

# EXHIBIT A

Laura Brindle

City of Littleton

## Water Resources Master Plan Planning Grant

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*2021 Planning Grant Application*

### *City of Littleton*

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Mrs. Laura Brindle

M: 303-386-6789

### *Mrs. Laura Brindle*

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2255 West Berry Avenue  
Littleton, CO 80120

[lbrindle@littletongov.org](mailto:lbrindle@littletongov.org)  
O: 303-795-3701  
M: 303-386-6789

# Application Form

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## *Application Summary*

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### Primary Contact Information\*

Please provide information for the primary contact for this project in the following format.

Agency:

Name:

Title:

Telephone:

Email:

City of Littleton  
Carolyn Roan  
Water Resources Manager  
303-795-3836  
croan@littletongov.org

### Grant Category\*

Select One:

- **Planning Grant:** \$1,000 - \$100,000, requiring a minimum of 10% total project cost cash match

Planning Grant

### Project Title\*

Water Resources Master Plan Planning Grant

### Project Address\*

*If this is an agency or system plan, please use agency's main address.*

2255 West Berry Ave. Littleton, CO 80120

### Project Location\*

Select a Jurisdiction or Unincorporated Arapahoe County:

*If this is an agency or system plan, please use agency's main address.*

Littleton

**GPS Coordinates (Latitude in Decimal Degrees)\***

*If this is an agency or system plan, please use coordinates for agency's main address.*

Example: Dove Valley Regional Park

Latitude: 39.577303

39.6178856

**GPS Coordinates (Longitude in Decimal Degrees)\***

*If this is an agency or system plan, please use coordinates for agency's main address.*

Example: Dove Valley Regional Park

Longitude: -104.828850

-105.0138888

**Grant Request Amount\***

\$75,000.00

**Cash Match Amount\***

\$75,000.00

**Total Project Amount\***

Total project amount includes grant request and cash match only. Please do not include in-kind match.

\$150,000.00

**Cash Match Percentage\***

Calculate cash match as % of total project cost.

50

**Project Partners**

List partner agencies if applicable.

N/A

**Executive Summary\***

Highlight key points of your proposal, such as project description, goals, need, partnerships, deliverables, etc.

The city of Littleton currently does not have a Water Resources Master Plan and has made it a priority in 2021-2022 to develop and adopt a plan in response to water issues, drought response, sustainability, and

resiliency. Littleton has not been a water service provider since selling the city's ailing water system as a result of the South Platte River Flood to Denver Water in 1972. Currently, Littleton has limited water portfolio (shares/rights) and a plan to prioritize the use of these assets is important for both short- and long-term decision making.

A Water Resources Master Plan will identify, prioritize, and manage water supply for various uses and needs, both current and into the future. The city is also facing many water-related issues including:

- Diminishing supply availability due to continuing drought conditions
- Reduced flows and projected no flows in the Highline Canal
- Lack of water supply for two pond facilities – Ketring Lake and Ridgeview Pond
- Management of resources attuned to the South Platte River Basin
- Water resources and drought resiliency planning for city rights-of-way and open spaces.

The city of Littleton requests \$75,000 from Arapahoe County Open Spaces, to develop a short and long-term (25 years) Water Resources Master Plan that assesses the current water portfolio, analyzes water needs, provides conservation strategies, and explores additional water rights. The plan will identify projects and programs to achieve renewable water goals and identify the investments needed to meet the community's long-term water goals.

## *Minimum Qualifications and Eligibility*

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### **Question 1\***

**Is the applicant in good standing with Arapahoe County Open Spaces? Please list your agency's ongoing Arapahoe County Open Spaces grant projects.**

Littleton is in good standing with the Arapahoe County Open Spaces and has a history of partnership with ACOS. ACOS has helped Littleton upgrade playgrounds, build new playgrounds, add amenities to trail heads, and add ADA access to parks. The city also partners with South Suburban Parks and Recreation District and Littleton Public Schools to preserve and improve on the city's outdoor features and recreational options.

Currently the City of Littleton has four open grants with ACOS including:  
 Reynolds Landing Phase 2 Park Improvements (2019 planning grant)  
 Superchi Parcel at Reynolds Landing Park (2020 planning grant)  
 Slaughterhouse Gulch Park Trail Connection Project (2020 standard grant)  
 Jackass Gulch Stabilization and Design Project (2020 planning grant)

The City of Littleton recently closed out two awards in 2020 and 2021 including:

Options Secondary at Whitman School Playground Renovation (2019 standard grant).  
 Field Elementary School Playground Improvements (2018 standard grant)

Littleton is also submitting two other planning grants for the 2022 application round.

## Question 2\*

**How does this project align with the Arapahoe County Open Space Master Plan, Arapahoe County Bicycle and Pedestrian Master Plan, an agency master plan, or other approved planning documents?**

The Water Resources Master Plan is aligned with priorities and themes described in the Arapahoe County Open Space Master Plan including enhancing the quality of life for current residents and future generations, promoting safe public access to recreational opportunities, and protecting the land that preserves water quality in rivers, lakes, and streams. The Water Resources Master Plan aligns with Open Space Master Plan by furthering its mission of protecting Arapahoe County's treasured parks, trails and open space for residents to enjoy today and forever.

