



COLORADO

**Colorado Water
Conservation Board**

Department of Natural Resources

1313 Sherman Street, Room 718
Denver, CO 80203

August 3, 2015

Colorado River Water Conservation District
Mr. John Currier, Chief Engineer
P.O. Box 1120
Glenwood Springs, CO 81602

**RE: Notice to Proceed - WSRA Grant – POGG1 2016-208
Kending Reservoir Feasibility Evaluations in the Co River Basin**

Dear John,

This letter is to inform you that the purchase order to assist in the Kending Reservoir Feasibility Evaluations in the Colorado River Basin was approved on August 3, 2015. The original PO and exhibit is attached.

With the executed purchase order, you are now able to invoice the State of Colorado for costs incurred through March 31, 2016 as indicated in the Exhibit A schedule. Upon receipt of your invoice(s), the State of Colorado will provide payment no later than 30 days.

If you have any questions or concerns regarding the project, please contact me.

Sincerely,

//s//

Brent Newman, Project Manager
Colorado Water Conservation Board
Water Supply Planning Section
1580 Logan Street, Suite 200
Denver CO 80203
(303) 866-3441 x3222
brent.newman@state.co.us

Attachments





STATE OF COLORADO
Department of Natural Resources

ORDER		** IMPORTANT **				
Number: POGG1 PDAA 20160000000000000208		The order number and line number must appear on all invoices, packing slips, cartons and correspondence				
Date: 08/03/15						
Description: PDAA WSRA Kending Reservoir Feasibility Evaluations		BILL TO				
Effective Date: 08/03/15 Expiration Date: 03/31/16		COLORADO WATER BOARD CONSERVATION				
BUYER		1313 SHERMAN STREET, ROOM 718				
Buyer:		DENVER, CO 80203				
Email:		SHIP TO				
VENDOR		COLORADO WATER BOARD CONSERVATION				
COLORADO RIVER WATER CONSERVE DIST		1313 SHERMAN STREET, ROOM 718				
PO BOX 1120		DENVER, CO 80203				
GLENWOOD SPRINGS, CO 81602-1120		SHIPPING INSTRUCTIONS				
Contact: J. Currier		Delivery/Install Date:				
Phone: .		F.O.B: FOB Dest, Freight Allowed				
		VENDOR INSTRUCTIONS:				
EXTENDED DESCRIPTION						
Vendor - CRWCD, acting by and through its Co River Water Projects Enterprise						
Section 14. Indemnification - 'If any article sold or delivered under this PO is covered by a patent, copyright, trademark, or application therefore, vendor shall, "to the extent permitted by law".....						
Line Item	Commodity/Item Code	UOM	QTY	Unit Cost	Total Cost	MSDS Req.
1	G1000		0	0.00	\$40,000.00	<input type="checkbox"/>
Description: PDAA WSRA Kending Res. Feasibility Evaluations						
Service From: 08/03/15 Service To: 03/31/16						
TERMS AND CONDITIONS						
https://www.colorado.gov/osc/purchase-order-terms-conditions						
DOCUMENT TOTAL = \$40,000.00						

Purchase Order Terms and Conditions

1. Offer/Acceptance. If this purchase order ("PO") refers to vendor's bid or proposal, this PO is an ACCEPTANCE of vendor's OFFER TO SELL in accordance with the terms and conditions of the "solicitation" identified in vendor's bid or proposal. The solicitation includes an RFP, IFB, or any other form of order by buyer. If a bid or proposal is not referenced, this PO is an OFFER TO BUY, subject to vendor's acceptance, demonstrated by vendor's performance or written acceptance of this PO. Any COUNTER-OFFER TO SELL automatically CANCELS this PO, unless a change order is issued by buyer accepting a counter-offer. This PO shall supersede and control over any vendor form(s) or part(s) thereof included in or attached to any bid, proposal, offer, acknowledgment, or otherwise, in the event of inconsistencies or contradictions, regardless of any statement to the contrary in such form(s) or parts thereof. **2. Safety Information.** All chemicals, equipment and materials proposed and/or used in the performance of this PO shall conform to the requirements of the Occupational Safety and Health Act of 1970. Vendor shall furnish all Material Safety Data Sheets (MSDS) for any regulated chemicals, equipment or hazardous materials at the time of delivery.

