Mountain Regional Water
a Special Service District of Summit County
5739 Paintbrush Rd.
Park City, UT 84098-1640
Tel. (435) 940-1916
Fax (435) 940-1945

Purchase Order No.:
MRW2026-11-10

MOUNTAIN REGIONAL WATER

PURCHASE ORDER

Vendor Info.

Name:	Bowen Collins & Associates Inc
Address:	154 E 14075 S
City, State Zip:	Draper, UT 84020
Phone/Contact:	801-495-2224 /

Ship To

Name:	Mountain Regional Water SSD
Address:	5739 Paintbrush Rd.
City, State Zip:	Park City, Utah 84098-1640
Phone:	435-940-1916

Qty.	Units	Description	Unit Price	TOTAL
		Water Master Plan & Impact Fees Updates		$ -
				$ -
1		Water Master Plan	$ 115,410.00	$ 115,410.00
1		Impact Fee Facilities Plan	$ 14,734.00	$ 14,734.00
1		Impact Fee Analysis	$ 19,607.00	$ 19,607.00
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
			Sub Total	$ 149,751.00
			Shipping & Handling	
			TOTAL	$ 149,751.00

Shipping Method:

Requested by: Sam Grenlie

Account Number:

Notes/Remarks:
See Fee Estimate dated 7/30/2026 for details.

REQUIRED SIGNATURES:

Financial Officer

General Manager (required if over $20,000)

Governing Board (required if over $50,000)

Mountain Regional Water is a political subdivision of Summit County and thereby exempt from State and Local Sales Tax. If a tax exemption certificate is required, please request a completed Utah State Form 721 from Financial Officer.

MOUNTAIN REGIONAL WATER
Bidding Information Form

MOUNTAIN REGIONAL WATER

General Information

Vendor Name: Bowen Collins & Associates Inc

Today's Date 11/10/2026

Please Check the First (1st) Box Below that Applies to this Payment:

[X] 1 **Sole Source Procurement**

Check all Boxes Below Accurately Describe the Sole Source Purchase:

[ ]	Only One Source for Item	Criteria: Compatibility with existing equipment, technology, software, accessories, replacement parts or service
[X]	Transitional Costs Unreasonable or Prohibitive	Training, conversion, compatibility, downtime, disruption of service, staff time, installation, ancillary software, hardware, equipment, or construction costs

Chief Procurement Officer Justification:

Bowen Collins is a pre-qualified, general engineering services firm. They are utilized on a rotational basis among other engineering firms with which MRW has significant experience.

Check the Box Below that Applies to This Sole Source Purchase:

[ ] The total amount of this purchase is less than $50,000

[X] The total amount of this purchase is $50,000 or More

[ ] 2 **Emergency Procurement**

The procurement must be necessary to "avoid harm or risk of harm to the public health, safety, welfare, or property."

Chief Procurement Officer Justification:

[ ] 3 **Funding Mandated Procurements**

Chief Procurement Officer Explanation of Vendor Required by Funding Mandate:

[ ] 4 **All Other Procurements** Complete and attach a '*Summary of Bids Form*'

Signatures

Name of Person Completing this Form: Sharon M. Kellner Date: 11/10/2026

Signature: Sharon M. Kellner

Chief Procurement Officer: Date: 11/11/26

Required for Sole Source and Emergency Procurements; and if Low Bid is not Accepted (see Vendor Quote Form)

WATER SCOPE OF WORK

Mountain Regional Water Special Service District (MRWSSD) has requested assistance with impact fees and a water master plan update. The purpose of this scope is to identify which specific tasks will be completed.

Phase 1 – Water Master Plan

Scope for Water Master Plan

- Task 1: Collect, Review, and Organize Data
- Task 2: Evaluate Current Water Use Patterns and Project Future Use
- Task 3: Evaluate Supplies, Existing and Future
- Task 4: Update Culinary Model
- Task 5: Identify Existing Operating Deficiencies
- Task 6: Identify Projected Future Operating Deficiencies
- Task 7: Evaluate Improvements to Resolve Identified Deficiencies
- Task 8: Develop a Water System Capital Facilities Plan
- Task 9: Document Results of Water Master Plan

Task 1.1 - Collect, Review, and Organize Data

Objective: To collect, review, and organize the data needed to update and calibrate a digital model of the MRWSSD water system that will be used to simulate water system operation under different scenarios and identify system deficiencies and needed capital improvements.