The Water Resources Master Plan will also help preserve and enhance riparian corridors such as the South Platte River. The plan will include strategies for conservation and sustainability that will preserve and enhance other water resources including irrigation canals.

This project is aligned with Littleton's Citywide Plan, Envision Littleton, with the Parks, Trails, and Open Space priority. This community-driven plan identifies specific goals related to the planning for recreation and the enjoyment of the outdoors and long-term sustainability of water resources. Additionally, recommendations for capital improvements from the Water Resources Master Plan will be integrated into the City's capital investment plans and priorities.

## Question 3\*

**Describe how this project addresses specific objectives in the Arapahoe County Open Space Resolution #030381/#110637.** *The resolution is available on the Open Space website.*

This project addresses the objectives of the Arapahoe County Open Space Resolution by preserving urban and rural open space and natural areas, protecting lands that preserve water quality in rivers, providing, maintaining, and improving neighborhood parks, open space, picnicking, and biking, walking and multiuse trails. Additionally, the water conservation strategies identified in the Water Resources Master Plan will help preserve wildlife habitats and corridors such as riparian areas within the city of Littleton.

## Certification and Authorized Signature Form\*

Please attach completed Certification and Authorized Signature Form as a PDF document. Form must be signed by highest authority in agency or authorized individual. *Required forms are available on the Open Space website.*

Please name your file as follows: *Applicant\_SignatureForm.pdf*

Littleton\_Applicant\_signatureform.pdf

## Project Timeline

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### Project Timeline Form\*

Please attach completed Project Timeline Form as a PDF document. *Required forms are available on the Open Space website.*

Please name your file as follows: *Applicant\_TimelineForm.pdf*

Littleton\_Timeline form .pdf

## ***Project Budget***

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### **Budget Narrative\***

**Provide a clear and concise budget narrative. Include details about expenses in each budget category, justification for any unusual line items, and an explanation of how you arrived at these estimates. Include amounts and sources of cash/in-kind match.**

Tasks and costs are estimated by Littleton public works staff who have overseen master planning efforts at the city. Task 1 is Planning and Project initiation, which includes consultant coordination with partners and stakeholders, coordinating reviews and comments from various master plan phases, and meetings with the team. Task 2 is the water rights review and assessment, which expected to take two months. This will include mapping and technical assessment of all city water utilization.

Public engagement and the strategic project leadership committee are expected to be a significant cost to the grant and continue throughout the project duration. This may include in person outreach, or may be more virtual in light of Covid-19 concerns. Costs also include discussion forums, meetings with stakeholders for the Water Resources Master Plan, project surveys and website, and forming a citizen's advisory committee.

Another task is sustainability planning, which includes water planning for future open space, parks, and trails community needs and landscaping practices and standards that emphasize water conservation, reuse, and sustainability. Finally, the Water Resources Master Plan will include implementation planning. The consultant will provide estimate costs to implement recommendations and develop a Master Plan document that summarizes research, findings, recommendations, and costs.

### **Budget Forms\***

Please attach completed Summary Budget Form and Detailed Expense Budget Form as a single PDF document. *Required forms are available on the Open Space website.*

Please name your file as follows: *Applicant\_BudgetForms.pdf*

Littleton\_Budgetforms (2).pdf

## ***Project Narrative***

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### **Question 1\***

**What type of planning project are you proposing and why? Describe the vision, goals, and desired outcomes of the project. What deliverables will be produced?**

The city of Littleton needs a comprehensive Water Resources Master plan to identify, prioritize, and manage water supply for various uses and needs, both current and into the future. The availability of water for drinking is relatively secure with Denver Water's master planning, but the city has limited supply of water for other uses such as irrigation, recreation, and pond and lake maintenance. These other uses of water need

to be considered in relation to Littleton's downstream neighbors' needs considering Colorado's semi-arid climate.

Currently, Littleton does not have any water reuse programs for municipal operations such as irrigation or offered to residents such as graywater reuse as allowed by state regulation. The Highline Canal runs through the eastern portion of the city; however, Denver Water plans to phase out using the canal for irrigation water supply. This presents water supply issues for Littleton's ponds and lakes. For example, the canal is used by the city to partially fill Ketring Lake each year. Additionally, other ponds and lakes that were supplied historically by the Highline Canal or stormwater runoff are dwindling due to decrease in canal operations and climate change. These ponds and lakes need water supply to maintain historic conditions of recreation use, aesthetics, and property values as expected by residents. Comprehensive evaluation of surface water rights, and possibility of expanding city groundwater use will also be studied in the Water Resources Master Plan.

In addition to water supply for ponds and lakes, Littleton has also identified more needs for water, including base and recreational flow in the South Platte river for recreation, which is a key economic driver for the city and maintaining and irrigating various public and private properties as required under agreements. One outcome from the Water Resources Master Plan is the identification of additional needs for water. Knowing these additional needs will allow Littleton to better plan for long-term water resources.

Another outcome of the Water Resources Master Plan is the identification of all sources of water for current or future use. Currently the city knows of several sources of potential water for various uses including the Nevada, Last Chance, Circle, and City ditches, groundwater wells, water reuse for irrigation, and stormwater storage. The Water Resources Master Plan will detail water resources supply projects to build the city's water resources portfolio.