3. Changes. Vendor shall furnish products and/or services strictly in accordance with the specifications and price set forth for each item. This PO shall not be modified, superseded or otherwise altered, except in writing signed by purchasing agent and accepted by vendor. Each shipment received or service performed shall comply with the terms of this PO, notwithstanding invoice terms or acts of vendor to the contrary, unless this PO has been modified, superseded or otherwise altered in accordance with this section.

4. Delivery. Unless otherwise specified in the solicitation or this PO, delivery shall be FOB destination. Buyer is relying on the promised delivery date, installation, and/or service performance set forth in vendor's bid or proposal as material and basic to buyer's acceptance. If vendor fails to deliver or perform as and when promised, buyer, in its sole discretion, may cancel its order, or any part thereof, without prejudice to its other rights, return all or part of any shipment so made, and charge vendor with any loss or expense sustained as a result of such failure to deliver or perform as promised. Time is of the essence.

5. Intellectual Property. Any software, research, reports, studies, data, photographs, negatives or other documents, drawings or materials (collectively "materials") delivered by vendor in performance of its obligations under this PO shall be the exclusive property of buyer. Ownership rights shall include, but not be limited to, the right to copy, publish, display, transfer, prepare derivative works, or otherwise use the materials. Vendor shall comply with all applicable Cyber Security Policies of the State of Colorado (the "State"), or buyer, as applicable, and all confidentiality and non-disclosure agreements, security controls, and reporting requirements.

6. Quality. Buyer shall be the sole judge in determining "equals" with regard to quality, price and performance. All products delivered shall be newly manufactured and the current model, unless otherwise specified.

7. Warranties. All provisions and remedies of the Colorado Uniform Commercial Code, CRS, Title 4 ("C.U.C.C."), relating to implied and/or express warranties are incorporated herein, in addition to any warranties contained in this PO or the specifications.

8. Inspection and Acceptance. Final acceptance is contingent upon completion of all applicable inspection procedures. If products or services fail to meet any inspection requirements, buyer may exercise all of its rights, including those provided in the C.U.C.C. Buyer shall have the right to inspect services provided under this PO at all reasonable times and places. "Services" as used in this section includes services performed or tangible material produced or delivered in the performance of services. If any of the services do not conform to PO requirements, buyer may require vendor to perform the services again in conformity with PO requirements, without additional payment. When defects in the quality or quantity of service cannot be corrected by re-performance, buyer may (a) require vendor to take necessary action to ensure that future performance conforms to PO requirements and (b) equitably reduce the payment due vendor to reflect the reduced value of the services performed. These remedies do not limit the remedies otherwise available in this PO, at law, or in equity.

9. Cash Discount. The cash discount period will start from the later of the date of receipt of acceptable invoice, or from date of receipt of acceptable products/services at the specified destination by an authorized buyer representative.

10. Taxes. Buyer and the State are exempt from all federal excise taxes under Chapter 32 of the Internal Revenue Code [No. 84-730123K] and from all State and local government sales and use taxes [CRS, Title 39, Article 26, Parts I and II]. Such exemptions apply when materials are purchased for the benefit of State, except that in certain political subdivisions (e.g., City of Denver) vendor may be required to pay sales or use taxes even though the ultimate product or service is provided to buyer. Buyer shall not reimburse such sales or use taxes.

11. Payment. Buyer shall pay vendor for all amounts due within 45 days after receipt of products or services and a correct notice of amount due. Interest on the unpaid balance shall begin to accrue on the 46th day at the rate set forth in CRS §24-30-202(24) until paid in full. Interest shall not accrue if a good faith dispute exists as to buyer's obligation to pay all or a portion of the amount due. Vendor shall invoice buyer separately for interest on delinquent amounts due, referencing the delinquent payment, number of day's interest to be paid, and applicable interest rate.

12. Vendor Offset. [Not Applicable to Inter-governmental POs] Under CRS §24-30-202.4 (3.5), the State Controller may withhold payment under the State's vendor offset intercept system for debts owed to State agencies for: (a) unpaid child support debts or arrearages; (b) unpaid balances of tax, accrued interest, or other charges specified in CRS §39-21-101, et seq.; (c) unpaid loans due to the Student Loan Division of the Department of Higher Education; (d) amounts required to be paid to the Unemployment Compensation Fund; and (e) other unpaid debts owing to the State as a result of final agency determination or judicial action.

13. Assignment and Successors. Vendor shall not assign rights or delegate duties under this PO, or subcontract any part of the performance required under this PO, without the express, written consent of buyer. This PO shall inure to the benefit of and be binding upon vendor and buyer and their respective successors and assigns. Assignment of accounts receivable may be made only upon written notice furnished to buyer.

