

State of Colorado, Colorado Water Conservation Board
Contract Routing Number (CLIN #): 09 PPA 00018
Contract No. 150414
Grant Amount: \$309,000

GRANT CONTRACT

THIS CONTRACT, by and between the State of Colorado, for the use and benefit of the Department of Natural Resources, Colorado Water Conservation Board, located at 1313 Sherman Street, Suite 721, Denver, Colorado 80203, (the "**State**"), and Fire Mountain Canal and Reservoir Company, a Colorado nonprofit corporation, located at 237 Grand Ave, Paonia, CO 81428 ("**Contractor**" or "**Grantee**").

FACTUAL RECITALS

- A. Authority exists in the law and funds have been budgeted, appropriated and otherwise made available and a sufficient unencumbered balance thereof remains available for encumbering and subsequent payment of this contract through the Colorado Financial Reporting Systems (COFRS).
- B. Required approval, clearance and coordination have been accomplished from and with appropriate agencies.
- C. Grantee's was awarded a grant by the Colorado Water Conservation Board in September 2007;
- D. Authority for the agency entering into this Contract arises from Colorado Revised Statutes (CRS) 39-29-109(1)(a)(III), 37-75-102 and 37-74-104(2)(c) and Senate Bill 06-179 adopted by the 2006 General Assembly.
- E. The State has allocated grant funds for the Sedimentation Management Study for Poania Reservoir. Grantee is ready, willing and able to provide such a task.

NOW THEREFORE, in consideration of and subject to the terms, conditions, provisions and limitations contained in this contract, the State and Contractor agree as follows:

AGREEMENT

1. Definitions

The following terms as used in this contract shall be construed and interpreted as follows, unless the context otherwise expressly requires a different construction and interpretation:

- 1.1. "**Compensation**" means the funds payable to Contractor by the State which are related to the Goods and Services set forth in the Scope of Work set forth in **Exhibit A**, attached hereto and incorporated herein.
- 1.2. "**Contract**" means this contract for Goods and Services, its terms and conditions, attached exhibits, documents incorporated by reference under the terms of this contract, and any future modifying agreements, exhibits, attachments or references that are incorporated pursuant to State Fiscal Rules and Policies.
- 1.3. "**Exhibit**" means a statement of work document, schedule, budget, or other identified exhibit which

has been incorporated into and attached to this contract.

- 1.4. **"Goods"** means anything that is produced or manufactured and that is obtained by the State, either in and of itself, or in conjunction with services.
- 1.5. **"Services"** means services performed or tangible material produced or delivered in the performance of services.

BASIC CONTRACT TERMS

2. Statement of Work

Contractor shall perform the Services described in **Exhibit A**, Scope of Work.

3. Performance Standard

Contractor shall perform the Services described in **Exhibit A**, Scope of Work, in accordance with the highest standard of care, skill and diligence provided by a professional person or company in performance of work similar to the Services, and all services, and all consumables, products, and materials used in performance of the Services shall be of good quality and free from faults and defects. Contractor warrants that (a) services or goods provided under this contract shall meet the description in **Exhibit A**, Scope of Work, (b) there are no pending or threatened suits, claims, or actions of any type with respect to the services or goods provided and (c) the services and goods shall be free and clear of any liens, encumbrances, or claims arising by or through Contractor or any party related to Contractor.

4. Performance Term

- 4.1. This contract shall be effective upon approval by the Colorado State Controller, or designee (the "Effective Date") and extend through December 31, 2010. Performance of this contract shall commence as soon as practicable after the Effective Date and shall be undertaken and performed in the sequence and manner set forth in **Exhibit A**, Scope of Work.
- 4.2. In the event the State desires to continue the Services and a replacement contract has not been fully approved by the termination date of this contract, the State, upon written notice to Contractor, may unilaterally extend this contract for a period of up to three (3) months. The contract shall be extended under the same terms and conditions as the original contract, including, but not limited to prices, rates and service delivery requirements. This extension shall terminate at the end of the three (3) month period or when the replacement contract is signed by the Colorado State Controller or an authorized delegate.

5. Grant Award (Compensation)

- 5.1. Payment of compensation pursuant to this contract will be made as earned, in whole or in part, from available State funds encumbered in a maximum amount not to exceed \$309,000 for the performance of the Services required by this contract and **Exhibit A**, Scope of Work. Satisfactory performance under the terms of this contract shall be a condition precedent to the State's obligation to compensate Contractor.
- 5.2. The maximum compensation payable under this contract, and under any renewal hereof, shall include all Contractor fees, costs and expenses.
- 5.3. The State shall not be liable to Contractor for payment of work or services or for costs or expenses incurred by Contractor prior to the "Effective Date".
- 5.4. The maximum amount available during each fiscal year of this contract for the purchase of Goods and Services shall be:
 - (a) Up to \$309,000 in fiscal year 2009;

- (b) \$309,000 less the amount spent in 2009 in fiscal year 2010.
- (c) \$309,000 less the amount spent in 2009 and 2010 in fiscal year 2011.

6. Availability of Funds

This contract is contingent upon the continuing availability of State appropriations as provided in Section 2 of the Colorado Special Provisions, incorporated as a part of this contract. The State is prohibited by law from making fiscal commitments beyond the term of its current fiscal period. If Federal appropriations or grants fund this contract in whole or in part, the contract is subject to and contingent upon the continuing availability of appropriated Federal funds for this contract. If State of Colorado or Federal funds are not appropriated, or otherwise become unavailable to fund this contract, the State may immediately terminate the contract in whole or in part without further liability.

PROCEDURES FOR AND OBLIGATIONS OF CONTRACT PERFORMANCE

7. Billing/Payment Procedure

- 7.1. The State shall establish billing procedures and pay Contractor the contract price or rate for Services performed, reviewed, and accepted or Goods delivered, inspected, and accepted pursuant to all the terms and conditions of this contract, including without limitation, performance, quality, milestones and completion requirements for payment set forth in **Exhibit A**, Scope of Work, and the State's inspection and acceptance rights in Section 8. Contractor shall submit invoices for payment on forms and provide requested documentation in a manner prescribed or approved by the State. Payments pursuant to this contract shall be made as earned, in whole or in part, from available funds encumbered for the purchase of the described Services and Goods. Incorrect payments by the State to Contractor due to omission, error, fraud, or defalcation shall be recovered from Contractor by deduction from subsequent payments under this contract or other contracts between the State and Contractor or collected as a debt due to the State.
- 7.2. Invoices and payments shall be mailed using the US Postal Service or other delivery service with a properly addressed stamped envelop to the address specified by the Contractor on form W-9 or other similar form and by the State in its billing procedures.
- 7.3. The State shall make payment in full with respect to each invoice within forty-five (45) days of receipt thereof; provided that the amount invoiced represents Goods and/or Services which have been accepted by the State and the form of the invoice is acceptable to the State. Uncontested amounts not paid by the State within forty-five (45) days shall bear interest on the unpaid balance beginning with the forty-sixth (46th) day at a rate of one percent (1%) per month until paid in full; provided, however, that no interest shall accrue with respect to unpaid amounts for which the State has delivered to Contractor notice of a good faith dispute. Contractor shall invoice the State separately for accrued interest on delinquent amounts. The billing shall reference the delinquent payment, the number of day's interest to be paid and the applicable interest rate.

