Water Quality Assessment Tool include data from Spinney and 11 Mile Reservoir? Other SPRUWP partners have data on these reservoirs, including Aurora Water and Denver Water. Denver Water is currently building their Denver Water Reservoir Program back up and can share data on request.

PRESENTATION: INSTITUTE FOR ENVIRONMENTAL SOLUTIONS, REDUCING CHEMICAL FOOTPRINTS TO PREVENT WATER POLLUTION AND IMPROVE HUMAN AND ENVIORNMENTAL HEALTH PRESENTATION

Carol Lyons, Mike Smith, and Reed Gerberick presented on the Institute for Environmental Solutions programs to reduce human exposure to chemicals of emerging concern (CECs). Their presentation is summarized below, and their presentation slides are attached to this meeting summary.

- The Institute for Environmental Solutions (IES) is a small non-profit organization founded in 2004 and based in Denver. IES delivers scientific solutions to improve human and environmental health. IES strictly conducts science-based work and does not lobby or advocate.
- IES recently published their 2018 annual report.

- IES seeks to address problems outside of the regulatory silos, such as CECs. They also work with stakeholders to implement solutions.
- CECs are found in household and personal care products, and IES addresses CECs found in these types of products. CECs can be found in pharmaceuticals and drugs too, but IES does not address these CECs. CECs are known endocrine disruptors.
- The book *Our Stolen Future* made known the presence of CECs in the environment. The book came out as the ability to detect contaminants in low concentration was improving. This improvement in detection allowed for scientists and researchers to detect CECs in places that they had not seen CECs before. It is difficult to determine when CEC concentrations first appeared in the waterways, but the chemicals were coming from household products.
- Common CECs include alkylphenol surfactants (nonylphenol and octylphenol) from cleaning products, BHA (Butylated hydroxyanisole) from processed foods, BPA (Bisphenol A) from plastic containers, DEET (Diethylmetatouluamide) from bug repellants, parbens from personal care and cosmetic products, oxybenzone from sunscreen, and triclosan from antimicrobial personal care products.
- To determine which CECs to address first, IES looked for three characteristics: how commonly found they are, whether there is scientific evidence they are harmful, and if there is something IES can do to reduce the impact.
- One example of a CEC is oxybenzone. Oxybenzone is found in sunscreen. Oxybenzone disrupts the endocrine system, bioaccumulates, and harms coral reefs. Oxybenzone can be absorbed through the skin, and it can wash off people and enter into the water. As a result, there has been coral bleaching in places like Hawaii, Key West Florida, and the Great Barrier Reef to the extent that Key West and Hawaii have banned the use of sunscreens with oxybenzone.
- Alternative to sunscreens with oxybenzone include mineral sunscreens that contain titanium dioxide and zine oxide. Another alternative strategy to reducing oxybenzone use is to cover skin with protective clothing.
- IES developed a video to inform general audiences about CECs. The video is available on YouTube: https://youtu.be/Vy6FvWSOobs.
- With long periods of exposure to CECs, there is an increased likelihood of prostate, breast, and thyroid cancers, ADD, ADHD, mutations, and reduced fertility rates in aquatic wildlife.
- Wastewater treatment facilities do not filter out CECs from surface cleaners, which then enter in the natural waterways. Downstream water users are then exposed to the CECs as other treatment facilities do not filter out the chemical compounds.
- Strategies to reduce the impact of CECs include buying products that do not contain CECs, making products at home, using less of a product with CECs, and using alternative strategies, such as wearing long clothes instead of applying sunscreen or insect repellant.
- The mission of the IES chemical footprint project is to prevent water pollution and protect human and environmental health by reducing household and commercial footprints.
- The term "chemical footprint" encompasses all the effects from all of a person's or organization's chemical use. Reducing one's chemical footprint includes identifying daily activities which exposes a human or the environment to CECs.
- Upgrading treatment facilities to filter out CECs is expensive, and it is difficult to pass regulation. IES instead focuses on preventing the use of CECs in the first place.
- To do this, they engage with the community in community-based social marketing. For people, it is not enough to understand that a problem exists to change someone's behavior. Social marketing is a set of strategies to attempt to find the barriers that prevent people from adopting new positive behaviors.
- IES conducted a series of online and in-person surveys and focus groups to better understand why people are buying or using products with CECs. This data then helps identify the barriers that keep people from switching to products without CECs.

