<b>EXHIBIT:</b>	

# **2018 Open Space Bond Capital Improvement INTIAL Undertaking:**

Clark Fork River Sustainable Access and Restoration Project

The 2018 Missoula County Open Space Bond was approved by Missoula County residents during the November 2018 General Election. The bond measure included up to \$1.5million for development of sustainable river access and riparian restoration along the Clark Fork River within the Open Space planning boundaries. Population growth within these planning boundaries has greatly impacted our local rivers. This is especially evident through downtown Missoula where bank erosion and destabilization from river access is harming local riparian areas and threatening public infrastructure.

The Clark Fork River Sustainable Access and Restoration Project (CFR Project) involves developing and/or improving multiple hardened river access sites and closing and restoring dozens of unstainable river access sites on both the North and South banks of the Clark Fork River from Ben Hughes Park to Riverside Park (Attachment A). Significant public scoping has occurred along the majority of this CFR Project area. A preliminary engineering report (Attachment B) was completed within a section of the project area, along the South bank of the Clark Fork River from the Madison St. and Orange St. Bridges.

This proposal is requesting expenditure of 2018 Open Space Bond Funds of up to\$225,000 for Phase 1 of the Clark Fork River Sustainable Access and Restoration Project. It is recommended that these funds be deducted from the "Clark Fork Restoration/Access" line item described in Exhibit A of Missoula City Council Resolution 8276. If approved this would leave a remaining balance of \$1,275,000 in this Clark Fork Restoration/Access line item.

### PROJECT DEVELOPMENT AND PRIOR PUBLIC PROCESS:

Following the 2010 removal of the Milltown Dam recreational use of the Clark Fork River through Missoula exploded. Exponential increases in the quantity and erosion severity of user created river access points along this stretch of river was observed. A 2014 inventory of these access points along  $2/3^{rd}$  mi. of the south bank of the Clark Fork River recorded:

- 34 separate user-made access sites
- 275 feet of eroded bank
- 7 user-made access points classified as severely eroded and threatening public infrastructure (Milwaukee Commuter trail)

In 2014, a partnership was formed between the Missoula Parks and Recreation Department, the Clark Fork Coalition, and the Missoula Water Quality District to find solutions for this problem. In an effort to understand how river recreationists use the Clark Fork River in downtown Missoula partners mobilized an army of volunteers to collect detailed information on the amount and type of recreational use and issued 4-page surveys to both river and trail users. These data, provided necessary information to begin developing plans to prevent further erosion and maintain recreational use capacity. Key findings from this statistically valid survey include:

- An average of 34 river users/hour (high of 76.6/hr.) floating past the Madison Street bridge during the survey period
- 70% of river use comprised by single-person tubers
- An estimated 14,200 tubers using the river between 2pm and 7pm from June 1-August 31

- High level of support for addressing erosion problems while maintaining river access by both trail and river users
- Documented multiple types of public use necessitating a variety of river access designs

Between 2015 and 2018, partners worked to develop a project to restore damaged riverbanks while providing appropriate hardened river access points. Multiple stakeholder meetings including representatives from every governmental land management agency in Missoula, City and County engineers, recreational and environmental and educational non-profits, The University of Montana and local business leaders were held to gain support and feedback on the project. A \$50,000 Renewable Resource Grant from the State of Montana was received to develop a preliminary engineering report to build sustainable access points and restore over 400 linear feet of eroding bank (Attachment B) along the South bank of the Clark Fork River between the Madison St. and Orange St. bridges (a.k.a The South Bank River access and Restoration Project).

