

AGENDA

Denver Board of Water Commissioners

Denver Water Administration Building
1600 West 12th Avenue
Denver, CO
Board Room, First Floor

Wednesday, November 6, 2019 9:00 a.m.

I. INTRODUCTORY BUSINESS

A. Call to Order and Determination of Quorum

B. Public Comment and Communications

At this point in the agenda, the Board may allow members of the public to address the Board on any item of interest within the jurisdiction of the board, and not on the agenda for action. Speakers wishing to address a specific Action Item will be invited to address the board when the item is being considered. Three minutes are allowed for each person unless the President determines otherwise.

1. Distributor Communications
2. Citizen Advisory Committee Communications

C. Ceremonies, Awards and Introductions

II. ACTION ITEMS

A. Consent Items

Items listed below are considered routine and may be enacted by one motion and vote. If any Board member desires discussion beyond explanatory questions, or corrections to the Minutes, the President may order that item to be considered in a separate motion and vote.

1. Minutes from October 9, 2019 – Open Session
2. Minutes from October 23, 2019 – Open Session
3. Ratification of the Ninth Amendment for Conduit No. 16 – Tunnel Installations Emergency Work – City Ditch Structural Repairs – Contract 500815
4. Inter-Governmental Agreement with the City of Littleton and Mile High Flood District Authorizing Stormwater into the High Line Canal – Contract 504221

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B. Individual Approval Items

- | | | |
|---|------------|-----------|
| 1. Conveyance of Welby Reservoir Lot 5
Property to Hydrodig Denver, LLC –
Contract 504188 | Amy Turney | 5 minutes |
|---|------------|-----------|

III. POLICY MATTERS

- | | | |
|---|------------|------------|
| A. Strontia Springs Reservoir Sediment
Management Strategy | Casey Dick | 15 minutes |
|---|------------|------------|

IV. EXECUTIVE UPDATE

A. CEO Update

B. CFO Update

C. Operations Update

V. BRIEFING PAPERS & REPORTS

A. Briefing Papers

1. Year-To-Date Sustainability Update
2. Policy for Reimbursements for Non-Denver Water Lead Service Line Replacements

B. Reports

VI. ADJOURNMENT

VII. TRUSTEE MATTERS

VIII. EXECUTIVE SESSION

The Board may adjourn the regular meeting and reconvene in executive session on topics authorized by
D.R.M.C. Sec. 2-34

A. Confidential Report D.R.M.C. Sec. 2-34

DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: November 6, 2019

Board Item: II-A-3

Ratification of the Ninth Amendment for Conduit No. 16 - Tunnel Installations Emergency Work - City Ditch Structural Repairs Contract 500815

Action by Consent

Individual Action

Purpose and Background:

Denver Water serves recycled water to customers for irrigation through the historic City Ditch beginning near Denver South High School. City Ditch is an open canal through most of Washington Park, the remaining portions are in buried concrete box culverts or buried pipelines before terminating at City Park. City Ditch runs seasonally from April 1 to November 1.

In late August 2019, Denver Water discovered a failure of a buried section of City Ditch at the intersection of South Lafayette Street and East Dakota Avenue. City Ditch was briefly turned off for our operations crews to perform temporary repairs to stabilize the ditch walls, and the damaged section was covered with steel plates to reinstate vehicular traffic until a permanent repair could be made. City Ditch was quickly turned back on to resume service to customers during the high irrigation demands of the summer season. The purpose for completing the permanent repairs quickly is to allow for the removal of the protective steel plates from the intersection before winter so snowplows are not damaged.

Denver Water designed a permanent repair to replace the damaged section with concrete pipe and solicited quotes from prequalified contractors already under contract to expedite the work of the repair.

Budget and Schedule:

The total amount of this ninth amendment is \$240,710 and the term of the contract is October 18, 2019 to November 22, 2019. Funds for this ninth amendment will come from the budget for 2019 Emergency/Unplanned business unit, which has sufficient funds to pay the \$240,710 estimated to be needed in 2019.

Selection of Business Partner:

Denver Water Solicited quotes from three general contractors that were prequalified to perform pipeline and heavy civil work. On October 16, 2019, quotes were received from two general contractors. Reynolds Construction, LLC was selected as the general contractor based on the lowest cost. One contractor declined to provide a quote due to lack of crew availability.

