



2016 PLANNING SESSION MINUTES
 RMWEA/RMSAWWA Joint Water Reuse Committee / WaterReuse Colorado

November 5, 2015 at 10:00 am
City of Aurora Municipal Center
 15151 E. Alameda Parkway, Aurora, CO
 Lowry Room; 3rd Floor
 Call in number 888-809-4012, Passcode 7641593#
 Note: Lunch will be provided to all attendees.

Attendees:

Dave Takeda	MSK Consulting
Damian Higham	Denver Water
Abbey Antolovich	Xylem
Frank Johns	Tetra Tech
Laura Belanger	Western Resource Adv.
Tara Kelley	Colo. Springs Utilities
Liz Lemonds	CDPHE
Julie Tinetti	Centennial W&S

Richard Leger	Aurora Water
Brenley McKenna	Denver Water
Bob Dye	Meredian
John Rehring	Carollo
Jodi Villa	Kennedy Jenks
Steve Ravel	HMM
Yelena Sandler	Arcadis

Phone Participants: None

1. Review Mission Statements

Review WRCO and Joint Reuse Committee mission statements:

The primary objectives of WaterReuse Colorado include supporting the mission of the Association, advocating legislation and regulations which facilitate appropriate water reuse, promoting safe and effective reuse throughout the state, and improving public understanding of water reclamation.

The RMSAWWA/RMWEA Joint Water Reuse Committee’s mission is to support and promote the safe use of reclaimed water in Colorado, New Mexico, and Wyoming. This is achieved through local workshops, participation in local and national conferences, regular meetings, and educational material.

2. 2016 Draft Calendar

The draft 2016 calendar and DPR project schedule (attached w/revisions made after the mtg) were reviewed. Suggestions included adding more details about scholarship and award schedules so we aren’t rushed in 2016 and also adding national conferences.

3. Review 2015 Strategic Plan and Other Documents

The minutes from the 2015 strategic planning meeting were reviewed (attached) and discussed.

4. 2016 Goals and Objectives (120 min)

Potential focus areas were discussed resulting in the 2016 Strategic Plan Action Items in Table 1 at the end of these minutes. Additional discussion about focus areas included:

Outreach/coordination w/other states/organizations

We've done outreach in the past to WY and NM. We're happy to help or coordinate with anything but no specific outreach is planned other than WRCO members continuing to stay engaged in other forums.

Local research projects funded by WRCO

Brenley informed the group that Denver Water will be completing a feasibility study regarding a research facility where DPR, among other things, will be studied. This is very preliminary but Denver Water will be looking at a governance structure, stakeholder engagement/ participation, and funding sources for the facility. As of now, it is planned to be constructed in the National Western Complex as a part of the redevelopment. Once we are further along in the study they will be looking for participation from the WRCO members. Brenley will continue to keep the group informed but asked that any ideas WRCO members have about such a facility be sent to her and Damian.

More engagement of treaters/users

Liz mentioned that there are approximately five potential West Slope reclaimed water treaters/users. The group agreed that we should reach out to them and other potential new treaters/users and see how we may be able to provide assistance to them, possibly setting aside time during an upcoming meeting (perhaps March) to for them to call in. Liz will send list of potential treaters/users to Richie who will contact them.

Industrial water reuse

There was a lot of discussion around industrial reuse, including that WRCO tends to be very municipal reuse focused. Industrial can mean a wide range of things from a municipality supplying industrial customers to industrial users with their own supply, such as the oil and gas industry. Industrial use can provide desirable year round use and industrial customers may be more willing to pursue reuse, including DPR, for economic reasons compared to other customers. The food and beverage industry is a potential area that reuse is increasing. Rather than trying to bring industry to us it probably makes sense to consider ways to go to them, perhaps at their conferences, and we could develop a list of potential WRCO member speakers. Abbey will look at CDPHE's Leadership Awards to see which companies have received those for possible outreach. The WateReuse Association is very interested in industrial reuse, so Abbey will continue to see what tools and work may be available that we could leverage. We discussed forming an industrial reuse subcommittee but decided this isn't currently a priority.

5. Other Items (45 min)

a. DPR Project (Schedule and Statement of Work are attached)

We reviewed the project schedule and John discussed the Statement of Work. This project will build on what's going in other states and nationally to ensure Colorado is well

positioned to implement DPR rather than being reactionary when a project is being pursued.

