


**Professional Services Contract
Staff Report**

DATE: JANAURY 16, 2025
TO: DOUGLAS COUNTY BOARD OF COUNTY COMMISSIONERS
THROUGH: DOUGLAS J. DEBORD, COUNTY MANAGER
FROM: TERENCE T. QUINN, AICP, DIRECTOR OF COMMUNITY DEVELOPMENT 
CC: DJ BECKWITH, PRINCIPAL PLANNER
LAUREN PULVER, PLANNING SUPERVISOR
KATI CARTER, AICP, ASSISTANT DIRECTOR OF PLANNING RESOURCES
SUBJECT: **PUBLIC CONTRACT FOR SERVICES BETWEEN DOUGLAS COUNTY AND FORSGREN ASSOCIATES INC IN THE AMOUNT OF \$578,360**

BOARD OF COUNTY COMMISSIONERS MEETING: JANUARY 28, 2025 @ 1:30 PM

I. EXCUTIVE SUMMARY

In support of the Board of County Commissioner's (Board) development of the 2050 Comprehensive Douglas County Water Plan (Water Plan), the Douglas County Water Commission (Water Commission) recommended the County contract with Forsgren Associates Inc. (Forsgren) for the maximum amount of \$578,360 for the period between January 30, 2025, to January 30, 2027.

II. REQUEST

Approval of public contract for services between Douglas County and Forsgren for \$578,360.

III. DESCRIPTION

Forsgren has prior experience in the creation of water plans having developed water plans for El Paso and Arapahoe Counties. They plan to partner with LRE Water and Michael Baker International to assist in the development of the Water Plan as they have done with previous plans. The Forsgren proposal outlined a public engagement and outreach plan including stakeholder meetings, focus groups, and public workshops throughout creation of the plan. Forsgren will also develop a robust groundwater analysis which will be used to establish a water supply and demand analysis for the County. Forsgren's proposal also included a land use policy analysis related to water use in the County. The contract maximum total amount is \$578,360.

IV. BACKGROUND

The Board approved a resolution in 2023 establishing the Water Commission in order to develop the Water Plan. The Water Commission determined it was necessary to contract with a consultant to provide professional knowledge and experience in developing the Water Plan.

In 2024, the County published a Request for Information to solicit input to better inform the development of a Water Plan scope of services, followed by a Request for Proposals. After review of responses to this process, the Water Commission recommended that the Board select Forsgren based on prior experience in creating similar plans and that the proposal balanced data collection and analysis with public engagement.

V. RECOMMENDED ACTION

It is staff’s recommendation that the public contract for services with Forsgren Associates Inc. be approved by the Board of County Commissioners as it complies with all County approval standards and procedural guidelines.

ATTACHEMENTS

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PUBLIC CONTRACT FOR SERVICES

THIS PUBLIC CONTRACT FOR SERVICES (the “Contract”) is made and entered into this _____ day of _____, 202__, by and between the **BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF DOUGLAS, STATE OF COLORADO** (the “County”), and **FORSGREN ASSOCIATES INC.**, a Colorado Corporation (the “Consultant”). The County and the Consultant hereinafter collectively referred to as the “Parties” and individually to as a “Party.”

RECITALS

WHEREAS, the County is undertaking certain activities for the **development of the 2050 Comprehensive Douglas County Water Plan**; and

WHEREAS, the County desires to engage the Consultant to render certain professional services and assistance in connection with such undertakings of the County; and

WHEREAS, the Consultant has the ability to assist the County through its professional expertise, knowledge, and experience and is ready, willing and able to provide such services, subject to the conditions hereinafter set forth.

NOW, THEREFORE, for and in consideration of the premises and other good and valuable consideration, the parties agree as follows:

1. LINE OF AUTHORITY: Kati Carter, Assistant Director of Planning Resources, (the “Authorized Representative”), is designated as Authorized Representative of the County for the purpose of administering, coordinating, and approving the work performed by the Consultant under this Contract.

2. SCOPE OF SERVICES: All services described in Exhibit A, attached hereto and incorporated herein, shall be performed by Contractor.

The County may, from time to time, request changes to the scope of services to be performed hereunder. Such changes, including any increase or decrease in the amount of the Consultant’s compensation, which are mutually agreed upon between the County and Consultant, shall be in writing and shall become part of this Contract upon execution.

The Consultant agrees to diligently and professionally perform all the services described herein in a manner satisfactory to the Authorized Representative. It is also understood and agreed that the Consultant shall not, in performing services hereunder, undertake any action or activity prohibited by the terms of any lease, permit, license or other agreement in effect during the term hereof between the Consultant and the County for the use and occupancy by the Consultant of any County facilities or space.

3. COMPENSATION: Subject to the maximum contract liability and all other provisions of this Contract, the County agrees to pay to the Consultant, and the Consultant agrees to accept payment as described in Exhibit B, attached hereto and incorporated herein, during the term hereof, in accordance with the terms set forth herein.

4. **MAXIMUM CONTRACT EXPENDITURE:** Any other provision of this Contract notwithstanding and pursuant to Section 29-1-110, C.R.S., the amount of funds appropriated for this Contract shall not exceed **FIVE HUNDRED SEVENTY-EIGHT THOUSAND THREE HUNDRED SIXTY DOLLARS AND NO CENTS (\$578,360.00)** for the current fiscal year. In no event shall the County be liable for payment under this Contract for any amount exceeding the appropriated funds. The County is under no obligation to make any future apportionment or allocation to this Contract. Any potential expenditures outside the current fiscal year are contingent upon the future annual appropriation of funds for such proposed expenditures.

5. **TERM:** It is mutually agreed by the parties that the term of this Contract shall commence as of 12:01 a.m. on **JANUARY 30, 2025** and terminate at 12:00 a.m. on **JANUARY 30, 2027**. This Contract and/or any extension of its original term shall be contingent upon annual funding being appropriated, budgeted and otherwise made available for such purposes and subject to the County's satisfaction with all products and services received during the preceding term.