In 2017, momentum from this project fueled the development of the Three Rivers Collaborative, a partnership between local and regional non-profits, State & Federal & Local governmental agencies, local businesses and community members. This group aims to collaboratively address issues and pursue opportunities for the benefit of Missoula-area Rivers and the people who value them. One of their first actions was to conduct a follow-up river use survey to the 2015 River Survey. Leveraging volunteer networks from across the groups, river use counts were conducted at four different sites including repeated counts at Madison Street Bridge. Key results at Madison Street Bridge from 2018 include:

- An average of 58.5 river users/hour (high of 174.7/hr.) floating under the Madison St. bridge during the survey period
- 66% of river use comprised by single-person tubers
- 73% users starting their float upstream of Madison Street and ending their float somewhere downstream, versus starting or ending at the Madison Street bridge

On February 21<sup>st</sup>, 2019 over 120 people attended a public open house held by the Three Rivers Collaborative to voice opinions about river management priorities. Results from that open house recognized the "South Bank River Access and Restoration Project" as a critical need to protect the Clark Fork River and strongly supported inclusion of the North bank of the river in the project. Based on the results of that public open house project partners (Missoula Parks & Recreation, The Clark Fork Coalition and The Missoula Water Quality District) decided to expand the South Bank River Access and Restoration Project to include the entire stretch of the Clark Fork River, creating the Clark Fork River Sustainable Access and Restoration Project (Attachment A) described in this document. Relocating approximately ¼ mi. of the Milwaukee trail on the South bank of the Clark Fork River, to increase riparian buffers and to prevent undermining of the trail by bank destabilization, is also a component of this project.

### **PROJECT BUDGET:**

A multitude of funding opportunities exist for riparian restoration projects and river access. An allocation of up to \$1.5 million in 2018 Open Space Bond funding was identified as eligible for use to improve local river access and riparian restoration. The goal of City project managers is to leverage 2018 Open Space bond money through partnerships, grants, donations and other funding mechanisms to do over \$3 million in river access and riparian restoration. The CFR project is a large undertaking, which will involve several phases and additional public process during project development. This initial request will fund project development, engineering, permitting and public process.

**FIGURE 1, Initial 2018 Open Space Bond request for the Clark Fork River Access and Restoration Project:** these figures are based on engineering and permitting estimates for similar work within the project area. Actual costs for engineering and permitting may vary depending on results of public process and final project designs.

Fig 1: CLARK FORK RIVER ACCESS PHASE 1 2019 OPEN SPACE BOND REQUEST AND ITINERARY			
Activities	Average Costs	Funding Source	
Survey of user-made access points within project area, partnership building, fundraising, public process	\$25,000.00	Project Coordinator's In- kind labor	
Project Design and formal public process	\$45,000.00	2018 Open Space Bond	
Engineering and permitting	\$180,000.00	2018 Open Space Bond	
Estimated Initial Project Cost	\$250, 000		

As described earlier in this document, local support for the CFR Project has been steadily growing for years and strong partnerships with local government agencies, non-profits and businesses already exist. Project coordinators intend to seek grants, partnerships, donations for implementation/construction as the CFR Project progresses through design/engineering/permitting. The following table represents potential phases for implementation of this project with an estimate of approximate costs. Actual costs for construction phases will not be known until Phase 1 engineering is complete. A separate Open Space Undertaking project proposal for project implementation (phases 2 &3) will be submitted at a later date.

**FIGURES 2 & 3, Approximate scope and estimated costs for potential phases of the Clark Fork River Access and Restoration Project:** these figures are based on construction estimates for similar work within the project area. Accurate costs for construction, permitting and project oversight; as well as specific locations for access points and timeframe for implementation of Phase 2 & 3 will not be known until completion of Phase 1. Accurate cost estimates for engineering, permitting and implementing this project may vary depending on results of public process and final project designs.

Fig. 2: CLARK FORK RIVER ACCESS POTENTIAL PHASE 2 (years 2020-2022)			
Activity/Item	Approximate Cost	Potential Funding Sources	
Project coordination	\$45,000	Open Space Bond and City In-kind Labor	
Up to 4 Major River Access Points	\$1,000,000	Open Space Bond, Donations, Grants, C&S Mil Levy, Urban Renewable Dist.	