14. Indemnification. If this PO is for services, to the extent provided by law, vendor shall indemnify, save, and hold harmless buyer, its employees and agents, against any and all claims, damages, liability and court awards including costs, expenses, and attorney fees and related expenses, incurred as a result of any act or omission by vendor, or its employees, agents, subcontractors or assignees, arising out of or in connection with performance of services under this PO.

15. Independent Contractor. Vendor shall perform its duties hereunder as an independent contractor and not as an employee. Neither vendor nor any agent or employee of vendor shall be deemed to be an agent or employee of buyer. Vendor and its employees and agents are not entitled to unemployment insurance or workers compensation benefits through buyer and buyer shall not pay for or otherwise provide such coverage for vendor or any of its agents or employees. Unemployment insurance benefits will be available to vendor and its employees and agents only if coverage is made available by vendor or a third party. Vendor shall pay when due all applicable employment, income, and local head taxes incurred pursuant to this PO. Vendor shall not have authorization, express or implied, to bind buyer to any agreement, liability or understanding, except as expressly set forth herein. Vendor shall (a) provide and keep in force workers' compensation and unemployment compensation insurance in the amounts required by law, (b) provide proof thereof when requested by buyer, and (c) be solely responsible for its acts and those of its employees and agents.

16. Communication. All communication concerning administration of this PO, prepared by vendor for buyer's use, shall be furnished solely to purchasing agent.

17. Compliance. Vendor shall strictly comply with all applicable federal and state laws, rules, and regulations in effect or hereafter established, including, without limitation, laws applicable to discrimination and unfair employment practices.

18. Insurance. Vendor shall obtain, and maintain, at all times during the term of this PO, insurance as specified in the solicitation, and provide proof of such coverage as requested by purchasing agent.

19. Termination Prior to Shipment. If vendor has not accepted this PO in writing, buyer may cancel this PO by written or oral notice to vendor prior to shipment of goods or commencement of services.

20. Termination for Cause. (a) If vendor refuses or fails to timely and properly perform any of its obligations under this PO with such diligence as will ensure its completion within the time specified herein, buyer may notify vendor in writing of non-performance and, if not corrected by vendor within the time specified in the notice, terminate vendor's right to proceed with the PO or such part thereof as to which there has been delay or a failure. Vendor shall continue performance of this PO to the extent not terminated and be liable for excess costs incurred by buyer in procuring similar goods or services elsewhere. Payment for completed services performed and accepted shall be at the price set forth in this PO. (b) Buyer may withhold amounts due to vendor as buyer deems necessary to reimburse buyer for excess costs incurred in curing, completing or procuring similar goods and services. (c) If after rejection, revocation, or other termination of vendor's right to proceed under the C.U.C.C. or this clause, buyer determines for any reason that vendor was not in default or the delay was excusable, the rights and obligations of buyer and vendor shall be the same as if the notice of termination had been issued pursuant to termination under §21.

21. Termination in Public Interest. Buyer is entering into this PO for the purpose of carrying out the public policy of the State, as determined by its Governor, General Assembly, and Courts. If this PO ceases to further the public policy of the State, buyer, in its sole discretion, may terminate this PO in whole or in part and such termination shall not be deemed to be a breach of buyer's obligations hereunder. This section shall not apply to a termination for vendor's breach, which shall be governed by §20. Buyer shall give written notice of termination to vendor specifying the part of the PO terminated and when termination becomes effective. Upon receipt of notice of termination, vendor shall not incur further obligations except as necessary to mitigate costs of performance. For services or specially manufactured goods, buyer shall pay (a) reasonable settlement expenses, (b) the PO price or rate for supplies and services delivered and accepted, (c) reasonable costs of performance on unaccepted supplies and services, and (d) a reasonable profit for the unaccepted work. For existing goods, buyer shall pay (e) reasonable settlement expenses, (f) the PO price for goods delivered and accepted, (g) reasonable costs incurred in preparation for delivery of the undelivered goods, and (h) a reasonable profit for the preparatory work. Buyer's termination liability under this section shall not exceed the total PO price plus a reasonable cost for settlement expenses. Vendor shall submit a termination proposal and reasonable supporting documentation, and cost and pricing data as required by CRS §24-106-101, upon request of buyer.

22. PO Approval. This PO shall not be valid unless it is executed by purchasing agent. Buyer shall not be responsible or liable for products or services delivered or performed prior to proper execution hereof.