6. **INVOICING PROCEDURES:** Payments shall be made to the Consultant based upon invoices submitted by the Consultant, provided such invoices have been approved by the Authorized Representative. Payments will be made to the Consultant within thirty (30) days, or within a mutually agreed upon period after County has received complete invoices from the Consultant. The County reserves the right to require such additional documentation, including monthly activity reports detailing the Consultant's activities and services rendered, as the County deems appropriate to support the payments to the Consultant. The signature of an officer of the Consultant shall appear on all invoices certifying that the invoice has been examined and found to be correct.

7. **CONFLICT OF INTEREST:** The Consultant agrees that no official, officer or employee of the County shall have any personal or beneficial interest whatsoever in the services or property described herein, and the Consultant further agrees not to hire, pay, or contract for services of any official, officer or employee of the County. A conflict of interest shall include transactions, activities or conduct that would affect the judgment, actions or work of the Consultant by placing the Consultant's own interests, or the interest of any party with whom the Consultant has a contractual arrangement, in conflict with those of County.

8. **INDEMNIFICATION:** The County cannot and by this Contract does not agree to indemnify, hold harmless, exonerate, or assume the defense of the Consultant or any other person or entity whatsoever, for any purpose whatsoever. The Consultant shall defend, indemnify and hold harmless the County, its commissioners, officials, officers, directors, agents and employees from any and all claims, demands, suits, actions or proceedings of any kind or nature whatsoever, including Workers' Compensation claims, in any way resulting from or arising from the services rendered under this Contract; provided, however, that the Consultant need not indemnify or save harmless the County, its officers, agents and employees from damages resulting from the sole negligence of the County's commissioners, officials, officers, directors, agents and employees.

9. **INDEPENDENT CONTRACTOR:** The Consultant is an independent contractor and is free to perform services for other clients. Notwithstanding any provision of this Contract, all personnel assigned by the Consultant to perform work under this Contract shall be and remain at all times, employees of the Consultant for all purposes. **THE INDEPENDENT CONTRACTOR IS NOT ENTITLED TO WORKERS' COMPENSATION OR UNEMPLOYMENT BENEFITS**

THROUGH THE COUNTY AND IS OBLIGATED TO PAY FEDERAL AND STATE INCOME TAX ON ANY MONIES EARNED PURSUANT TO THE CONTRACT RELATIONSHIP.

10. NO WAIVER OF GOVERNMENTAL IMMUNITY ACT: The parties hereto understand and agree that the County, its commissioners, officials, officers, directors, agents and employees, are relying on, and do not waive or intend to waive by any provisions of this Contract, the monetary limitations or any other rights, immunities and protections provided by the Colorado Governmental Immunity Act, §§ 24-10-101 to 120, C.R.S., or otherwise available to the County.

11. ASSIGNMENT: The Consultant covenants and agrees that it will not assign or transfer its rights hereunder, or subcontract any work hereunder, either in whole or in part without the prior written approval of the Authorized Representative. Any attempt by the Consultant to assign or transfer its rights hereunder shall, at the option of the Authorized Representative, void the assignment or automatically terminate this Contract and all rights of the Consultant hereunder.

12. COUNTY REVIEW OF RECORDS: The Consultant agrees that, upon request of the Authorized Representative, at any time during the term of this Contract, or three (3) years thereafter, it will make full disclosure to the County and make available for inspection and audit upon request by the Authorized Representative, the County Director of Finance, or any of their authorized representatives, all of its records associated with work performed under this Contract for the purpose of making an audit, examination or excerpts. The Consultant shall maintain such records until the expiration of three (3) years following the end of the term of this Contract.

13. OWNERSHIP OF DOCUMENTS: Drawings, specifications, guidelines and any other documents prepared by the Consultant in connection with this Contract shall be the property of the County.

14. ASSIGNMENT OF COPYRIGHTS: The Consultant assigns to the County the copyrights to all works prepared, developed, or created pursuant to this Contract, including the right to: 1) reproduce the work; 2) prepare derivative works; 3) distribute copies to the public by sale, rental, lease, or lending; 4) perform the works publicly; and 5) to display the work publicly. The Consultant waives its rights to claim authorship of the works, to prevent its name from being used wrongly in connection with the works, and to prevent distortion of the works.

15. TERMINATION: The County shall have the right to terminate this Contract, with or without cause, by giving written notice to the Consultant of such termination and specifying the effective date thereof, which notice shall be given at least ten (10) days before the effective date of such termination. In such event, all finished or unfinished documents, data, studies and reports prepared by the Consultant pursuant to this Contract shall become the County's property. The Consultant shall be entitled to receive compensation in accordance with this Contract for any satisfactory work completed pursuant to the terms of this Contract prior to the date of notice of termination. Notwithstanding the above, the Consultant shall not be relieved of liability to the County for damages sustained by the County by virtue of any breach of the Contract by the Consultant.

16. NOTICES: Notices concerning termination of this Contract, notices of alleged or actual violations of the terms or provisions of this Contract, and all other notices shall be made as follows:

by the Consultant to: Kati Carter
100 Third Street
Castle Rock, CO 80104
Ph: (303) 814-4354
E-mail: kcarter@douglas.co.us

with a copy to: Douglas County Attorney's Office
100 Third Street
Castle Rock, CO 80104
Ph: (720) 733-4500
E-mail: Attorney@douglas.co.us

and by the County to: Will Koger
Forsgren Associates Inc.
56 Inverness Drive East, Ste. 112
Englewood, CO 80112
Ph: (720) 279-1855
E-mail: wkoger@forsgren.com

Said notices shall be delivered personally during normal business hours to the appropriate office above, or by prepaid first-class U.S. mail, via facsimile, or other method authorized in writing by the Authorized Representative. Mailed notices shall be deemed effective upon receipt or three (3) days after the date of mailing, whichever is earlier. The parties may from time-to-time designate substitute addresses or persons where and to whom such notices are to be mailed or delivered, but such substitutions shall not be effective until actual receipt of written notification.