8. Inspection and Acceptance

The State reserves the right to inspect Services provided under this contract at all reasonable times and places during the term of this contract, including any extensions. If any of the Services does not conform to contract requirements, the State may require Contractor to promptly perform the Services again in conformity with contract requirements, at no additional cost to the State. When defects in the quality or quantity of Services cannot be corrected by re-performance, the State may:

- (a) require Contractor to take necessary action to ensure that future performance conforms to this contract requirements; and

- (b) equitably reduce the payment due to Contractor to reflect the reduced value of the Services performed.

These remedies shall in no way limit the remedies available to the State in other provisions of this contract or remedies otherwise available in equity or at law, all of which may be exercised by the State, at its option, in lieu of or in conjunction with the preceding measures. Furthermore, the reduction, delay or denial of payment under this provision shall not constitute a breach of contract or default by the State.

9. Reporting

Unless otherwise provided in this contract or the exhibits hereto, Contractor shall submit, on a quarterly basis and upon termination or completion of work, a written progress report analyzing the performance under this contract and specifying progress made for each activity identified in Contractor's duties and obligations. Such written analysis shall be in accordance with the procedures developed and prescribed by the State. The preparation of reports in a timely manner shall be the responsibility of Contractor and failure to comply may result in the delay of payment of funds and/or termination of this contract. Required reports shall be submitted to the State not later than the end of each calendar quarter, or at such time as otherwise specified. Notwithstanding anything herein to the contrary, including without limitation the priority provisions set forth in Section 35, specific reporting requirements set forth in **Exhibit A**, Scope of Work, or in other exhibits to this contract, shall take precedence over this general reporting provision.

10. Rights in Data, Documents, and Computer Software

- 10.1 Any software, research, reports, studies, data, photographs, negatives or other documents, drawings, models, materials, or work product of any type, including drafts, prepared by Contractor in the performance of its obligations under this contract (the "Work Product"), shall be the exclusive property of the State and all Work Product shall be delivered to the State by Contractor upon completion, termination, or cancellation of this contract. The rights of the State with respect to such Work Product shall include, but not be limited to, the right to copy, publish, display, transfer, prepare derivative works, or otherwise use such Work.
- 10.2 Contractor shall not use, willingly allow, cause or permit such property to be used for any purpose other than the performance of Contractor's obligations under this contract, without the prior written consent of the State. The rights of the State with respect to such property shall include, but not be limited to, the right to copy, publish, display, transfer, prepare derivative works, or otherwise use such property.

11. Maintenance, Inspection and Monitoring of Records

- 11.1 Contractor shall maintain a complete file of all records, documents, communications, notes and other written materials or electronic media, files or communications, which pertain in any manner to the operation of programs or the delivery of Services or Goods under this contract, and shall maintain such records for a period of three (3) years after the date of termination of this contract or final payment hereunder, whichever is later, or for such further period as may be necessary to resolve any matters which may be pending, or until an audit has been completed; provided, that if an audit by or on behalf of the Federal and/or Colorado State government has begun but is not completed or audit findings have not been resolved after a three (3) year period, such materials shall be retained until the resolution of the audit findings.
- 11.2 Contractor shall permit the State, the Federal Government or any other duly authorized agent of a governmental agency to audit, inspect, examine, excerpt, copy and/or transcribe Contractor's records during the term of this contract and for a period of three (3) years following termination of this contract or final payment hereunder, whichever is later, to assure compliance with the terms hereof or to evaluate Contractor's performance hereunder.
- 11.3 Contractor also shall permit these same described entities to monitor all activities conducted by Contractor pursuant to the terms of this contract. As the monitoring agency, in its sole discretion, may deem necessary or appropriate, such monitoring may consist of internal evaluation procedures,

examination of program data, special analyses, on-site checking, formal audit examinations, or any other reasonable procedure. All such monitoring shall be performed in a manner that will not unduly interfere with contract performance.

12. Confidentiality of State Records and Information

- 12.1 Contractor acknowledges that it may come into contact with confidential information in connection with this contract or in connection with the performance of its obligations under this contract, including but not limited, to personal records and information of individuals. It shall be the responsibility of Contractor to keep all State records and information confidential at all times and to comply with all Colorado State and Federal laws and regulations concerning the confidentiality of information to the same extent applicable to the State. Any request or demand for information in the possession of Contractor made by a third party who is not an authorized party to this contract shall be immediately forwarded to the State's principal representative for resolution.
- 12.2 Contractor shall notify all of its agent, employees, subcontractors and assigns who will come into contact with State information that they are subject to the confidentiality requirements set forth herein, and shall provide each with a written explanation of the requirements before they are permitted to access information or data. Contractor shall provide and maintain a secure environment that ensures confidentiality of all State records and information wherever located. No State information of any kind shall be distributed or sold to any third party or used by Contractor or its agents in any way, except as authorized by the contract and as approved by the State. State information shall not be retained in any files or otherwise by Contractor or its agents, except as set forth in this contract and approved by the State. Disclosure of State records or information may be cause for legal action against Contractor or its agents. Defense of any such action shall be the sole responsibility of Contractor.

13. Litigation Reporting

Contractor, within ten (10) days after being served with a summons, complaint, or other pleading in a case which involves Services provided or Contractor's performance under this contract, which has been filed in any Federal or state court or administrative agency, shall deliver copies of such document to the State's principal representative, or in absence of such designation, to the chief executive officer of the department, agency, or institution executing this contract on behalf of the State.

14. Conflict of Interest.

- 14.1 During the term of this contract, Contractor shall not engage in any business or personal activities or practices or maintain any relationships which conflict in any way with the full performance of Contractor's obligations under this contract.
- 14.2 Additionally, Contractor acknowledges that in governmental contracting, even the appearance of a conflict of interest is harmful to the interests of the State. Thus, Contractor shall refrain from any practices, activities or relationships that could reasonably be considered to be in conflict with the full performance of Contractor's obligations to the State in accordance with the terms and conditions of this contract, without the prior written approval of the State.
- 14.3. In the event that Contractor is uncertain whether the appearance of a conflict of interest may reasonably exist, Contractor shall submit to the State a full disclosure statement setting forth the relevant details for the State's consideration and direction. Failure to promptly submit a disclosure statement or to follow the State's direction in regard to the apparent conflict shall be grounds for termination of the contract.
- 14.4. Contractor and subcontractors, permitted under the terms of this contract, shall maintain a written code of standards governing the performance of their respective employees engaged in the award and administration of contracts. No employee, officer or agent of Contractor or any permitted

subcontractor shall participate in the selection, or in the award or administration of a contract or subcontract supported by Federal funds if a conflict of interest, real or apparent, would be involved. Such a conflict would arise when:

- (a) an employee, officer or agent;
- (b) any member of the employee's immediate family;
- (c) an employee's partner; or
- (d) an organization, which employs, or is about to employ, any of the above,

has a financial or other interest in the firm selected for award. Contractor's or subcontractor's officers, employees, or agents shall neither solicit nor accept gratuities, favors, or anything of monetary value from Contractor, potential contractors, or parties to sub-agreements.

