

REQUEST FOR QUALIFICATIONS



Agricultural Engineering & Irrigation

Planning Support Services

On behalf of

Upper Gunnison River Water Conservancy District

November 18, 2020

The Upper Gunnison River Water Conservancy District (District) is pleased to solicit this request for qualifications for a consultant or consultant team to assist the District with agricultural irrigation planning and engineering services (work issued on a Task Order and as-needed basis) related to the *Upper Gunnison Basin Irrigation Assessment and Optimization Project*. The District anticipates consultant support throughout all seven watersheds as described in this document, with the greatest work effort occurring in the Ohio, East and Tomichi Creek sub-basins (Figure 1).

1.0 Background

The District was established in 1959 by a vote of the taxpayers pursuant to the *Water Conservancy Act* to conserve, protect, and defend the waters within the Upper Gunnison River Basin. The District is governed by a board of eleven directors and staffed by its General Manager, General Counsel, Office Manager, Water Resource Specialist and Administrative Assistant. Our mission is to be an active leader in all issues affecting the water resources of the Upper Gunnison River Basin. The District website provides additional detail and can be found at: www.ugrwcd.org

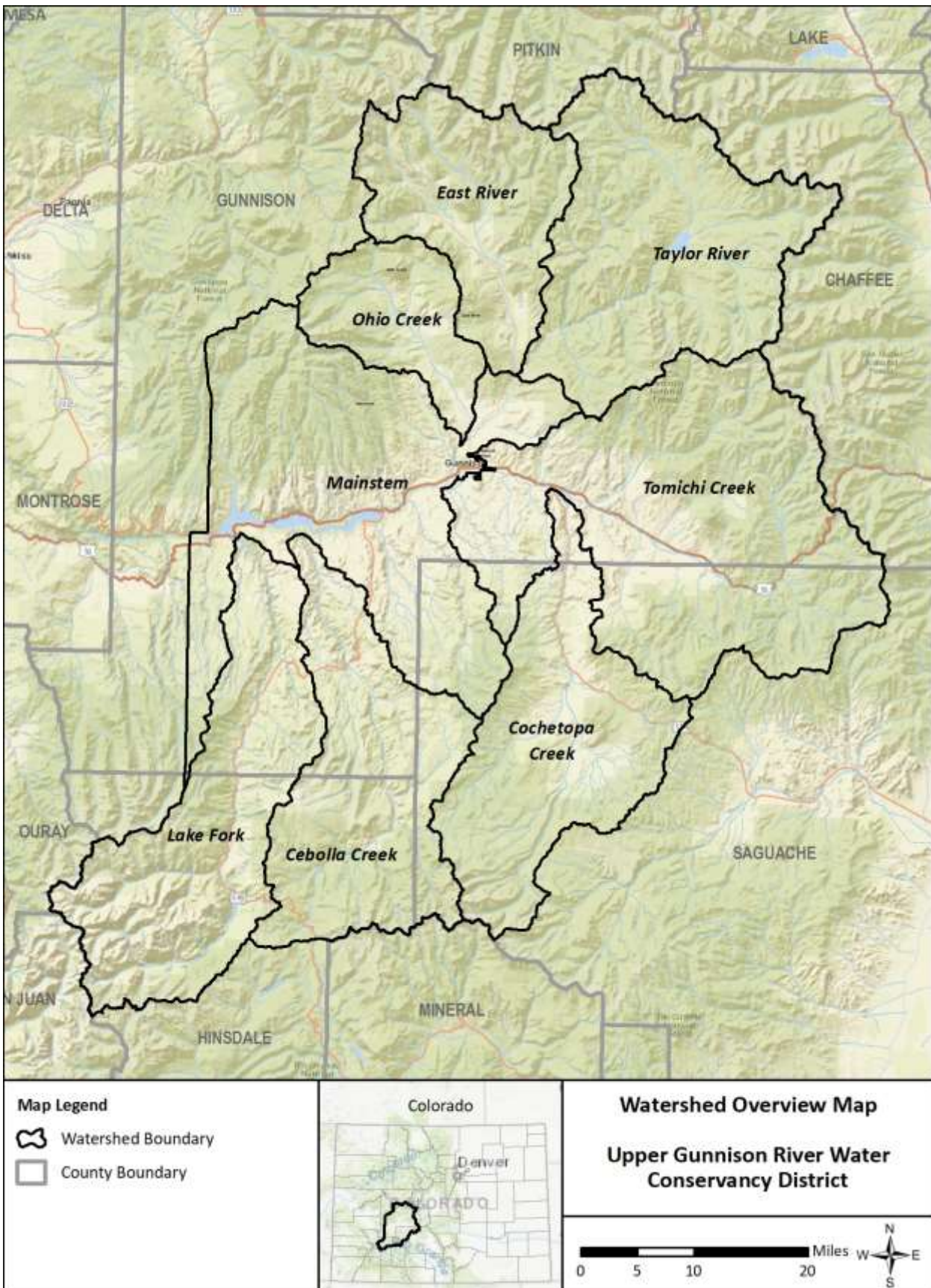
The Upper Gunnison River watershed is geographically located in west-central Colorado in the headwaters of the Gunnison River Basin, upstream of Blue Mesa Reservoir. The mainstem of the Gunnison River which forms at the confluence of the East and Taylor Rivers in Almont, picks up other tributaries on its way into Blue Mesa Reservoir. There are seven tributary mountain watersheds that make up the Upper Gunnison River Basin including Ohio Creek, East River (includes the Slate River), Taylor River, Gunnison River, Tomichi Creek (includes Quartz Creek), Cochetopa Creek, and the Lake Fork of the Gunnison (Figure 1).