17. NONDISCRIMINATION: In connection with the performance of work under this Contract, the Consultant agrees not to refuse to hire, discharge, promote or demote, or to discriminate in matters of compensation against any person otherwise qualified, solely because of race, color, religion, national origin, gender, age, military status, sexual orientation, marital status, or physical or mental disability.

18. GOVERNING LAW; VENUE: This Contract shall be deemed to have been made in, and construed in accordance with the laws of the State of Colorado. Venue for any action hereunder shall be in the District Court, County of Douglas, State of Colorado. The Consultant expressly waives the right to bring any action in or to remove any action to any other jurisdiction, whether state or federal.

19. COMPLIANCE WITH ALL LAWS AND REGULATIONS: All of the work performed under this Contract by the Consultant shall comply with all applicable laws, rules, regulations and codes of the United States and the State of Colorado. The Consultant shall also comply with all applicable ordinances, regulations, and resolutions of the County and shall commit no trespass on any public or private property in the performance of any of the work embraced by this Contract.

20. SEVERABILITY: In the event any of the provisions of this Contract are held to be unenforceable or invalid by any court of competent jurisdiction, the validity of the remaining provisions shall not be affected. Should either party fail to enforce a specific term of this Contract

it shall not be a waiver of a subsequent right of enforcement, nor shall it be deemed a modification or alteration of the terms and conditions contained herein.

21. NO THIRD PARTY BENEFICIARIES: The enforcement of the terms and conditions of this Contract and all rights of action relating to such enforcement, shall be strictly reserved to the County and the Consultant, and nothing contained in this Contract shall give or allow any such claim or right of action by any other or third person under such Contract.

22. ADVERTISING AND PUBLIC DISCLOSURE: The Consultant shall not include any reference to this Contract or services performed pursuant to this Contract in any of Consultant's advertising or public relations materials without first obtaining the written approval of the Douglas County Public Affairs Director. Nothing herein, however, shall preclude the transmittal of any information to officials of the County, including without limitation, the County Manager, Assistant County Manager, and the Board of County Commissioners.

23. PRIORITY OF PROVISIONS: In the event that any terms of this Contract and any Exhibit, attachment, or other referenced document are inconsistent, the following order of priority shall control:

- 1st This Contract, Sections 1 through 28
- 2nd RFP # CD_002_2024
- 3rd Exhibit C- Insurance Requirements
- 4th Exhibit A- Scope of Services
- 5th Exhibit B- Method of Payment
- 6th Response to RFP # CD_002_2024

24. HEADINGS; RECITALS: The headings contained in this Contract are for reference purposes only and shall not in any way affect the meaning or interpretation of this Contract. The Recitals to this Contract are incorporated herein.

25. ENTIRE AGREEMENT: The parties acknowledge and agree that the provisions contained herein constitute the entire agreement and that all representations made by any commissioner, official, officer, director, agent or employee of the respective parties unless included herein are null and void and of no effect. No alterations, amendments, changes or modifications to this Contract, except those which are expressly reserved herein to the Authorized Representative, shall be valid unless they are contained in writing and executed by all the parties with the same formality as this Contract.

26. INSURANCE: The Consultant shall be required to maintain the insurance requirements provided in Exhibit C, attached hereto and incorporated herein by reference. The Consultant shall provide evidence that such requirements have been met and shall provide updated information to the County in the event any changes are made to the Consultant's insurance coverage during the term of this Contract.

27. COUNTY EXECUTION OF AGREEMENT: This Contract is expressly subject to, and shall not be or become effective or binding on the County, until execution by all signatories of the County.

28. FORCE MAJEURE: No party shall be liable for failure to perform hereunder if such failure is the result of *force majeure*. Any time limit shall be extended for the period of any

delay resulting from any *force majeure*, or this Contract may be terminated if such delay makes performance of the Contract impossible or impracticable. *Force majeure* shall mean causes beyond the reasonable control of a party such as, but not limited to, weather conditions, acts of God, strikes, work stoppages, unavailability of or delay in receiving labor or materials, faults by contractors, subcontractors, utility companies or third parties, fire or other casualty or action of government authorities.

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Exhibit A

SCOPE OF SERVICES

The Consultant will develop a 2050 Comprehensive Douglas County Water Plan (Water Plan) for the County. The goal of the 2050 Comprehensive Douglas County Water Plan is to inform long-term strategic water planning for Douglas County, its municipalities, special district partners, and rural individual well owners.

Phased Implementation

The project will follow four primary phases as outlined in the County's Request for Proposal # CD_002_2024 (RFP). Each phase includes clear objectives, deliverables, and a focus on collaboration to meet County expectations.

Collaborative Approach

The Consultant will maintain consistent communication with County staff, the Douglas County Water Commission (DCWC), and other stakeholders through various channels, including phone, email, virtual meetings, and in-person sessions. This collaboration will ensure alignment with project objectives and goals at every stage.

Optional Services

Both Parties shall collaborate throughout the term of the Contract to define and refine the scope of optional tasks within the allocated optional fees. The mutual agreement regarding the scope, timing, and funding of the optional tasks shall be documented in writing, signed by authorized representatives of both Parties.

PROJECT MANAGEMENT

The Consultant will oversee all aspects of project management to ensure timely and effective delivery of services.

The Project Manager, Will Koger, will maintain regular contact with the County's Staff to ensure alignment with project goals. At a minimum, the Project Manager will schedule monthly coordination meetings with the County's staff and maintain consistent contact throughout the month. Additional team members will join these meetings as needed, based on the specific topics or areas of focus for each discussion. Communication will be ongoing via phone, face-to-face and virtual meetings, and email.