We also discussed considering ways to potential incorporate some school age educational materials (seeing if we can build off existing WRCO member materials, such as from Aurora, CSU and others) into DPR project Task 2 materials development. Liz said she would provide Colorado Science Standards which might be helpful to clearly link to any materials to encourage teachers to use them.

Additionally, Brenley mentioned that a Denver Water employee recently completed her thesis on the topic of public perception of DPR in Denver. If there is interest in having her present at a future meeting, Brenley can see if she would be available.

b. Reuse Rendezvous and Colorado Water Congress (2016)

The Colorado Water Congress (CWC) Annual Convention is in January 2016. At our urging, the Executive Director of CWC has agreed to include a full day reuse track to the pre-convention workshop day (Wed 1/27) and reuse sessions to the convention. We provided a list of session/panel/topic ideas and will continue to work with CWC to develop the agenda.

The Reuse Rendezvous (RR) will be held in conjunction with CWC. Other evenings are full so the RR will be held at the CWC hotel (Hyatt Regency Denver Tech Ctr) on Tues eve 1/26. Cost is \$75/head which includes food and drinks. Damian noted that the RR will target both water quality and quantity and reviewed event goals and target audience. \$2,500 towards the event is being provided by CDPHE's pollution prevention advisory board and Damian is asking the Joint Reuse Ctte for a \$1,000 sponsorship tomorrow (11/7/2015). We discussed charging some attendees a nominal fee and landed with some people, such as consultants, perhaps paying if necessary for budget reasons. CSU is brewing beer for the event w/attendees signing a waiver before they can drink. Damian will work with CDPHE to ensure the beer complies with regs. A Save the Date card needs to go out soon and Damian has put a list of potential invitees together. [Note: A subctte was formed during the 11/5/15 WRCO regular mtg to work in this event. See those mtg minutes for more RR details.]

c. 2016 Workshop in August

We decided that we will not host a workshop in August 2016. With DPR project timing, we will likely have a lot from that project that could be presented on the following year at an August 2017 workshop. Dave suggested that we reach out to the Joint Reuse Ctte to see about presenting at their September Annual Conference, perhaps offering to run the reuse track. The call for papers is expected in February so we will check in with them then.

2016 Strategic Planning Focus Areas	WRCO Member Lead
1) Outreach/coordination w/other states/organizations a) Attempt to set up a meeting at the RMSAWWA/RMWEA Annual Conference b) Reach out potable reuse hire being made by AWWA c) Outreach to a broad range of entities will occur through the Reuse Rendezvous	1a. 1b. Dave 1c. Damian
2) Local Research Projects Funded by WRCO a) WRCO 2016 DPR Project b) If a DPR pilot project emerges, consider how WRCO might be involved c) Keep an eye on Western Stock Show complex water education and research project for how WRCO might want to be involved. d) Review reuse-specific Action Items in final Colorado Water Plan for potential action beyond the DPR project.	2a. John 2b. 2c. Brenley 2d. Laura
3) More Engagement of Treaters & Users a) Continue to recognize users via local and possibly national awards b) Outreach targeted specifically for known potential reclaimed water treaters/users to see how WRCO may be of assistance c) WRCO DPR Project will provide engagement opportunities d) Check in the Joint Reuse Cttee about presenting at their Sept conference	3a. Abbey 3b. Richie (w/list from Liz) 3c. John 3d. Dave
4) Industrial Water Reuse a) Maintain current level of involvement which included staying abreast of industrial webinars and conferences and WateReuse tools and research. b) Consider opportunities to have industrial users present to WRCO or to do tours of industrial facilities.	4a. Abbey 4b. Abbey
5) State-Level Legislation a) We are not currently pursuing legislation but ideas may emerge from Reuse Rendezvous or DPR Project b) Invite key legislative/regulatory contacts to Reuse Rendezvous c) Talk to contact at Capitol to let them know we're available if can provide assistance	5a. 5b. Damian 5c. Dave
6) Public Outreach and Acceptance a) This is key component of the WRCO DRP Project. b) At end of WRCO DPR Project (in 2017) consider a WRCO sponsored follow up to DPR Project survey	6a. John 6b.