- Once IES identifies and understands the barriers, they can create strategies to address those specific barriers. Potential barriers include a lack of knowledge, forgetting to act, structural barriers like access, or lack of motivation. If the barrier is that people are forgetting to act, a potential solution could be to create a phone app with a list of ingredients to avoid.
- Overcoming barriers to change is a difficult program. One strategy is to emphasize social norms and obtain commitment. For example, to obtain commitment, IES will ask a group of people to raise their hands if they are going to reduce their chemical footprint. These types of commitments make it more likely that people will adopt new behaviors. As more people adopt a behavior, it starts to spread within their network.
- IES tries to learn from the community through surveys and focus groups. They engage with community members to understand if there are other benefits to reducing one's chemical footprint beyond the environmental benefits, such as saving money. They also host workshops and public events to demonstrate to people different ways to reduce their chemical footprint.
- IES partners with public schools, such as Northgate Public Schools, to conduct a Blue Crew Water Stewards program. The Blue Crew Water Stewards program curriculum adheres to Colorado science education standards, so the program curriculum complements a teacher's lesson plans while teaching about different aspects related to chemical footprint.
- The Blue Crew Water Stewards program is implemented through three consecutive workshops. Each workshop ends with a discussion and feedback session with the students. The first workshop starts with a discussion. They then follow up this discussion with an interactive workshop where they simulate the path of water through the water cycle. They identify where contains can enter the water cycle, how it travels, and where it may or may not be filtered out. The second workshop is about CECs: what they are, how they move, and where they are found. IES staff conduct an activity where students have to match CECs with a common household item. They also run an activity on how to reduce one's chemical footprint. The third workshop is focused on making action plans and commitments to reducing one's chemical footprint. They provide ingredients and do-it-yourself project instructions to share with friends and family.
- IES uses the qualitative data gathered from the feedback sessions to improve their workshops. They are developing a more comprehensive curriculum to bring to other schools. They are developing workshops for sixth, seventh, and eighth grade students. They also are interested in working with high schools, but it depends on funding and ability of IES to partner with other schools.
- IES provides resources through their website and YouTube videos on topics such as how to read labels and make homemade products without CECs.
- IES organized two activities for SPRUWP partners to participate. The first activity was one in which participants identified CECs in household products and determined ways to reduce the chemical footprint. The other was a do-it-yourself activity where students created their homemade household products. SPRUWP members participated in the activities and provided feedback on them.

Clarifying Questions

SPRUWP members asked clarifying questions following IES's presentation. Questions are indicated in italics.

What is the support structure of IES, and from where does IES receive funding? IES's funding primarily comes from grants and individual donors. They also partner with the Clean Label Project and Ocean First Institute in Boulder to leverage resources.

IES's school workshops target youth in sixth, seventh, and eighth grade. With this demographic, it is likely that the partners are the ones who are making purchasing decisions. How does IES get information to the parents?

There is anecdotal evidence that demonstrates that young students do influence purchasing decisions. Students learn about CECs and then discuss it with their parents when they go to their homes. IES is also

working with teachers to identify what products students would be interested in making. Ideas like do-it-yourself deodorant is popular. Other ideas include face wash, body scrub, or lip balm.

SPRUWP Partner Feedback on Activities

IES requested feedback from SPRUWP partners on the two activities in which SPRUWP members participate. Their comments are summarized below.

- Having hands-on activities is helpful to facilitate student learning.
- It is important to know the community, their resources, and the cultural relevance of the curriculum. Middle schoolers are the likely the right age group for this conversation, and they are likely to influence each other. However, they may need specific and clear directions as students at that age can get loss in the activities.
- Be sure to check in with teachers before the lesson to check for any accommodations that students may need. For example, some students may need bigger font to help them read.
- Develop a take-home flyer or pamphlet for students to deliver to their parents.
- Partner with organizations, such as JoyFill on Tennyson Street which is a business that creates household products and provides refills of containers.
- Consider a youth leadership program in which youth act as trainers for other young students. Groundwork has a similar program, Green Team, in which they empower and pay youth leaders.
- One activity could be students develop a product line of products without CECs.
- Many middle schoolers have smart phones. There are apps that allow people to scan labels to gather product information. There could be an activity where students scan the products in their classroom.
- Develop the curriculum for Spanish-speaking partners.
- One way for information to reach the parents is to have students teach their parents at parent meetings.
- Homemade products may be cheaper, so IES should use an economic perspective to encourage people to create homemade products.