Additional deliverables for this project include:

- Research and document the uses/rights/agreements associated with those sources
- Identify and prioritize needs for the City of Littleton
- Justification for water supply to those needs, considering water conservation principles
- Explore alternatives for supplying water to various needs, or how to reduce the needs.
- How to obtain more water to meet needs
- Explore sustainability practices, such as re-use
- Explore additional water rights or convert existing rights into different uses.
- Estimate costs to implement recommendations.
- Develop a Master Plan document that summarizes research, findings, recommendations, and costs.

## Question 2\*

**Describe the community/neighborhood and types of users that the project will serve. Estimate the number of users that will benefit annually. Discuss the benefits of the planning effort to users, the community, and the agency.**

*Include up to five community support letters in the Attachments section.*

The City of Littleton is located in central Colorado, within the Front Range of the Southern Rocky Mountains. The South Platte River flows from south to north through Littleton, with additional tributaries also running through the city. Littleton is the county seat of Arapahoe County, with the majority of the city

located within Arapahoe County and small portions located in Douglas and Jefferson counties. Littleton is part of the greater Denver metropolitan region and is approximately nine miles south of Downtown Denver.

Littleton is accessible via two Regional Transportation District (RTD) light rail stations, Downtown and at Mineral Avenue, and is home to the main campus of Arapahoe Community College. The city limits encompass a total area of approximately 13.8 square miles. According to the U.S. Census Bureau, Littleton had a 2010 population of 41,737 and an estimated 2017 population of 47,734. Littleton lies 5,351 feet above sea level and has an average temperature range of 35-64 degrees, an average rainfall of 16.3 inches per year, and an average of 65.7 inches of snowfall per year. Given its location along the South Platte River and extensive open space, parks, and trails, Littleton is home to a range of recreation activities. Littleton also retains its original and historic downtown. The recreational and historical aspects of the community continue to attract tourists to Littleton.

Littleton's goal is to provide a sustainable, reliable, and renewable water supply, now and into the future, for all of Littleton citizens and businesses. The Water Resources Master Plan is a city-wide plan that will benefit all the estimated 48,000 residents. Because this is a long-term plan, the benefits of being able to plan for future resources will impact future and current Littleton residents for the next 20 to 30 years. It is assumed that Littleton's 2040 population will fall within a forecast range of 51,289 to 74,200 persons, which yields a midpoint of 62,745 residents.

Long-term water supply and efficient use/re-use will be a core focus for the entire metro area through 2040 and beyond. The benefits of a Water Resources Master Plan to the Littleton community include hazard mitigation related to flood and drought, identifying future demand related to population growth, water supply reliability, and the enhancement and protection of wildlife areas and recreational assets. The plan will also bring fiscal benefits to the community through enhancement of the South Platte River, improvement of the city's understanding of water use trends, and present options and strategies in a manner that will allow Littleton to map out a program that best fits its goals and financial capabilities.

### Question 3\*

**What specific steps will you take to complete the planning project? How will you obtain public input, engage stakeholders, and handle opposition to the project? What is your agency's process for adopting a final plan? If applicable, include documentation of opposition and/or evidence of any public input received to date in the Attachments section.**

The city of Littleton will work with a consultant to complete the Water Resources Master Plan. The planning project will begin in fall 2021 with a scoping workshop among the City of Littleton and the consultant to discuss the vision and goals of the Water Resources Master Plan. The session will also help clarify any additional needs from the plan. After the scoping session a project workplan and specific schedule will be developed with meeting dates, plan reviews, and critical milestones for deliverables.

The consultant will be responsible for the project research to identify all sources of water and the uses, rights, and agreements associated with those water sources. They will also evaluate future scenarios considering a range of population growth, economic growth, future climate, and future conservation program assumptions, provide financial analysis of costs to develop water supply, and recommend action plans for implementation. The consultant will compile the final master plan with research conducted, findings, recommendations, and associated costs.

The city of Littleton may form a citizen's advisory committee or steering committee to ensure public engagement, share ideas about water supply strategies, gather input on water conservation and demand management strategies, and address stakeholder's water concerns. The Water Resources Master Plan will consider multiple viewpoints from stakeholders such as Denver Water, Mile High Flood District, South



Suburban Parks and Recreation District, local Homeowners Associations, and businesses. Other stakeholders may include:

- City of Englewood
- South Platte Working Group
- Arapahoe County
- Department of Local Affairs (DOLA)
- Connector Water and Wastewater Districts
- South Metro Land Conservancy
- Littleton Public Schools
- Neighborhood Associations and Homeowners Associations
- Douglas County
- Jefferson County
- Highline Canal Conservancy
- Littleton Crabapple Route Association

Other key projects components will include:

1. Mapping and Technical Assessment of City Water Utilization
  - a. GIS based assessment of all city water usage
  - b. Assessment of water and irrigation utilization in city parks, open space and trails
  - c. Determination of quality of current water delivery systems including raw and potable water plus irrigation systems
  - d. Utilization of spatial data modeling to determine current and future patterns based on utilization assessments and projections of future needs
2. Water Planning for Future Open Space, Parks, and Trails Community Needs
  - a. Current and project needs for all parks and open space
  - b. Assessment of options for water-based facilities such as Ketring Lake, Ridgeview Park, and South Platte Park
3. Landscaping practices and standards that emphasize water conservation, reuse, and sustainability

There is no known public opposition currently. As Littleton moves forward with the project recommendations from the Water Resources Master Plan, the city will offer clear updates on its progress and welcomes ongoing discussion with the public to address any concerns.