Draft 2016 WRCO/Joint Reuse Committee Schedule (11/16/2015 Version)

Note: Awards Committee 2016 schedule needs to be added/finalized

January 2016

- Jan 7: WRCO/Joint Reuse Ctte Mtg, Plum Creek Water Reclamation Authority
- Jan 25 – 27: AWWA Int'l Potable Reuse Symposium, Long Beach, CA
- Jan 26 Eve: Reuse Roundup
- Jan 27: Colorado Water Congress Reuse Workshop Track
- Jan 28 & 29: Colorado Water Congress Reuse Sessions
- Basin Roundtable presentations and votes on WSRA funding requests (CO, Metro, SPlatte)

February

- Feb 1: CWCB WSRA Grant Application due
- Begin working on August Workshop (In odd years. Doing in 2016?)
- Scholarship and Awards Committees develop announcements and schedule

March

- Mar 1: WRCO/JRC Scholarship Program Advertisement
- Mar 3: WRCO/Joint Reuse Ctte Mtg, City of Aurora Municipal Center
- (Date TBD) Present at CWCB board meeting. CWCB votes on WSRA grant applications
- Early in month: Scholarship and Awards announcements out

Apr/May

- May 1: Scholarship Applications Due
- May 5: WRCO/Joint Reuse Ctte Mtg, Plum Creek Water Reclamation Authority
- Contracting with CWCB, Carollo and other DPR Project Funders
- Decide if will conduct an August member survey

May/June

- DPR Project Kickoff. Reg/tech & ed/outreach workgroups meet? Set up project mtg calendar
- June 15: Award Ctte Final Decision on Scholarships Due

July

- Jul 7: WRCO/Joint Reuse Ctte Mtg, City of Aurora Municipal Center
- Revisit strategic planning "Action Items"
- Revisit research committee priorities
- Review scholarship applications

August

- Workshop (In odds years. Doing in 2016?)
- Present Scholarships and Awards at workshop or other event/mtg (late Aug/early Sept)
- Member survey?

September

- Sep 1: WRCO/Joint Reuse Ctte Mtg, 2015 Plum Creek Water Reclamation Authority
- Sep 11 – 14: 31st Annual WaterReuse Symposium, Tampa, FL
- Sep 24 – 28: WEFTEC, New Orleans, LA
- Notice of Elections

October (or November)

- Officer nominations: Board/others think about and talk to potential nominees

November

- Nov 3: WRCO/Joint Reuse Ctte Mtg, City of Aurora Municipal Center
- Nov mtg minutes **must** include notice of January annual meeting and elections (both must be noticed at least 30 days in advance)
- Strategic Planning Planning Mtg (Incoming President/Secy prepares agenda and runs)
- Initiate Workshop (odd years)
- Discuss next year's budget
- Determine if need committee to consider proposed bylaw changes

January 2017 (2016 Pres will prepare this agenda and run this meeting, new Pres takes over these duties at the March 2017 meeting. See 2015 Jan mtg minutes for Jan format)

- Renew Spending Policy
- Elections
- Bylaws Review or Amendment

WATEREUSE COLORADO WSRA GRANT APPLICATION October 2015		2016							2017											
		J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
		Task 1 DPR Regulatory and Institutional Framework for Colorado																		
1.1	DPR Success and Failure in OR TX NM and CA																			
1.2	CO Reg Strategy Workgroup Meetings (4)																			
1.3	Summary Report																			
Task 2 Public Outreach for DPR at the Local and State Level																				
2.1	Public Education and Outreach Workgroup																			
2.2	Develop Web-Based Educational Materials																			
2.3	Web-Based Outreach Stakeholder Survey																			
2.4	Interpret and Apply Results from Surveys																			
2.5	Outreach Materials for DPR Demonstration Facility																			
2.6	Develop and Deliver Outreach Materials and Messages																			
Task 3 Leveraging Potable Reuse Planning Tools																				
3.1	Synthesis of Health Research																			
3.2	Enhance IT3PR																			
3.3	Tool Updates Rollout																			
3.4	Colorado Case Studies																			
Task 4 Summary, Project Management, and Administration of Grant Funds																				
4.1	Executive Summary																			
4.2	Project Management																			
4.3	Administration of Grant Funds																			

STATEMENT OF WORK
Water Reuse Colorado (WRCO)
Project: Advancing Direct Potable Reuse to Optimize Water Supplies and Meet Future Demands

October 30, 2015

Meeting Colorado's water needs is an increasingly difficult challenge, requiring new thinking and nontraditional supplies. The forthcoming Colorado State Water Plan recognizes this reality, with its emphasis on water conservation and water reuse, and in particular, its acknowledgment of the role that potable water reuse will necessarily play in our state's future water supply portfolio.