PRESENTATION: EMILY PATTERSON, CLIMATE SMART DENVER DECISION SUPPORT TOOL IN WESTWOOD PRESENTATION

Emily Patterson, program director at the Trust for Public Lands (TPL), presented on the Climate Smart Cities decision support tool and lessons learned from implementing projects in Westwood. Her presentation is summarized below.

- Westwood is a neighborhood in southwest Denver. Morrison Road is the main street of Westwood.
- The Climate Smart Denver decision support tool did not start with data; it started when the community invited the Trust for Public Lands to talk with them about what in the built environment was important to the community.
- Westwood is one of the youngest neighborhoods in Denver but also has one of the highest rates of obesity. The community said they were concerned about health issues and safety of neighborhoods (parks, streets, alleyways, etc.).
- One of the first priorities of the community was beautifying the alleyways. Students used alleyways to go to school because the sidewalks were dangerous. The alleyways were filled with trash. Some residents said that there were people coming from places like Lakewood to dump trash. Additionally, there were large dumpsters in the alleys and not individual trash cans, which was affecting water quality. The community was interested in making the alleyways safe for their children, but there was also the side benefit of improving water quality.
- The lack of trees and tree canopies was also an issue. The neighborhood only had 9% canopy cover in comparison to 30% canopy cover in wealthier neighborhoods. The lack of tree canopy makes the neighborhood warmer for residents.

- TPL at the national level had a program called Climate Smart Cities. Although the community was not talking about climate change, there were climate driven concerns. TPL's priorities through the Climate Smart Cities program are to connect (through trails and transit lines), cool (through shade and canopy cover), absorb (stormwater), and protect. Some of these priorities aligned with the concerns that community members were communicating.
- TPL began to think about how to implement projects in Westwood through the lens of climate equity. TPL organized a panel of experts to talk about climate equity in Westwood, and 50 people attended.
- TPL also built the decision support tool. It is a large tool with a large amount of data which provides context for the Climate Smart Cities program's priorities.
- The maps created from the tool are data driven. The maps identify the areas of greatest needs for different priorities by using a color code (e.g., areas in red are the highest priority). Examples of layers in the data tool include low-income population, minority populations, linguistics, less than high-school education, etc.
- A partner group known as Cool Connected Westwood formed led by Westwood Unidos.
 Westwood Unidos and the partnership evaluated priorities and began to identify projects. TPL
 worked with these partners through the Cool Connected Westwood initiative and had discussions
 about what projects partners are working on and how they can begin to align projects and work
 together.
- At the same time that these partnerships were forming, the City of Denver was implementing their neighborhood planning effort. Partners began identifying a greenway through Westwood, known as Westwood Via Verde, that would connect green alleys, parks, Weir Gulch, other renovation projects, and Xcel easements (which counted as parks but did not act as parks for the community). Public Works and Denver Parks and Recreation partnered with Westwood Unidos and Groundwork Denver to implement the Via Verde project.
- The partners worked with Stream Landscape Architecture and Planning to confirm routes and identify the opportunities for cross-connections. In 2018. They finished the implementation plan and identified a new set of priority projects. These projects included improving the Xcel easements and increasing safety on Kentucky Road. Other projects included wayfinding and alley cleanups.
- In 2019, partners were able to move forward with 30% of the design of intersection improvements on Kentucky road. They also completed 30% of design for the Xcel easements. They also worked with Denver Parks and Recreation for pocket park design.
- The partners also identified potential renovations for existing parks, like Knox and Kentucky Park, and areas for new parks, such as an area adjacent to the elementary school.
- The core team still meets monthly, which has been meeting on a month-by-month basis since 2016. In their last meeting, thirty people met to look at past projects and plan for where they can move forward in 2020. Since 2016, the partners have developed habitat gardens, bicycle libraries, and more.
- Youth have been involved in the project. Groundwork's Youth Green Team helped plant trees and planned outreach efforts for Via Verde and pocket parks.
- It was important to the partners to work within the context of the community. Since the community enjoyed block parties, the partners hosted block parties. They also listened to the community. For example, they asked community members why they were not planting trees. Some community members saw trees as a liability, and some wanted flowering fruit trees. Partners chose then to plant perennial flowers at the base of the trees, and Westwood Unidos worked with tree planters to change their communication and outreach materials.
- Partners also worked with local artists to add a cultural element. A third generation Westwood artist created a mural along Via Verde to represent the connections between the community and the earth.
- Partners noticed paleta carts throughout the community. Artists painted the paleta carts to turn them into climate action educators. Groundwork Denver used it for water quality outreach efforts,