23. Fund Availability. Financial obligations of buyer payable after the current fiscal year are contingent upon funds for that purpose being appropriated, budgeted and otherwise made available. If this PO is funded in whole or in part with federal funds, this PO is subject to and contingent upon the continuing availability of federal funds for the purposes hereof. Buyer represents that it has set aside sufficient funds to make payment for goods delivered in a single installment, in accordance with the terms of this PO.

24. Choice of Law. State laws, rules and regulations shall be applied in the interpretation, execution, and enforcement of this PO. The C.U.C.C. shall govern this PO in the case of goods unless otherwise agreed in this PO. Any provision included or incorporated herein by reference which conflicts with such laws, rules, and regulations is null and void. Any provision incorporated herein by reference which purports to negate this or any other provision in this PO in whole or in part shall not be valid or enforceable or available in any action at law, whether by way of complaint, defense, or otherwise. Unless otherwise specified in the solicitation or this PO, venue for any judicial or administrative action arising out of or in connection with this PO shall be in Denver, Colorado. Vendor shall exhaust administrative remedies in CRS §24-109-106, prior to commencing any judicial action against buyer.

25. Public Contracts for Services. [Not Applicable to offer, issuance, or sale of securities, investment advisory services, fund management services, sponsored projects, intergovernmental POs, or information technology services or products and services] Vendor certifies, warrants, and agrees that it does not knowingly employ or contract with an illegal alien who will perform work under this PO and will confirm the employment eligibility of all employees who are newly hired for employment in the United States to perform work under this PO, through participation in the E-Verify Program or the Department program established pursuant to CRS §8-17.5-102(5)(c). Vendor shall not knowingly employ or contract with an illegal alien to perform work under this PO or enter into a contract or PO with a subcontractor that fails to certify to vendor that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this PO. Vendor shall (a) not use E-Verify Program or Department program procedures to undertake pre-employment screening of job applicants during performance of this PO, (b) notify subcontractor and buyer within three days if vendor has actual knowledge that subcontractor is employing or contracting with an illegal alien for work under this PO, (c) terminate the subcontract if subcontractor does not stop employing or contracting with the illegal alien within three days of receiving notice, and (d) comply with reasonable requests made in the course of an investigation, undertaken pursuant to CRS §8-17.5-102(5), by the Colorado Department of Labor and Employment. If vendor participates in the Department program, vendor shall deliver to the buyer a written, notarized affirmation that vendor has examined the legal work status of such employee, and shall comply with all of the other requirements of the Department program. If vendor fails to comply with any requirement of this provision or CRS §8-17.5-101 et seq., buyer may terminate this PO for breach and, if so terminated, vendor shall be liable for damages.

26. Public Contracts with Natural Persons. Vendor, if a natural person eighteen (18) years of age or older, hereby swears and affirms under penalty of perjury that he or she (a) is a citizen or otherwise lawfully present in the United States pursuant to federal law, (b) shall comply with the provisions of CRS §24-76.5-101 et seq., and (c) has produced a form of identification required by CRS §24-76.5-103 prior to the date vendor delivers goods or begins performing services under terms of the PO.

EXHIBIT A

Kendig Reservoir Feasibility Evaluations

West Divide Project

April 23, 2015

Colorado River District

West Divide Water Conservancy District



BACKGROUND

The West Divide Project (Project) was first envisioned in the late 1930s as a modest storage project to provide supplemental irrigation water to the Divide Creek drainage in Garfield County, Colorado. Subsequent studies for the Project anticipated the supply of water for municipal, domestic, industrial, and irrigation water supplies as well as for flood control, recreation, and fish and wildlife enhancement.

The Bureau of Reclamation (Reclamation) included the Project in the Colorado River Storage Projects Act (CRSP) of 1956, which gave priority to the Project for the completion of planning reports. The Project is a participating project of the CRSP, along with Glen Canyon Dam, the Aspinall Unit, Flaming Gorge Reservoir, and other facilities.

The primary water rights for the Project were conditionally decreed in 1958 to the Colorado River Water Conservation District (Colorado River District). The West Divide Water Conservancy District (West Divide) was formed on April 22, 1964, to provide local project sponsorship and administration of the West Divide Project. A portion of the water rights associated with the project have been conveyed from the Colorado River District to West Divide.

