



January 21, 2016

Craig Godbout - WSRA Application Colorado Water Conservation Board 1313 Sherman St., Room 721 Denver, CO 80203

Re: Grant Application for Biological Treatment of Selenium in Concentrate

Dear Mr. Godbout,

The Cherry Creek Basin Water Quality Authority ("CCBWQA") is providing this letter to express support for the grant application for "Biological Treatment of Selenium in Concentrate" as proposed by the Arapahoe County Water and Wastewater Authority ("ACWWA") and the Cottonwood Water and Sanitation District ("CWSD"). This project would construct a Biochemical Reactor ("BCR") to remove selenium from the reject water from the reverse osmosis treatment process.

Selenium concentrations in discharges to Cherry Creek, its tributaries and the Reservoir are a concern of the CCBWQA to protect fish and invertebrates in these ecosystems. Therefore, the development of natural treatment systems like this BCR, which physically removes selenium and allows discharges to meet the aquatic protection limits provides value for both the discharger to optimize its water source and for the CCBWQA by helping protect the environment.

The BCR natural treatment system also has the potential to provide additional benefits by removing other constituents of concern such as nutrients. Hopefully the development of this system will further the technology that can protect ecosystems throughout the state. Therefore, the CCBWQA is pleased to support this application.

Sincerely,

Stephanie Piko Chairman





January 28, 2016

Colorado Water Conservation Board Craig Godbout – WSRA Application 1313 Sherman Street, Room 721 Denver, CO 80203

RE: Support for CWSD/ACWWA WSRA Funding Request for Biological Treatment to Remove Selenium

Dear Mr. Godbout,

This letter is in support of the Cottonwood Water and Sanitation District (CWSD) and Arapahoe County Water and Wastewater Authority (ACWWA) Water Supply Reserve Account (WSRA) funding request for an important project that re-establishes a much-needed facility to meet our south metro water supply needs. This biological treatment approach also expands our knowledge of treatment options for selenium in the Cherry Creek basin as well as other basins in Colorado, with the added benefit of nutrient removal that will ultimately be beneficial to the Cherry Creek Reservoir.

The Southeast Metro Stormwater Authority (SEMSWA) is an active member of the Cherry Creek Basin Water Quality Authority's Technical Advisory Committee and their Board of Director's, and applauds the ground-breaking approach proposed with this project. By pursuing grant funding from the WSRA with the approval of the Metro Roundtable, the results of this pioneering treatment can be shared amongst all the entities that have a vested interest in fully using and reusing water from Cherry Creek and thereby replacing the use of non-tributary groundwater that is not sustainable. We are also pleased that they will be enhancing water quality in addition to meeting water supply demands with their approach. Specifically, by removing selenium from Cherry Creek, with the added benefit of bioreactor media that can also remove phosphorous, nitrates and other constituents of concern in the basin, we believe the health of the Cherry Creek Reservoir will be improved.

SEMSWA works closely with all jurisdictional entities within the Cherry Creek basin and supports the use of WSRA funds for projects that will benefit the water quality in Reservoir as well as expand the science of innovative treatment strategies for a safe, high quality water supply. We hope you will look favorably upon this proposal submitted by co-applicants CWSD and ACWWA that has the potential to appreciably enhance the health of the Cherry Creek Reservoir.

Sincerely,

cc:

John A. McCarty, PE, PWLF Executive Director, SEMSWA

Pat Mulhern, CWSD



8400 East Prentice Avenue Suite 315 Greenwood Village, CO 80111

Phone 720 216 5158 Fax 720 216 5154

January 25, 2016

Craig Godbout – WSRA Application Colorado Water Conservation Board 1313 Sherman Street, Room 721 Denver, CO 80203

RE: Support Letter for Cottonwood Water & Sanitation District / ACWWA -- Biological Treatment of Selenium Concentrate (reinstatement of the Joint Water Purification Plant) Grant Application

Dear Craig,

The South Metro Water Supply Authority (SMWSA) supports the grant request for the Joint Water Purification Plant ("JWPP") project recently proposed by Cottonwood Water & Sanitation District ("Cottonwood") and Arapahoe County Water & Wastewater Authority ("ACWWA") as described in their grant application.