- and some carts were outfitted with an air quality monitor as a prototype project o measure air quality around schools. They also added boombox to the paleta carts.
- One of the biggest lessons is it is not possible to implement these projects alone. City partners and ambassadors for the project have been essential for implementing the project and identifying opportunities to be creative. The Safe Routes to Schools program was an important partner to champion for safety and helped bring the design of the intersection of Irving and Kentucky to 100%.
- The Climate Smart Denver decision support tool is hosted at https://web.tplgis.org/Denver. The data description explains the goal and criteria for each priority. For example, the connect priority has a goal of creating safe routes to schools, employers, and grocery stores. People can use the tool to examine parcels and parks and show how it ranks in achieving climate goals. It is also possible to stack priorities to identify where there are the biggest challenge; for example, one area might have connect as a priority but not cool.
- There are similarities between the Climate Smart Cities tool and the Natural Capital tools. The Climate Smart Cities decision support tool is a more urban-focused tool.

Clarifying Questions

SPRUWP members asked clarifying questions following Emily Patterson's presentation. Questions are indicated in italics.

Is the decision support tool only for public spaces or can people look at their houses? With the decision support tool, a person can examine a parcel of any size.

What is the accessible amount of greenspace in Westwood?

There are greenspaces in Westwood that count towards parks but do not function as parks. If one were to determine greenspaces based on the functionally, then about a quarter of the greenspaces in Westwood would not count as greenspaces. It is important to look at the data in different ways.

What do green alleys look like?

In Westwood, improving the alleyways was about grassroots cleanup. Community members took the trash out and repaired fences. They also painted both sides of the fences in the alleys and put coffee cans with flowers on fence poles. They installed light and cameras that looked into the alleys. Part of the implementation plan also address water quality issues by allowing alleys to capture and treat stormwater before it went into pipes.

Are partners looking at permeable pavements?

The partners are looking at the potential of permeable pavements. Partners have identified nine projects, three of which have reached 30% design. There were water quality needs at the Kentucky-Irving intersection, pocket parks, and Xcel easements. Partners will continue to work on determining if permeable pavements will be an option.

What are the next steps for the project?

- One of the largest barriers to the project is maintenance. There is a group of University of Colorado-Boulder Masters of the Environment students determining how to maintain projects. Partners are considering community-driven maintenance and training programs.
- They are also working with and learning from other projects across the city that developing loops like the Westwood Via Verde. Groups are developing a looped path in Montbello to connect people to fresh food and a looped path In Park Hill that will feature projects around art, culture, and history. These groups are beginning to meet to see if there are ways to connect loops across the city as well as learn from each other.

What is 30% design?

- Projects are designed to the 30% threshold to give a better sense to partners on what 100% of the project is going to cost. For example, after completing 30% of the design for the Xcel easements, partners know the whole project will cost around \$500,000.
- It also creates opportunity to identify different ways a project could develop. Partners extended the Xcel easement project to connect the easements to a community bikeway to create a mile and a half stretch of greenway.

What are the different elements that went into the tool?

The tool allows users to create maps and generate parcel reports. The tool is user friendly and encompasses the entire Denver area, not only Westwood.

NEXT STEPS

- SPRUWP partners were asked if the third Tuesday on a quarterly basis still worked with SPRUWP partners. Partners said that this was the best time to meet.
- Planning for 2020 meetings will start soon. For those who are interested in specific speakers and topics, please fill out a Google spreadsheet with suggestions. Mike McHugh suggested speaking about the Source Water Protection Plan and potentially partnering with Alison Witheridge in August or November of 2020.
- The education and outreach and science and data committee will continue to meet on a quarterly basis. If you are interested in joining the committee, please contact Sam Haas.