A feasibility report for the Project was published in 1966 and proposed a plan for developing irrigation, municipal, and industrial water in the Crystal River drainage and along the Colorado River between Glenwood Springs and DeBeque. Under this plan, principal water storage was planned for development on the Crystal River. In response to the feasibility report, Congress authorized construction of the Project in 1966. However, despite the fact that the Project was authorized, funds were never appropriated by Congress to develop the Project.

In 2014, the two Districts abandoned the portion of water rights that would have allowed water to be conveyed from the Crystal River to Divide Creek as the original Project had contemplated. However, the evaluation of development alternatives for the Project is on-going and the Districts continue to evaluate alternatives that would supply existing unmet water demands within the Divide Creek basin through the development of individual Project components in a cost effective and environmentally sensitive manner. Specifically, the Districts are focused on further evaluating the feasibility of a Kendig Reservoir that would utilize local water supplies available from West Divide Creek. Accordingly, this particular component of the larger West Divide Project is the focus of this scope of work.

Kendig Reservoir

The Kendig Reservoir site is located in the West Divide Creek drainage, about 15 miles south of Silt, Colorado (Figure 1). A conditional water storage right has been decreed for Kendig Reservoir in the amount of about 18,000 acre feet. Kendig Reservoir was decreed in Civil Action 4954 (adjudication date July 9, 1965) for 15,450 acre feet. Kendig Reservoir 1st Enlargement was decreed in 79CW315 (adjudication date December 31, 1979) for 2,610 acre feet.

Water in West Divide Creek is primarily used for irrigation of agricultural lands, industrial purposes related to natural gas development, stock watering and domestic uses. The reservoir was previously proposed because the distribution of annual flows does not coincide with the distribution of annual demand. The reservoir would store the early summer peak flows which would allow late season irrigation demands to be met more frequently; thus, water shortages are reduced. The storage could also be used to supply non-irrigation demands including industrial, domestic, environmental, recreation, and hydropower generation. Kendig Reservoir is located at the original Kendig dam site proposed by the USBR (1966).

The purpose of this scope of work is to evaluate the development costs and potential operation of a Kendig Reservoir concept that is supplied solely by native gravity inflow from West Divide Creek. Recent studies (Black and Veatch, 2011) have evaluated the feasibility of the decreed “Lower Kendig Reservoir” site, and also an alternative “Upper Kendig Reservoir” site. The Upper Kendig Reservoir was first proposed in the 1986 Hydro-Triad report. The Upper Kendig Reservoir dam site is located approximately 1.7 miles upstream of the Lower Kendig dam site. The Upper Kendig dam site was selected so the stored water could be provided by gravity to a larger service area via delivery to the Highline Ditch. The Highline Ditch is a major irrigation ditch in the Divide Creek basin. This study would evaluate the original Kendig Reservoir site and Upper Kendig Reservoir site which could provide between 5,000 and 15,000 acre feet of storage.

Preliminary estimates reflect that an average of over 12,000 acre feet of native storable inflow occurs at the site annually, although storable inflow may be 2,000 acre feet or less in critically dry years. It is anticipated that the development of a 5,000 to 15,000 acre foot reservoir at this site may be appropriate given the amount of storable gravity inflow of West Divide Creek. Although a larger reservoir would provide additional carryover storage for supply in dry years, a smaller reservoir may be more cost effective. Additional study is required to identify optimal reservoir sizes, potential reservoir operation, the firm yield of the reservoir, geotechnical issues and project costs.

West Divide Creek is tributary to the Colorado River and subject to a call by a group of senior irrigation water rights near Grand Junction collectively known as the Cameo Call. In addition to the Cameo Call, Kendig Reservoir would also be subject to many downstream senior irrigation ditches on West Divide Creek. In many years, West Divide Creek is on call much of the irrigation season, and the Kendig Reservoir storage rights may only be in priority during winter months and the height of spring snowmelt.

Stored water may be available for release and delivery to downstream water users located south of the Colorado River between New Castle and Parachute. The existing water rights allow for the following uses: irrigation, domestic, municipal, industrial, stock, hydropower, and recreation. Because of the reduced dry year water availability, carryover storage would likely be important to maximize dry year supplies.

Study Objectives

West Divide and the Colorado River District seek to complete an up-to-date analysis of the feasibility of a Kendig Reservoir. The study objectives include:

1. Identify Existing and Foreseeable Water Supply Demands
2. Quantify Physical and Legal Water Availability and Evaluate Potential Reservoir Operations
3. Identify Environmental and Permitting Issues
4. Develop Conceptual Design and Cost Estimates of Storage Alternatives

This scope of work describes a potential investigation of the feasibility of a Kendig Reservoir. The goal of the study is to locate and design an appropriately sized embankment that is required to satisfy anticipated water demands, and that is feasible from an engineering, environmental and permitting perspective and cost effective to develop.

1.0 PROPOSED WORK TASKS

The following six work tasks are proposed.

1.1 Water Supply Demands

Potential water demands for the project will be evaluated and summarized. This task will estimate the location, type and magnitude of foreseeable water demands for Kendig Reservoir. The study will use existing information to the extent possible and will estimate water demands for a 50 year planning period (year 2065).

Irrigation Demands. Much of the area within a potential service area of Kendig Reservoir has inadequate irrigation water. The amount (in acre feet) and general location of irrigation shortages will be estimated from several sources of information including:

- Previous studies
- State of Colorado diversion records
- NRCS mapping and aerial photography
- Division of Water Resources mapping of irrigated area
- Irrigator Interviews

Commercial / Industrial Demands. Estimates of commercial and industrial water demands will be derived from the Phase I Energy Development Water Needs Assessment (URS, 2008) and Phase II Energy Development Water Needs Assessment (AMEC, 2011), the Garfield County Energy Master Plan, and from local knowledge of demands associated with the oil and gas industry.

Residential / Municipal Water Demand. Demands for residential and municipal use will be estimated primarily from State demographer projections of population growth, and the recently amended Garfield County Comprehensive Plan (October 2013).

Recreational and Potential Instream Flow Demands. Demands for flat water recreation and potential instream flow demands of West Divide Creek and Divide Creek will be evaluated from data available from Colorado Parks and Wildlife, the Colorado Water Conservation Board, and diversion records from Divide Creek irrigation ditches.

Hydroelectric Power Demand. The demand for Kendig Reservoir to produce hydroelectric power will be evaluated in conjunction with the local power provider Holy Cross Energy.

System Augmentation Water. The demand for Kendig Reservoir to provide augmentation water available for contract releases to the Colorado River will be evaluated.

1.2 Physical and Legal Water Availability

Kendig Reservoir will store water via gravity inflow from West Divide Creek. The amount of water physically and legally available for diversion will be estimated using available stream flow records at the local U.S. Geological Survey stream gage on West Divide Creek (West Divide Creek Near Raven, CO), and the Colorado River and Divide Creek water right call record. The water supply estimates will be completed for a study period from 1955 through 2014 on a daily time step and will assist in the evaluation of potential Kendig Reservoir size configurations and potential year to year reservoir operations.

1.3 Environmental and Permitting – Fatal Flaw Assessment

ERO Resources previously completed a broad overview of environmental permits, authorizations, and regulatory requirements for the Lower and Upper Kendig Reservoir sites (ERO, 2011). Thus, an updated reconnaissance level fatal flaw environmental and permitting assessment will be completed for both Kendig Reservoir sites, including any other identified feasible reservoir sites in the area.

A “desk top” investigation will be completed at each of the sites to identify the presence of known plant species of concern, and to identify any other fatal flaws that are apparent. Anticipated environmental and permitting issues will be documented for each of the sites.

The purpose of this assessment is not to conduct a complete environmental investigation for each component, but to screen identified reservoir sites that have known fatal flaws from a permitting or environmental standpoint. Further environmental reviews will be required in the future when preferred development configurations have been identified.

1.4 Conceptual Design of Storage Alternatives

The objective of this work task is to evaluate existing information and site conditions, and prepare feasibility-level concepts and cost opinions for the Lower and Upper Kendig Reservoir sites to support the continued feasibility evaluation of a Kendig Reservoir.

A “desk top” study to evaluate other potential dam and reservoir locations that could avoid potential fatal flaws when compared to the existing reservoir sites (Lower and Upper Kendig Reservoir sites) will also be completed. A site visit will then be performed in order to confirm the geologic mapping is appropriate, and to identify any geotech fatal flaws. Preliminary geotechnical and hydraulic analyses will be performed as needed for one recommended reservoir site.

Preliminary feasibility-level plans of construction, including operation and maintenance costs, will be developed for the potential dam and reservoir locations. It is anticipated that the cost estimates will provide detailed information for feasibility-level planning purposes only.