Monthly invoices will detail hours, expenses, and work performed. A Work Plan will include a detailed budget, schedule, and staffing by task, with consistent coordination meetings and communication throughout the project.

Deliverables:

- Holding a Kickoff Meeting with the County staff and the Douglas County Water Commission (DCWC) to establish a clear understanding of the project goals, milestones, schedule, public engagement plan, and lines of communication. This meeting will also identify project leadership and stakeholders.

- Preparing a Work Plan with a schedule for milestones and deliverables, along with budget, assignments, project references, etc.
- Preparing monthly progress reports with task, budget, and schedule updates.
- Providing draft technical results to the DCWC for information and feedback at key work stages. Up to six submittal stages are included for our base fee and two more would be added for the expanded option.
- Presenting updates to County staff, the DCWC, and other stakeholders at key stages of the work. Up to six such presentations are included for our base fee and two more would be added for the expanded option.

Optional Services:

- *Two additional draft technical submissions*
- *Two additional stakeholder presentations*

PHASE 0 – ENGAGEMENT AND OUTREACH

The Consultant will employ a combination of engagement techniques to gather input from residents and stakeholders on constraints, priorities, opportunities, and commonly held perceptions about long-term water supplies. These include stakeholder meetings, focus groups, public workshops, and presentations to the Board of County Commissioners, as detailed below.

Stakeholder Meetings

The Consultant will coordinate with the DCWC to assemble a representative stakeholder group that includes water providers, planners, and developers. The group will meet quarterly throughout the project to provide input related to engagement, findings, and recommendations. Meetings will be held in-person with a virtual option.

The Consultant will be responsible for:

- Coordinating and facilitating up to five meetings with this group.
- Developing agendas, relevant content, and minutes, including any action items identified.

Focus Groups

As the project progresses, the Consultant will collaborate with the DCWC to identify appropriate categories and members for focus groups. These may include developers, HOA representatives, or others impacted by the DCC Water Plan’s recommendations.

The Consultant will be responsible for:

- Conducting up to two focus groups to gain a deeper understanding and garner additional input on particular issues or topics derived from survey results and the first open house.

Public Workshops

The Consultant will conduct three public workshops:

- **Initial Virtual Open House:** It will provide a project overview, share how people can receive updates, and offer input opportunities as the project progresses. Includes a Q&A session with the project team.
- **Two In-Person Open Houses:** The Open Houses should be conducted near the beginning of Phase 2. The Open Houses should be located at each end of the County, north and south generally, to be convenient for as many residents as possible.

The Consultant will share initial findings on current and future supply and demand at these workshops and seek input on potential strategies for water use, conservation, and recycling that will help inform recommendations.

To boost local engagement and education, the Consultant proposes inviting other community organizations that are focused on water use and conservation in the county or region to the open house. This could include, for example, water providers, Denver Botanic Gardens, or Wild Ones. This also provides partners the ability to set up a table/display offering attendees information and resources related to conservation (e.g., water-wise, drought-tolerant landscaping) and efficient water use (e.g., rain-barrel collection systems).

Board of County Commissioner Presentations

The Consultant recommends presenting to the Board of County Commissioners twice. The first presentation will be at a project midpoint, prior to the end of Phase 3 to share key information, respond to questions and hear any feedback prior to a second, final presentation when the Plan is considered for Commissioner adoption.

Phase 0 - Optional Services

The Consultant recommends the following tasks for enhanced public engagement, which have been identified as optional to provide budget flexibility. If these optional services are not selected, the County and stakeholders will be expected to post basic information regarding the DCC Water Plan.

Optional Service - Digital Engagement Hub

The Consultant will use Social Pinpoint to create a digital engagement hub to house project information, updates, and a notification sign-up form. Content will be refreshed up to five times throughout the course of the project, sharing updated data, opportunities for engagement (e.g., open houses), and draft documents for public review.

- ***Update 1: Setup***

Initially, the engagement hub will contain an overview, including a project description, goals, schedule, and desired outcomes. The Consultant will create a project interest and questions form to allow interested community members to receive project updates, ask questions, or provide comments throughout the process. The Consultant will maintain and monitor the form and responses.

- **Update 2: Water Priorities Survey**

This update will align with Phase 1 of the project. The Consultant will collaborate with DCWC to finalize questions for an online survey that will be broadly disseminated. The survey will remain open for approximately 45 days and will gather input on stakeholders' water supply priorities and preferences related to conservation, recycling, reuse, and increased storage. The Consultant will also share details of the first public open house and encourage participants to invite colleagues, neighbors, and friends.

- **Update 3: Survey and Study Summary**

This update will be released at the start of Phase 2. It will include an initial summary of findings from both water supply and demand analyses, as well as a summary of responses from the online survey. Any emerging trends, such as a preference for increased in-home graywater reuse, will be highlighted in this update.

- **Update 4: Open House Notification**

This update will occur during Phase 2. The Consultant will provide information on the second and third public open houses, including dates, locations, and times.

- **Update 5: Final Report**

This update will occur near the end of Phase 3. The Consultant will share the final report, a summary of findings, and next steps.

Optional Service - Outreach Materials and Activities

To build awareness of the project throughout the County, the Consultant will create a one-page project information sheet that can be distributed digitally or as a hard copy. This sheet will mirror the content included on the Social Pinpoint engagement hub, including the project overview, schedule, goals, opportunities for involvement, and desired outcomes. The Consultant will encourage the project stakeholder group to assist in distributing the one-pager within their networks to enhance awareness and engagement.