Adoption of a master plan involves a presentation of a draft master plan at a City Council meeting for review and public comment. The draft plan will then address public comments and a final presentation to the City Council is given to obtain adoption of the plan.

#### Question 4\*

**Describe how the project will be completed within the required two year time frame. Discuss the agency's capacity to complete the project, including project management, resources, and experience implementing similar projects.**

In accordance with the project timeline, the planning project will be completed within the two-year timeframe, with the entire project taking no more than 18 months to complete. A request for proposals will be opened in fall 2021 seeking a consultant for the Water Resources Master plan. The project will begin in fall 2021 and it is expected to take 12-18 months. The final master plan documents will be submitted to the City Council for approval by fall 2022 or early winter 2023, depending on the schedule of community engagement opportunities.

Project management will be provided by the City of Littleton Public Works department in consultation with the selected consultant. Carolyn Roan, Water Resource Manager for the city, will oversee the consultant contract and planning process. The City of Littleton has experience developing and implementing similar master plans for Littleton's asset portfolio including the Transportation Master Plan, Fiber Master Plan, and Pavement Management Master Plan. Carolyn Roan is also currently leading the project management on the development of a Stormwater Master Plan.

### Question 5\*

**How much of your cash match is secured? If applicable, what are your plans for securing additional funds? Describe cash and in-kind match partnerships established for this planning project.**

*Include partner support letters in the Attachments section and include match from partners on the Budget Forms. Grant recipients are responsible for project cost overruns.*

The cash match for this planning grant of \$75,000 (50% of the total project cost of \$125,000) is to be funded from the city of Littleton's Open Space Fund. This project was planned for in budget discussions and is available in the 2021 budget for this fund.

Based on the detailed findings and strategies suggested from the Water Resources Master Plan, future design and construction phases are expected to be funded from a combination of sources and partnerships including the City of Littleton Open Space Fund, private/public partnerships, additional Arapahoe County Open Space grant funds, other grant opportunities like Great Outdoors Colorado, Mile High Flood District, and South Suburban Parks and Recreation. The future construction cost is not yet known until the research and findings from the Water Resources Master Plan are complete.

### Question 6\*

**What will you do to ensure that the plan is implemented once the planning effort is complete? Discuss strategy, timeline, funding, and partnerships for implementation. Identify possible barriers to implementation (consider ownership, legal access, and encumbrances at the project site; current zoning; necessary permits; sensitive natural, historic, or cultural resources; etc.).**

*If applicable, provide supporting documentation showing ownership, legal access, and/or permission from landowner in the Attachments section.*

The Water Resources Master Plan is essential to capital planning because it will assess current assets, project future needs, assign risk, and align Littleton's resources. The water supply strategies detailed in the master plan will take time and significant capital expenditures. Projects addressing needs such as water supply to ponds and lakes are expected to be short-term. For example, the city has already budgeted for the construction related to the Water Firming project at Ketring Lake in 2022-2023. The master plan will also include capital financing requirements needed to meet the city's long-term water resources goals and develop financing plans to generate the capital funds required for transitioning to a sustainable supply. As part of the financing plan, the city anticipates applying to additional grants such as Arapahoe County Open Spaces, Colorado Conservation Water Board, and Great Outdoors Colorado.

It is expected that the capital improvement projects in the master plan will need permits of various types and will also need to be evaluated for compliance with various environmental regulations including the National Environmental Protection Act (NEPA), Threatened and Endangered Species Act, Clean Water Act, Clean Air Act, and Floodplain Development.

### Question 7\*

**Discuss the agency's capacity to maintain the project once implemented. Who will be responsible for maintenance? Estimate annual costs to maintain the site and explain how maintaining this project site will affect the agency's budget.**

The Water Resources Master Plan will be a short- and long-term plan that examines future scenarios related to climate change, population growth, and economic growth. Different scenarios and recommendations will account for these variables. For example, conservation programs based on high population growth to offset demand increases. Because of variability in the future, the Water Resources Master Plan will need to be revisited every 5-7 years for updates and check-ins. The maintenance of the plan will be conducted by the City of Littleton.

The Water Resources Master Plan will have various recommendations for future projects. The cost of maintaining these is unknown at this time and will be detailed in the cost analysis section of the plan.

### Question 8\*

**Describe how this planning effort will address inclusivity per Americans with Disabilities Act guidelines.**

To the extent possible and when applicable the Water Resources Master Plan will be designed to meet current ADA requirements.

### Question 9\*

**If successful in obtaining this grant, how will the agency use this project to inform citizens about the value of the Arapahoe County Open Space Sales and Use Tax?**

The City of Littleton will help educate residents about the importance of the Arapahoe County Open Space sales tax program via a wide range of outreach opportunities. The city has provided information to citizens through signage at open spaces and parks and information at City Council meetings and public engagement meetings and will continue to do so.