S/MWBE Information:

The Small/Minority and Women-owned Business Enterprise (MWBE) goal established for this construction project is 8% participation. Reynolds Construction, LLC achieved 8.1% participation. Due to the emergency nature of this work, there is no additional MWBE participation associated with this amendment.

Recommendation:

It is recommended that the Board ratify the ninth amendment to Contract 500815 with Reynolds Construction, LLC, which was signed as an emergency by the CEO, for an extension of contract period through November 22, 2019 and for an addition of \$240,710 for a total amended contract amount not to exceed \$23,832,523.27.

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Approvals:

- James S. Lochhead, CEO/Manager
- Julie Anderson, Chief of Staff
- Jessica R. Brody, General Counsel
- Angela C. Bricmont, Chief Financial Officer

- Brian D. Good, Chief Administrative Officer
- Mike King, Chief External Affairs Officer
- Robert J. Mahoney, Chief Engineering Officer
- Thomas J. Roode, Chief Operations Officer

DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: November 6, 2019

Board Item: II-A-4

Inter-Governmental Agreement with the City of Littleton and Mile High Flood District Authorizing Stormwater into the High Line Canal Contract 504221

Action by Consent

Individual Action

Purpose and Background:

Denver Water has worked cooperatively with other governmental entities and the High Line Canal Conservancy to develop a future vision for the High Line Canal (Canal) that will preserve the Canal's natural character and unique recreational experience. One potential use of the Canal is to convey and detain stormwater to improve water quality and drainage. Recent studies performed by Mile High Flood District (MHFD), formerly Urban Drainage and Flood Control District, Denver Water, and other governmental entities show that the Canal has the potential to serve as an effective stormwater treatment and conveyance facility. As a result of the studies, the City and County of Denver, the City of Greenwood Village, and the Mirabelle Metropolitan District in Douglas County have entered into agreements to convey and treat stormwater in the Canal through portions of their jurisdictions. The City of Littleton (City) also wishes to utilize the Canal for stormwater purposes.

Inter-Governmental Agreement (IGA) 504221 formally authorizes the City to install and maintain stormwater outfalls into the Canal.

Under the IGA:

- The City may use the Canal to carry stormwater within an authorized reach of the Canal beginning at Windemere Street to the Lee Gulch wasteway.
- Before discharging to the Canal, the City will pre-treat stormwater to comply with its municipal separate storm sewer system permit.
- The City may construct bio-retention facilities to temporarily detain stormwater within the Canal to perform additional treatment in the Canal. Under Colorado water law, the bio-retention facilities can detain the stormwater for no more than 72 hours.
- The City will undertake responsibility for maintaining the Canal within the authorized reach.
- MHFD will model and monitor the volume and quality of the City's stormwater in the Canal and approve all outfall flows and bio-retention facilities proposed by the City.
- The parties will carry out various tasks to maintain continuous public recreation access and compliance with the High Line Canal Framework Plan.

In approving the IGA, the Board will be making an exception to a May 4, 1999 Policy, in which the Board prohibited developed stormwater from entering irrigation facilities, including the Canal. Based on the location of the segment of the Canal authorized to carry the City's stormwater and the terms of the IGA, an exception to the Board's Policy for this IGA is appropriate.

Budget and Schedule:

There is no budgetary impact for this item.

S/MWBE Information:

Small/Minority and Women-owned Business Enterprise goals are not applicable for this item.

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Recommendation:

It is recommended that the Board approve IGA 504221 with the City and MHFD to authorize stormwater outfalls, water quality features, and long-term maintenance access into the Board's High Line Canal in the City of Littleton.

Approvals:

- James S. Lochhead, CEO/Manager
- Julie Anderson, Chief of Staff
- Jessica R. Brody, General Counsel
- Angela C. Bricmont, Chief Financial Officer
- Brian D. Good, Chief Administrative Officer
- Mike King, Chief External Affairs Officer
- Robert J. Mahoney, Chief Engineering Officer
- Thomas J. Roode, Chief Operations Officer

DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: November 6, 2019

Board Item: II-B-1

Conveyance of Welby Reservoir Lot 5 Property to Hydrodig Denver, LLC Contract 504188

Action by Consent

Individual Action

Purpose and Background:

In 2012 Denver Water completed the acquisition of property necessary for Welby Reservoir, located at approximately 69th Avenue and York Street, which combined with the Bambei-Walker Reservoir, constitutes the Downstream Reservoir Water Storage Program. The acquisition of property and dedication of right-of-way resulted in three remnant parcels, two of which the Board declared surplus in October 2012. Two of the surplus parcels were exchanged with a neighboring landowner, and one was listed for sale. The parcel that was listed for sale, 0.543 acres of vacant land designated Lot 5 of the Welby Reservoir Subdivision, was ultimately taken off the market for lack of interest. Recently staff relisted Lot 5 and received two offers. The highest offer was from the adjacent landowner, Hydrodig Denver, LLC in the amount of \$105,000. The proposed use of the site will be an expansion of their headquarters for their hydro-excavating business.