Activities:

1. Review the following information that will be provided by MRWSSD:
   - Previous water system planning documents
   - MRWSSD Water Annual Report Data
   - Water use data
   - Boundaries of water system pressure zones (updates)
   - Boundaries of future annexations areas and potential service areas (updates)
   - Local fire flow requirements
   - Existing water system maps and attributes in GIS format that includes pipe location, age, material, locations and sizes of existing fire hydrants, and location and sizes of water meters
   - GIS information detailing locations and attributes of wells, springs, pumps, pressure-reducing valves, reservoirs, and other pertinent system facilities
   - Growth projections from local municipal general plans or other planning documents.
   - Digital files containing aerial mapping and topographic data of the water system service area
   - GIS shape files of current District boundaries, water system service area, and parcel boundaries with required attributes.
   - Existing water model files
   - District water rights and contracts for water supply
   - District source of supply yields for average, dry conditions
   - Annual budgets for the capital facility expenditures for the past ten years
2. Prepare for and attend a project kickoff meeting to review the project objectives and schedule, develop project and data coordination procedures, and discuss questions regarding information to be provided by the District. Provide ongoing project management and project coordination.

Products:

1. Information and understanding needed to develop a computer model of the MRWSSD water system and use it in preparing a capital improvements plan.

Task 1.2: Evaluate Current Water Use Patterns and Project Future Use

***Objective*:** To determine the potential quantity and distribution of water demands in the MRWSSD water system.

Activities:

1. Based on water use records, evaluate current water use patterns in MRWSSD. This will include determining how much water use occurs indoors vs. outdoors. This will also include identifying average historical use, peaking factors, seasonal use patterns, and the effect of conservation based on State of Utah's conservation goals.
2. Examine land use and zoning maps to estimate future density and development in currently undeveloped areas. Meet with District personnel to consider any known plans for future increases in density in currently developed areas or potential annexations.
3. Develop projected demands for MRWSSD through build out based on the combined results of the activities described above.

Products:

1. Charts and tables as necessary to summarize the District's current water use patterns.
2. Charts and tables as necessary to summarize the District's projected water use.
3. Updated shapefile of water demand projections.

Task 1.3 – Evaluate MRWSSD Supplies and Storage, Existing and Future

***Objective*:** With updated system demands, evaluate the adequacy of existing supplies and storage and master plan development of future supplies.

Activities:

1. Meet with planning and engineering personnel, as appropriate, to discuss existing supply production and future supply alternatives. Evaluation of supply and storage will include consideration of imported water from other agencies and potential drought situations.
2. Evaluate the adequacy of District sources to meet projected demands on an annual basis, including consideration of the effects of conservation. This will include consideration of the timing of various sources and how existing and future sources can be used throughout the year to meet demands.
3. Evaluate the adequacy of District sources to meet projected peak demands. This will include consideration of the capacity of individual sources and storage during peak demand periods.

Products:

1. Notes of meetings with MRWSSD personnel
2. Tables summarizing existing and future source production
3. Plots comparing existing and future sources against projected demands (annual, peak day, and seasonal)
4. 40-year plan satisfying supply of future growth and Supply and Demand report.

Task 1.4: Update Culinary Model System

Objective: The District maintains an existing culinary hydraulic model of the District's water system, but it is primarily a schematic model in many areas. Where the District has updated GIS records, the model can be updated to reflect the most accurate information.

Activities:

1. BC&A to update the District's hydraulic model with the latest available GIS data so that it better reflects the latest information. Include updates to the following areas:
    - Promontory Summit Subdivision (include or not)
    - Willow Creek Water Line Update
    - Pipe Lengths.
    - Update all PRV settings and names
    - Fix the Pine Meadows Pressure Zones
    - Model FCV to Stagecoach
    - Weilemen and Discovery PRVs and linework
    - Olympic Park updates
    - Raw Water System and 4 critical raw connections
    - Timberline Pressure Zones (4)
2. BC&A will geocode the District's water demand (billing) data into the water model. It is assumed water demand data is available with correct addresses for the water meters. GIS coordinates are preferred if available.
3. Create a Water age scenario for water quality analysis.
4. Use information from District water records to develop typical seasonal demand patterns and peaking factors used in the water system analysis.
5. Use available system operational data (tank levels, pressure gauges, flow meters) to calibrate the hydraulic model to simulate field conditions.