Our members are diligent in working together to reduce the region's dependency on nonrenewable groundwater by developing and reusing renewable water supplies. This particular project is an important project for these communities because it will not only help the providers meet their growing water supply demands without further drawing upon depleting groundwater, but it will also advance an effective new biological treatment technology designed to treat high concentrations of selenium in reverse osmosis ("RO") discharge. By reinstating the RO process at the Joint Water Purification Plant, this project would allow both Cottonwood and ACWWA to fully use and reuse their current Cherry Creek alluvial supplies and it will improve the water quality in the Cherry Creek Watershed.

Although both of these communities are relatively small, their ability to treat, use, and reuse an existing renewable water supply like the Cherry Creek alluvial supplies is of statewide importance for a couple of reasons. First, because of the nonrenewable water supply challenges facing the south metro area, Colorado's Water Plan (CWP) and the South Platte/Metro Basin Roundtables have recognized this region as one of the major "M&I gap" areas in the state. In addition, this project is an important IPP (Identified Project and Process) in the South Platte/Metro Basin Implementation Plan (BIP) and its success helps implement the BIP and CWP. Continued reliance on Denver Basin Aquifers, even by smaller communities, causes a more rapid depletion within the aquifer system. Solving a portion of this nonrenewable water supply issue with more effective treatment solutions benefits the entire region and moves us all one step closer to sustainable use of our water resources. This partnership and construction of the proposed biological treatment system provides a terrific example of creating regional solutions to reduce dependency on non-renewable groundwater, to expand and utilize existing renewable resources, and help meet the challenges in the state's largest "gap" area.

Second, this area is only one of many areas in Colorado with a water supply problem that is requiring the use of Reverse Osmosis (RO). One of the biggest challenges with RO is brine disposal because of the potential water quality impacts. Proper treatment to remove selenium, nitrates, phosphorus, and other chemicals of emerging concern or trace pharmaceuticals ("CECs") is often critical to water supply use and reuse in many areas. This grant application pilots new and emerging technologies that may be applicable to other regions of the state facing either brine disposal challenges associated with RO or selenium problems in general.

Finally, this project and grant application has broader benefits beyond those of ACWWA and Cottonwood. By effectively reducing selenium and other levels in the RO discharge, this treatment plant will also help protect lower portions of the Cherry Creek Watershed. It will improve water quality providing environmental and recreational benefits in the Cherry Creek Watershed, Cherry Creek Reservoir, and downstream.

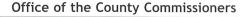
South Metro Water Supply Authority and its members support this project and encourage approval of the grant application.

Sincerely,

Eric Hecox, Executive Director

Lie B. Kert

South Metro Water Supply Authority





January 12, 2016

www.douglas.co.us

Craig Godbout - WSRA Application Colorado Water Conservation Board 1313 Sherman St., Room 721 Denver, CO 80203

Re:

Cottonwood Water and Sanitation District Biological Treatment of Selenium in Concentrate

(Reinstatement of the JWPP)

Dear Mr. Godbout:

Douglas County is submitting this letter in support of the grant application for "Biological Treatment of Selenium in Concentrate as proposed by the Cottonwood Water and Sanitation District ("Cottonwood") and the Arapahoe County Water and Wastewater Authority ("ACWWA"). These applicants intend to use these funds to construct a biological treatment system to reduce the selenium concentrations in the concentrate discharge from the reverse osmosis ("RO") process at their Joint Water Purification Plant ("JWPP").

Development in Douglas County and its urban areas has been substantial over the past 30 years, and has been largely reliant on use of Denver Basin non-tributary ground water ("NTGW") over that time period. Douglas County has been working with water providers to find other water resources to reduce the burden on the NTGW through conservation, reuse and development of local renewable water supplies. These entities have invested heavily in the JWPP to develop and reuse their local resources but have been frustrated by difficulties in dealing with selenium in the discharge from RO. This project is an ideal solution that uses natural treatment processes to remove the selenium and meet the standard for aquatic protection, and provides environmental benefits to Cherry Creek Reservoir as well.

Water supply is a very important issue in Douglas County where renewable water supplies are scarce. This project would enable these entities to provide a high quality, safe water supply for their customers and would allow them to recapture the value of an important investment.