Approximately 82% of the lands located within the District are federal public lands. Agriculture accounts for over 97% of the current water diversions in the Upper Gunnison River Basin. The total amount of irrigated acreage in the Basin is over 66,000 acres, mostly irrigated hay and grass pasture.

Water is the foundation of our local economy and culture. The Basin is known for its recreational activities such as fishing, boating, rafting, skiing, hunting, mountain biking and camping; and this is a continually growing part of the local economy.

The District recently embarked on a watershed and stream management planning process. The overarching goal for the Upper Gunnison Basin Watershed Management Plan – is the protection and sustainable continuity of existing water uses (agricultural, municipal, ecological and recreational) at a time of diminishing water supply and increased demand. Other related goals, consistent with both the Gunnison Basin and State Water Plans, include maintenance and improvement of water quality, improvement of relationships between consumptive and non-consumptive water users, improvement and maintenance of water-use infrastructure, and conservation and efficiency among all users. Through initial watershed planning efforts and stakeholder outreach the District developed an inventory and needs assessment for the *Ohio Creek, East River, and Lake Fork sub-basins (Phase 1 Sub-basins)*. The full report can be accessed at the following link: [Phase I Report](#)

Figure 1. Upper Gunnison River Water Conservancy District



Over the next couple of years, District watershed planning will be focused on *Phase 2 Sub-basins* which encompasses the remaining four Upper Gunnison watersheds (Taylor, Tomichi/Cochetopa, Cebolla, and Gunnison Mainstem). Our goal is to understand water resources needs, issues, and other projects to protect or improve existing and future water uses. This being said, the consultant is expected to conduct an irrigation system assessment overview in all seven tributary mountain watersheds with greatest emphasis of work effort in the Ohio Creek, East and Tomichi Creek sub-basins where the majority of our irrigated acreage lies, where we have multiple uses, and/or where frequent water shortages occur.

Following is a summary of basin characteristics.