Task 1.5: Identify Existing Operating Deficiencies

Objective: Identify portions of the existing MRWSSD water system that do not meet recommended operating criteria under several different scenarios and determine water losses in the system.

Activities:

1. Use the computer model to simulate operating conditions of the existing water system under extended period conditions. We will identify specific deficiencies that occur during peak hour demand as well as under a peak day demand condition with added fire flow demands (as defined by District personnel through various locations in the distribution system). Review computer output from the existing-condition model simulations to determine if the existing facilities (including conveyance, pumping, and storage facilities) meet recommended operating criteria. Recommended operating criteria will be based on minimum State criteria and consultant's recommendations based on experience with other water systems. Identify facilities that do not meet the desired operating criteria.
2. Utilize information provided from District operations personnel to identify condition related improvements that need to be implemented in the water system to mitigate existing problems.
3. Use the computer model to simulate existing operating conditions with assorted variables including but not limited to: source transmission line interruptions, water tank interruptions, well interruptions, major distribution line disruptions, etc. Our redundancy analysis will also include consideration of extended power outages and needs for auxiliary power within the system.

Products:

1. A list of existing water system deficiencies.
2. A list of potential water system deficiencies dependent on the variables and scenario.

Task 1.6: Identify Projected Future Operating Deficiencies

Objective: Identify portions of the existing MRWSSD water system that will not meet the recommended operating criteria for full buildout conditions.

Activities:

1. Revise the water demands in the water system model to include future water system demands at 10 year, and buildout development conditions.
2. Use the computer model to simulate operating conditions of the existing water system facilities under

projected future peak hour demand as well as under projected future peak day demand conditions with added fire flow demands (provided by District personnel distributed in various locations throughout the water system). Review computer output from the model simulations and identify facilities that do not meet desired operating criteria.
3. Evaluate the adequacy of existing water supply sources and water storage facilities to meet the future needs imposed on the water system.
4. Use the computer model to simulate future 10 year, and buildout operating conditions with assorted variables including but not limited to: water supplier transmission line interruptions, water tank interruptions, well interruptions, major distribution line disruptions, conservation changes to demand, etc.

Product:
1. A list of existing water system facilities that will need to be improved in order to meet desired operating criteria for projected future water demands under various demands, variables, and scenarios listed above.

Task 1.7: Evaluate Improvements to Resolve Identified Operating Deficiencies

Objective: Evaluate alternative system improvements that, if implemented, would resolve the identified water system deficiencies.

Activities:
1. Utilize the computer model to evaluate alternative water system improvements to resolve the system deficiencies.
2. With District personnel, identify the recommended water system capital improvement projects that will resolve the identified system deficiencies best. At this time, the District will also provide a list of any additional condition related improvements it desires to include in the capital improvement plan.
3. Develop cost estimates for the recommended system improvements.

Product:
1. A list of alternative capital improvement projects with cost estimates that can be implemented to resolve the identified water system deficiencies.

Task 1.8 - Develop Water System Capital Facilities Plan

Objective: Develop a water system capital improvements plan for budgeting and planning purposes for the existing system and for future growth.

Activities:
1. Meet with District personnel to develop prioritization criteria for recommended water system improvement projects. Prioritize recommended capital improvement projects based on whether needed improvements are to correct existing deficiencies, replacement or rehabilitation, or associated with future development and the other prioritization criteria developed with personnel.
2. Develop a detailed 10-year water system capital facilities plan and budget for the existing system. Capital facility plan will be setup such that necessary information will be available for the District's Impact Fee Facilities Plan per the Utah Impact Fees Act.
3. Prioritize recommended improvements that should be made outside the 10-year planning window.

Products:
1. 10-year budget plan for capital improvements for the existing system.
2. Prioritized list of all capital improvements with cost estimates.

Task 1.9 – Document Results

Objective: Prepare a report summarizing the results of this study.

