# Exhibit A

Statement Of Work					
Prepared Date:	07/01/23				
Name of Grantee:	City of Grand Junction				
Name of Water Project:	Grand Junction Graywater Education and Incentive Program				
Water Project Overview:					
The city of Grand Junction adopted a Graywater Control Program Ordinance on September 21, 2022.					
Based on experiences of othe	er municipalities/counties that have adopted ordinances following adoption of				
the State of Colorado's Graywater Control Regulation, owners and developers are slow to adopt					
graywater systems due to a g	eneral lack of knowledge of and familiarity with the graywater uses and				
systems and the high cost of installation. This grant proposal seeks to overcome these hurdles in the					
early stages of the program following the City's passing of its Graywater Control Program Ordinance					

through education, outreach, demonstration, and incentive programs.

The funding will be used to educate homeowners, commercial businesses, institutions, and builders/developers about the City's Graywater Control Program Ordinance, design criteria, and the types of systems that are allowed under the ordinance. The City will also partner with Colorado Mesa University to set up a site where a graywater system is installed and can be used for training and demonstration. Lastly, the City will establish a fund to incentivize the installation of graywater systems in Grand Junction.

#### **Project Objectives:**

Increased awareness of water supply / demand gap and options for water conservation. Creation of an education and outreach campaign and supporting materials that are geared toward Western Slope community interests that can be shared with other Western Slope local governments. Early adoption of graywater in Grand Junction. Partnership with university campus to support both higher level education and establish a community demonstration project. Implementation of effective incentives to encourage the use of graywater and quantification of water savings associated with graywater implementation.

# Tasks

## Task 1 – Development of Best Available Practices Worksheets

Description of Task:

Develop a series of worksheets which provide guidance on existing regulations and permitting requirements for graywater systems, when graywater use is appropriate, and best practices for installation, operation, and maintenance of graywater systems. The worksheets will include information about potential risks of graywater use, graywater impacts on landscaping, and how to minimize those

impacts. At a minimum, the following worksheets will be developed for use by developers, installers, and homeowners:

- Best practices for laundry to landscape graywater systems for homeowners
- Best practices for gravity graywater systems from individual showers during a bathroom remodel for homeowners
- Best practices for laundry to landscape & gravity graywater systems for installers
- Best practices for graywater systems producing water for toilet flushing for installers
- Best practices for multi-family/commercial/institutional graywater systems

#### Method/Procedure:

The City's Water Conservation Specialist and Communication and Outreach staff will develop the Best available practices worksheets. The City is aware that Denver is undergoing a similar effort through their Graywater Education and Outreach Program and will collaborate with Denver Department of Public Health and Environment to obtain/share content that can be utilized by both organizations. Additional research will be conducted to collect information on the topics listed in the task description and will include discussions with other municipalities, researchers, graywater system installers and manufacturers, and through internet-based literature reviews. The worksheets will be formatted in a graphical format for ease of use and will be available in both English and Spanish languages.

## Deliverable:

The deliverables for this task will be a series of best practices worksheets.

The City will use the same template format as Denver so that worksheets developed by each entity can be interchanged between the City and Denver and other agencies wishing to use them can add their logos and branding.

# Tasks

## Task 2 – University Graywater System Demonstration Site

#### Description of Task:

The City will partner with Colorado Mesa University (CMU) to set up a site where a graywater system is installed and can be used for training and demonstration.

Colorado Mesa University has an enrollment of nearly 11,000. Colorado Mesa's main campus encompasses 141 acres in the heart of Grand Junction, Colorado and includes housing for about 2,500 students. Colorado Mesa is one of the City's largest water customers with total annual water usage on campus of about 49 million gallons (150 acre-feet) of which approximately 38.9 million gallons (119 acre-feet) is used for irrigation. Partnering with Colorado Mesa to incorporate graywater systems on campus could yield significant water savings as well as serve as a demonstration site for graywater systems in Grand Junction and the Western Slope regionally.

Exhibit A POGG1 2024\*2713 Page **2** of **7**  Colorado Mesa is planning a new student housing project over the next year. The Formation District Multi-Use Facility, which will include student housing (150 students) and retail shops, will be constructed by late 2024. The City will partner with Colorado Mesa's staff to determine how a graywater system might be incorporated into this project.