REPRESENTATIONS AND WARRANTIES

15. Warranties. During the term of this contract and for a period of twelve months following the State's final acceptance under this contract, Contractor warrants as follows:

- 15.1 All Services under this Contract shall be performed in accordance with the specifications set forth in this contract and **Exhibit A** and in a manner acceptable to the State. Contractor shall re-perform any Services that fail to satisfy this warranty.
- 15.2 All deliverables delivered under this contract by Contractor shall meet the specifications set forth in this contract and **Exhibit A**. Contractor shall correct or replace any deliverables which fail to satisfy this warranty.

The foregoing warranties and such other warranties as may be set forth in **Exhibit A**, Scope of Work, are a part of the minimum work requirements of this contract, and as such will be at no additional cost to the State.

16. Licenses, Permits, and Responsibilities

Contractor certifies that, at the time of entering into this contract, it has currently in effect all necessary licenses, certifications, approvals, insurance, permits, and other authorizations required to properly perform the Services and/or deliver the Goods covered by this contract. Contractor warrants that it shall maintain all necessary licenses, certifications, approvals, insurance, permits, and other authorizations required to properly perform this contract, without reimbursement by the State or other adjustment in contract price. Additionally, all employees of Contractor performing services under this contract shall hold the required licenses or certification, if any, to perform their responsibilities. Contractor, if a foreign corporation or other entity transacting business in the State of Colorado, further certifies that it currently has obtained and shall maintain any applicable certificate of authority to do business in the State of Colorado and has designated a registered agent in Colorado to accept service of process. Any revocation, withdrawal or non-renewal of licenses, certifications, approvals, insurance, permits or any such similar requirements necessary for Contractor to properly perform this contract, shall be deemed to be a default by Contractor and grounds for termination of this contract by the State.

17. Tax Exempt Status

Contractor acknowledges that the State of Colorado is not liable for any sales, use, excise, property or other taxes imposed by any Federal, State or local government tax authority. The State also is not liable for any Contractor franchise or income related tax. No taxes of any kind shall be charged to the State.

18. Legal Authority

Contractor warrants that it possesses the legal authority to enter into this contract and that it has taken all actions required by its procedures, by-laws, and/or applicable laws to exercise that authority, and to lawfully

authorize its undersigned signatory to execute this contract and to bind Contractor to its terms. Contractor agrees it shall submit voluntarily to the personal jurisdiction of the Federal and State courts in the State of Colorado and venue in the City and County of Denver, Colorado. The person(s) executing this contract on behalf of Contractor warrant(s) that such person(s) have full authorization to execute this contract.

19. Compliance with Applicable Law

19.1 Contractor shall at all times during the execution of this contract strictly adhere to, and comply with, all applicable Federal and Colorado State laws, and their implementing regulations, as they currently exist and may hereafter be amended, which laws and regulations are incorporated herein by this reference as terms and conditions of this contract. Contractor also shall require compliance with such laws and regulations by subcontractors under subcontracts permitted under this contract.

REMEDIES

20. Remedies

In addition to any other remedies provided for in this contract, and without limiting the remedies otherwise available at law or in equity, the State may exercise the following remedial actions if Contractor substantially fails to satisfy or perform the duties and obligations in this contract. "Substantial failure" to satisfy duties and obligations shall be defined to mean material, insufficient, incorrect or improper performance, activities, or inaction by Contractor. These remedial actions are as follows:

- (a) Suspend Contractor's performance pending necessary corrective action as specified by the State, without Contractor's entitlement to adjustment in price/cost or schedule. Furthermore, at the State's option, a directive to suspend may include suspension of this entire contract or any particular part of this contract that the State determines in good faith would not be beneficial or in the State's best interests due to Contractor's substantial non-performance. Accordingly, the State shall not be liable to Contractor for costs incurred after the State has duly notified Contractor of the suspension of performance under this provision, and Contractor shall promptly cease performance and incurring costs in accordance with the State's directive;
- (b) Withhold payment to Contractor until the necessary Services or corrections in performance, development or manufacture are satisfactorily completed;
- (c) Request the removal from work on this contract of employees or agents of Contractor identified by the State, in its reasonable judgment, as being incompetent, careless, insubordinate, unsuitable, or otherwise unacceptable, or whose continued employment on this contract the State deems to be contrary to the public interest or not in the best interests of the State;
- (d) Deny payment for those Services or obligations which have not been performed which have not been provided and which, due to circumstances caused by Contractor, cannot be performed, or if performed would be of no value to the State. Denial of the amount of payment must be reasonably related to the value of work or performance lost to the State; and/or
- (e) Terminate this contract for default.

The above remedies are cumulative and the State, in its sole discretion, may exercise any or all of them individually or simultaneously.

21. Termination for Convenience

21.1 When the interests of the State so require, the State may terminate this contract in whole or in part, for the convenience of the State. The State shall give written notice of termination to Contractor specifying the termination of all or a portion of this contract and the effective date of such. Exercise by the State of this termination for convenience provision shall not be deemed a breach of contract by the State. Upon receipt of written notice, Contractor shall incur no further obligations in connection with the terminated work and, on the date set in the notice of termination, Contractor shall stop work to the extent specified. Contractor also shall terminate outstanding orders and subcontracts as they relate to the terminated work. All finished or unfinished documents, data,

studies, research, surveys, drawings, maps, models, photographs, and reports or other materials prepared by Contractor under this contract shall, at the option of the State, be delivered by Contractor to the State and shall become the State's property. The State may direct Contractor to assign Contractor's right, title, and interest under terminated orders or subcontracts to the State. Contractor shall complete and deliver to the State the work not terminated by the notice of termination and may incur obligations as are necessary to do so within the contract terms.

- 21.2 If this contract is terminated by the State as provided herein, Contractor shall be paid an amount which bears the same ratio to the total compensation as the Services satisfactorily performed or the deliverables satisfactorily delivered or installed bear to the total Services or deliverables covered by this contract, less payments of compensation previously made. In addition, for contracts that are less than 60% completed, the State may reimburse the contractor for a portion of actual out-of-pocket expenses (not otherwise reimbursed under this contract) incurred by Contractor during the contract period which are directly attributable to the uncompleted portion of Contractor's obligations covered by this contract. In no event shall reimbursement under this clause exceed the contract amount. If this contract is terminated for cause, or due to the fault of the Contractor, the Termination for Cause or Default provision shall apply.