The city will use its communication department to develop promotional materials and press releases related to the project. The grant and project progress will also be promoted through the Littleton Report, which is a monthly news report published by the Communications Department, featuring all the latest city news and events. The newsletter is mailed to all residents and business owners in the city and provided at city offices. The city can also provide information about the project and use of Arapahoe County Open Space sales and use tax via its various social media outlets.

All public-facing plan documents such as the master plan will display the Arapahoe County Open Spaces logo. The city will work with ACOS to display any promotional signage or other promotional requirements of the grant. Littleton will submit all press and recognition materials to ACOS for review prior to print, distribution, and/or fabrication.

## Attachments

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### Attachment 1: Evidence of Support from Highest Authority\*

Please attach evidence of support from the agency's highest authority (official letter or resolution) as a PDF document. At a minimum, this document must include: project title, amount of grant funds requested, statement that matching funds are secured and/or efforts to secure funds are underway (include the amount of matching funds committed), and certification that the project will be open to the public or serve a public purpose if implemented. *A sample resolution is available on the Open Space website.*

Please name your file as follows: *Applicant\_SupportHighestAuthority.pdf*

Littleton\_SupportHighestAuthority.pdf

### Attachment 2: Evidence of Community Support\*

Please attach up to 5 letters of support from users, working groups, community members, volunteers, schools, etc. as a single PDF document. Letters should be specific to the project and dated within the last 6 months.

Please name your file as follows: *Applicant\_CommunitySupport.pdf*

Littleton\_CommunitySupport.pdf

### Attachment 3: Documentation of Opposition\*

Please attach documentation of opposition to the project (such as letters, petitions, articles, etc.) as a single PDF document. If there is no known opposition, please attach a page stating that this section is not applicable.

Please name your file as follows: *Applicant\_Opposition.pdf*

Littleton\_opposition.pdf

### Attachment 4: Evidence of Commitment from Project Partners\*

Please attach evidence of commitment from project partners (such as partner support letters, commitment to provide cash/in-kind match, or maintenance agreements) as a single PDF document. There is no maximum allowable number of partner support letters. If there are no partners for this project, please attach a page stating that this section is not applicable.

Please name your file as follows: *Applicant\_PartnerCommitments.pdf*

Littleton\_Partnercommitments.pdf

### Attachment 5: Primary Project Photo

Please attach one high resolution photo in JPG format. Please choose the photo that provides the best overall representation of your project. This photo will be used for presentations and/or publications.

*A photo of existing conditions is required for site plan applications.*

*Please name your file as follows: Applicant\_PrimaryPhoto.jpg*

## Attachment 6: Photos

Please attach photos of existing conditions at the project site (including captions) as a single PDF document. Include conceptual drawings if applicable.

*Photos are required for site plan applications.*

*Please name your file as follows: Applicant\_Photos.pdf*

Littleton\_Maps.pdf

## Attachment 7: Maps

Please attach a site map and a vicinity map as a single PDF document.

*Maps are required for site plan applications and system plan applications as appropriate.*

*Please name your file as follows: Applicant\_Maps.pdf*

## Attachment 8: Site Visit Form

Please attach a completed site visit form as a PDF document. *Required forms are available on the Open Space website.*

*Site visit forms are required for site plan applications and system plan applications as appropriate.*

*Please name your file as follows: Applicant\_SiteVisitForm.pdf*

## Attachment 9: Evidence of Property Ownership/Access

Please attach evidence of property ownership/legal access (legal documentation, ArapaMAP, etc.) as a single PDF document.

*Evidence of property ownership/legal access is required for site plan applications and system plan applications as appropriate.*

*Please name your file as follows: Applicant\_PropertyOwnership.pdf*

## Attachment 10: Other Attachments

Please attach additional supporting documentation (news articles, related planning documents, etc.) as a single PDF document.

*Please name your file as follows: Applicant\_OtherAttachments.pdf*

## Confirmation

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Please click the "I Agree" button below to certify that your application is complete and ready to submit. Once submitted, applications are final and cannot be returned.\*

I agree



## File Attachment Summary

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### *Applicant File Uploads*

- Littleton\_Applicant\_signatureform.pdf
- Littleton\_Timeline form .pdf
- Littleton\_Budgetforms (2).pdf
- Littleton\_SupportHighestAuthority.pdf
- Littleton\_CommunitySupport.pdf
- Littleton\_opposition.pdf
- Littleton\_Partnercommitments.pdf
- Littleton\_Maps.pdf

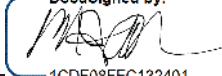


### Certification and Authorized Signature Form

*Please use this form for the 2021 Arapahoe County Open Spaces grant application.*

**By signing this form, I certify that:**

- **The information included in this application is true to the best of my knowledge.**
- **If funded, the applicant commits to completing the proposed project.**
- **If funded, the applicant accepts responsibility for any cost overruns necessary to complete the project.**
- **If funded, the completed project will be open to the public or will otherwise serve a public purpose.**
- **If funded, the applicant agrees to maintain the completed project site or to continue its maintenance agreement with a partner agency as outlined in the application.**
- **I am authorized to sign on behalf of the applicant.**

DocuSigned by:  
  
 1CDF08FFC132401...