The City will work with Colorado Mesa staff and its contractors to develop a concept plan for a graywater system for irrigating 4,000 sf of landscape adjacent to the future Formation District Multi Use Facility. The preliminary cost estimate for the system is \$40,000. A life cycle cost estimate will be developed for the graywater system taking into consideration added costs of graywater system components and potential cost savings associated with using graywater versus potable water for these uses. The life cycle cost estimate will be compared to the status quo project costs to determine the funding gap that could be offset with grant funding.

Based on the results of the life cycle cost estimate, the City will utilize grant funding for the housing project to offer an incentive for installing the graywater systems (up to 50% toward construction costs and up to \$20,000 toward planning costs). The level of incentive will take into consideration:

- Offsetting costs of system installation (CMU to fund at least 50% toward construction costs)
- Offsetting cost of permitting fees
- Reducing/offsetting plant investment/tap fees for new water and sewer services.

The results of this analysis will also help inform Task 4 for multi-family housing projects.

#### Method/Procedure:

Colorado Mesa's contractor will develop plans and estimated capital costs for a graywater system for the housing project.

Colorado Mesa staff will develop a life-cycle cost estimate for a graywater system as compared to the housing projects without a graywater system.

City staff will evaluate the funding gap and determine the incentive level to help offset the cost of system installation, permitting fees, and equitable reduction in plant investment fees considering reduced water/sewer usage.

If Colorado Mesa decides to proceed with installation of graywater system, detailed plans will be submitted for permitting review in accordance with City design criteria.

Colorado Mesa/City will develop informational materials and signage to be posted in the housing project to be used for student and community education/demonstration.

Deliverable:

- Detailed design plans for graywater systems.
- Educational materials

Tasks

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## Task 3 – Graywater Workshops

#### Description of Task:

A series of free workshops will be developed to educate developers/builders, installers, and homeowners about graywater systems. Similar to the worksheets, the workshops will provide guidance on existing regulations and permitting requirements for graywater systems, when graywater use is appropriate, and best practices for installation, operation, and maintenance of graywater systems.

The workshops will also include information about potential risks of graywater use, graywater impacts on landscaping, and how to minimize those impacts. Separate workshops will be developed for installers, developers, and homeowners. Each workshop will focus on topics appropriate for the intended audience (for example a workshop for homeowners might focus on laundry to landscape systems).

- A total of four workshops will be held for homeowners. Two in the first year of the grant and two in the second year. These workshops will be free of charge to participants.
- A total of four workshops will be held for developers/builders and contractors. The City will coordinate with local building and contractor associations to organize the events. Two in the first year of the grant and two in the second year. These workshops will be free of charge to participants.
- The installers workshops will be developed and presented by a consultant or installer who specializes in graywater systems. We anticipate recording the virtual events so they can be made available on demand.

This task will consist of developing workshop content, scheduling, and teaching the workshops.

## Method/Procedure:

The City is aware that Denver is undergoing a similar effort through their Graywater Education and Outreach Program grant and will collaborate with Denver Department of Public Health and Environment to obtain/share content that can be utilized by both organizations. The City is also aware that the City of Tuscon offers a Laundry to Landscape Graywater Harvesting Class through the Watershed Management Group that could be accessed for content material.

Workshops will be delivered in person and virtual format and will consist of the following:

Laundry to Landscape for Homeowners and/or Installers (2-hour class).

Graywater Installers comprehensive course (8-hour class). The course will include:

- Introduction to system types, City ordinance, permitting, and design criteria
- Subsurface irrigation systems
- Treatment systems for urinal/toilet flushing

## Deliverable:

The deliverables for this project are metrics which will be summarized in required grant reports:

- Number of workshops held
- Number of attendees

# Tasks

## Task 4 – Establish Incentive Program

Description of Task:

This task will involve the following:

- Research incentives used in other municipalities to understand what incentives are most effective. Examples of incentives include:
  - Offset cost of permitting fees
  - Offset costs of system installation
  - Reduce / offset plant investment/tap fees for new water and sewer services. Given that the City's jurisdiction covers multiple water service areas (City, Ute Water Conservancy District, Clifton Water District), evaluate mechanism for interagency fund transfers.
- Program / incentive fund development
- Educating homeowners and developers about the incentive fund
- Administration of the incentive fund. Administrative duties include purchasing and distributing laundry to landscape kits, issuing rebates and reimbursements, tracking expenses and fund balances, and other required duties.