22. Termination for Default/Cause

If Contractor refuses or fails to perform any of the provisions of this contract with such diligence as will ensure its completion within the time and pursuant to the requirements and terms specified in this contract, the State may notify Contractor in writing of such non-performance. If Contractor fails to promptly correct such delay or non-performance within the time specified, the State, may at its option, terminate this entire contract or such part of this contract as to which there has been delay or a failure to properly perform. If terminated for cause, the State shall only reimburse Contractor for accepted work or deliverables received up to the date of termination and final payments may be withheld. In the event of termination, all finished or unfinished documents, data, studies, research surveys, reports, other materials prepared by Contractor, or materials owned by the State in the possession of Contractor, at the option of the State, shall be returned immediately to the State or retained by the State as its property. At the State's option, Contractor shall continue performance of this contract to the extent not terminated, if any, and shall be liable for excess costs incurred by the State in procuring from third parties replacement services or substitute goods as cover. Notwithstanding any remedial action by the State, Contractor also shall remain liable to the State for any damages sustained by the State by virtue of any breach by Contractor and the State may withhold any payment to Contractor for the purpose of mitigating the State's damages, until such time as the exact amount of damages due to the State from Contractor is determined. Upon termination by the State, Contractor shall take timely, reasonable and necessary action to protect and preserve property in the possession of Contractor in which the State has an interest. Further, the State may withhold amounts due to Contractor as the State deems necessary to protect the State against loss because of outstanding liens or claims of former lien holders and to reimburse the State for the excess costs incurred in procuring similar goods or services. Any action taken by the State hereunder or pursuant to paragraph 15 shall not be cause for Contractor to terminate this Contract for default or material breach. If, after termination by the State, it is determined for any reason that Contractor was not in default or that Contractor's action/inaction was excusable, such termination shall be treated as a termination for convenience and the rights and obligations of the parties shall be the same as if this contract had been terminated for convenience, as described herein.

23. Insurance

- 23.1 The Contractor shall obtain, and maintain at all times during the term of this agreement, insurance in the following kinds and amounts:
- a. Worker's Compensation Insurance as required by state statute, and Employer's Liability Insurance covering all of the Contractor's employees acting within the course and scope of their employment.

b. Commercial General Liability Insurance written on ISO occurrence form CG 00 01 10/93 or equivalent, covering premises operations, fire damage, independent contractors, products and completed operations, blanket contractual liability, personal injury, and advertising liability with minimum limits as follows:

- i. \$1,000,000 each occurrence;
- ii. \$1,000,000 general aggregate;
- iii. \$1,000,000 products and completed operations aggregate; and
- iv. \$50,000 any one fire.

If any aggregate limit is reduced below \$1,000,000 because of claims made or paid, the contractor shall immediately obtain additional insurance to restore the full aggregate limit and furnish to the State a certificate or other document satisfactory to the State showing compliance with this provision.

c. Automobile Liability Insurance covering any auto (including owned, hired and non-owned autos) with a minimum limit as follows: \$1,000,000 each accident combined single limit.

- 23.2 The State of Colorado shall be named as additional insured on the Commercial General Liability and Automobile Liability Insurance policies (leases and construction contracts will require the additional insured coverage for completed operations on endorsements CG 2010 11/85, CG 2037, or equivalent). Coverage required of the contract will be primary over any insurance or self-insurance program carried by the State of Colorado.
- 23.3 The Contractor will require all insurance policies in any way related to the contract and secured and maintained by the Contractor to include clauses stating that each carrier will waive all rights of recovery, under subrogation or otherwise, against the State of Colorado, its agencies, institutions, organizations, officers, agents, employees and volunteers.
- 23.4 All policies evidencing the insurance coverages required hereunder shall be issued by insurance companies satisfactory to the State.
- 23.5 The Contractor shall provide certificates showing insurance coverage required by this contract to the State within 7 business days of the effective date of the contract, but in no event later than the commencement of the services under the contract. No later than 15 days prior to the expiration date of any such coverage, the contractor shall deliver the State certificates of insurance evidencing renewals thereof. At any time during the term of this contract, the State may request in writing, and the contractor shall thereupon within 10 days supply to the State, evidence satisfactory to the State of compliance with the provisions of this section.
- 23.6 Notwithstanding subsection (a) of this section, if the Contractor is a "public entity" within the meaning of the Colorado Governmental Immunity Act, CRS 24-10-101, et seq., as amended ("Act"), the contractor shall at all times during the term of this contract maintain only such liability insurance, by commercial policy or self-insurance, as is necessary to meet its liabilities under the Act. Upon request by the State, the contractor shall show proof of such insurance satisfactory to the State.

24. Governmental Immunity

Notwithstanding any other provision of this contract to the contrary, no term or condition of this contract shall be construed or interpreted as a waiver, express or implied, of any of the immunities, rights, benefits, protection, or other provisions of the Governmental Immunity Act. The parties understand and agree that liability for claims for injuries to persons or property arising out of negligence of the State of Colorado, its departments, institutions, agencies, boards, officials and employees is controlled and limited by the provisions of sections 24-10-101, et seq., C.R.S., as now or hereafter amended and the risk management statutes, sections 24-30-1501, et seq., C.R.S., as now or hereafter amended.

25. Force Majeure

Neither Contractor nor the State shall be liable to the other for any delay in, or failure of performance of, any covenant or promise contained in this contract, nor shall any delay or failure constitute default or give rise to any liability for damages if, and only to the extent that, such delay or failure is caused by "force majeure." As used in this contract "force majeure" means acts of God; acts of the public enemy; public health/safety emergency acts of the State or any governmental entity in its sovereign capacity; fires; floods, epidemics; quarantine restrictions; strikes or other labor disputes; freight embargoes; or unusually severe weather.

MISCELLANEOUS PROVISIONS

26. Representatives

Each individual identified below is the principal representative of the designating party. All notices required to be given to a party pursuant to this contract shall be hand delivered with receipt required or sent by certified or registered mail to such party's principal representative at the address for such party set forth below. Either party may from time to time designate by written notice substitute addresses or persons to whom such notices shall be sent.