Budget and Schedule:

There is no budgetary impact for this item.

S/MWBE Information:

Small/Minority and Women-owned Business Enterprise goals are not applicable for this item.

Recommendation:

It is recommended that the Board:

1. Approve Contract 504188 with Hydrodig Denver, LLC in the amount of \$105,000 for the conveyance of Lot 5 of the Welby Reservoir Subdivision.
2. Authorize the CEO/Manager, or his designee(s), to execute all necessary instruments and/or documents, subject to approval of the Board's Office of General Counsel, to convey Lot 5 of the Welby Reservoir Subdivision.

Approvals:

- | | |
|--|--|
| <input checked="" type="checkbox"/> James S. Lochhead, CEO/Manager | <input type="checkbox"/> Brian D. Good, Chief Administrative Officer |
| <input type="checkbox"/> Julie Anderson, Chief of Staff | <input type="checkbox"/> Mike King, Chief External Affairs Officer |
| <input type="checkbox"/> Jessica R. Brody, General Counsel | <input checked="" type="checkbox"/> Robert J. Mahoney, Chief Engineering Officer |
| <input type="checkbox"/> Angela C. Bricmont, Chief Financial Officer | <input type="checkbox"/> Thomas J. Roode, Chief Operations Officer |

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DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: November 6, 2019

Board Item: V-A-1

Briefing Paper for Year-To-Date Sustainability Update

Strategic Plan Alignment

Lenses: Customer Centric Industry Leader Long-Term View
Sustainability is an integral part of the Strategic Plan, within the Excellent Operations perspective. Continual improvement of operations advances our intent for leadership within the industry, saves resources, reduces costs, and strengthens our resiliency and long-term planning.

Summary

Year-to-date sustainability update:

- Facilities
 - Building J LEED
 - Administration Building
- Energy
 - Greenhouse Gas Inventory
 - Network Fleet Idling Report
 - Hydroelectric Generation
 - Utility Management Software, EnergyCAP
 - Energy Efficiency Projects
- Water
 - Denver Water Metering Project
- Waste
 - Reusable Dishware and Compostable Disposables
 - 6S Waste Diversion
- Contracts and Procurement
 - Office Supply Rapid Improvement Event
 - Municipal Waste (recycling/compost/trash) Request for Proposals
- Education
 - Lunch & Learns, Coffee Breaks, Sustainability Bar
 - Communications and Outreach
 - Site Visits

Background

As a major water provider in the West, Denver Water views itself as having a special responsibility to the environment. It is a responsibility that we take very seriously. We incorporate it into both our strategic thinking and daily operations.

Sustainability for the next 100 years will require innovation, resilience, and adaptability in everything we do. Establishing current state, baselines, goals, and commitments for the organization is necessary in order to know what direction we are heading, and what we are accomplishing.

Budget

The budget for system-wide energy efficiency and lighting upgrade projects and support of sustainability pilots is \$40,000.

In 2019, Sustainability has contributed \$9,000 for LED lighting at Gross Reservoir; \$4,000 for lighting upgrades at Winter Park; \$1,500 for a lighting upgrade at Kassler; \$20,000 for monitoring-based commissioning for the Central Utility Plant at the Operations Complex; and \$2,200 for AMI Beacon meters for OCR water metrics.

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Alternatives

Not applicable

Approach

Facilities:

Denver Water is pursuing LEED Silver Certification for the Building J renovation, needing to achieve 50 points. The current count is between 46-50, depending on replacement or repair of air handling systems, MERV 13 filter installation, and replacement of old water fixtures.

Construction of the new Administration Building is almost complete with a 920-kW system of solar photovoltaics installed on the roof, over the 3rd floor of the parking garage and over visitor parking. The Administration Building also has a recycling system to treat blackwater to standards for reuse in toilets and irrigation. Rainwater from the roof will also be used for irrigation.