Challenging and new regulatory issues, such as those surrounding Direct Potable Reuse (DPR), have difficulty progressing in the abstract. Where DPR has been successfully implemented (Oregon, Texas, New Mexico), the need for water and the leadership of select utilities resulted in a thoughtful, rigorous, and yet, expedited regulatory approval. This WateReuse Colorado (WRCO) project will build upon these and other successful DPR experiences, and intends to do so based upon specific and succinct example projects in Colorado. The work will focus on the three key areas, all of which were highlighted in the May 2015 Colorado DPR Workshop hosted by the Water Environment Research Foundation (WERF) and the Colorado Water Conservation Board (CWCB):

- Regulatory and Institutional Framework
- Public Outreach
- Technical Aspects

This three-tiered approach is generally consistent with successful precedents in Texas, New Mexico, and Oregon. The WRCO project will be conducted in three interrelated tasks, corresponding to the three focus areas described above. A fourth task provides project conclusions, as well as management and administration of grant funds. Carollo Engineers was selected through a competitive process to administer and manage the project and implement and complete project tasks, with assistance from WRCO members and other project participants.

Task 1: DPR Regulatory and Institutional Framework for Colorado

Description of Task

This task will define a clear path to developing, implementing, and administering regulations for DPR in Colorado. Having this path defined is a critical step toward adopting and implementing regulations that the regulators, regulated community, and public can stand behind and support with confidence. This work will leverage extensive regulatory efforts from New Mexico, California, Texas, Oregon, and nationally, while reflecting Colorado's unique water management systems. The end point of this effort will be a defined path to developing regulations, including how to implement and apply the recently-developed National Framework for DPR (prepared by WateReuse, the National Water Research Institute [NWRI], Water Environment Federation, American Water Works Association, and a seven-member Independent Advisory Panel in 2015) to Colorado. It will also address questions regarding what state resources (e.g., Colorado Department of Public Health and Environment [CDPHE]) are needed to develop the regulations and administer them once adopted.

Task 1.1 – DPR Implementation Success and Failure in OR, TX, NM, and CA. As noted in the 2015 WERF document *Considering the Implementation of Direct Potable Reuse in Colorado*, DPR is not prohibited in Colorado, but there is also no clear regulatory pathway. This subtask will compare and contrast the regulatory pathways for DPR in Oregon, New Mexico, Texas, and California. Oregon, New Mexico, and Texas used flexible but protective approaches to permit and implement DPR projects. California has taken a different approach to DPR. Beginning in 2011, the WasteReuse Association – with broad industry support – established the California DPR Research Initiative, funding over \$6 million in DPR research to date. In parallel, the State Water Resources Control Board has been mandated to determine by fall 2016 if it is feasible to develop DPR regulatory criteria for the State of California. Once determined, California utilities may have to wait another few years before DPR is officially regulated. Thus, the important questions remain: What are the specific regulatory, legal, and institutional barriers that were overcome in Oregon, New Mexico, and Texas; how do those compare and contrast to the barriers in California (where DPR regulation is slow); and how do those barriers compare to Colorado’s?

The project team will research these questions, working closely with the successful project teams in Oregon, New Mexico, and Texas, and working with the California teams looking to progress DPR in California. Once this effort is complete, the project team will summarize its findings in a presentation to be used in Task 1.2, below.

Task 1.2 – Colorado Regulatory Strategy Workgroup Meetings. The project team will convene a series of four quarterly workgroup meetings to weigh issues, make recommendations, and exchange information. The workgroup shall be convened by the WRCO President or Board and will include Colorado Department of Public Health and Environment (CDPHE) regulatory staff, Colorado utilities, regulators and utilities from other states, national experts.¹ These workgroups will be facilitated by Jeff Mosher, of NWRI. Potential topics are defined as follows:

- Meeting #1 - Review of DPR projects and initiatives in Oregon, Texas, New Mexico, and California. Presentation and discussion on technical, outreach, and institutional/legal issues. Workgroup to brainstorm institutional/legal issues for Colorado and to assign tasks for more detail and investigation.
- Meeting #2 - Workgroup to report back with draft summaries of institutional/legal issues for DPR in Colorado. Workgroup will be divided into sub-groups to work through example DPR projects in Colorado, identifying and providing proposed approaches to resolving identified technical and legal/institutional issues. Workgroup to discuss avenues for securing resources needed for CDPHE’s efforts in developing regulations.
- Meeting #3 - Extension of Meeting #2, details to be determined.
- Meeting #4 - Final meeting of Workgroup. The goal of this meeting will be to reach consensus on a path forward for DPR in Colorado.

Task 1.3 – Summary Report. The planning team will develop a summary report of Workgroup activities and a path forward for DPR regulatory development in Colorado, working in collaboration with CDPHE. This will include a brief summary of the legal and institutional barriers (and success stories) to DPR in

¹ Hours and expenses beyond those listed in Carollo fee estimate will be funded separately and provided as in-kind project contributions.

California, New Mexico, Oregon, and Texas, and approaches to addressing the specific legal and institutional barriers to DPR in Colorado.

Task 1 Cost: \$75,882 plus WRCO and other project participant in-kind staff time contributions

Task 1 Deliverables:

- Summary report of Workgroup activities and a path forward for DPR regulatory development in Colorado.

Task 2: Public Outreach for DPR at the Local and State Level

Description of Task

Public acceptance of reuse, and in particular potable reuse, has been shown to be among the most significant challenges in implementing a project. Targeted research as well as project experience from other utilities across the country has clearly demonstrated the benefits of a well-planned, open, and factual public information and outreach program that starts well in advance of implementing a potable reuse project. Extensive tools for potable reuse education and outreach have been developed by the WaterReuse Research Foundation (WRRF), most specifically the work in WRRF project no. 13-02 (Model Communication Plans for Increasing Awareness and Fostering Acceptance of DPR) and the work in WRRF project no. 12-06 (Guidelines for Engineered Storage for DPR). This task will support local-level potable reuse public outreach and messaging efforts by providing tools and information, as well as examples of outreach success through websites and education programs, that can be used by utilities across the state. A series of tasks will be used to gauge the specific public perceptions and associated outreach needs, develop messaging tools, and distribute the messages to relevant audiences.

Task 2.1 – Public Education and Outreach Workgroup. Convene a series of four workgroup meetings to weigh issues, make recommendations, and exchange information. These meetings will be held in conjunction with the Task 1.2 Workgroup Meetings (i.e., on the same day, immediately preceding or following those meetings). These meetings will discuss the terminology and goals for the outreach task (Meeting #1), results of the web-based survey effort (Meeting #2), the planned educational materials for the example utility (Meeting #3), and the results of the educational efforts for the same example utility (Meeting #4). The Workgroup’s findings and recommendations will be documented in brief meeting minutes.

Task 2.2 – Develop web-based educational materials. Develop a series of public information web pages applicable to Colorado utilities/communities that can be used as a resource and referenced/linked by utilities practicing or considering potable water reuse. Web pages will utilize materials developed through WaterReuse, The Ways of Water, and materials dedicated to a better understanding of Colorado's water supplies. The included and linked information will highlight potable reuse around the Western U.S., answers to frequently asked questions, details of treatment technologies, regulatory barriers, and can provide information or links to existing information regarding potable reuse success stories, treatment technologies, regulatory protections, and other related information.

Task 2.3 – Web-Based Outreach Stakeholder Survey - Working with up to two select example utilities, the project team will develop and conduct a web-based survey using the water customer email address database. The email invitation will contain a URL that links respondents to the survey. The survey will

start by showing a short, 2 minute, informational animation on how the water cycle interfaces with municipal water supplies, and how it might be altered to take more advantage of water reuse. The survey will use existing animations (one or both: The Ways of Water or a Water: Think & Drink animation). The survey differs from opinion polls where people are not first informed, which may be a key factor in potable reuse acceptance. The draft survey content and questions will be developed by the project team and finalized with WRCO input. A written summary of the survey results will be provided with conclusions identified.

Task 2.4 – Interpret and apply results from surveys. Using the survey results above, the project team will detail the public perception hurdles faced for DPR in Colorado and documented in the Task 2.2 written summary. Have workgroup review and decide on next steps integrating results.

Task 2.5 – Outreach Materials for DPR Demonstration Facility. Develop materials to support public outreach associated with a DPR demonstration facility in the Front Range, with access provided to all Colorado residents to extend messaging regarding DPR’s water security benefits and public health and regulatory protections. Develop educational materials including signage to highlight key features of the facility, and provide training of staff (and potentially WRCO volunteers) for providing tours. WRCO members may offer their time as in-kind contributions to provide scheduled tours. *In the event that a DPR demonstration facility is not constructed during the execution of this project, the funds will instead be allocated to development/delivery of additional outreach materials under Task 2.6.*

Task 2.6 – Develop and Deliver Outreach Materials and Messages through Multiple Outlets. This task includes efforts to develop some or all of the following: one or more Op-Ed articles regarding water reuse to be placed in major newspapers; development and delivery of presentations to legislators, opinion leaders, or other influential groups; development of press release(s); use of social media; and similar efforts. Carollo’s efforts under this task will be up to the labor and expenses described in the accompanying cost estimate; additional support will be provided by WRCO, its members and other project participants as in-kind contributions.

Task 2 Cost: \$98,334 plus WRCO and other project participant in-kind staff time contributions

Task 2 Deliverables:

- Central website or template website for potable reuse in Colorado.
- Outreach stakeholder survey, including summary report with conclusions.
- Development of educational materials for DPR demonstration facility.
- Documentation of other outreach completed, e.g., Op-Eds, meetings, tours, and presentations.
- Minutes from Public Education and Outreach Workgroup meetings.

Task 3: Leveraging Potable Reuse Planning Tools

Description of Task: This task will enhance existing planning tools and assist Colorado utilities with their assessment of DPR as a potential supply option. Research being conducted nationally has resulted in many approaches and tools that can be used locally to support the analysis and implementation of potable reuse projects, with a specific interest in cost comparisons of water supply options, treatment train options, and other cost-benefit analyses. However there is limited awareness in the water provider community regarding these extremely useful tools. This task includes updating/adapting an existing treatment alternatives

screening tool for Colorado utilities' use and demonstrating its use at the local level. This will avoid providers needing to "start from scratch" when assessing treatment train options (including alternatives to membrane-based treatment and the corresponding need for brine management) and the potential role of potable reuse in a supply portfolio.

Task 3.1 – Synthesis of Health Research - This task will review and summarize the treatment and health based analysis of potable water reuse systems, to provide the necessary basis for updating and applying the treatment train tool in Tasks 3.2 and 3.3. Understanding the level of pathogen removal provided by various treatment trains, as well as targeted removal levels, is key to ensuring public health is protected. Resources include WRRF projects no. 11-02, 12-06, 11-10, the National Research Council's *Potential for Expanding the Nation's Water Supply Through Reuse of Municipal Wastewater*, the NWRI *Framework for Direct Potable Reuse*, and the State of California's potable reuse regulations. Results will be summarized in a brief technical memorandum.

Task 3.2 – Enhance IT3PR - WRRF project no. 11-02 developed a detailed potable reuse treatment model, the Integrated Treatment Train Toolbox for Potable Reuse (IT3PR). The IT3PR tool focuses on advanced treatment processes commonly used in California for potable water reuse to remove pathogens and trace organics, allowing a quick comparison of removals to target removal goals. In particular, IT3PR can be beneficial for comparing reverse osmosis (RO)-based treatment trains to non-RO-based trains, as utilities seek ways of meeting potable reuse treatment goals while avoiding the challenges associated with brine disposal. Colorado utilities have shown innovation in the use of alternative technologies and approaches to potable water reuse, such as bank filtration in the Prairie Waters project in Aurora. IT3PR will be updated to reflect the innovative nature of potable reuse in Colorado. Updates will include an extension of the literature options ("engine") within the tool, extension of the cost library (or "engine") within the tool, and an iterative and collaborative approach to working with WRCO as the tool is refined.

Task 3.3 – Tool Updates Rollout. In conjunction with one of the Task 1.2 Regulatory workgroup meetings, the IT3PR tool development will be detailed to the project team, likely in Meeting #3.

Task 3.4 – Colorado Case Studies - Once the IT3PR tool is refined, the project team will work with WRCO to define 3 Colorado case studies for DPR analysis using the tool. These three case studies will represent real world applications for utilities that are seriously considering DPR as an option. Output from the case studies will be treatment and cost summaries for each facility to help utilities that are interested in DPR understand how to utilize the tool and interpret results. A technical memorandum and presentation will be prepared to summarize and disseminate the findings.

Task 3 Cost: \$31,806 WRCO and other project participant in-kind staff time contributions

Task 3 Deliverables:

- Brief technical memorandum on water quality and public health pertaining to DPR.
- Updated IT3PR tool for DPR treatment planning and cost estimating.
- Technical memorandum on 3 DPR case studies in Colorado and presentation of results at one or two state/regional-level conferences (e.g., WRCO biannual reuse conference, RMWEA annual conference, etc.).

Task 4: Summary, Project Management, and Administration of Grant Funds

Task 4.1 – Executive Summary – The results of Tasks 1, 2, and 3 will be summarized in an Executive Summary with previous tasks’ documentation comprising a series of appendices.

Task 4.2 – Project Management – Brief monthly project status reports will be provided with monthly invoices, formatted per CWCB requirements. Monthly project coordination calls will be held with WRCO leadership. Ongoing staffing, communications, and scope and schedule management will be provided.

Task 4.3 – Administration of Grant Funds – Develop format for monthly submittals to CWCB and develop materials to submit to CWCB each month for reimbursement.

Task 4 Cost: \$27,933

Task 4 Deliverables:

- Draft and final Executive Summary with Appendices.
- Monthly project status reports.
- Monthly submittal materials for CWCB.

Total Project Cost: \$233,955 plus WRCO and other project participant in-kind staff time contributions

PROJECT SCHEDULE

A project schedule accompanies this Statement of Work.



**MEETING MINUTES
2015 PLANNING SESSION**

RMWEA/RMSAWWA Joint Water Reuse Committee / WaterReuse Colorado

December 4, 2014; 11:00 am
City of Aurora Municipal Center
15151 E. Alameda Parkway, Aurora, CO
Elk Room; 4th Floor

Attendees: See attached sign-in sheet.

1. **Month-by-Month Calendar** – Dave Takeda presented a Joint Reuse Committee (JRC)/WaterReuse Colorado (WRCO) Annual Calendar. The Calendar, attached, is meant to capture meetings and other events that are routinely held by the two groups. Any comments to the calendar should be directed to Dave. dave@mskwater.com
2. **Review Mission Statements** – The Mission Statements for WRCO and for RMSAWWA/RMWEA were read and discussed. The question was asked as to whether a Mission Statement exists for the Joint RMWEA Water Reuse committee. John Rehring will look into it.
3. **Review 2014 Strategic Plan and Other Documents** – The 2014 Strategic Planning Meeting minutes were reviewed and discussed. Specifically, the Group discussed the list of focus areas that was generated from the 2014 meeting, what efforts were made toward the focus areas, and whether the Group's priorities have changed with respect to these focus areas. The focus areas discussed were:
 - a. Outreach and Coordination with Other States/Organizations (WY, NM, other)
 - i. Not much effort was made in 2014 to reach out to other states or organizations.
 - ii. History has been that other states with reuse groups were either not very active or they were working on independent efforts.
 - iii. WRCO/JRC should make an effort to schedule meetings with other states and organizations in conjunction with conferences, workshops, etc.
 - iv. Discussion of Laura's list of organizations was held. We discussed assigning WRCO/JRC members to various organizations. Laura will update the listing and it will be reviewed again at the January meeting.

b. Local Research Projects Funded by WRCO

- i. No research projects were proposed in 2014. One was considered through the Water Research Foundation (WRF), but was tabled. The project involved the creation of a toolkit for industrial conversions.
- ii. Now is the time to think about proposed projects for WRF for next year, as their deadline for application is sometime in the first quarter of 2015. Ideas should not be Colorado-specific for submittal to WRF. WRCO could participate, monetarily and otherwise, in others' projects, including studies on potable reuse.
- iii. Research should be a high priority, and it was decided that a sub-committee should be formed. Anyone interested in further exploring ideas related to research and research funding should notify John Rehring. In addition, please contact John with ideas for research projects that could be funded, either entirely or in part, by WRCO. John will organize discussion before January meeting. JRehring@Carollo.com

c. More Engagement of Treaters and Users

- i. Membership – WRCO's membership has grown and continues to be a priority.
- ii. Engagement of:
 1. Existing Users – Past efforts to try to engage existing Users has had little to no response, which may mean that Users are satisfied and have no questions or complaints. We would like Users to know that our organizations exist. We could do this by:
 - a. Continuing to nominate Users, on a local and national basis, for reuse awards.
 - b. Participating in Users' forums/events – i.e. the Landscape Industry Expo.
 2. New Users – Treaters continue to reach out to their individual Users.
 3. Existing Treaters – We have a list of Treaters that we can use to reach out.
 4. Potential Treaters – We could contact people at Workshop who aren't re-using, go to the Treaters' events (i.e. the Colorado Oil and Gas Association conference), and look for panel-like discussion opportunities at other organizations' events.