For the State:

Name: Todd Doherty

Title: Project Manager, Intrastate Water Management and Development, CWCB

Address: 1313 Sherman Street, Room 721, Denver, CO 80203

Telephone: (303) 866-3945

For Contractor:

Name: Randall Fischer

Title: Secretary, Fire Mountain Canal and Reservoir Company

Address: P.O. Box 414, Paonia, CO 81428

Telephone: (970) 527-3662

27. Assignment and Successors

Unless otherwise specified in **Exhibit A**, Scope of Work, Contractor's rights and obligations under this contract shall be deemed to be personal and may not be transferred, assigned or subcontracted without the prior, written consent of the State, which shall not be unreasonably withheld. Any attempt at assignment, transfer or subcontracting without such consent shall be void, except that Contractor may assign the right to receive payments from the State pursuant to section 4-9-318, C.R.S. All subcontracts and subcontractors consented to by the State shall be made subject to the requirements, terms and conditions of this contract. Contractor alone shall be responsible for all subcontracting arrangements, directions and delivery of subcontracted work or Goods, and performance of any subcontracted Services. Contractor shall require and ensure that each subcontractor shall assent in writing to all the terms and conditions of this contract, including an obligation of the subcontractor to indemnify the State as is required under Section 3 of the Colorado Special Provisions, incorporated as a part of this contract.

28. 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 State and Contractor. Nothing contained in this contract shall give or allow any claim or right of action whatsoever by any third person. It is the express intention of the State and Contractor that any such person or entity, other than the State or Contractor, receiving services or benefits under this contract shall be deemed an incidental beneficiary only.

29. Severability

To the extent this contract may be executed and performance of the obligations of the parties may be accomplished within the intent of the contract, the terms of this contract are severable. Should any term or provision hereof be declared invalid or become inoperative for any reason, such invalidity or failure shall not affect the validity of any other term or provision hereof.

30. Waiver

The waiver of any breach of a term, provision, or requirement of this contract shall not be construed or deemed as waiver of any subsequent breach of such term, provision, or requirement, or of any other term, provision, or requirement.

31. Entire Understanding

This contract is intended as the complete integration of all understandings between the parties. No prior or contemporaneous addition, deletion, or other amendment hereto shall have any force or effect whatsoever, unless embodied herein in writing. No subsequent novation, renewal, addition, deletion, or other amendment hereto shall have any force or effect unless embodied in a writing executed and approved pursuant to the Colorado State Fiscal Rules.

32. Survival of Certain Contract Terms

Notwithstanding anything herein to the contrary, all terms and conditions of this contract, including but not limited to its exhibits and attachments, which may require continued performance, compliance, or effect beyond the termination date of the contract, shall survive such termination date and shall be enforceable by the State in the event of the Contractor's failure to perform or comply as required.

33. Modification and Amendment

- 32.1 This contract is subject to such modifications as may be required by changes in Federal or Colorado State law, or their implementing regulations. Any such required modification automatically shall be incorporated into and be part of this contract on the Effective Date of such change, as if fully set forth herein.
- 32.2 Except as specifically provided in this contract, no modification of this contract shall be effective unless agreed to in writing by both parties in an Amendment to this contract, properly executed and approved in accordance with Colorado State law and State Fiscal Rules.

34. Venue

Venue for any action related to performance of this contract shall be in the City and County of Denver, Colorado.

35. Order of Precedence

The provisions of this contract shall govern the relationship of the State and Contractor. In the event of conflicts or inconsistencies between this contract and its exhibits or attachments, such conflicts or inconsistencies shall be resolved by reference to the documents in the following order of priority:

- (a) Colorado Special Provisions, pages 12 to 13.
- (b) Remaining pages of the contract, pages 1 to 11.
- (c) **Exhibit A**, Statement of Work

SPECIAL PROVISIONS

The Special Provisions apply to all contracts except where noted in *italics*.

1. **CONTROLLER'S APPROVAL. CRS §24-30-202 (1).** This contract shall not be deemed valid until it has been approved by the Colorado State Controller or designee.
2. **FUND AVAILABILITY. CRS §24-30-202(5.5).** Financial obligations of the State payable after the current fiscal year are contingent upon funds for that purpose being appropriated, budgeted, and otherwise made available.
3. **INDEMNIFICATION.** Contractor shall indemnify, save, and hold harmless the State, its employees and agents, against any and all claims, damages, liability and court awards including costs, expenses, and attorney fees and related costs, incurred as a result of any act or omission by Contractor, or its employees, agents, subcontractors, or assignees pursuant to the terms of this contract.
[Applicable Only to Intergovernmental Contracts] No term or condition of this contract shall be construed or interpreted as a waiver, express or implied, of any of the immunities, rights, benefits, protection, or other provisions, of the Colorado Governmental Immunity Act, CRS §24-10-101 et seq., or the Federal Tort Claims Act, 28 U.S.C. 2671 et seq., as applicable, as now or hereafter amended.
4. **INDEPENDENT CONTRACTOR. 4 CCR 801-2.** Contractor shall perform its duties hereunder as an independent contractor and not as an employee. Neither contractor nor any agent or employee of contractor shall be or shall be deemed to be an agent or employee of the state. Contractor shall pay when due all required employment taxes and income taxes and local head taxes on any monies paid by the state pursuant to this contract. Contractor acknowledges that contractor and its employees are not entitled to unemployment insurance benefits unless contractor or a third party provides such coverage and that the state does not pay for or otherwise provide such coverage. Contractor shall have no authorization, express or implied, to bind the state to any agreement, liability or understanding, except as expressly set forth herein. Contractor shall provide and keep in force workers' compensation (and provide proof of such insurance when requested by the state) and unemployment compensation insurance in the amounts required by law and shall be solely responsible for its acts and those of its employees and agents.
5. **NON-DISCRIMINATION.** Contractor agrees to comply with the letter and the spirit of all applicable State and federal laws respecting discrimination and unfair employment practices.
6. **CHOICE OF LAW.** The laws of the State of Colorado, and rules and regulations issued pursuant thereto, shall be applied in the interpretation, execution, and enforcement of this contract. Any provision of this contract, whether or not incorporated herein by reference, which provides for arbitration by any extra-judicial body or person or which is otherwise in conflict with said laws, rules, and regulations shall be considered null and void. Nothing contained in any provision incorporated herein by reference which purports to negate this or any other special provision in whole or in part shall be valid or enforceable or available in any action at law, whether by way of complaint, defense, or otherwise. Any provision rendered null and void by the operation of this provision will not invalidate the remainder of this contract, to the extent that this contract is capable of execution. At all times during the performance of this contract, Contractor shall strictly adhere to all applicable federal and State laws, rules, and regulations that have been or may hereafter be established.
7. **VENDOR OFFSET. CRS §§24-30-202 (1) and 24-30-202.4. [Not Applicable to Intergovernmental Agreements]** The State Controller may withhold payment of certain debts owed to State agencies under the State's vendor offset intercept system for: (a) unpaid child support debts or child support 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 certified by the State Controller as owing to the State as a result of final agency determination or judicial action.
8. **SOFTWARE PIRACY PROHIBITION. Governor's Executive Order D 002 00.** No State or other public funds payable under this contract shall be used for the acquisition, operation, or maintenance of computer software in violation of federal copyright laws or applicable licensing restrictions. Contractor

hereby certifies that, for the term of this contract and any extensions, Contractor has in place appropriate systems and controls to prevent such improper use of public funds. If the State determines that Contractor is in violation of this paragraph, the State may exercise any remedy available at law or equity or under this contract, including, without limitation, immediate termination of this contract and any remedy consistent with federal copyright laws or applicable licensing restrictions.