Activities:
1. Prepare a draft report that summarizes the results of the study and presents the recommended water system capital improvements plan.

2. Meet with District personnel to review comments on draft report.
3. Incorporate District comments into the final report.

Products:

1. An electronic copy of the draft water system master plan report.
2. Five paper copies of the final water system master plan report.
3. One electronic PDF copy of the final water system master plan report.
4. Two copies of a technical appendix (if any) that contains pertinent technical data used in developing the master plan report.

Develop recommended timing for needed improvements based on the critical nature of needed improvements or funding/timing limitations.

Phase 2 – Impact Fee Facilities Plan

Task 2.1 – Impact Fee Facilities Plan

Objective: Prepare an Impact Fee Facilities Plan that identifies eligible 10-year water system projects and allocates project costs between existing, short-term, and long-term users consistent with the requirements of the Impact Fee Act.

Activities:

1. Provide the District with a data needs list for information required to perform the study. Define the percentage of capacity of existing facilities used by existing, short-term, and long-term users. It has been assumed that the District will continue to use the same two impact fee service areas as has been done previously (Main service area and Promontory).
2. Use the District's water master plan, hydraulic model, and related planning information to develop the list of 10-year projects in the District. Divide the proportion of project costs between existing, short-term, and long-term users as required by the Impact Fee Act.
3. Prepare and distribute copies of the draft Impact Fee Facilities Plan to stakeholders identified by the District and organize, prepare for, and attend a stakeholder meeting to obtain comments. Attend the required public hearing for the Impact Fee Facilities Plan.

Products:

1. Draft Impact Fee Facilities Plan for District and stakeholder review.
2. One electronic copy and up to five hard copies of the final Impact Fee Facilities Plan for distribution to the public as part of the public notice requirements.

Phase 3 – Impact Fee Analysis

Task 3.1 – Impact Fee Analysis

Objective: Develop a defensible Impact Fee Analysis that calculates appropriate water impact fees based on the Impact Fee Facilities Plan, master planning information, anticipated development, existing capacity, future system improvements, and applicable financing assumptions.

Activities:

1. Retain Zions Public Finance to perform the Impact Fee Analysis as part of this project. Provide technical support to Zions Public Finance during preparation of the Impact Fee Analysis. Attend the required public hearing for the Impact Fee Analysis.

Products:

1. Impact fee calculation documentation and supporting technical information for inclusion in the Impact Fee Analysis.
2. Recommended water impact fee based on the adopted methodology and supporting analysis.
3. Draft Impact Fee Analysis report for District and stakeholder review.
4. One electronic copy and up to five hard copies of the final Impact Fee Analysis report.

FEE

We propose to work on a time and expense basis. A detailed manhour estimate to perform the tasks listed in the scope of work above is included as an attachment to this proposal. A summary of the not to exceed fees associated with requested tasks for the water system master plan is included below.

Water Master Plan & Impact Fee Summary

Phase	Description	Cost
Phase 1	Water Master Plan	$115,410
Phase 2	Impact Fee Facilities Plan	$14,734
Phase 3	Impact Fee Analysis	$19,607
Total		**$149,750**

SCHEDULE

It is anticipated that this project would take approximately 6 to 9 months to complete. As part of the kickoff meeting with the District, we would identify District milestones and Board meetings as targets for deliverables.