1.5 Report Preparation

A summary report will be completed. This report will document study results and will provide recommendations, if warranted, regarding the most viable alternatives to develop the most feasible and cost effective Kendig Reservoir. An economic analysis will be completed to evaluate the total cost per acre foot of developed water associated with a Kendig Reservoir. These costs will help the Districts better assess the overall feasibility developing a Kendig Reservoir. The report may contain photographs, summaries of meetings and engineering reports/designs. In order to satisfy CWCB WSRA Basin grant criteria, the final summary report shall be provided to the CWCB that summarizes the project and documents how the project was completed.

In addition, a progress report shall be provided to the CWCB every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in this scope of work including a description of any major issues that have occurred and any corrective action taken to address these issues.

1.6 Project Management / Contingency Funds

WWG will prepare the Colorado Basin Roundtable Water Supply Reserve Account (WSRA) basin application, manage the contract with the CWCB, oversee and manage the sub-consultant, facilitate and attend meetings, assist in public outreach, review reports, and complete other duties as assigned throughout the project schedule.

2.0 STUDY TEAM AND SCHEDULE

An integrated team of two professional firms will complete the feasibility study:

Wilson Water Group (WWG) will be the project manager and will be responsible for the completion of the study. WWG will also complete the evaluation of water demands and water supplies, including a reconnaissance level fatal flaw review of the environmental and permitting issues.

RJH Consultants (RJH) is the engineering design firm with appropriate experience and will complete all required engineering investigations including the evaluation of existing information and site conditions and prepare feasibility-level concepts and opinions of probable costs for the identified Kendig Reservoir site(s).

All team members will be involved in the identification of any potential reconfiguration alternatives.

The study will commence on August 1, 2015 using matching funds from the two districts and be completed by March 31, 2016. No WSRA funds will be used prior contract execution with CWCB. Suggested project milestones are:

- | | |
|--|--------------------|
| • Task 1.1 – Site Reviews and Environmental Evaluation | September 30, 2015 |
| • Task 1.2 – Water Demand Investigations | September 30, 2015 |
| • Task 1.3 – Physical and Legal Water Availability | September 30, 2015 |
| • Task 1.4 – Conceptual Design of Storage Alternatives | November 30, 2015 |
| • Task 1.5 – Summary Report | March 31, 2016 |

It is anticipated that all work tasks will be completed by March 31, 2016.

3.0 STUDY COSTS

Total project costs will not exceed \$60,000 unless approved by the two districts. Proposed costs by work task are:

	Cost Estimate		WSRA		Match
Task 1.1 – Water Supply Demands	\$ 5,000	=	\$ 0	+	\$ 5,000
Task 1.2 – Physical and Legal Water Availability	\$12,000	=	\$ 9,000	+	\$ 3,000
Task 1.3 – Environmental and Permitting	\$ 5,000	=	\$ 5,000	+	\$ 0
Task 1.4 – Conceptual Design of Storage Alternatives	\$25,000	=	\$15,000	+	\$10,000
Task 1.5 – Report Preparation	\$ 8,000	=	\$ 8,000	+	\$ 0
Task 1.6 – Project Management / Contingency Fund	<u>\$ 5,000</u>	=	<u>\$ 3,000</u>	+	<u>\$ 2,000</u>
Total Cost =	\$60,000		\$40,000		\$20,000