Method/Procedure:

The City is aware that Denver is undergoing a similar effort through their Graywater Education and Outreach Program grant and will collaborate with Denver Department of Public Health and Environment to obtain/share content for incentive programs that can be utilized by both organizations.

Identification of the most effective techniques to incentivize graywater adoption will consist of web-based research, and interviews with installers, developers, and other municipalities with graywater programs. Once the research is complete, it will be used as the basis to establish an incentive fund to encourage adoption of graywater by developers and homeowners.

For homeowners, the incentive fund will support increased adoption of graywater reuse by:

- Providing up to 50 free laundry to landscape install kits to homeowners who wish to install a graywater system.
- Offsetting permitting fees through waivers or rebates.

Increased adoption of graywater reuse by developers/builders working on single family and multifamily projects will be incentivized by:

- Incentivizing the cost of installation. Grand Junction will set aside \$30,000 for rebates and anticipates offering a rebate of up to \$1,000 for single family graywater systems and \$5,000 for non-single family graywater systems. The amount of the incentive may be revised based upon the results of research and the analysis performed in Task 2.
- Offsetting Water and Sewer Plant Investment fees. Grand Junction will set aside a total of \$50,000 to offset up to 15% of water and sewer plant investment fees.

The number and type of incentives will depend on a number of factors, including socioeconomics, available funding, and which incentives are determined to be most attractive to homeowners, developers, and homebuilders.

Deliverable:

The deliverables for this project are metrics which will be summarized in required grant reports:

• Number / cost of graywater incentives awarded

# Budget and Schedule

This Budget and Schedule reflects the tasks identified in the Statement of Work.

Task No.	Task Description	Expected Task Start Date	Expected Task End Date	Grant Funding	Match Funding	Total
1	Development of Best Available Practices	10/1/2023	1/31/2024	\$0.00	\$8,200.00	\$8,200.00
2	University Graywater System Demo Site	10/1/23	12/31/24	\$35,000.00	\$27,807.00	\$62,807.00
3	Graywater Workshops	10/1/25	4/30/25	\$15,360.00	\$10,120.00	\$25,480.00
4	Establish Incentive Program	10/1/23	3/31/24	\$88,880.00	\$26,220.00	\$115,100.00
			Total	\$139,240.00	\$72,347.00	\$211,587.00
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# **Reporting Requirements**

**Progress Reports:** The grantee shall provide the CWCB a progress report every six months, beginning from the date of issuance of the grant agreement. The progress report shall describe the status of the tasks identified in the statement of work, including a description of any major issues that have occurred and any corrective action taken to address these issues.

**Final Report:** At completion of the project, the applicant shall provide the CWCB a final report on the applicant's letterhead that:

- Summarizes the project and how the project was completed.
- Describes any obstacles encountered, and how these obstacles were overcome.
- Confirms that all matching commitments have been fulfilled.
- Includes photographs, summaries of meetings and engineering reports/designs.

The CWCB will pay out the last 10% of the budget when the final report is completed to the satisfaction of CWCB staff. Once the final report has been accepted, and final payment has been issued, the grant agreement will be closed without any further payment.

## Payment

Payment will be made based on actual expenditures and must include invoices for all work completed. The request for payment must include a description of the work accomplished by task, an estimate of the percent completion for individual tasks and the entire project in relation to the percentage of budget spent, identification of any major issues, and proposed or implemented corrective actions.

Costs incurred prior to the effective date of this grant agreement are not reimbursable. The last 10% of the entire grant will be paid out when the final deliverable has been received. All products, data and information developed as a result of this grant agreement must be provided to the CWCB as part of the project documentation.

## **Performance Measures**

Performance measures for this grant agreement shall include the following:

(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum inkind contributions (if applicable) per the budget. Per grant guidelines, the CWCB will pay out the last 10% of the budget when the final report is completed to the satisfaction of CWCB staff. Once the final report has been accepted, and final payment has been issued, the grant agreement will be closed without any further payment.

(b) Accountability: Per grant guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per Grant Guidelines, progress reports must be submitted at least once every 6 months. A final report must be submitted and approved before final project payment.

(c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each progress report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.

(d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the grant agreement.