Sustainability continues to partner with Environmental Compliance to attend site audits at Source of Supply (SOS), Treatment, and Distribution facilities. The visits and collaboration provide opportunity to discuss sustainability needs at all our locations, such as lighting retrofits, waste hauling needs, vehicle idling, and more.

Energy:

Greenhouse Gas Inventory totals for 2018 are 44,363 mtCO_{2e}, an increase from 2019's approximately 41,000 mtCO_{2e}. Multiple factors affected this increase including energy use, weather, and lower hydropower production at Dillon Reservoir, Williams Fork Reservoir, Foothills Treatment Plant, Hillcrest Pump Station, and Roberts Tunnel due to maintenance in 2018.

Reports are now produced monthly to track both the emissions and cost of unnecessary vehicle idling. As of October 1, 2019, the cost of unnecessary idling has exceeded \$105,000. This is equivalent to nearly 41,000 gallons of fuel and 373 metric tons of greenhouse gas emissions. These statistics are corroborated from the current budget forecast from Fleet on organization fuel cost overages. If the current trend continues, Denver Water will waste over \$120,000 of fuel in 2019. This data is brand new and reports are now provided to leaders so that we can work to reduce idling and its associated environment and financial costs.

Hydroelectric power generation between June and September 2019 was less than expected due to maintenance on multiple generating units. We did not meet the required capacity factor test in 2019, which will result in an approximate 19% decrease of 2020 capacity payments to Denver Water by Xcel Energy (approximately \$409,000). The Sustainability Team is working with Engineering and Operations and Maintenance to better sequence and schedule future hydro maintenance to avoid financial losses from operating and capacity payments.

A project to implement new Utility Management Software, called EnergyCAP, is in the integration and testing phase. Once complete this year, it will allow for automated electronic data exchange for all accounts from Xcel Energy and site-specific energy tracking and reporting.

Energy efficiency projects have been completed at Gross Reservoir, Winter Park Headquarters, and the Kassler Center main garage. These will result in estimated annual savings of 25,000 kWh, \$1,600, and 20 tons of CO₂. A feasibility study for floating solar was delivered in May, but Sustainability and SOS decided not to move forward with a floating solar project in its proposed state. Commissioning of the new Administration Building has changed from standard commissioning to monitoring-based commissioning which will benefit Denver Water by testing all equipment and identifying savings and operational inefficiencies during the warranty period. Participation in Xcel's Solar Connect program is contributing carbon-free energy at 10 Denver Water sites. Namaste Solar has almost completed installation of solar panels for the Operations Complex Redevelopment project, which will offset 100% of the Administration building energy use and is part of Xcel Energy's Solar Rewards incentive program.

Water:

Sustainability collaborated with GIS, Water Efficiency and Re-Use, Customer Care, Grounds, and the Meter Shop to tackle the water reporting goals in the Sustainability Guide. Site visits over the summer helped confirm accurate water meter reads and identify sites that will need further equipment or monitoring.

A site water budget for each of our metro facilities has been created as well as an initial monthly report. We are now able to show actual consumption versus water budget per facility. This is going to be an important tool moving forward for managing our properties and facilities.

In the future, we can improve and refine the water budgets based on actual landscape type. This initial baseline however will be enough to help Denver Water identify problem sites and make improvements. Already, this reporting helped identify a piping misconfiguration at Belleview Pump Station that was sending water in a circle through a meter and giving very inaccurate meter readings.

Waste:

Reusable dishware was purchased to cut down on waste in the new Administration Building break rooms.

Sustainability worked closely with the new cafeteria vendor to ensure that all items provided in the cafeteria are either reusable or compostable.

Leading up to the move into the Administration Building, a lot of work was done to divert as much waste as possible from the landfill. Sustainability worked with various teams to find ways to donate, auction, repurpose, or recycle items that were no longer needed.

Procurement and Contracts:

Sustainability participated in a Rapid Improvement Event (RIE) to streamline the process of ordering consistent and sustainable office supplies for the organization. The result of the RIE was to move to a new vendor managed inventory system that will support Denver Water in cutting down excess orders, preventing the accumulation of excess supplies, and procuring the most responsible office supplies for the organization.

Denver Water is issuing a Request for Proposals for municipal waste hauling of (non-operational) waste, recycling, and compost. The new contract will begin in January of 2020 and the Sustainability Team will continue as the contract administrator.