We believe that a grant from the WSRA can be an important contribution to making this a viable solution.

Thank you for your consideration.

David A. Weaver, Chair

Sincerely,

BOARD OF DOUGLAS COUNTY COMMISSIONERS

DAW/tm

David A. Weaver Commissioner District I Roger A. Partridge Commissioner District II Jill E. Repella Commissioner District III



January 20, 2015

Mr. Craig Godbout – WRSA Application Colorado Water Conservation Board 1313 Sherman Street, Room 721 Denver, CO 80203

Re: Letter of Support for Cottonwood Water and Sanitation District and Arapahoe County Water and Wastewater Authority Project

The Arapahoe County Water and Wastewater Authority ("ACWWA") is one of several service districts that provides water service to Centennial residents and businesses. The ACWWA service area covers over 5 square miles of the City of Centennial, roughly 50 percent of its service area. ACCWA also serves areas of unincorporated Arapahoe County in the vicinity of the Centennial Airport that constitute part of a large master planned development known as the Dove Valley Business Park. Together, these areas form an interconnected business and residential community that also include potential growth areas for Centennial and the broader region. There are over 1.2 square miles of developable land within the ACWWA service area in the City of Centennial alone and more in unincorporated Arapahoe County.

The City of Centennial recognizes the substantial investment ACWWA and the Cottonwood Water and Sanitation District ("Cottonwood") have made in the Joint Water Purification Plant ("JWPP"). When construction of the plant commenced in 2008, the plant was lauded for its potential to serve 12,000 residents and over 30,000 employees and its intended goal to increase reliance on a renewable water source and to improve water quality. The inability of the JWPP to deliver on these goals has been to the detriment of Centennial residents and businesses and others in the broader region. The JWPP is also critically important to sustained growth and development, particularly with respect to water supply and water quality.

ACCWA and Cottonwood have asked the City of Centennial for its support in pursuit of a grant that would assist in the construction of a biological treatment system to remove selenium from the concentrate discharge following reverse osmosis treatment and the reinstatement of the reverse

osmosis treatment process. This project would promote a greater return on the \$30 million investment made in the JWPP and both increase utilization of the JWPP and water quality, outcomes that would benefit both Centennial residents and businesses. An increased reliance on a renewable water source and a focus on improved water quality should positively influence growth and development in the ACWWA service area in Centennial and unincorporated Arapahoe County.

In recognition of the positive impacts the proposed project may have on Centennial residents and businesses and future growth opportunities, the City of Centennial strongly supports the Metro Roundtable grant application to the Colorado Water Conservation Board for this critical project.

Sincerely,

Mayor Cathy Noon

Catly Noon

Pc: Centennial City Council



January 19, 2016

Craig Godbout – WSRA Application Colorado Water Conservation Board 1313 Sherman St., Room 721 Denver, CO 80203

Mr. Godbout,

The Town of Parker has been made aware of a proposal by the Cottonwood Water and Sanitation District and the Arapahoe County Water and Wastewater Authority (Districts) to construct a biological treatment system (biochemical reactor) to remove selenium from the concentrate discharge at the current water treatment plant. The proposed biochemical reactor will allow the plant to reinstate the RO treatment that it was originally designed for, thereby, providing better water quality to customers and complying with their discharge permit.

In conjunction with the proposed biochemical reactor construction, it is our understanding that the Districts are pursuing a grant through the Colorado Water Conservation Board to offset the high cost of the proposed project.

Town of Parker representatives have reviewed the biochemical reactor proposal from the Districts and have also been presented the design by the Districts' engineer. Based on the information provided, the Town fully supports the proposed project and would ask the CWCB to consider awarding the grant to the Districts for this project.

The Town of Parker is a part of the Cherry Creek Basin Water Quality Authority and also has residents that live within the service boundary of this water treatment plant. In the interest of the environment and Town residents, this proposal appears to be an excellent use of a State funded grant.

Please feel free to contact Jacob James, Senior Stormwater Engineer at (303) 840-9546 or <u>jjames@parkeronline.org</u> with any questions or if the Town can provide any additional information.

Respectfully,

Mike Waid Mayor

cc: Pat Mulhern, Cottonwood Water and Sanitation District Jacob James, Town of Parker