4/9/2021

Authorized Signature (highest authority in agency or authorized individual)

Date

Mark Relph, City Manager

Printed Name and Title

Water Resources Master Plan

Grant Project or Joint Project Name





**2021 Open Space Grants - Project Timeline Form**

Use the sample timeline below as a guide to complete your proposed project timeline. Rows or columns may be added as necessary to include any milestones specific to your project. Timeline must be detailed, realistic, and coincide with details provided in the narrative portion of the grant application. Timeline must conclude within two years of project start date.

| Task                                 | Au<br>g<br>20<br>21 | Sep<br>20<br>21 | Oct<br>20<br>21 | No<br>v<br>20<br>21 | De<br>c<br>20<br>21 | Jan<br>202<br>2 | Feb<br>20<br>22 | Ma<br>r<br>20<br>22 | Apr<br>20<br>22 | Ma<br>y<br>20<br>22 | Jun<br>e<br>202<br>2 | Jul<br>y<br>20<br>22 | Au<br>g<br>20<br>22 | Septem<br>ber<br>2022 |
|--------------------------------------|---------------------|-----------------|-----------------|---------------------|---------------------|-----------------|-----------------|---------------------|-----------------|---------------------|----------------------|----------------------|---------------------|-----------------------|
| Grant Award Notification             |                     |                 |                 |                     |                     |                 |                 |                     |                 |                     |                      |                      |                     |                       |
| IGA Executed (Project Start Date)    |                     |                 |                 |                     |                     |                 |                 |                     |                 |                     |                      |                      |                     |                       |
| Planning meeting and project kickoff |                     |                 |                 |                     |                     |                 |                 |                     |                 |                     |                      |                      |                     |                       |
| Public Engagement Meetings           |                     |                 |                 |                     |                     |                 |                 |                     |                 |                     |                      |                      |                     |                       |
| Strategic Leadership Committee       |                     |                 |                 |                     |                     |                 |                 |                     |                 |                     |                      |                      |                     |                       |
| Water Rights Review                  |                     |                 |                 |                     |                     |                 |                 |                     |                 |                     |                      |                      |                     |                       |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| and Assessment                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sustainability & Reuse Assessment and Planning |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Landscape Management and Regulatory Standards  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Implementation Planning                        |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Presentation 1 to Council                      |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Adoption of Master plan                        |  |  |  |  |  |  |  |  |  |  |  |  |  |

Summary Budget Form - SMALL and PLANNING Grants (10% minimum cash match)

| Source of Funds                              | Date Funds Secured | Grant Request   | Cash Match      | Total Project Funds |
|--|--------------------|-----------------|-----------------|---------------------|
| Arapahoe County Open Spaces Grant            | 8/10/2021          | \$75,000        |                 | \$75,000            |
| City of Littleton/Open Space Fund Cash Match |                    |                 | \$75,000        | \$75,000            |
|  |                    |                 |                 | \$0                 |
|  |                    |                 |                 | \$0                 |
|  |                    |                 |                 | \$0                 |
| <b>Totals</b>                                |                    | <b>\$75,000</b> | <b>\$75,000</b> | <b>\$150,000</b>    |

|                            |                                    |                    |
|----------------------------|------------------------------------|--------------------|
| <b>MATCH REQUIREMENTS</b>  | Total Project Cost:                | \$150,000.00       |
|                            | Cash Match % Required:             | 10%                |
|                            | <b>Required Cash Match Amount:</b> | <b>\$15,000.00</b> |
|                            | Project Cash Match Budgeted:       | \$75,000.00        |
| <i>Minimum Met? Y or N</i> |                                    |                    |

**Applicant: City of Littleton**

**Project Title: Water Resources Master Plan**

*\* Please do not include in-kind match on the Budget Forms. Describe in-kind match in the budget narrative and project narrative if applicable.*



**CITY OF LITTLETON, COLORADO**

**Resolution No. 18**

**Series, 2021**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LITTLETON, COLORADO, AUTHORIZING AN APPLICATION TO THE ARAPAHOE COUNTY OPEN SPACES GRANT PROGRAM FOR A PLANNING GRANT FOR THE DEVELOPMENT OF A WATER RESOURCES MASTER PLAN**

**WHEREAS**, the city of Littleton as part of its mission statement acquires and improves land and conserves natural resources within city boundaries to develop and provide park and recreation facilities for the public; and

**WHEREAS**, Arapahoe County provides funding for such projects through distribution of its Open Space Grant monies; and

**WHEREAS**, the city of Littleton has requested \$75,000 to develop a short and long-term plan that assesses current water portfolio, conservation strategies, and city water needs for 25-year time horizon from Arapahoe County Open Spaces.

**NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LITTLETON, COLORADO, THAT:**

1. The City Council of city of Littleton strongly supports the grant application the development of a water resources master plan.
2. The City Council of city of Littleton has authorized sufficient appropriation for the \$50,000 in matching funds for said Arapahoe County Open Space Grant and authorizes the expenditure of funds necessary to meet the terms and obligations of the awarded grant.
3. The city commits to completing the water resources master plan if the grant is awarded.
4. If the grant is awarded, the city of Littleton acknowledges responsibility of cost overruns for Water Resources Master Plan project.
5. If the grant is awarded, the city council of the city of Littleton hereby authorizes the city Manager to sign the grant agreement and grant records with Arapahoe County.
6. This resolution is in full force and effect from and after its passage and approval.