Education:

Sustainability has delivered 11 lunch and learns through Q3, covering a range of topics from water-wise landscaping to forest fires. Sustainability Coffee Breaks are hosted bi-weekly, with various topics discussed after participants view a short video. These topics have included global approaches to sustainability, life-cycle analysis, endangered species, and food systems. Each Wednesday, Sustainability staffs “office hours” for employees, providing education and trivia on sustainability topics.

Summerfest was another opportunity for education and outreach. Sustainability team members, as well as volunteers from the Green Team, helped educate employees on waste sorting.

Throughout Q2 and Q3 Sustainability delivered messaging about centralized waste, the new method of handling and sorting municipal waste on the operations campus. These communications were created with change management for our employees in mind.

Owner(s) Kate Taft, Administrative Services

Attachments The August monthly/to-date Sustainability Reports are attached. There is a two-month lag time due to billing cycles.

Respectfully submitted,

Kate Taft, Sustainability Manager

Brian Good, Chief Administrative Officer

Briefing Paper Regarding Policy Options for Reimbursements for Third Party Lead Service Line Replacements

Strategic Plan Alignment

Lenses: Customer Centric Industry Leader Long-Term View
This briefing paper presents options for the Board's consideration regarding reimbursement of third-party lead service line replacement costs as a part of Denver Water's proposed Lead Reduction Program Plan (LRPP). Denver Water has received inquiries from a variety of customers and other stakeholders regarding whether Denver Water will reimburse customers and others who replace lead service lines ahead of Denver Water's scheduled replacements or who have replaced lines prior to the start of the LRPP. This briefing paper outlines options and associated impacts for discussion at a future Board meeting.

Summary

Denver Water has recently requested that the Environmental Protection Agency (EPA) approve a variance from the Safe Drinking Water Act's Lead and Copper Rule's corrosion control treatment requirements to allow Denver Water to implement its LRPP in place of orthophosphate treatment. If approved, Denver Water will take a strategic approach to determining how to prioritize lead service line (LSL) replacements based upon health equity and environmental justice (HE&EJ) principles, lead exposure risk, the City and County of Denver's paving schedule, and other relevant factors.

This briefing paper presents the following policy questions for the Board's consideration:

- (1) Should Denver Water reimburse customers, developers and/or the City when they replace LSLs in advance of Denver Water's prioritized LSL replacements under the LRPP?
 - (a) If yes, should reimbursements be made at Denver Water's average cost of LSL replacement, actual third party cost, or a hybrid approach?
- (2) Should Denver Water reimburse distributors in situations in which they would otherwise have to replace LSLs under Denver Water's Operating Rules?
- (3) Should Denver Water allow for retroactive reimbursement of customers who replaced their LSLs at their cost prior to the LRPP?

Background

Under the LRPP, Denver Water must replace at least 4,477 LSLs per year based upon its current LSL inventory to complete replacement of all LSLs by 2034. In meeting this requirement, Denver Water plans to prioritize replacements based on lead exposure risk, health equity and environmental justice, as well as logistical considerations, as outlined in the LRPP. Areas with the highest risk score will be prioritized for LSL replacement, which will occur according to a block by block or street by street replacement schedule.

Independent of these prioritized LSL replacements, Denver Water will continue to perform unscheduled LSL replacements during water main replacement work or when

responding to customer leaks (estimated at 900 per year). These LSLs are currently replaced at Denver Water's cost.

Unscheduled LSL replacements also include situations in which Denver Water requires third parties to replace LSLs at their cost. These include the following types of replacements:

- In cooperation with the Denver Building Department, Denver Water requires customers and developers to replace LSLs when major construction work is being performed at a licensed premise pursuant to Operating Rule 9.04.3 (estimated at 200 to 500 per year).
- Denver Water may require developers to replace LSLs when the developer is also required to make a main extension or upgrade pursuant to Operating Rule 2.09.1 (estimated at 100 per year).
- Denver Water requires the City and County of Denver to replace LSLs disturbed during wastewater improvement projects pursuant to a 2018 Inter-agency Agreement (estimated at 100 per year).

The following table presents the estimated cost of replacing prioritized and unscheduled LSLs based on an assumed average replacement cost of \$6,500:

Type of Replacement	Number of LSLs/Year	Total Cost
Prioritized	4,477	\$29,100,500
Unscheduled		
Main Replacements & Leaks	900	\$5,850,000
Major Construction Permits	500	\$3,250,000
Developer Replacements	100	\$650,000
City IAA Replacements	100	\$650,000
Total:	5,877	\$39,500,500

It is important to note that as part of the LRPP, Denver Water will provide lead filters and replacement cartridges to all customers with known, suspected or possible LSLs until customers' LSL are replaced. Thus, all customers will be protected against lead exposure while they await LSL replacement.