2.0 Basin Descriptions

2.1 Ohio Creek Sub-basin: Ohio Creek is a tributary to the Gunnison River flowing southeast through a valley of irrigated mountain meadows and productive ranches. During the last several decades the Ohio Creek basin has seen an increase in residential development and a surge of new property owners. Irrigation for pasture grass production is the primary water use with 13,900 irrigated acres provided by 89 headgate structures. These structures currently hold water rights ranging from less than 5 cfs and 10 cfs and greater. While irrigation is the primary water use in Ohio Creek, approximately 19 stream miles are actively managed for angling by property owners and their guests. The basin has very limited storage potential and experiences high flows in the springs and low flows later in the season which has been a long-standing problem. Assessment work has been initiated to identify potential projects that can reduce shortages, improve watershed health, and protect existing uses. Potential projects identified include diversion, ditch, temporary storage, and stock pond improvements; channel restoration, and water conservation measures.

2.2 East River Sub-basin

The East River begins at Emerald Lake above the Town of Crested Butte and encompasses the Slate River, Brush Creek, and Cement Creek as tributaries. There is a diverse community of water users in the basin including agriculture, recreation, municipal, and ecosystem services. Crested Butte Mountain Resort is a major economic driver in the area and draws water from the East River for snowmaking. There are diverse challenges presented by a legacy of mining and impaired streams, a growing population, and competing water uses. There are 13,900 irrigated acres in the East River basin provided by 68 headgate structures; however, 80 percent of the land within the basin boundary is public land. Local stakeholders have invested substantial resources to address agricultural, recreational, and ecosystem needs on the East River. These include water quality issues, riparian degradation, bank stabilization, and environmental needs. Agricultural users in the basin have also worked with local stakeholders to secure funding for water efficiency and conservation projects, including diversion reconstructions and piping projects.

2.3 Tomichi Creek Sub-basin

Tomichi Creek is a 71.8-mile-long tributary of the Gunnison River in Gunnison and Saguache

Counties, Colorado. Agate Creek, Marshall Creek, Razor Creek, Quartz Creek, and Cochetopa Creek are major tributaries of the Tomichi and originate on the continental divide and flow in a westerly direction until the confluence with the Gunnison River near the town of Gunnison. The Tomichi Creek watershed is comprised of sagebrush range, irrigated meadows and wetlands at low elevations, and coniferous forest to alpine tundra in headwater areas. Irrigation is the predominate water use on Tomichi Creek and its tributaries with 27,800 acres of irrigated land. Tomichi Creek, and its tributaries also support wetlands and cold-water trout habitat. Public lands in the Tomichi watershed are popular destinations for hunters and anglers. This basin has very limited storage and experiences high flows in the springs and low flows later in the season which has been a long-standing problem. Preliminary assessment work has been initiated to identify potential projects that can reduce shortages, improve riparian health, bank stability, and overall watershed health.

2.4 Cebolla Creek

Cebolla Creek is a 40-mile-long tributary of the Gunnison River in Gunnison and Hinsdale Counties, Colorado. Headwaters to Cebolla and its major tributaries, Spring Creek, Mineral Creek and Powderhorn Creek flow in a north westerly direction into Blue Mesa Reservoir west of Gunnison, CO. The Cebolla watershed is comprised of irrigated meadows and wetlands at low elevations and coniferous forest to alpine tundra in headwater areas. Irrigation is the predominate water use on Cebolla Creek with 3,000 acres of irrigated land. This basin has very limited storage and experiences high flows in the spring and low flows later in the season. However, Cebolla does not experience frequent dry up or near dry up as do other tributaries to the Upper Gunnison. Assessment work has been initiated to identify potential projects that can reduce shortages, improve riparian health, bank stability, and overall watershed health. Finally, the Cebolla watershed and its tributaries support excellent wildlife and cold-water trout habitat. This area is popular for second homeowners attracted to scenic views, hunting, and angling.