KENDIG RESERVOIR FEASIBILITY STUDY																					
PROPOSED WORK TASKS AND COST ESTIMATE																					
Proposed Work Tasks	Wilson Water Group									RJH									Total Cost Estimate		
	K. Sundeen Principal Rate \$185/hr		M. Pastore Project Manager Rate \$145/hr		W. Ryan Sr. Project Engineer Rate \$125/hr		T. Benton Project Engineer Rate \$115/hr		Allowance	WWG Subtotal	R. Huzjak Principal - 8 Rate \$205/hr		E. Friend Sr. Professional - 7 Rate \$163/hr		E. Hahn Professional - 6 Rate \$150/hr		TBD Engineer - 1 Rate \$94/hr			Allowance	RJH Subtotal
	Hrs	Total	Hrs	Total	Hrs	Total	Hrs	Total			Hrs	Total	Hrs	Total	Hrs	Total	Hrs	Total			
	Hrs	Total	Hrs	Total	Hrs	Total	Hrs	Total	for Expenses	Hrs	Total	Hrs	Total	Hrs	Total	Hrs	Total	for Expenses			
Task 1.1 - Water Supply Demands	4	\$ 740	4	\$ 580	8	\$ 1,000	20	\$ 2,300	\$ 380	\$ 5,000	0	\$ -	0	\$ -	0	\$ -	0	\$ -	\$ -	\$ -	\$ 5,000
Task 1.2 - Physical and Legal Water Availability	2	\$ 370	8	\$ 1,160	24	\$ 3,000	60	\$ 6,900	\$ 570	\$ 12,000	0	\$ -	0	\$ -	0	\$ -	0	\$ -	\$ -	\$ -	\$ 12,000
Task 1.3 - Environmental and Permitting	2	\$ 370	16	\$ 2,320	8	\$ 1,000	8	\$ 920	\$ 390	\$ 5,000	0	\$ -	0	\$ -	0	\$ -	0	\$ -	\$ -	\$ -	\$ 5,000
Task 1.4 - Conceptual Design of Storage Alternatives	4	\$ 740	6	\$ 870	6	\$ 750	6	\$ 690	\$ 836	\$ 3,886	7	\$ 1,435	32	\$ 5,216	50	\$ 7,500	70	\$ 6,580	\$ 341	\$ 21,072	\$ 24,958
Task 1.5 - Report Preparation	2	\$ 370	20	\$ 2,900	4	\$ 500	4	\$ 460	\$ 584	\$ 4,814	2	\$ 410	6	\$ 978	6	\$ 900	10	\$ 940	\$ -	\$ 3,228	\$ 8,042
Task 1.6 - Project Management / Contingency Fund	2	\$ 370	28	\$ 4,060	2	\$ 250	2	\$ 230	\$ 90	\$ 5,000	0	\$ -	0	\$ -	0	\$ -	0	\$ -	\$ -	\$ -	\$ 5,000
Total:	16	\$ 2,960	82	\$ 11,890	52	\$ 6,500	100	\$ 11,500	\$ 2,850	\$ 35,700	9	\$ 1,845	38	\$ 6,194	56	\$ 8,400	80	\$ 7,520	\$ 341	\$ 24,300	\$ 60,000

WILSON WATER GROUP LLC
2015 RATE SCHEDULE
Effective January 1, 2015 through December 31, 2015

	<u>Hourly Rate</u>
PRINCIPAL	\$ 185.00
SENIOR PROJECT MANAGER	\$ 165.00
PROJECT MANAGER	\$ 145.00
SENIOR PROJECT ENGINEER.....	\$ 125.00
PROJECT ENGINEER.....	\$ 115.00
STAFF ENGINEER	\$ 95.00
ADMINISTRATIVE SUPPORT	\$ 80.00

Costs associated with prints, copies, and telephones are indirect expenses and are included in the above rates. Travel costs associated with airfares, airport parking, hotels, and meals will be billed as direct expenses. Mileage for automobile travel more than 100 miles from the Wilson Water Group office will be billed at the current Federal GSA POV mileage reimbursement rate.

2015 FEE SCHEDULE

Professional Services

Labor Category	Billing Rate per Hour (\$)
Technical Expert	230
Principal – Grade 8	205
Senior Professional – Grade 7	190
Senior Professional – Grade 6	163
Professional – Grade 5	150
Professional – Grade 4	122
Engineer/Geologist – Grade 3	112
Engineer/Geologist – Grade 2	100
Engineer/Geologist – Grade 1	94
CAD Designer	96
Word Processor/Administrative Staff	74

These rates are billed for both regular and overtime hours in all categories.

General Expenses

Reimbursement for general expenses, which include field and laboratory equipment; computer equipment and software; printing and reproduction; communications and mailing; local transportation, tolls and parking; field vehicles; and field equipment will be invoiced based on a percentage of labor costs and type of project as follows:

- General consulting services and planning and feasibility studies – 4%
- Design and bid document preparation and geotechnical investigations – 6%
- Construction management and field observation – 8%

Out of Town Travel and Subsistence

Reimbursement for expenses for travel, rental vehicles, hotels, meals, and other costs associated with out of town and overnight travel will be invoiced at cost plus a 10 percent service charge.

Subcontractors and Subconsultants

Reimbursement for work performed by subconsultants and subcontractors will be invoiced at cost plus a 10 percent service charge.

Contract Labor

Contract labor provided by independent consultants and temporary agencies for activities such as drafting, engineering, and word processing will be invoiced at the appropriate labor category as described above for professional services.

Payment Terms

Invoices will be submitted monthly and are due Net 30 days. Interest will accrue at the rate of 1 percent of the invoice amount per month, for amounts that remain unpaid more than 30 days after the invoice date.