Up to 10 Minor Access Points	\$250,000	Open Space Bond, Donations, Grants, C&S Mil Levy, Urban Renewable Dist.
Contingency and incidentals (30% of above)	\$388,500	Open Space Bond, Donations, Grants, C&S Mil Levy, Urban Renewable Dist.
Relocation of 1/2 mi. of the Milwaukee trail	\$180,000	City leverage
TOTAL:	\$1,863,500	

Fig 3: CLARK FORK RIVER ACCESS RESTORATION POTENTIAL PHASE 3 (years 2021-2024)			
Activity/Item	Approximate Cost	Potential Funding Sources	
Project coordination	\$22,000	Open Space Bond and City In-kind Labor	
Restore, Replant and Maintain closure on up to 70 user access points	\$210,000	Donations, Grants, C&S Mil Levy	
Volunteer coordination and onsite education	\$30,000	Open Space Bond, Donations, Grants, C&S Mil Levy, Urban Renewable Dist.	
Contingency and Incidentals (30% of the above)	\$78,600	Open Space Bond, Donations, Grants, C&S Mil Levy, Urban Renewable Dist.	
TOTAL:	\$340,600		

#### **SUPPORTING DOCUMENTS:**

This project is either directly or indirectly supported by the following community plans:

- 2004 Missoula's Master Park Plan <a href="https://www.ci.missoula.mt.us/DocumentCenter/View/776/May-2004-Final-Master-Parks-and-Recreation-Plan-?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/776/May-2004-Final-Master-Parks-and-Recreation-Plan-?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/776/May-2004-Final-Master-Parks-and-Recreation-Plan-?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/776/May-2004-Final-Master-Parks-and-Recreation-Plan-?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/776/May-2004-Final-Master-Parks-and-Recreation-Plan-?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/776/May-2004-Final-Master-Parks-and-Recreation-Plan-?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/776/May-2004-Final-Master-Parks-and-Recreation-Plan-?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/776/May-2004-Final-Master-Parks-and-Recreation-Plan-?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/776/May-2004-Final-Master-Parks-and-Recreation-Plan-?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/776/May-2004-Final-Master-Parks-and-Recreation-Plan-?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/776/May-2004-Final-Master-Parks-and-Recreation-Plan-?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/776/May-2004-Final-Master-Parks-and-Recreation-Plan-?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/776/May-2004-Final-Parks-and-Recreation-Parks-And-Recreation-Parks-and-Recreation-Parks
- 2006 Missoula's Open Space Plan, adopted in 2006
   <a href="https://www.ci.missoula.mt.us/DocumentCenter/View/652/2006-Updated-Open-Space-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/652/2006-Updated-Open-Space-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/652/2006-Updated-Open-Space-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/652/2006-Updated-Open-Space-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/652/2006-Updated-Open-Space-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/652/2006-Updated-Open-Space-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/652/2006-Updated-Open-Space-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/652/2006-Updated-Open-Space-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/652/2006-Updated-Open-Space-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/652/2006-Updated-Open-Space-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/652/2006-Updated-Open-Space-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/652/2006-Updated-Open-Space-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/652/2006-Updated-Open-Space-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/652/2006-Updated-Open-Space-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/652/2006-Updated-Open-Space-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/652/2006-Updated-Open-Space-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/652/2006-Updated-Open-Space-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/652/2006-Updated-Open-Space-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/652/2006-Updated-Open-Space-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/652/2006-Updated-Open-Space-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/652/2006-Updated-Open-DocumentCenter/View/652/2006-Updated-Open-DocumentCenter/View/652/2006-Updated-Open-DocumentCenter/
- 2010 Missoula's Conservation Lands Management Plan, adopted in 2010 <a href="https://www.ci.missoula.mt.us/DocumentCenter/View/4499/Conservation-Lands-Management-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/4499/Conservation-Lands-Management-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/4499/Conservation-Lands-Management-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/4499/Conservation-Lands-Management-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/4499/Conservation-Lands-Management-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/4499/Conservation-Lands-Management-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/4499/Conservation-Lands-Management-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/4499/Conservation-Lands-Management-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/4499/Conservation-Lands-Management-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/4499/Conservation-Lands-Management-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/4499/Conservation-Lands-Management-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/4499/Conservation-Lands-Management-Plan?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/4499/Conservation-Lands-Management-Plan?bidId="https://www.ci.missoula.mt.us/Document-Plan?bidId="https://www.ci.missoula.mt.us/Document-Plan?bidId="https://www.ci.missoula.mt.us/Document-Plan?bidId="https://www.ci.missoula.mt.us/Document-Plan?bidId="https://www.ci.missoula.mt.us/Document-Plan?bidId="https://www.ci.missoula.mt.us/Document-Plan?bidId="https://www.ci.missoula.mt.us/Document-Plan?bidId="https://www.ci.missoula.mt.us/Document-Plan?bidId="https://www.ci.missoula.mt.us/Document-Plan?bidId="https://www.ci.missoula.mt.us/Document-Plan?bidId="https://www.ci.missoula.mt.us/Document-Plan?bidId="https://www.ci.missoula.mt.us/Document-Plan?bidId="https://www.ci.missoula.mt.us/Document-Plan?bidId="https://www.ci.missoula.mt.
- 2014 Missoula Parks/Open Space/Trails Asset Management Plan <a href="https://www.ci.missoula.mt.us/DocumentCenter/View/24843/2014-02-24-Park-Asset-Management-Plan-as-adopted?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/24843/2014-02-24-Park-Asset-Management-Plan-as-adopted?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/24843/2014-02-24-Park-Asset-Management-Plan-as-adopted?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/24843/2014-02-24-Park-Asset-Management-Plan-as-adopted?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/24843/2014-02-24-Park-Asset-Management-Plan-as-adopted?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/24843/2014-02-24-Park-Asset-Management-Plan-as-adopted?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/24843/2014-02-24-Park-Asset-Management-Plan-as-adopted?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/24843/2014-02-24-Park-Asset-Management-Plan-as-adopted?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/24843/2014-02-24-Park-Asset-Management-Plan-as-adopted?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/24843/2014-02-24-Park-Asset-Management-Plan-as-adopted?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/24843/2014-02-24-Park-Asset-Management-Plan-as-adopted?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/24843/2014-02-24-Park-Asset-Management.plan-as-adopted?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/24843/2014-02-24-Park-Asset-Management.plan-as-adopted?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/24843/2014-02-24-Park-Asset-Management.plan-as-adopted?bidld="https://www.ci.missoula.mt.us/DocumentCenter/View/24843/2014-02-24-Park-Asset-Management.plan-as-adopted?bidld="https://www.ci.missoula.mt.us/Document.plan-as-adopted?bidld="https://www.ci.missoula.mt.us/Document.plan-as-adopted?bidld="https://www.ci.missoula.mt.us/Document.plan-as-adopted?bidld="https://www.ci.missoula.mt.us/Document.plan-as-adopted.pdf">https://www.ci.missoula.mt.us