2.5 Gunnison River Mainstem

The Gunnison River mainstem begins at the confluence of the East and Taylor rivers in Almont. After several miles of widening canyon, it emerges into a broad and extensive floodplain, in the center of which sits the City of Gunnison, the most densely populated area of the Upper Gunnison Basin, with a population of 6,500 people. The town is surrounded by agricultural land primarily in hay production and several real estate developments that are converted agricultural land. Ohio Creek joins the mainstem just northwest of Gunnison and Tomichi Creek flows into the mainstem just southwest of Gunnison. There are 3,400 irrigated acres on the Gunnison mainstem, with 21 headgate structures that have water rights ranging from less than 5 cfs to more than 20 cfs.

Further west of Gunnison, the river is again contained in a short canyon which opens again into a former ranching valley which is now almost completely inundated by the 945,000-acre-foot Blue Mesa Reservoir. The Lake Fork of the Gunnison River, Cebolla, Soap, Elk, Dry, Steuben and Beaver creeks all flow into Blue Mesa Reservoir, along with other smaller streams, from the West Elk Mountains to the north and the Alpine Plateau to the south. The

mainstem is primarily used for agriculture and urban-suburban alluvial supplies (municipal and private wells). The City of Gunnison also has an early decree for direct flows for a municipal ditch system. The mainstem, from Almont to West of Gunnison, especially the canyon reaches are also heavily used by fishermen and the commercial rafting industry. Blue Mesa Dam, at the beginning of the deeper and wilder Black Canyon region, is considered the outlet of the Upper Gunnison River Basin.

2.6 Taylor River

The Taylor River is one of the Colorado River's wettest headwater watersheds, draining the western slopes of the Collegiate Range and portions of the Sawatch Range, two of the highest ranges in the entire Continental Divide, as well as the easternmost portions of the Elk Mountains and the northwesterly slopes of the Fossil Range. Several tributaries collect the river's flow in a large high-altitude park before the river drops into a spectacular canyon region approximately 20 miles long, to its confluence with the East River in Almont. The head of the canyon was dammed in the 1930s to create the 106,230 acre-foot Taylor Park Reservoir in the lower portion of Taylor Park to provide late-season storage for the Uncompahgre Project in the Montrose-Delta area.

In addition to water for that project, the Taylor River and Taylor Park Reservoir are used and managed locally for whitewater recreation including commercial operations, lake and stream fishing, agricultural irrigation, and flatwater recreation. There are 1,100 irrigated, with 16 headgate structures that have water rights ranging from less than 5 cfs to more than 10 cfs. Taylor Park and a smaller open area in the canyon have several established guest resorts and high-end real estate developments with alluvial wells.

2.7 Lake Fork

The Lake Fork of the Gunnison River watershed flows into the lower portion of Blue Mesa Reservoir near Sapinero. Its major tributary is Henson Creek, which meets the Lake Fork in the Town of Lake City. This area is home to historic mining activities, with many abandoned workings contributing significant heavy metal loading to streams. Land use in the lower Lake Fork is primarily irrigated pasture and hay meadows and grazing, although increasingly these agricultural lands are being sub-divided and developed. There are 1,215 irrigated acres on the Lake Fork, with 48 headgate structures that have water rights ranging from less than 5 cfs to more than 10 cfs.

Although population is low year-round, large numbers of visitors are drawn to the area as part of the BLM Alpine Triangle Recreation Management Area. Lake San Cristobal, Colorado's second largest natural lake, is a major attraction. Restoration and conservation activities are well under way in the upper watershed. To date, ten mine sites have been remediated, including the Hough Mine, a major contributor of metal loading to Henson Creek, through a broad stakeholder partnership. The LFVC has also been restoring the river channel in the vicinity of the Town of Lake City. The Town of Lake City has recently invested substantial funds to replace the Town's water lines, which were losing 70% through leakage. The Town, Hinsdale County, and the UGRWCD also placed a water retention

structure at the outlet of Lake San Cristobal to provide 950 acre-feet of augmentation water. The wetlands at the inlet of Lake San Cristobal are now protected through conservation easements.

Additional information is also provided in Attachment A related to the number of diversions and acreage served in each sub-basin.