The Consultant will also provide brief content for County staff and key stakeholders to share in their e-newsletters. The series will include:

- *The first newsletter will announce the project.*
- *The second will announce the engagement hub on Social Pinpoint and the first open house.*
- *The third will summarize survey responses.*
- *The fourth will announce the second and third open houses.*

PHASE 1: WATER SUPPLY AND DEMAND ANALYSIS

The Consultant will conduct the water supply and demand analysis in four major tasks as described below.

Task 1: Water Supply Information Collection

Task 1a – Data Tabulation

This process begins by collecting, reviewing, and evaluating water supply plans from all water providers (including municipalities, water districts, special districts, water companies, and community well systems) and regional entities that extend into the county such as the South Metro Water Supply Authority. The Consultant will reference the Colorado Water Plan, the Basin Implementation Plans, and their provisions that apply to Douglas County and its water providers.

The Consultant will prepare a comprehensive water supply and water use profile for Douglas County water providers starting with the template provided in the RFP and present the water information to the DCWC. Some of this data will be available from the State's database. From this data, the Consultant will tabulate water resource supplies and reliability and source of supply use data including tributary, non-tributary, not non-tributary, alluvial water (well), surface water, water rights, water storage rights, contracts, or commitments of water providers and transfer of water from providers external to Douglas County.

From this data, the Consultant can determine and tabulate the average annual yield and safe yield of the surface and groundwater water rights identified above and extrapolated in 10-year increments through 2050.

The Consultant will assess raw water storage by tabulating available reservoir capacities and mapping storage locations available to water providers, noting other water information, as applicable, including current and projected water conservation efforts by County water providers to extend supplies and serve new growth through 2050. The Consultant will analyze the results of the information gathered, including annual water production history, and current and projected water use for each municipality or water district.

Task 1b – Mapping & Development of Figures and Digital Data

The Consultant will develop a comprehensive mapping and data system to support the discussion of opportunities and challenges associated with water supply planning throughout Douglas County. Colorado water is unique in that water providers account for all water used from the source of supply to the point of return, including system losses or even lawn irrigation return flows that occur in between. Not only is the water tracked, but the specific types of use or specific places of use are limited by permits or court decrees.

Further, most municipal water supplies have varying degrees of reliability or annual firm yield based on climate, changes in river administration, declining water levels in aquifers, or contractual obligations or limitations. To understand the limits (also known as institutional barriers) is to understand the potential for future shortages as well as opportunities for cooperation, sharing, and interconnection between water providers.

The Consultant will first collect digital and other publicly available data and organize it into a geodatabase and interactive GIS map. Once this is accomplished, the GIS map can serve two purposes: to assist the County in its decision-making regarding the use of groundwater to support new development and growth, and as a tool for the public to understand the groundwater resources they rely on, allowing them to rapidly find accurate, concise information regarding their groundwater. This mapping will also incorporate data developed during the groundwater analysis (Task 3) to provide further value.

The Consultant envisions developing a GIS database with layers for water wells, water rights, water providers' boundaries and service areas, water providers' existing and projected facilities, and County data. The database will also have hyperlinks to the Colorado Division of Water

Resources (DWR) and other publicly available data as demonstrated in the Arapahoe County figures that follow. Additionally, the database will house the groundwater analysis data.

The data collected could include the following:

- County GIS/digital data
- County existing and future growth scenarios
- County administrative boundaries related to Section 18A designations regarding water supply zones
- Identified water provider boundaries, service areas, current and future zoning plans, and, to the extent available, existing and projected water facilities that can be shared
- GIS data from DWR regarding:
 - Well permit and structure data (both Denver Basin and alluvial)
 - Pre-213 and other data regarding Denver Basin groundwater (i.e., not nontributary [NNT], nontributary [NT], and deemed consent boundaries)
 - Active surface water rights
 - Regional Denver Basin data sets available from the USGS and DWR (water levels, geophysical data, etc.)
 - Groundwater analysis data (PETRA analysis)

This GIS map and underlying data will be used in the DCC Water Plan to:

- Assist in the identification of data gaps and information needs.
- Assist in identifying overlap of service areas, areas of cooperation between service areas, areas of possible interconnections, and other water-sharing services (regional facilities).
- Assist in the identification of barriers to sharing water services.

Task 2: Water Demand Projection Analysis

The Consultant will analyze currently planned and projected development through 2050, as well as projected water demands by water providers compared to current water supply and demands. This will include analyzing land within existing water provider service areas and areas expected to develop with individual wells.

The Consultant will then use this analysis to develop a countywide gap analysis between water supply and demand. Using the DWR well database, the Consultant will catalogue the location of Denver Basin wells as described under “mapping” and assign an estimated production level to approximate the total, current supply from these sources to support the gap analysis.

The Consultant will forecast future consumption by assuming wells currently in production will continue to produce at the current rate (with decline curves by aquifer) and by adding the anticipated consumption from future wells. The Consultant will use the County’s growth analysis to project a new well count in rural areas. The intent is to account for the current and future production for this sector in the gap analysis through 2050.

Data from each water supplier will be aggregated, tabulated, and presented graphically for the county or regions within the county as:

- Current, 2030, 2040, and 2050 water supply forecasts
- Current, 2030, 2040, and 2050 water demand forecasts
- 2030, 2040, and 2050 gap analyses

The Consultant will also analyze supply and demand for current conditions on individual rural wells and use the County's growth analysis to project demands for that sector through 2050. The Consultant will then run a gap analysis in coordination with the groundwater analysis of Task 3.

Besides evaluating projected water demands by water providers, the Consultant will largely focus on the nontributary Denver Basin aquifer demands east of the foothills. Not-nontributary Denver Basin groundwater, alluvial groundwater, and fractured granite groundwater, while used, are subject to augmentation plans reducing the projected demands.