Policy Question 1: Reimbursement for Unscheduled Replacements

Budget

If a policy is adopted to reimburse customers, developers or the City for unscheduled LSL replacements, Denver Water will need to increase its annual LRPP budget, which could result in a rate increase depending on the number of reimbursements and cost per reimbursement.

Alternatives

Four options are presented below:

- Alternative 1 explores the implications of not providing reimbursement for unscheduled LSL replacements.
- Alternative 2 presents an alternative of reimbursing for all unscheduled replacements based upon Denver Water's average LSL replacement cost.
- Alternative 3 presents a policy option of reimbursing for all unscheduled LSLs at actual third-party cost.

- Alternative 4 presents a hybrid policy of compensating the City at actual cost, and all other customers and developers at Denver Water’s average cost.

Alternative 1: Should Denver Water stay with its current approach, which does not provide reimbursement of customers, developers, or the City for unscheduled replacements made in accordance with the Operating Rules and the 2018 IAA with the City?

Alternative 1	
Pros	Cons
<ul style="list-style-type: none"> • This alternative would enable Denver Water to focus its LSL replacement efforts and funding entirely on prioritized LRPP replacements. • Denver Water would be able to better control the budget for LSL replacement rather than allocate an uncertain amount of resources for third party replacements. 	<ul style="list-style-type: none"> • This approach might cause frustration among customers who would prefer to replace their LSLs now rather than wait for Denver Water to do so. • This approach is not responsive to requests from some stakeholders that we provide support to allow customers to replace their LSLs as soon as possible. • Denver Water would miss an opportunity to increase its annual rate of LSL replacement by incentivizing third party LSL replacement. • There might be questions raised about fundamental fairness: customers would be required to pay for their LSL replacements as part of home remodel projects whereas customers who are not remodeling their properties would have their LSLs replaced at Denver Water’s cost.

Alternative 2: Should Denver Water reimburse customers, the City and developers for unscheduled LSL replacements up to a cap based on Denver Water’s average cost to replace LSLs? Denver Water’s average cost for LSL replacements is currently \$6,500 per line.

Alternative 2	
Pros	Cons
<ul style="list-style-type: none"> • Offering reimbursement to customers not currently prioritized for LSL replacements would support those customers in replacing their own lines when they choose to do so with contractors they select. • This approach could accelerate the rate of LSL replacements or reduce the rate at which Denver Water must replace LSLs without a net increase in the program’s lifetime cost. • Denver Water would not have to pay permit fees for LSL replacement (estimated to be \$25/line). • Denver Water would avoid the risk of claims associated with performing work on private property. • This approach is favorable to the City and developers. 	<ul style="list-style-type: none"> • Some might argue that the funds used for customer reimbursements should instead be applied to customers who would be next in priority under the prioritization principles. • Reimbursement at Denver Water’s cost might not fully reimburse some customers for the costs they pay out-of-pocket to have their own lines replaced by private contractors. • This approach would require that Denver Water budget additional funds for LSL replacements in the early years of the program, which could in turn impact rates or cause Denver Water to defer other work. • Customers replacing their own LSLs would nonetheless require that Denver Water allocate meter inspectors and personnel to make taps, when these resources might otherwise be needed for prioritized LSL

<ul style="list-style-type: none"> • It would help reduce the size and cost of the filter program (a \$100/year savings per customer, approximately). <p><i>If this policy is adopted, the Board could use the current average cost of LSL replacements incurred on water main replacement projects during 2020, and use the actual cost seen in the LRPP for each subsequent calendar year.</i></p>	<p>replacements and water main replacement work.</p> <ul style="list-style-type: none"> • Denver Water would need to determine whether to allow customers of distributors to request reimbursement. This would require coordination with distributors.
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Alternative 3: Should Denver Water reimburse customers, the City and developers for unscheduled LSL replacements up to the actual cost for the customer to replace their LSL? Actual cost of LSL replacements by customers tends to be higher and more variable as compared to when Denver Water performs LSL replacements.