• 2018 Missoula's Downtown Business Improvement Plan, *currently under development* <a href="https://missoulasdowntownmasterplan.com/resources-1">https://missoulasdowntownmasterplan.com/resources-1</a>

Additionally, a recent statistically valid survey across Missoula County (2018 Missoula City/County Park, Trails and Open Space survey.... <a href="https://www.ci.missoula.mt.us/DocumentCenter/View/44212/2018-PROST-Survey-Results-PDF?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/44212/2018-PROST-Survey-Results-PDF?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/44212/2018-PROST-Survey-Results-PDF?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/44212/2018-PROST-Survey-Results-PDF?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/44212/2018-PROST-Survey-Results-PDF?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/44212/2018-PROST-Survey-Results-PDF?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/44212/2018-PROST-Survey-Results-PDF?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/44212/2018-PROST-Survey-Results-PDF?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/44212/2018-PROST-Survey-Results-PDF?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/44212/2018-PROST-Survey-Results-PDF?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/44212/2018-PROST-Survey-Results-PDF?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/44212/2018-PROST-Survey-Results-PDF?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/44212/2018-PROST-Survey-Results-PDF?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/44212/2018-PROST-Survey-Results-PDF?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/44212/2018-PROST-Survey-Results-PDF?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/44212/2018-PROST-Survey-Results-PDF?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/44212/2018-PROST-Survey-Results-PDF?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/44212/2018-PROST-Survey-Results-PDF?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/44212/2018-PROST-Survey-Results-PDF?bidId="https://www.ci.missoula.mt.us/DocumentCenter/View/44212/2018-PROST-Survey-Results-PDF?bidId="https://www.ci.missoula.mt.us/Document

## **ATTACHMENT A**