Task 3: Groundwater Analysis

The groundwater analysis is an integral part of the Water Plan and will be accomplished concurrently with the rest of the Plan, by the same team. While several Douglas County water providers have increased their use of renewable water for existing and future development (surface water and alluvial groundwater), development in the unincorporated areas of the County continues to rely upon nonrenewable Denver Basin groundwater. Although this has been the primary supply for the region, the resource is not consistent across the county and is declining rapidly in some locations.

Allocation of Denver Basin groundwater is straightforward and governed by state law. Denver Basin groundwater is allocated based upon land ownership, saturated sand thickness, and specific yield. However, the ability to withdraw the legally computed allocation can be strained due to the fine-grained geology present in the aquifers and potential well-to-well impacts on a local and regional scale. This means significant water rights on paper can have a physical supply of wet water that is substantially less. For water providers, residents, and developers dependent upon this nonrenewable resource, this presents a significant challenge. The focus of this analysis will be to identify those areas where the physical supply of Denver Basin groundwater does not meet the expected allocation.

Water quality can also be a major concern for water providers, residents, and developers. Denver Basin supplies are susceptible to elevated levels of radium, uranium, selenium, arsenic, and other naturally occurring constituents, in addition to the more typical iron and manganese exceedances. Total dissolved solids (TDS) can also be an issue, primarily in Laramie-Fox Hills wells. A key component of that analysis will be the use of a PETRA model. This model uses geophysical and raster logs from numerous public resources (DWR, USGS, Colorado Geological Survey, Colorado Energy & Carbon Management Commission) to develop a picture of the Denver Basin aquifers. This model will help the Consultant analyze data to further characterize the amount of groundwater that is physically available using current technology. The Consultant will use collected data and geophysical and raster logs within the county to create cross-sections that define the extent of Denver Basin groundwater, depth, saturated sand, thickness, and productivity.

To accomplish this, the Consultant will:

- Map unincorporated lands within the county and prepare a water inventory of these lands

- Compile alluvial water rights, exempt and non-exempt well permits (including pre-213 wells), and Denver Basin groundwater data from DWR
- Compile decrees/determinations regarding Denver Basin groundwater in unincorporated areas
- Collect a representative sample of geophysical logs, raster logs, and Colorado Energy & Carbon Management Commission logs to evaluate the Dawson and Denver aquifers across the county, with a primary focus on unincorporated areas
- Utilize the State groundwater allocation calculations to evaluate the Arapahoe and Laramie-Fox Hills aquifers across the county
- Use the PETRA model, with State groundwater allocation calculations, and other regional data sets to estimate physically available groundwater in the county. Using the water rights and well permit data, the Consultant will compare the PETRA estimated physical availability in the Dawson and Denver aquifers to the groundwater volume allocated by state regulations for these aquifers
- Total the amount of alluvial groundwater being withdrawn based on DWR well permit records
- Estimate current Denver Basin water level trends (collected from public resources) to evaluate changes that will influence future availability of Denver Basin supplies
- Review county regulations pertaining to groundwater development and county data associated with subdivisions approved in unincorporated areas
- Analyze and extrapolate conditions expected through the year 2050 in 10-year increments
- Review and analyze current and potential future water statutes and regulations affecting groundwater use, such as the “Slow Sip” case before the Colorado Supreme Court
- Review areas of the county where County staff have identified complaints or evidence of significant groundwater declines and reductions in available supply. Assess construction of existing wells in these areas and whether the reductions result from well construction issues or localized zones of low well productivity and/or significant declines in aquifer water levels
- Evaluate aquifer declines regionally and locally upon review of publicly available data
- Collect data on water quality from USGS, EPA, CDPHE, or Douglas County Health, where available, and map areas with potential water quality issues
- Identify and recommend strategies to address data gaps, including a possible Denver Basin aquifer monitoring

Groundwater Analysis Deliverables:

- Inclusion in the geodatabase and interactive web-map water wells, water provider boundaries and service areas, subdivisions in unincorporated areas, decrees and pre-213 data, PETRA data, and other relevant Douglas County data layers.

- A technical Task Memorandum documenting the PETRA analysis, data development, groundwater withdrawal computations and assumptions, water quality information, and water level information.
- For all deliverables, the Consultant assumes that spatial and tabular data sets, related information, and reports relevant to this effort will readily be available from the County, State, water providers, or other public resources.

Optional Services - Phase I

The following tasks are offered as optional services for Tasks 2 and 3:

- *Perform demand analysis for not-nontributary Denver Basin groundwater, alluvial groundwater, and fractured granite groundwater subject to augmentation plans.*
- *Obtain data and perform PETRA analysis on the Arapahoe and Laramie-Fox Hills aquifers, which to date have not been extensively used due to depth.*

PHASE 2: LAND USE POLICY ANALYSIS

The Consultant will prepare a Land Use Policy Analysis and provide observations and findings to assist the DCWC in developing draft land use policies that integrate into the Water Plan. The scope is based on the Consultant's understanding that the amount, form, and location of future land development will drive future water demands and challenge the County's water providers to sustain and deliver a long-term supply.

Through this analysis, the Consultant will assess how the relationship between forecasted demand and supply, as calculated in Task 2, correlates to forecasted changes in land use for 2030, 2040, and 2050. Generally, as more residential, commercial, and industrial land uses come online in Douglas County in the next 25 years, the Consultant expects the gap between demand and supply to tighten. Following methods used in other recent countywide studies, the Consultant will rely on a combination of local, regional, and state-level data to estimate key indicators including population growth, number of residential dwelling units, amount of commercial/industrial square footage, and the number of new jobs. The Consultant will tabulate each of these for the years 2030, 2040, and 2050 and evaluate them in comparison to the demand/supply variation calculated in Task 2.

Depending on the findings, the Consultant can then make informed land-use policy recommendations. For example, if demand is projected to exceed supply under the ultimate land use scenario (full buildout), the Consultant can identify strategies that would help the County recalibrate its forecasted land-use portfolio and reduce the level of projected demand. Ultimately, the goal of this task is to establish a framework that allows the County to accommodate continued development while maintaining reliable water supplies.

PHASE 3 – DEVELOPMENT OF THE DCC WATER PLAN

The Consultant will develop the overall DCC Water Plan using the information from Phases 1 and 2, including the groundwater analysis. The Consultant will facilitate meetings with the DCWC to develop policy recommendations based on study observations, analyses, and findings.

Additionally, the Consultant will identify and discuss renewable water alternatives that could serve the county in the future. The Consultant will lead the public meetings referenced in Phase 0 during the Plan development and after the final Plan is published.

Throughout the work performance, the Consultant will prepare correspondence, meeting summaries, and technical memoranda documenting activities and recommendations. These documents will be compiled by topical sections and then integrated to create the DCC Water Plan. A draft report will be submitted to the County staff, followed by a meeting to receive review comments. Afterward, the Consultant will prepare a draft of the report for public comment.

If requested, the Consultant can extend the schedule to first present the Plan to the DCWC and BOCC before releasing it for public comment. Once public comments are received, the Consultant will prepare a "pre-final" version of the report and join County staff in presenting it to the DCWC, Planning Commission, and BOCC for adoption. Following these meetings, the Consultant will incorporate final comments received and produce a final report.

The DCC Water Plan is expected to include the following sections:

1. Executive Summary: Presented in a user-friendly format, easily understood and accessible to the public, such as a summary or brochure condensing the findings.
2. Maps and Graphics: To enhance readability and ease-of-use.
3. Summary of Phase 1 – Water Supply and Demand Analysis: The full report will be included as an appendix, possibly with a stand-alone report for the groundwater analysis.
4. Summary of Phase 2 – Land Use Policy Analysis: The full report will be included as an appendix.
5. Summary of Groundwater Analysis: The full report will be included as an appendix.
6. Public Engagement Summary.

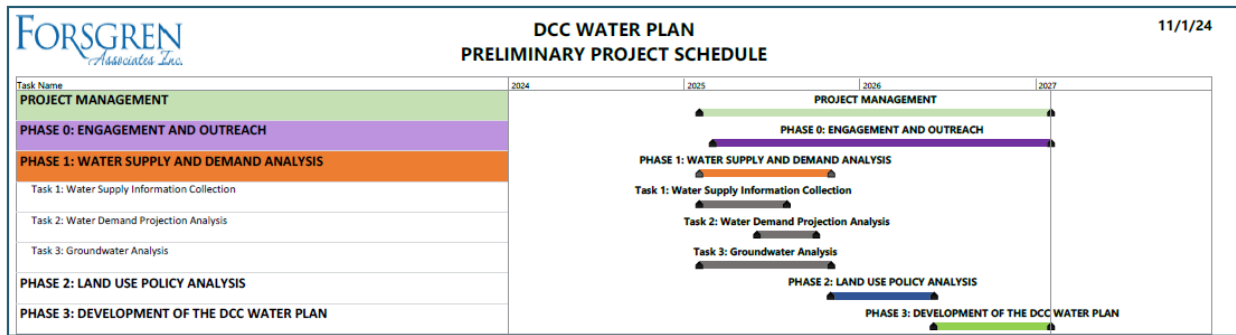
Optional Services - Phase 3

The Consultant can offer the following tasks as optional services:

- *Provide presentations of the draft report to the DCWC and BOCC prior to releasing it for public comment.*
 - *Provide technical advisory support to the County as they carry forward policy recommendations for possible BOCC adoption as regulatory requirements. This would primarily include support by the Consultant's technical advisor, Mr. Craig Dossey.*
-

PROJECT TIMELINE

The Vendor will deliver the Water Plan in approximately 24 months after Notice to Proceed is issued by the County.



**Exhibit B
METHOD OF PAYMENT**

The total cost of the provided services is not to exceed **Five Hundred Seventy-Eight Thousand Three Hundred Sixty Dollars and No Cents (\$578,360.00)** for the current fiscal year.

A base fee is **Four Hundred Seventy-Two Thousand Six Hundred Dollars and No Cents (\$472,600.00)**, this is the total amount of authorized fees and not to exceed amount for this Contract unless the County expressly authorizes an increase for additional Optional Services to be performed.

Additional optional fees are up to **One Hundred Five Thousand Seven Hundred Sixty Dollars and No Cents (\$105,760.00)**.

Both parties shall collaborate throughout the term of the Contract to define and refine the scope of optional tasks within the allocated optional fees. The mutual agreement regarding the scope, timing, and funding of the optional tasks shall be documented in writing, signed by authorized representatives of both Parties. No Optional Services will be performed nor associated fees charged by the Contractor without first obtaining the express written consent of the County, which must include the maximum allowable fee increase and total Contract not to exceed amount that is being authorized.

FEE PROPOSAL SUMMARY			
TASK	DESCRIPTION	BASE FEE	OPTIONAL FEES
PM	Project Coordination & Administration	\$79,194	\$9,778
			Optional Tasks
			Tech Submittals & Presentations (2)
0.0	Public Engagement & Outreach	\$95,761	\$33,097
			Optional Tasks
			Digital Engagement Hub
			Outreach Materials and Activities
1.0	Water Supply Demand & Analysis	\$153,273	\$26,510
			Optional Tasks
			Demand Analysis for Ground Water Under Augmentation Plans
			PETRA Analysis (Arapahoe & Laramie-Fox Hills Aquifers)
2.0	Land Use Policy Analysis	\$46,802	\$0
3.0	Development of Douglas County Water Plan	\$97,569	\$36,374
			Optional Tasks
			Present Draft to DCWC & BOCC Before Public Review
			Policy and Implementation
	TOTAL	\$472,600	\$105,760

Partial payment for completed work to the County’s satisfaction is allowed. Invoices for completed work will be issued monthly and are due and payable within thirty (30) days from the date of issuance.