9. EMPLOYEE FINANCIAL INTEREST. CRS §24-18-201 and §24-50-507. The signatories aver that to their knowledge, no employee of the State has any personal or beneficial interest whatsoever in the service or property described in this contract.

10. PUBLIC CONTRACTS FOR SERVICES. CRS §8-17.5-101. *[Not Applicable to agreements relating to the offer, issuance, or sale of securities, investment advisory services or fund management services, sponsored projects, intergovernmental agreements, or information technology services or products and services]* Contractor certifies, warrants, and agrees that it does not knowingly employ or contract with an illegal alien who will perform work under this contract and will confirm the employment eligibility of all employees who are newly hired for employment in the United States to perform work under this contract, through participation in the E-Verify Program or the Department program established pursuant to CRS §8-17.5-102(5)(c), Contractor shall not knowingly employ or contract with an illegal alien to perform work under this contract or enter into a contract with a subcontractor that fails to certify to Contractor that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this contract. Contractor (a) shall not use E-Verify Program or Department program procedures to undertake pre-employment screening of job applicants while this contract is being performed, (b) shall notify the subcontractor and the contracting State agency within three days if Contractor has actual knowledge that a subcontractor is employing or contracting with an illegal alien for work under this contract, (c) shall terminate the subcontract if a subcontractor does not stop employing or contracting with the illegal alien within three days of receiving the notice, and (d) shall 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 Contractor participates in the Department program, Contractor shall deliver to the contracting State agency, institution of higher education or political subdivision a written, notarized affirmation, affirming that Contractor has examined the legal work status of such employee, and comply with all of the other requirements of the Department program. If Contractor fails to comply with any requirement of this provision or CRS §8-17.5-101 et seq., the contracting State agency, institution of higher education or political subdivision may terminate this contract for breach and, if so terminated, Contractor shall be liable for damages.

11. PUBLIC CONTRACTS WITH NATURAL PERSONS. CRS §24-76.5-101. Contractor, 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 one form of identification required by CRS §24-76.5-103 prior to the effective date of this contract.

Revised May 13, 2008

THE PARTIES HERETO HAVE EXECUTED THIS CONTRACT

GRANTEE:

STATE OF COLORADO:

BILL RITTER, JR. GOVERNOR

Fire Mountain Canal and Reservoir Company

By

William C. Howe
For Executive Director, Department of Natural Resources

William C. Howe
Signature of Authorized Officer

WILLIAM C HOWE PRES.
(Print) Name & Title of Authorized Officer

Date 6-2-08

LEGAL REVIEW:

Attorney General, John W. Suthers

By WJA

CORPORATIONS:

(A corporate attestation is required.)

Attest (Seal) By [Signature] SECRETARY 5/28/2008
(Corporate Secretary or Equivalent) (Place corporate seal here, if available)

ALL CONTRACTS MUST BE APPROVED BY THE STATE CONTROLLER

CRS 24-30-202 requires that the State Controller approve all state Contracts. This Contract is not valid until the State Controller, or such assistant as he may delegate, has signed it. The Contractor is not authorized to begin performance until the Contract is signed and dated below. If performance begins prior to the date below, the State of Colorado may not be obligated to pay for the goods and/or services provided.

STATE CONTROLLER
David J. McDermott, CPA

By Dianne C. Stump
Date 8-22-08

Exhibit A

COLORADO WATER CONSERVATION BOARD WATER SUPPLY RESERVE ACCOUNT SEDIMENTATION MANAGEMENT STUDY FOR PAONIA RESERVOIR

SCOPE OF WORK

The work will be performed in two phases. The first phase will consist of identifying and evaluating possible mitigation options at a feasibility level in order to narrow the focus to the most feasible alternative(s). The objective of the first phase of the study is to assess the potential technical feasibility of alternative sediment management techniques, identify the most economical alternative, and identify potential fatal flaws. This phase will also research regulatory requirements associated with optional sediment management techniques. Phase One work will include the following:

1. Review Existing Information – Existing information includes original construction documents, established operation and maintenance procedures, sediment surveys performed by the U.S. Bureau of Reclamation, as well as sampling and studies performed by the U.S. Geologic Survey, the Colorado Department of Health and Environment and the U.S. Forest Service. The initial step of the study will include research and familiarization with these and any other documents discovered.

2. Peer Review of Previous Studies – Previous studies conducted by Western Engineers include the following:

April 2005 – Preliminary Dredging Feasibility Study

May 2006 – Evaluation of Historic Sediment Surveys

February 2007 – Preliminary Evaluation of Sediment Mitigation Options

A review of this information will be conducted by a firm or individual with broad experience and expertise in reservoir sedimentation. A preliminary report will be prepared discussing the results of the peer review including comments regarding validity of conclusions

3. Collection of Additional Data - This task entails collecting the following information:

- a. Hydrologic data (stream flow and rainfall data).
- b. Sediment sampling and testing – Samples will be collected from the surface of the sediment at 10 to 15 locations. These samples will be tested for grain size distribution, index properties, moisture content, organic carbon content and agronomic characteristics. Selected samples will be tested for hazardous constituents.
- c. Grab samples of the inflow and outflow water will be obtained several times during the season and the samples will be tested for solids concentration plus the characteristics listed above for the sediment samples. It is anticipated that 10 to 15 of these water samples will be obtained and tested.

4. Feasibility Evaluation of Optional Sediment Management Techniques – A range of possible mitigation options will be considered and evaluated as discussed below:

- a. Pressure Flushing – Pressure flushing is executed with a high water surface elevation in the reservoir and entails opening a low-level gate at the dam. This flushing technique is usually implemented solely to clear deposited sediment from the immediate area in front of low level outlets. Pressure flushing leads to the development of a cone-like space upstream of the outlet, which is cleared of sediment.
- b. Drawdown Flushing – Drawdown flushing is used to remove deposited sediment from the reservoir bed. The objective with drawdown flushing is to draw the water surface elevation in the reservoir down sufficiently to result in river-like flow conditions in the reservoir that will lead to re-suspension of deposited sediment and its discharge downstream of the dam. Such operation requires a low-level outlet with sufficient discharge capacity, and at a low enough invert, to develop the desired flow conditions. Once the river-like flow conditions have established it is necessary to discharge enough water through the reservoir to re-suspend the sediment and discharge it downstream of the dam.
- c. Reservoir Routing – This option entails creating flow conditions in the reservoir during flood flows that will, ideally, transport incoming sediment through the reservoir without deposition. This technique does not increase reservoir capacity, because it does not re-suspend any significant amounts of deposited sediment. The main goal is to prevent additional sedimentation by conveying incoming sediment through the reservoir without deposition. The investigation of routing or flushing options will also involve evaluation of the feasibility for installation of a low-level controlled outlet.
- d. Mechanical Dredging – Mechanical dredging involves using a mechanical dredge to loosen sediment material, pump it into a discharge line and transport the dredged slurry to a sedimentation basin where it can be settled and decanted. The disposal site must be sufficiently flat and large enough to allow for local permanent disposal of the dewatered sediment.
- e. Hydro-Suction – This option is similar in concept to mechanical dredging except that the removal of the sediment from the reservoir basin is done with out a pump. The sediment is lifted from the bottom of the reservoir and transported downstream from the dam based on the difference in elevation between the reservoir level and the downstream disposal site. Both mechanical dredging and hydro-suction require a disposal site and, therefore, the Phase One work will include identification of potential sites.
- f. Reduction of Basin Sediment Yield - Although experience has shown that catchment management is not generally an economically feasible approach to reservoir sedimentation management, information from long-time local residents suggests that a large source, if not the primary source, of sediment consists of a landslide, or series of landslides, located within a very limited stretch of one of the tributaries to Paonia Reservoir. This part of the study will include a detailed field examination of the drainage basin, selected sampling and testing of grab samples from any suspect source areas, review of aerial photography, research existing sediment yield information (including regional data), identification of both human and natural disturbances and characterization of any channel degradation.

5. The evaluation of alternatives will include conceptual designs as appropriate and associated cost estimates.

6. Investigate Regulatory Constraints – The cost and/or feasibility of some mitigation options may be significantly impacted by the necessity to satisfy federal, state and local legislative and regulatory agency rules and standards. Additionally, some of the methods normally used for sediment control may not be commonly used in the State of Colorado and

rules and regulations may need to be clarified, expanded or revised to address these methods. Therefore, it will be important to adequately identify and define the limitations that will constrain these methods.

7. The Phase One study findings will be presented in a report. The report will identify the technical feasibility of the alternative sediment management techniques and will select the most economical sediment management options. Additionally, the report will provide the engineers' opinions regarding the likely degree of success that can be anticipated using the techniques evaluated. The report will be followed by discussions between the project sponsors and the engineers. The objective of the discussions will be to agree on two or three selected sediment management techniques that should be investigated in more detail in Phase Two.

Phase Two work will consist of refining the selected option(s) by obtaining more comprehensive supporting data, performing more detailed engineering analyses, refining cost estimates and pursuing needed permits. The actual scope of the Phase Two work will be somewhat dependent on the results of the Phase One analyses. The current application for funding is based on the anticipated scope of work described below. The cost estimate includes a not-to-exceed amount for investigation of the selected option(s). A contingency factor has been applied to the estimated study cost to account for any needed modifications to the Phase Two scope of work:

1. Detailed Evaluation of the Selected Option(s) – Depending on the selected option(s) the Phase Two work may include one or more of the following possible work tasks:
 - a. Preparation of Numeric Sediment Transport Model and Evaluation – In order to evaluate the potential success of mitigation options which involve flushing or routing, it will be necessary to develop a computerized sediment transport/deposition model of the reservoir basin. This model will be developed using one of the existing modeling programs for unsteady, non-uniform sediment transport such as MIKE 11 or MIKE 21C (developed by the Danish Hydraulic Institute). This work will include a conceptual investigation to determine the most appropriate software; calibration of the model using currently existing stream concentration and flow data, data collected as part of this investigation as well as existing reservoir sedimentation data; and running the model under various anticipated or proposed conditions. In addition to modeling the effect of various flushing/routing scenarios, analyses will be made of variations in reservoir operational protocols on future sediment accumulation rates.
 - b. Dredging Disposal Sites – It will be necessary to enter into discussions with the owners of potential disposal sites in order to assure that a suitable site can be obtained and to assess the likely cost involved with developing such a site. Preliminary designs will be provided for identified sites. It will also be necessary to determine the right of way requirements needed to provide a discharge pipeline route from the dam to the disposal site.
 - c. Drainage Basin Yield Reduction – Further investigations will be conducted related to any methods which are identified in the Phase One evaluation as having a potential for economical success. The related Phase Two work will include obtaining field soil samples and performing investigations into the costs involved and the likelihood of success for these options. For example, if it is found that active slides comprise a significant source of sediment, shallow soil samples will be obtained and tested, the slide characteristics will be further investigated and preliminary stability evaluations will be

performed to identify possible stabilization alternatives. It is not intended that this work will include detailed geotechnical investigations or analyses.

- d. Preliminary designs may be performed for installation of a low-level outlet gate. This work will include collaboration with the U.S. Bureau of Reclamation which retains safety and technical oversight of the facility.

2. Monitoring and Sampling – It is anticipated that sediment monitoring stations will be established at two locations. These locations will be immediately upstream from the reservoir (probably located near the existing flow gauging station) and immediately downstream from the reservoir. These stations will provide a means to start gathering baseline data for such tasks as correlating the stations with total trapped sediment, correlating with runoff rates, identifying seasonal variations in sedimentation and establishing patterns of sediment inflow and outflow which will be needed to implement a flushing or routing protocol. This task will include the following:

- a. Each station will include means to monitor water turbidity, temperature and conductivity. The turbidity probe will be tethered at the most appropriate location and depth in the stream in such a way that it will rise and fall with the stream stage.
- b. Each station will also include the ability to monitor stream stage.
- c. A pumped sampler will be installed at each station which includes the ability to obtain stream samples at the location of the turbidity probe at designated times. The sampling events may be triggered either by pre-established rules, or by remote communication. Each sampler will be capable of obtaining and storing up to 24 samples.
- d. Measurement data will be remotely available by means of satellite telemetry.
- e. At the downstream station (and, if necessary, at the upstream station), a flow rating curve will be developed using standard flow measurement techniques. If appropriate, the station at the upper end of the reservoir basin will be located near the existing stream gauging station. Stream flows downstream from the reservoir will also be determined based on inflow and storage variations. Time-variable relationships will be determined between reservoir stage and reservoir storage capacity based on historic sedimentation rates.
- f. Turbidity/Sediment Concentration and Stage/Sediment Concentration relationships will be determined based on periodic field suspended sediment samples taken at each station. It is anticipated that samples will be taken during normal flow periods each season as well as important flow events such as rising and falling limbs of storms and various spring runoff flows. The estimated cost for the proposed work is based on a maximum of 15 sampling events.
- g. The turbidity monitoring and suspended sediment monitoring will need to be supplemented with bed load sampling. However, previous studies have indicated that bed load is a small percentage of total load and, therefore, it is anticipated that the number of bed load samples will be approximately 25 percent of the suspended sediment samples.
- h. Samples will be obtained of the bed material at selected locations.
- i. Appropriate laboratory tests will be performed on all collected samples.
- j. The costs presented in this application are based on a sampling, monitoring and calibration program which continues for a period of two years.