RFQ Schedule

November 19, 2020	RFQ release date.
November 25, 2020	Cut-off date for submitting questions electronically to the District, schavez@ugrwcd.org by 4:00 p.m.
November 30, 2020	Response to questions.
December 4, 2020	RFQ and Fee Schedule due electronically in PDF format (10 MB limit) to Beverly Richards, beverly@ugrwcd.org , by 4:00 p.m.
December 8, 2020	Announcement of final consultant selection or request for additional interview(s)
December 14, 2020	Project Start Date

Questions regarding this RFQ may be addressed to schavez@ugrwcd.org.

2.0 Statement of Purpose

It is the intent of the District to solicit qualifications from a consultant or consultant team with expertise in Agricultural Irrigation Planning and Engineering services to conduct an Upper Gunnison Irrigation Delivery System Assessment and provide on-going support for engineering needs within the District. This Work supports on-going Watershed and Stream Management Planning and implementation efforts being conducted by the District. Please note that project implementation will be accomplished through a separate and future Final Design-Bid-Build process.

3.0 Project Proposal Requirements

In general, RFQ responses should address the following:

- Technical approach for the project
- Technical and managerial resources and expertise that the consultant will use to meet project requirements
- Project-specific resumes of proposed key personnel who will perform work
- Previous project experience and references
- Fee Schedule for all project staff
- Capacity to accomplish the work in the required timeframe

Final project approach, scope, schedule and cost will be negotiated with the District upon contracting. Attachment B includes a sample of the District's "Professional Services Agreement" which the selected consultant would be asked to enter into. Prospective consultants should review and become familiar with this document.

5.0 General Scope of Services

Consultant is expected to conduct optimization assessments in all seven watersheds and will be managed by the District's General Manager. Consultant will be working as part of a dynamic and interdisciplinary Upper Gunnison Watershed Management Planning (WMP) Team of experts in the areas of water law, water rights, policy, fisheries, agriculture, recreation, environment, water quality, and hydrology.

Project Goals: Conduct a comprehensive irrigation infrastructure assessment throughout the District with special emphasis/work effort in the Ohio Creek, East and Tomichi Creek sub-basins. The goal of this work effort is to improve irrigation water management and water availability for all water uses (agricultural, environmental, and recreational), identify potential storage opportunities (in-line temporary, off-channel) and assist with development of pre-feasibility cost estimation and planning for key projects.

A brief general summary of the anticipated work effort is described below.

Task 1. Preliminary Assessment

- A. *Review existing data and relevant studies provided by SOR Team and participate in field tour of the Upper Gunnison basin.* Conduct preliminary reconnaissance tour with the SOR Team and associated landowners to aid in system understanding. Review relevant data, seek additional information as needed, and summarize conclusions in technical memo.
- B. *Conduct preliminary SOR evaluation and propose project approach.* Evaluate and summarize existing challenges. Document options/potential approaches and solutions to address operational and design issues. Recommend strategies and actions including but not limited to, an evaluation of potential opportunities for local system storage for temporarily capturing and re-timing supply to meet demand, changes in operation and management when going from open to closed delivery systems, operational changes associated with reconfiguring ditch alignments and/or delivery points, potential on-farm application efficiency opportunities, etc. Share preliminary evaluation and proposed project SOR approach with SOR Team and landowners to obtain final input before proceeding with more detailed analyses.

Task 2. Detailed System Optimization Analysis & Preliminary Cost Estimate

- A. *Improvement Opportunities* - Conduct a comprehensive analysis of irrigation efficiency improvement opportunities. This includes analysis of actions, including but not limited to, local storage opportunities, re-timing of deliveries, minimizing ditch system losses, infrastructure assessments, reconfiguration designs, and options to improve irrigation scheduling and application efficiency. Draft Technical Memo summarizing improvement

opportunities.

- B. *Draft Systematic Plan* - Develop a draft plan for systematically improving the off- and near-ranch or sub-division delivery systems. Describe the steps and provide a draft pre-feasibility level cost estimate to implement the proposed actions and share with the SOR Team and landowners for input. Draft System Optimization Review Plan.
- C. *Cost Estimate* – Based upon input received in Task 2.B, develop a final draft of the SOR plan components and pre-feasibility cost estimate to implement identified opportunities. Present to SOR Team and landowners. Incorporate any final input and finalize plan.

Task 3. Site specific irrigation system assessment & pre-feasibility cost estimate

- A. Conduct individual landowner and/or *site specific*, irrigation system improvement assessments and feasibility cost estimates as requested by the District on an on-going basis.

Attachment A

Upper Gunnison District Irrigation Structure Summary by Basin

Watershed	Irrigated Acres	Total Main Ditch Length (miles)	# Headgate Structures	Structures with Total Water Rights < 5cfs	Structures with Total Water Rights > 5cfs and <10 cfs	Structures with Total Water Rights >10 cfs
Ohio Creek	13,900	140	89	32	23	34
East River	13,900	105	68	24	18	26
Taylor River	1,100	20	16	9	4	3
Gunnison Mainstem	3,400	65	21	5	4	12 (8 of 12 > 20 cfs)
Tomichi Creek	27,800	360	319	188	56	75
Cebolla Creek	3,000	70	72	48	17	7
Lake Fork	1,215	35	48	34	10	4

Attachment B

EXAMPLE CONSULTING AGREEMENT

THIS CONSULTING AGREEMENT (the "Agreement") is dated this 1st day of February, 2020, between the Upper Gunnison River Water Conservancy District (Client) and XYZ, LLC (Consultant).

The Client is of the opinion that the Consultant has the necessary qualifications, experience and abilities to provide consulting services to the Client.

The Consultant is agreeable to providing such consulting services to the Client on the terms and conditions set out in this Agreement.

In consideration of the matters described above and of the mutual benefits and obligations set forth in this Agreement, the receipt and sufficiency of which consideration is hereby acknowledged, the Client and the Consultant (individually the Party and collectively the Parties to this Agreement) agree as follows:

1. The Client hereby agrees to engage the Consultant to provide the Client with consulting services as a water resource engineer for the Client's watershed management planning (Services) as described in the Scope of Services attached hereto as *EXHIBIT A*.
2. The Services will also include any other consulting tasks which the Parties may agree on.
3. The term of this Agreement (the "Term") will begin on the date of this Agreement and will remain in full force and effect until the completion of the Services as described in the timeline contained in *EXHIBIT A*. The Term may be extended with the written consent of the Parties.
4. The Consultant will charge the Client for the Services at the rates set forth in the Project Cost Estimate contained in *EXHIBIT A*.
5. The Client will be invoiced every month utilizing the Monthly Progress Report format attached hereto as *EXHIBIT B*.
6. Invoices submitted by the Consultant to the Client are due within 30 days of receipt.
7. The Consultant will be reimbursed from time to time for reasonable and necessary expenses incurred by the Consultant in connection with providing the Services.
8. All expenses must be pre-approved by the Client.
9. The Consultant agrees that they will not disclose, divulge, reveal, report or use, for any purpose, any Confidential Information which the Consultant has obtained, except as authorized by the Client or as required by law. The obligations of confidentiality will apply during the Term and will survive indefinitely upon termination of this Agreement.