Exhibit C
INSURANCE REQUIREMENTS

CONSULTANT or CONTRACTOR shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Consultant, Contractor, its agents, representatives, or employees.

MINIMUM SCOPE AND LIMIT OF INSURANCE

Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Covering CGL on an “occurrence” basis, including products and completed operations, property damage, bodily injury and personal & advertising injury (including coverage for contractual and employee acts) with limits no less than **\$1,000,000** per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit. \$2,000,000.
2. **Automobile Liability:** Insurance Services Office Form covering, Code 1 (any auto), or if CONSULTANT or CONTRACTOR has no owned autos, Code 8 (hired) and 9 (non-owned), with limit no less than **\$1,000,000** per accident for bodily injury and property damage.
3. **Workers’ Compensation** insurance as required by the State of Colorado, with Statutory Limits, and Employer’s Liability Insurance with limit of no less than **\$1,000,000** per accident for bodily injury or disease
4. **Professional Liability** (Errors and Omissions) Insurance appropriate to the CONSULTANT or CONTRACTOR’s profession, with limit no less than **\$1,000,000** per occurrence or claim, \$2,000,000 aggregate.

The Insurance obligations under this agreement shall be the minimum Insurance coverage requirements and/or limits shown in this agreement; whichever is greater. Any insurance proceeds in excess of or broader than the minimum required coverage and/or minimum required limits, which are applicable to a given loss, shall be available to the COUNTY. No representation is made that the minimum Insurance requirements of this agreement are sufficient to cover the obligations of the CONSULTANT or CONTRACTOR under this agreement.

OTHER INSURANCE PROVISIONS:

The insurance policies are to contain, or be endorsed to contain, the following provisions:

Additional Insured Status. **Douglas County, its officers, officials, employees, and volunteers are to be covered as additional insureds** on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the CONSULTANT or CONTRACTOR including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the CONSULTANT or CONTRACTOR’s insurance (at least as broad as ISO Form CG 20 10 11 85 or **both** CG 20 10, CG 20 26, CG 20 33, or CG 20 38; **and** CG 20 37 forms if later revisions used).

Primary Coverage. For any claims related to this contract, the **CONSULTANT or CONTRACTOR’s insurance coverage shall be primary** insurance. Any insurance or self-insurance maintained by Douglas County, its officers, officials, employees, or volunteers shall be excess and non- contributory to the CONSULTANT or CONTRACTOR’s insurance.

Notice of Cancellation. Each insurance policy required above shall state that **coverage shall not be canceled, except with notice to Douglas County.**

Waiver of Subrogation. CONSULTANT or CONTRACTOR hereby grants to Douglas County a waiver of any right to subrogation which any insurer of said CONSULTANT or CONTRACTOR may acquire against Douglas County by virtue of the payment of any loss under such insurance. CONSULTANT or CONTRACTOR agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not Douglas County has received a waiver of subrogation endorsement from the insurer.

Self-Insured Retentions, Deductibles and Coinsurance. The CONSULTANT or CONTRACTOR agrees to be fully and solely responsible for any costs or expenses as a result of a coverage deductible, coinsurance penalty, or self-insured retention. Douglas County may require the CONSULTANT or CONTRACTOR to provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or Douglas County. The CONSULTANT or CONTRACTOR will indemnify Douglas County, in full, for any amounts related to the above.

Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to Douglas County.

Claims Made Policies. If any of the required policies provide coverage on a claims-made basis:

1. The Retroactive Date must be shown and must be before the date of the contract or the beginning of contract work.
2. Insurance must be maintained and evidence of insurance must be provided *for at least three (3) years after completion of the contract of work.*
3. If coverage is canceled or non-renewed, and not *replaced with another claims-made policy form with a Retroactive Date* prior to the contract effective date, the Consultant must purchase "extended reporting" coverage for a minimum of *three (3) years* after completion of contract work.

Verification of Coverage. CONSULTANT or CONTRACTOR shall furnish Douglas County with original certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause. All certificates and endorsements are to be received and approved by Douglas County before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the CONSULTANT or CONTRACTOR's obligation to provide them. Douglas County reserves the right, but not the obligation, to review and revise any insurance requirement, not limited to limits, coverage, and endorsements. Additionally, Douglas County reserves the right, but not the obligation, to review and reject any insurance policies failing to meet the criteria stated herein. Failure on the part of the CONSULTANT or CONTRACTOR to provide insurance policies within ten (10) working days of receipt of the written request will constitute a material breach of contract upon which Douglas County may immediately terminate this contract.

The completed certificates of insurance with additional insured endorsements and waivers of subrogation and any notices, within 20 days of cancellation, termination, or material change will be sent via mail or e-mail to:

Douglas County Government
Attn: Risk Management
100 Third Street
Castle Rock, Colorado 80104
risk@douglas.co.us

Subcontractors Consultant or Consultant shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and CONSULTANT or CONTRACTOR shall ensure Douglas County is an additional insured on insurance required from subcontractors.

Failure to Procure or Maintain Insurance. The CONTRACTOR will not be relieved of any liability, claims, demands, or other obligations assumed by its failure to procure or maintain insurance, or its failure to procure or maintain insurance in sufficient amounts, durations, or types. Failure on the part of the CONTRACTOR to procure or maintain policies providing the required coverage, conditions and minimum limits will constitute a material breach of contract upon which Douglas County may immediately terminate this contract.

Governmental Immunity. The parties hereto understand and agree that Douglas County is relying on, and does not waive or intend to waive by any provision of this Agreement, the monetary limitations or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, C.R.S. §§ 24-10-101 *et seq.* as from time to time amended, or otherwise available to Douglas County, its officers, or its employees

Special Risks or Circumstances

Douglas County reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.