Resolution No.18

Page 2 of 2

48

49 INTRODUCTION, READ AND ADOPTED at a regularly scheduled meeting of the

50 City Council of the City of Littleton, Colorado, on the 6th day of April 2021, at 6:30 p.m. at the

51 Littleton Center<sup>1</sup>, 2255 West Berry Avenue, Littleton, Colorado.

52 ATTEST:

DocuSigned by:

53 Colleen Norton

54 CF35EE7F11B64D4...  
COLLEEN L. NORTON

56 CITY CLERK

57

58 APPROVED AS TO FORM:

DocuSigned by:

59 Reid Betzing

60 B98911B338724F5...  
REID BETZING

62 CITY ATTORNEY

63

64

65

DocuSigned by:

Jerry Valdes

7FAF2EA831B9462...

MAYOR



<sup>1</sup> Due to COVID19, the City of Littleton is providing virtual coverage of city council meetings to protect the health of citizens, council members and staff. Citizens and participants will be limited to virtual participation until further notice.



**City of Littleton**

2255 W. Berry Avenue  
Littleton, Colorado 80120  
303-795-3700

April 27, 2021

Arapahoe County Open Spaces  
6934 S. Lima Street, Unit A  
Centennial, CO 80112

Dear Grant Review Committee,

Thank you for reviewing the City of Littleton's recently submitted planning grant application for the Water Resources Master Plan project. The city will be providing a cash match of \$75,000 for this project. Thank you again for your consideration.

Sincerely,

DocuSigned by:

A handwritten signature in black ink that reads "Mark Relph". The signature is written in a cursive style and is positioned above a horizontal line that spans the width of the signature box.

1CDF08FFC132401...

Mark Relph  
City Manager



April 13, 2021

Grant Review Committee  
Arapahoe County Open Space Department  
6934 S. Lima Street, Unit A  
Centennial, CO 80112

Dear Grant Review Committee:

Please accept this letter in support of the City of Littleton's grant application for a Water Resources Master Plan Planning Grant, written on behalf of the City of Englewood Utilities Department. It is with great pleasure that the Utilities Department supports the City of Littleton (City) in developing a comprehensive Water Resources Master Plan that identifies, prioritizes, and manages current and future water supply for various uses.

A Water Resource Master Plan will allow the City to develop strategies for managing future issues such as recreation, climate change, open space, community resource management, and water rights. Currently, the City lacks a comprehensive plan, which poses a hindrance to maintaining an adequate water supply for irrigation, recreation, and pond/lake maintenance. Developing a Master Plan would allow the City to address these issues and address its current lack of a water reuse program.

Central issues the City will focus on include Denver Water's plans to phase out the use of the Highline Canal for irrigation water supply, which the City uses to partially fill Ketring Lake each year. Additionally, other ponds and lakes historically supplied by the Highline Canal or by stormwater runoff are dwindling due to decreased canal operations and climate change.

The City must not only plan for their needs but also support their regional partnership with the South Suburban Parks & Recreation District for parks and open space. With a finite water rights portfolio, the perfection of any rights is vital to protect and preserve downstream users and the South Platte River. This plan will identify all current and potential water sources, research and document the rights associated with those sources, explore sustainability practices, and estimate costs to implement the recommendations. A complete evaluation of surface water rights and the possibility of expanding City groundwater use is crucial to maintain historic conditions of recreation use, aesthetics, and property value, as expected by Littleton residents.

As a critical partner to the City of Englewood, the Utilities Department applauds the City of Littleton in their pursuit of a Planning Grant to proactively manage their valuable water supply and strongly supports their efforts to plan for and maintain water resources for years to come.

Sincerely,

A handwritten signature in blue ink, appearing to read "Pieter Van Ry".

Pieter Van Ry  
City of Englewood Utilities Director





April 15, 2021

Arapahoe County Open Space Department  
6934 S. Lima Street, Unit A  
Centennial, CO 80112

Dear Grant Review Committee,

Denver Water supports The City of Littleton's grant application for a Water Resources Master Plan Planning Grant.

The city of Littleton lacks a comprehensive Water Resources Master Plan that identifies, prioritizes, and manages water supply for various uses and needs, both current and future. The availability of drinking water is secure through Denver Water but water supply for other uses, such as irrigation, recreation and pond/lake maintenance in the city is limited. With a finite water rights portfolio, the city must plan for key future issues like recreation, climate change, open space, and community resource management. The city must not only plan for our needs but tie into regional partnerships with South Suburban Parks & Recreation District for parks and open space. Acquisition, contracting and/or leasing of any rights is critical to protect and preserve downstream users and the South Platte River.

The City of Littleton does not currently have any water reuse programs; for municipal operations (irrigation) or offer technical assistance to residents. The High Line Canal runs through the eastern portion of the city; however, Denver Water Department plans to transition the use of the High Line Canal from irrigation water supply, of which the city uses to partially fill Ketring Lake each year, to a stormwater management structure. Other pond/lakes that historically were supplied by High Line Canal or stormwater runoff are not permitting by Colorado water law.