10. All written and oral information and material disclosed or provided by the Client to the Consultant under this Agreement is Confidential Information regardless of whether it was provided before or after the date of this Agreement or how it was provided to the Consultant.
11. All intellectual property and related material, that is developed or produced under this Agreement, is a “work made for hire” and will be the sole property of the Client. The use of the Intellectual Property by the Client will not be restricted in any manner.
12. The Consultant may not use the Intellectual Property for any purpose other than that contracted for in this Agreement except with the written consent of the Client. The Consultant will be responsible for any and all damages resulting from the unauthorized use of the Intellectual Property.
13. Upon the expiration or termination of this Agreement, the Consultant will return to the Client any property, documentation, records, or Confidential Information which is the property of the Client.
14. In providing the Services under this Agreement it is expressly agreed that the Consultant is acting as an independent contractor and not as an employee. The Consultant and the Client acknowledge that this Agreement does not create a partnership or joint venture between them, and is exclusively a contract for service. The Client is not required to pay, or make any contributions to, any social security, local, state or federal tax, unemployment compensation, workers' compensation, insurance premium, profit-sharing, pension or any other employee benefit for the Consultant during the Term. The Consultant is responsible for paying, and complying with reporting requirements for, all local, state and federal taxes related to payments made to the Consultant under this Agreement.
15. As described in *EXHIBIT A*, the Consultant may, at the Consultant's absolute discretion, engage a third party sub-contractor to perform some or all of the obligations of the Consultant under this Agreement and the Client will not hire or engage any third parties to assist with the provision of the Services.
16. In the event that the Consultant hires a sub-contractor:
 - a. the Consultant will pay the sub-contractor for its services and the Compensation will remain payable by the Client to the Consultant.
 - b. for the purposes of the indemnification clause of this Agreement, the sub-contractor is an agent of the Consultant.
17. Except as otherwise provided in this Agreement, the Consultant will have full control over working time, methods, and decision making in relation to provision of the Services in accordance with the Agreement. The Consultant will work autonomously and not at the direction of the Client. However, the Consultant will be responsive to the reasonable needs and concerns of the Client.

18. Except as otherwise provided in this Agreement, the Consultant will provide at the Consultant's own expense, any and all equipment, software, materials and any other supplies necessary to deliver the Services in accordance with the Agreement.

19. The Parties acknowledge that this Agreement is non-exclusive and that either Party will be free, during and after the Term, to engage or contract with third parties for the provision of services similar to the Services.

20. All notices, requests, demands or other communications required or permitted by the terms of this Agreement will be given in writing and delivered to the Parties at the following addresses by U.S. Mail or electronic mail:

Client: 210 West Spencer, Suite B, Gunnison, CO 81230 schavez@ugrwcd.org

Consultant: 123 Alphabet Street

or to such other address as either Party may from time to time notify the other.

21. Except to the extent paid in settlement from any applicable insurance policies, and to the extent permitted by applicable law, each Party agrees to indemnify and hold harmless the other Party, and its respective directors, shareholders, affiliates, officers, agents, employees, and permitted successors and assigns against any and all claims, losses, damages, liabilities, penalties, punitive damages, expenses, reasonable legal fees and costs of any kind or amount whatsoever, which result from or arise out of any act or omission of the indemnifying party, its respective directors, shareholders, affiliates, officers, agents, employees, and permitted successors and assigns that occurs in connection with this Agreement. This indemnification will survive the termination of this Agreement.

22. Any amendment or modification of this Agreement or additional obligation assumed by either Party in connection with this Agreement will only be binding if evidenced in writing signed by each Party or an authorized representative of each Party.

23. The Consultant will not voluntarily, or by operation of law, assign or otherwise transfer its obligations under this Agreement without the prior written consent of the Client.

24. It is agreed that there is no representation, warranty, collateral agreement or condition affecting this Agreement except as expressly provided in this Agreement.

25. This Agreement will be governed by and construed in accordance with the laws of the State of Colorado.

26. In the event that any of the provisions of this Agreement are held to be invalid or unenforceable in whole or in part, all other provisions will nevertheless continue to be valid and enforceable with the invalid or unenforceable parts severed from the remainder of this Agreement.

27. The waiver by either Party of a breach, default, delay or omission of any of the provisions of this Agreement by the other Party will not be construed as a waiver of any subsequent breach of the same or other provisions.

Upper Gunnison River Water Conservancy District

By: Sonja R. Chavez, General Manager

Consultant XYZ, LLC

By: John Doe, President