Alternative 3	
Pros	Cons
<p>Alternative 3 would have many of the same pros as Alternative 2 above. It would also have the following additional benefits:</p> <ul style="list-style-type: none"> • This approach would provide an additional incentive above option 2 for customers to replace their own LSLs, likely accelerating the rate of LSL replacements. • Reimbursement based upon actual cost would likely be received well by customers seeking reimbursement, as well as other key stakeholders. 	<p>Alternative 3 would have many of the same cons as Alternative 2 above. It would also have the following additional drawbacks:</p> <ul style="list-style-type: none"> • It could add significant cost to the LRPP because customers would not realize the economies of scale that Denver Water can achieve, and full reimbursement eliminates any drivers to minimize cost. • This approach would be open to abuse through customers, developers, or their contractors inflating costs. • This policy option could increase the challenge of budgeting funds for an unpredictable financial commitment.

Alternative 4: Should Denver Water reimburse the City for LSL replacements at actual cost and reimbursement developers and customers at Denver Water's average cost?

Alternative 4	
Pros	Cons
<p>Alternative 4 has many of the same pros as Alternatives 2 and 3. However, it has the following additional benefits:</p> <ul style="list-style-type: none"> • By allowing the City to recover the actual cost of LSL replacements, this policy approach will likely reduce objections from the City and simplify financial tracking. • By limiting reimbursement of customers and developers to the average cost, Denver Water could avoid the risks of paying inflated costs. 	<p>Alternative 4 has the same drawbacks as Alternative 2.</p>

Potential Eligibility Requirements for Alternatives 2, 3, and 4:

If Alternative 2, 3 or 4 is adopted, the Board might want to consider establishing eligibility requirements for customer reimbursements to avoid conflict with the LRPP and other stakeholders, such as Denver Public Works Department, as well as to mitigate the drawbacks of these approaches outlined above. The following types of conditions would also help focus resources on the most vulnerable customers:

- Customers could be required to first complete a water quality test, and Denver Water could set a lead concentration threshold to be eligible for reimbursement.

A lead concentration threshold of 10 parts per billion (ppb), for example, would help Denver Water perfect its LSL inventory and focus resources on those most at risk of lead exposure. Although no level of lead is safe, a level of 10 ppb would also align with EPA's recently proposed changes to the Lead and Copper Rule.

- The Board could choose to limit the reimbursement eligibility to customers who have children in the home under the age of 18 or who are pregnant.

Children are the most vulnerable population when it comes to lead exposure. Thus, there is a particular rationale for incentivizing these customers to replace their LSLs.

- The customer must not be located on a street that the City has paved within the past three years at the time of the request.

This condition would minimize conflict with Denver Public Works' paving program and would avoid damage to streets that have been recently paved.

- The Board could opt not to reimburse in cases in which the LSL is already scheduled to be replaced within a year.

This condition would avoid duplicating already scheduled LSL replacement work and would minimize disruption to City streets.

- Reimbursement in a given year could be capped based on the amount budgeted for that year.

The number of customer-reimbursements could be limited to the amount budgeted on an annual basis to minimize impacts to rates or other planned work.

Policy Question 2: Reimbursement of Distributors for the Cost to Replace LSLs that Distributors are Required to Replace Under the Operating Rules

Background For the purpose of this briefing paper, it is assumed Denver Water will cover distributors' costs to replace any LSLs within their service areas as part of Denver Water's prioritized LSL replacement schedule. It is conceivable that in some cases Denver Water or its contractor may perform the LSL replacements in the distributors' service areas or, in some cases, distributor might perform the replacements. In either case, additional consideration needs to be given to these issues, with input from distributors.

More immediately, it has come to Denver Water's attention that some distributors might be performing capital projects in the next few years that will impact LSLs. Under Denver Water's Operating Rule 9.04.4, if construction activities in the street result in relocation, cutting or damage to a lead service line, the responsible party must replace all non-copper components of the service line from the water main to the first copper or brass fitting within the structure. This briefing paper poses the question of whether Denver Water should reimburse the distributor for LSL replacements that they would otherwise be required to perform under Denver Water's Operating Rules.

Budget If a policy is adopted to reimburse distributors for LSL replacements required under Operating Rule 9.04.4, Denver Water will need to increase its annual LRPP budget, which could impact rates.

Alternatives Below, two alternatives are presented. Under Alternative 1, the status quo of requiring distributors to replace LSLs at their cost that have been relocated, cut or damaged, would be maintained. Under Alternative 2, Denver Water would reimburse distributors for the cost to replace these LSLs.