MRWSSD
Water System Master Plan & Impact Fee
Fee Estimate
7/30/2026

	OFFICE STAFF		DESIGNER	ENGINEERS							
	OFFICE	**EDITOR**	**TECH 3**	**Staff Eng.**	**PE**	**PM**	**SR**	**SUBTOTAL**	**SUBTOTAL**	**SUBTOTAL**	**Total Cost**
LABOR	M. Skousen	D.Williams	S.Riggs	Winslow	McKinnon	J. Oldham	K.Larson	HOURS	**COST**	**EXPENSES**	
Hourly Rate	$147.00	$96.60	$161.70	$175.35	$208.95	$249.90	$263.55				
Phase 1											
Task 1.1 - Collect, Review, and Organize Data											
Review available information	2			12	3	2	3	22	$4,316	$0	$4,316
Kickoff meeting and Project Management				4	4	16		24	$5,536	$180	$5,716
Task 1.2 - Evaluate Current and Projected Water Use Patterns											
Evaluate current water use patterns				6		1	2	9	$1,829	$0	$1,829
Examine land use based on the community planning documents				12	4	4		20	$3,940	$0	$3,940
Project future water demands				8	6		2	16	$3,184	$0	$3,184
Task 1.3 - Evaluate Water Supply, Existing and Future											
Analysis of existing and future supply				12	4	1	2	19	$3,717	$0	$3,717
Evaluate annual supply				8	2		2	12	$2,348	$0	$2,348
Evaluate peak capacity				8	2		2	12	$2,348	$0	$2,348
Task 1.4 - Update, Develop, and Calibrate a Hydraulic Model											
Water Model Geometry and Control updates				40	12		4	56	$10,576	$0	$10,576
Distribute demands				8	4			12	$2,239	$0	$2,239
Winter Water Age Scenario for Water Quality Analysis				8	4		1	13	$2,502	$0	$2,502
Develop Seasonal Demand Patterns				4	2	1	1	8	$1,633	$0	$1,633
Calibrate the model based on available system data				8	4		2	14	$2,766	$0	$2,766
Task 1.5 - Identify Existing Deficiencies											
Simulate existing operating conditions and identify deficiencies				10	6	2	2	20	$4,034	$0	$4,034
Work with City staff to identify condition related deficiencies				8	4	2		14	$2,738	$0	$2,738
Redundancy analysis				8	4	1	1	14	$2,752	$0	$2,752
Task 1.6 - Identify Future Deficiencies											
Create future demand scenario in model				8	4		1	13	$2,502	$0	$2,502
Simulate future operating conditions and identify deficiencies				8	4	1	2	15	$3,016	$0	$3,016
Evaluate adequacy of supply to meet future needs				8	4	1	2	15	$3,016	$0	$3,016
Future Redundancy Analysis				8	6		1	15	$2,920	$0	$2,920
Task 1.7 - Evaluate Improvement Alternatives											
Evaluate improvement alternatives	2			12	4	2	2	22	$4,261	$0	$4,261
Select recommended improvements				12	4	1	2	19	$3,717	$0	$3,717
Cost estimates				8	2	1		11	$2,071	$0	$2,071
Task 1.8 - Develop Capital Facilities Plan											
Develop Prioritization Criteria				12	4	2		18	$3,440	$0	$3,440
Develop detailed improvement plan				16	4	2		22	$4,141	$0	$4,141
Prioritize improvements				12	4	1	2	19	$3,717	$0	$3,717
Task 1.9 - Document Results											
Draft report	4	10		32	16	6	8	76	$14,116	$0	$14,116
Review comments				8	4	2	2	16	$3,266	$180	$3,446
Final Report	4	4	2	16	8	4	6	44	$8,356	$57	$8,413
Master Plan Subtotal	**12**	**14**	**2**	**324**	**133**	**53**	**52**	**590**	**$114,993**	**$417**	**$115,410**
Phase 2											
Task 2.1 - Impact Fee Facilities Plan											
Assemble Existing Facilities Inventory and Determine Excess Capacity	1			16	8	1	4	30	$5,928	$0	$5,928
Calculation of Capacity in Future Improvements				6	2	1	4	13	$2,774	$0	$2,774
Document Results				16	8	2	4	30	$6,031	$0	$6,031
Impact Fee Facilities Plan Subtotal	**1**	**0**	**0**	**38**	**18**	**4**	**12**	**73**	**$14,734**	**$0**	**$14,734**
Phase 3											
Task 3.1 - Impact Fee Analysis											
Develop Impact Fee Analysis	1				8	2	8	19	$4,427	$15,180	$19,607
Impact Fee Analysis Subtotal	**1**	**0**	**0**	**0**	**8**	**2**	**8**	**19**	**$4,427**	**$15,180**	**$19,607**
TOTAL LABOR	14	14	2	362	159	59	72	682	**$134,153**	**$15,597**	**$149,750**

Expenses include:

Mileage reimbursement at $0.75/mile

Compensation will be on time and materials basis. Total compensation for completing the Scope of Services will not exceed the total amount shown without prior written approval of Owner. Hourly rates will be updated on January 1 of each calendar year by BC&A.