A full evaluation of surface water rights, and possibility of expanding city groundwater use, desperately needs to be studied to maintain historic conditions of recreation use, aesthetics and property value, as expected by Littleton residents. This plan will identify all sources of water (current or potential), research and document the rights associated with those sources, explore sustainability practices and estimate costs to implement recommendations.

Sincerely,



Amy Turney, P.E.  
Director of Engineering – Property & Distribution

April 9, 2021

Arapahoe County Open Space Department  
6934 S. Lima Street, Unit A  
Centennial, CO 80112

RE: Support for Littleton Water Resources Master Plan Planning Grant.

Dear Grant Review Committee,

As a regional stormwater management agency, the Mile High Flood District fully supports the City of Littleton's grant application for a Water Resources Master Plan Planning Grant. Public agencies have a responsibility to proactively and sustainably manage our natural resources. We appreciate the approach the City of Littleton is taking to comprehensively understand water opportunities and challenges to then develop a strategic approach to better manage those.

With a finite water rights portfolio, the City must plan for key future issues like recreation, climate change, open space, and community resource management. The planning effort also benefits their regional partnership with the South Suburban Parks & Recreation District for parks and open space. It is critical to protect and preserve downstream users and the South Platte River.

The City of Littleton does not currently have any water reuse programs for municipal operations (irrigation), nor is it able to offer technical assistance to residents. The High Line Canal runs through the eastern portion of the City and the City has historically drawn supplemental water from the canal to maintain a water level capable of sustaining aquatic life in Ketring Lake each year. This and other ponds and lakes in Littleton that were historically supplemented by the High Line Canal are suffering due to decrease in canal operations as well as climate change. Denver Water now plans to phase out use of the canal for irrigation water supply, driving an immediate and critical need for the City to implement alternative measures to ensure the City's open parks and spaces remain healthy and usable.

A full evaluation of surface water rights, examination of stormwater reuse, and possibly expanding groundwater consumption all need to be studied to maintain recreational use, aesthetics and property values as expected by Littleton citizens. This plan will identify all sources of water (current and potential), research and document the rights associated with those sources, explore sustainability practices and estimate costs to implement recommendations.

The Mile High Flood District looks forward to working with the City to achieve these goals.

Sincerely,



Ken A. MacKenzie  
Executive Director

April 8, 2021

Arapahoe County Open Space Department  
6934 S. Lima Street, Unit A  
Centennial, CO 80112

Dear Grant Review Committee,

As the City's park and recreation provider, South Suburban Park and Recreation District supports The City of Littleton's grant application for a Water Resources Master Plan Planning Grant.

The city of Littleton lacks a comprehensive Water Resources Master Plan that identifies, prioritizes, and manages water supply for various uses and needs, both current and future. The availability of drinking water is secure through Denver Water but water supply for other uses, such as irrigation, recreation and pond/lake maintenance in the city is limited. With a finite water rights portfolio, the city must plan for key future issues like recreation, climate change, open space, and community resource management. The city must not only plan for our needs but tie into regional partnerships with South Suburban Parks & Recreation District for parks and open space. Perfection of any rights is critical to protect and preserve downstream users and the South Platte River.

The City of Littleton does not currently have any water reuse programs for municipal operations (irrigation) or offer technical assistance to residents. The Highline Canal runs through the eastern portion of the city. Denver Water plans to phase out use of the canal for irrigation water supply, which is used to partially fill Ketring Lake each year. Other pond/lakes that historically were supplied by Highline Canal or stormwater runoff are dwindling due to decrease in canal operations and other factors.

A full evaluation of surface water rights, and possibility of expanding city groundwater use, desperately needs review to maintain historic conditions of recreation use, aesthetics and property value, as expected by Littleton residents. This plan will identify all sources of water (current or potential), research and document the rights associated with those sources, explore sustainability practices and estimate costs to implement recommendations.

Sincerely,



Rob Hanna  
Executive Director

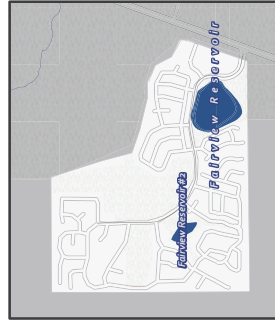
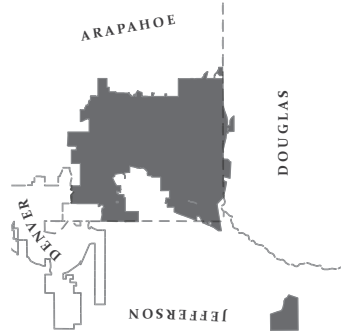
There is no known opposition for the Water Resources Master Plan at the time of grant application submission.

There are no partners on the Water Resources Master Plan.

# City of Littleton

## Waterbodies & Waterways

- Legend**
-  Rivers & Ditches
  -  Lakes, Reservoirs & Ponds
  -  Unnamed Waterbodies
  -  Railroad
  -  Parks & Open Space
  -  City Limits
  -  County Boundary



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