3. Cost/Benefit Analysis – A cost/benefit analysis will be performed for each of the selected mitigation methods evaluated. Costs will include construction costs, life-cycle costs and any

other indirect costs. Benefits will include both direct benefits from storage recovery as well as any identifiable indirect benefits.

4. Runoff Prediction Tools – The ability to reliably anticipate storable runoff volume will increase the range of sediment management options. For example, if flushing is found to be a feasible option, the ability to maximize the average available reservoir head and/or reservoir release flows while still assuring full storage will increase the effectiveness of the flushing processes. Therefore, part of the Phase Two portion of the study will be to evaluate the potential for developing accurate runoff prediction models based on a combination of SNOTEL data, basin characteristics and climate forecasts. This work will consist of the following:

- a. Research the availability of existing runoff prediction models and their applicability.
- b. Make a preliminary correlation between historic SNOTEL records and runoff volume.

5. Investigate Funding Options – Research will be done to assure that all feasible sources of funding have been identified. These may include but not be limited to water users, the Colorado River Water Conservation District, State agencies and Federal Agencies.

6. Investigate Partnering Possibilities – There may be other entities which have an interest in pursuing sediment mitigation but are not in a position to contribute funding to the project. These entities might be able to contribute technical expertise, political support or administrative assistance. These groups might include, but are not be limited to, the U.S. Natural Resource Conservation Service, the U.S. Bureau of Reclamation, the U.S. Fish and Wildlife Service, the U.S. Geological Survey, the local Soil Conservation District, local water users groups, the Colorado Department of Health and Environment, the Colorado Division of Wildlife, the North Fork River Improvement Association and the Colorado Water Conservation Board. The potential interested parties will be identified and contacted to determine interest and ability to assist.

7. Meetings and Preparation of Report – Status and steering meetings will be held with the North Fork Water Conservancy District and other interest parties at selected intervals. A final report will be prepared which summarizes the investigations performed and their results, provides updated cost estimates for the alternatives, presents advantages and disadvantages of each alternative and presents conclusions and recommendations for future action.

A time schedule along with a schedule of costs and a detailed study cost estimate are included with this supplement.

PAYMENT

Invoicing shall be by task. The request for payment shall include: a description of the work accomplished; an estimate of the percent completion for individual tasks and for the entire project in relation to the percentage of budget spent. Costs incurred prior to the effective date of this purchase order are not reimbursable. Invoicing shall be based on actual costs utilizing the rates summarized above.

The last 5 percent of the project budget will be withheld until final project documentation is complete. All products, data and information developed as a result of this purchase order must be provided to CWCB in hard copy and electronic format as part of the project documentation.

Exhibit A

COLORADO WATER CONSERVATION BOARD WATER SUPPLY RESERVE ACCOUNT SEDIMENTATION MANAGEMENT STUDY FOR PAONIA RESERVOIR

SCOPE OF WORK

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rules and regulations may need to be clarified, expanded or revised to address these methods. Therefore, it will be important to adequately identify and define the limitations that will constrain these methods.

7. The Phase One study findings will be presented in a report. The report will identify the technical feasibility of the alternative sediment management techniques and will select the most economical sediment management options. Additionally, the report will provide the engineers' opinions regarding the likely degree of success that can be anticipated using the techniques evaluated. The report will be followed by discussions between the project sponsors and the engineers. The objective of the discussions will be to agree on two or three selected sediment management techniques that should be investigated in more detail in Phase Two.

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 - b. Dredging Disposal Sites – It will be necessary to enter into discussions with the owners of potential disposal sites in order to assure that a suitable site can be obtained and to assess the likely cost involved with developing such a site. Preliminary designs will be provided for identified sites. It will also be necessary to determine the right of way requirements needed to provide a discharge pipeline route from the dam to the disposal site.
 - c. Drainage Basin Yield Reduction – Further investigations will be conducted related to any methods which are identified in the Phase One evaluation as having a potential for economical success. The related Phase Two work will include obtaining field soil samples and performing investigations into the costs involved and the likelihood of success for these options. For example, if it is found that active slides comprise a significant source of sediment, shallow soil samples will be obtained and tested, the slide characteristics will be further investigated and preliminary stability evaluations will be

performed to identify possible stabilization alternatives. It is not intended that this work will include detailed geotechnical investigations or analyses.

- d. Preliminary designs may be performed for installation of a low-level outlet gate. This work will include collaboration with the U.S. Bureau of Reclamation which retains safety and technical oversight of the facility.

2. Monitoring and Sampling – It is anticipated that sediment monitoring stations will be established at two locations. These locations will be immediately upstream from the reservoir (probably located near the existing flow gauging station) and immediately downstream from the reservoir. These stations will provide a means to start gathering baseline data for such tasks as correlating the stations with total trapped sediment, correlating with runoff rates, identifying seasonal variations in sedimentation and establishing patterns of sediment inflow and outflow which will be needed to implement a flushing or routing protocol. This task will include the following:

- a. Each station will include means to monitor water turbidity, temperature and conductivity. The turbidity probe will be tethered at the most appropriate location and depth in the stream in such a way that it will rise and fall with the stream stage.
- b. Each station will also include the ability to monitor stream stage.
- c. A pumped sampler will be installed at each station which includes the ability to obtain stream samples at the location of the turbidity probe at designated times. The sampling events may be triggered either by pre-established rules, or by remote communication. Each sampler will be capable of obtaining and storing up to 24 samples.
- d. Measurement data will be remotely available by means of satellite telemetry.
- e. At the downstream station (and, if necessary, at the upstream station), a flow rating curve will be developed using standard flow measurement techniques. If appropriate, the station at the upper end of the reservoir basin will be located near the existing stream gauging station. Stream flows downstream from the reservoir will also be determined based on inflow and storage variations. Time-variable relationships will be determined between reservoir stage and reservoir storage capacity based on historic sedimentation rates.
- f. Turbidity/Sediment Concentration and Stage/Sediment Concentration relationships will be determined based on periodic field suspended sediment samples taken at each station. It is anticipated that samples will be taken during normal flow periods each season as well as important flow events such as rising and falling limbs of storms and various spring runoff flows. The estimated cost for the proposed work is based on a maximum of 15 sampling events.
- g. The turbidity monitoring and suspended sediment monitoring will need to be supplemented with bed load sampling. However, previous studies have indicated that bed load is a small percentage of total load and, therefore, it is anticipated that the number of bed load samples will be approximately 25 percent of the suspended sediment samples.
- h. Samples will be obtained of the bed material at selected locations.
- i. Appropriate laboratory tests will be performed on all collected samples.
- j. The costs presented in this application are based on a sampling, monitoring and calibration program which continues for a period of two years.

3. Cost/Benefit Analysis – A cost/benefit analysis will be performed for each of the selected mitigation methods evaluated. Costs will include construction costs, life-cycle costs and any

other indirect costs. