



February 10, 2016

Hello 2016 Recycled Water Management Advisory Committee:

Denver Parks and Recreation along with Denver Water is preparing to convene a working group to discuss issues related to recycled water. I would like to invite you to participate in this exciting opportunity. The issues we will cover include: potential monitoring and testing sites, mitigation and remediation strategies for salinity buildup in soil and tree/plant tissue in Denver Parks. The first meeting will be scheduled for February 2016. The proposed timeline for the committee is to have six meetings between February and July of 2016 to discuss the recycled water program, impacts, metrics and possible mitigation and remediation strategies. Two additional meetings will be scheduled in November and December of 2016 to re-group, assess the progress made during the 2016 irrigation season and set the direction for ongoing communication between Denver Parks, Denver Water and stakeholders moving forward. The committee structure will be evaluated at the end of 2016 to ensure that all stakeholders are engaged and updated annually on the recycled water program.

Raeann Gagne will be sending out a Doodle Poll to determine the best date for our kick off meeting which will consist of a tour of the Recycled Water Plant and a short meeting for everyone to get acquainted, review the charter, and discuss expected outcomes. The two possible dates for the tour and short meeting will be Tuesday, February 16<sup>th</sup> or Wednesday, February 24<sup>th</sup> from 3:00pm till 6:00pm. We will also start looking for the best dates for the rest of the 2016 meetings.

I have included some background information for you to look at to familiarize yourself with the recycled water issue. The attachments are:

- Welcome Letter
- Workgroup Charter
- Salinity Study Summary
- Denver Park Conversion sites
- Denver Water Recycled Water information sheet
- Cheesman Park Tree Data information from 2013-2015

The committee structure would be composed of the following individuals:

Meeting Facilitator                      Lisa Carlson

**Denver Parks and Recreation Advisory Board Members invited to participate:**

Washington Park:                      Liz Drogan  
Cheesman Park:                      Jay Rust  
City Park:                                  Eric Clayman  
FNE Denver:                              Thad Jacobs

**Other Community Members invited to participate:**

Community Stakeholder:              Sonia John  
Denver INC:                                Cindy Johnstone  
West Washington Park:                David Matthews

**Denver Parks**

Scott Gilmore                              Deputy Executive Director  
Cyndi Karvaski                              Communications and Marketing  
Doug Woods                                 Parks Director  
Deb Binard                                    Water Conservation  
Rob Davis                                     City Forester

**Denver Water**

Brenley McKenna                         Reusable Water Program Manager  
Katie Knoll                                  Stakeholder Relations  
Russell Plakke                              Recycled Water Plant Manager  
Mark Cassalia                              Water Conservation Specialist  
Damian Higham                              Recycled Water Specialist

**In addition to the committee above, we will create a Technical Sub-committee made up of the following subject matter experts:**

**Technical Sub-Committee**

Terry Engle                                 CSU  
Bill Jacobi                                    CSU  
Al Polanksky                                Environmental Health  
Sonrisa Lucero                              Office of Sustainability  
Bahman Sheikh                             Denver Water  
Steve Geist                                    Swingle

Just so everyone has a good background, I have included a link to the Denver Water Recycled Water website and a summary of Recycled Water Use in Denver Parks.

<http://www.denverwater.org/WaterQuality/RecycledWater/>

## Recycled Water in Denver City Parks

- We continue to work with our partner, Denver Water, to look at different techniques and management practices to our utilization of recycled water in Denver Parks.
- Denver Parks and Recreation and Denver Water plan to continue our cooperative partnership in this area by forming this collaborative group in 2016 to evaluate and determine testing needed, explore mitigation strategies and evaluate best management practices.
- As the population of Denver and the surrounding region continues to grow, the increased use of recycled water is an approach to maximize the existing water resource. Recycled water is needed and plays a major role in providing irrigation to our landscapes.
- We recognize the importance of recycled water and its role in building an adequate water supply for the future. We are focused on this and stress that we have to maximize all of our water sources.
- Recycled water is less expensive than potable water saving approximately \$1 million a year in cost to the city.
- Recycled water can have a negative impact on certain conifer species if sodium and chloride build up within needle tissue of these trees. Colorado spruce, white fir, ponderosa pine, and white pine are some of most sensitive species. Our challenge is recycled water conversions sites with large mature sensitive confers.
- Recycled water can be contributing factor to the declining health of some of the trees in our parks however, other factors such as weather conditions (drought conditions, hard winter freezes), age, soil quality, disease and pests are affecting tree health. Weaker trees are more susceptible to these stresses and sometimes cannot recover.
- Denver is working to identify possible options to preserve the highest value trees.
- We recently installed a brand new irrigation system in Chessman Park designed to spray away from the evergreen foliage. DPR is evaluating adjusting irrigation nozzles in other sites to minimize foliar contact.
- We have added sodium blockers to our fertilizer injector systems in 5 locations and continue to monitor and test the effects as we consider expanding to other sites in the future. We are planning on adding this sodium blocker system to Washington Park and Chessman Park irrigation systems.
- We are looking at other species of trees when re-planting that are more tolerant to the conditions in our region to mitigate tree loss. There are tree species that tolerate recycled water (mostly deciduous trees).
- A 2010 report done for Denver Water by landscape consultants found high concentrations of sodium around trees in Denver Parks, which is irrigated with recycled water. A new updated report on "Soil Testing after 11-Years with Recycled Water" by Colorado State University will be released in February of 2016 and will evaluate the continued use of recycled water in Denver Parks.

- We will continue to work with Denver Water and community members to take a closer look at the use of recycled water, its effects on trees and park landscaping and possible options to protect and preserve these trees.

Thanks all for your interest in participating in this effort and I look forward to meeting everyone over the next few months.

Sincerely,

Scott Gilmore, Denver Parks and Recreation