Alternative 1: Should the Board maintain the status quo of requiring distributors to replace LSLs that are relocated, cut or damaged at distributors' cost?

Alternative 1	
Pros	Cons
<ul style="list-style-type: none"> • The status quo avoids budgeting challenges and the need for a potential rate increase. 	<ul style="list-style-type: none"> • Such a policy would likely be disfavored by distributors. • The status quo might create a fairness issue if Denver Water is collecting rates from distributors for LSL replacements, but requiring distributors to continue to bear the cost of LSL replacements required under Operating Rule 9.04.4.

Alternative 2: Should the Board adopt a policy of allowing reimbursement of distributors for distributor-performed LSL replacements that are required under Operating Rule 9.04.4?

Alternative 2	
Pros	Cons
<ul style="list-style-type: none"> • Such a policy would likely be welcomed by impacted distributors and could encourage additional distributor support for the LRPP. • Such a policy is more likely to be perceived as fair to distributors. 	<ul style="list-style-type: none"> • Denver Water might face challenges in controlling the budget for LSL replacements, although this could be mitigated by requiring advance notice if a distributor’s planned capital work would impact LSLs. • This approach could result in higher than anticipated costs for the LRPP. • This could add additional complexity to administering the accelerated LSL program, as it would likely require negotiation of intergovernmental agreements for each project.

If the above alternative is selected, there will be a question as to whether to allow for reimbursement based upon average or actual cost of LSL replacement. Because the distributor is likely working with a contractor as part of its capital projects, and therefore able to reduce costs of the work, the Board may want to consider whether to reimburse the distributor based upon the actual cost of LSL replacement.

Policy Question 3: Reimbursement for Prior LSL Replacements

Background

Some customers have asked whether Denver Water will reimburse customers who replaced their LSLs prior to implementation of the LRPP. It is estimated that since Denver Water enhanced its lead reduction efforts in 2016, approximately 1,325 customers have replaced their lines at their cost as set forth in the table below:

Type of Replacement	Approximate Number of LSLs Replaced between 2016-2019	Approximate Reimbursement Cost
Lines Replaced Due to Construction at Licensed Premise	1,200	\$7,800,000
DURA Revolving Loan Fund	55	\$357,500
Leaks Between Meter and House	70	\$455,000
Total	1,325	\$8,612,500

Budget

If a policy is adopted to reimburse customers for LSLs previously replaced at the customers’ cost, Denver Water would need to increase its annual LRPP budget, which might result greater rate increases.

Alternatives

Two alternatives are presented below. Under Alternative 1, Denver Water would maintain the status quo by not providing for reimbursement of customers who have

had their LSLs replaced in the past. Under Alternative 2, a policy is presented of reimbursing customers for the LSLs previously replaced at the customer's cost.

Alternative 1: Should Denver Water maintain the status quo through a policy that does not reimburse customers for LSLs previously replaced at customers' expense?

Alternative 1	
Pros	Cons
<ul style="list-style-type: none"> This approach would avoid an adverse budget impact. This policy would allow Denver Water to conserve its financial resources for future LSL replacements. 	<ul style="list-style-type: none"> Customers who have previously paid to replace their LSL might not be supportive of this approach.

Alternative 2: Should the Board adopt a policy to reimburse customers who have previously replaced their LSLs at their own cost?

Alternative 2	
Pros	Cons
<ul style="list-style-type: none"> It would create a sense of fairness for customers who have already paid the cost to replace their LSLs. It could increase support for the LRPP and any needed rate increases among those who have already replaced their LSLs. 	<ul style="list-style-type: none"> It would add cost to the LRPP without reducing the LSL replacement work Denver Water will need to perform. It could be difficult for some customers to document the costs they paid for LSL replacements previously performed. It could be difficult to set criteria for reimbursement after the fact.

Should the Board decide to reimburse customers for prior LSL replacements, additional consideration will have to be given to the following questions:

- How far back in time should Denver Water go in approving reimbursement?
- Should eligibility be limited to customers or should other third parties also be reimbursed?
- What standards and documentation requirements should apply?
- Should there be caps on the numbers of LSL replacements eligible for reimbursement or on the reimbursement rate?

Conclusion This briefing paper is being provided for informational purposes to help inform the Board's decision on the policy questions posed above. It is anticipated that the alternatives presented above will require further discussion at a future Board meeting.

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Attachments None.

Respectfully submitted,

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