d. Industrial Reuse

- i. Abbey has been keeping the groups well-informed of industrial reuse webinars, etc.
- ii. WRCO/JRC will continue to monitor industrial reuse.

e. State-Level Legislation

- i. Ability to impact is currently through State Water Plan. WRCO/JRC will maintain monitoring of the Plan's status during 2015, and discuss further actions at our 2015 Planning meeting.
- ii. Regulatory – Besides new uses, what others items do we want to discuss/pursue?

f. Public Outreach and Acceptance

- i. There was a suggestion to concentrate on press releases.
 - 1. Does WRA have guidelines for talking to press? Richard to follow up with WRA.
 - 2. Maintain positive image, accurate information, correct terminologies.
- ii. Contact schools, scouts and service organizations.
- iii. Place links to WRA's videos on municipalities' websites, use for presentations.
- iv. Social media may be an avenue to outreach.
- v. Compile an inventory of what the Treaters do now - Jodi will start compiling a list and report in January. Please contact Jodi with your outreach efforts.
JodiVilla@KennedyJenks.com

g. Potable Water Reuse

A decision was made to not make this a separate line item. WRCO/JRC will keep apprised of what is going on and keep this topic as an item on the agenda. At some point, we can adjust our focus level.

h. Recognition of Value of Water and Reuse

- i. This topic ties to public outreach, and will no longer be a separate focus area.
- ii. Discussion was held as to California's change of classification of reuse water from wastewater to a water resource. Richard will contact Rich Nagel to discuss this.

Summary of Focus Areas for 2015

Focus Area	Ability to Impact (H-High, M-Medium, L-Low)	Priority (1-High, 2-Medium, 3-Low)
Outreach/Coordination with other States/Organizations (WY, NM, other)	H	2
Local Research Projects Funded by WRCO	H	1
More Engagement of Treaters & Users	M	2
Industrial Water Reuse	L	1
State-Level Legislation	L	2
Public Outreach and Acceptance	H	2

Additional items:

- Steve Gunderson, former Division Director of Water Quality Control Division, now has a replacement. This may be a good opportunity to meet his replacement and introduce ourselves.
- Damian has previously talked about planning an event to bring regulators, developers, municipalities, etc. together. What are we promoting? What is our goal? What is the venue? It may be a good forum to announce our WRCO awards and scholarships, and to educate regulators. We will discuss this at the January meeting.
- Laura stated that now is the opportunity for WRCO/JRC to provide recommended action plans to the reuse section of the Water Plan. If these action plans are included in the Water Plan, it may lay the groundwork for future funding and legislation.
- Dave noted that other organizations vote to approve their agendas and minutes. WRCO/JRC decided that it was a good idea and will start implementing this.
- Website – Steve will update website for new meetings. He has received pictures from Colorado Springs Utilities and from Aurora; but would like to have more pictures with captions. Steve also would like to get feedback on how often people go to site and look at it. If utilized, the site would be great for outreach efforts.

2015 Meeting Dates:

January 8, 2015	Plum Creek Water Reclamation Authority
March 5, 2015	City of Aurora Municipal Center
May 7, 2015	Plum Creek Water Reclamation Authority
July 2, 2015	City of Aurora Municipal Center
September 3, 2015	Plum Creek Water Reclamation Authority
November 5, 2015	City of Aurora Municipal Center

Ideas for presenters at the meetings included Guy Carpenter of the Arizona section of WaterReuse, and the WRCO scholarship recipients. Please send any other ideas to Dave.

January meeting agenda will include:

WRCO Officer Elections
Dedicated time for Water Quality Control Division
Review spending plan
Review funding ideas (John)
Review public outreach efforts list from Treaters (Jodi)
Review organizations list (Laura)
Reuse roundtable rendezvous roundup discussion (Damian)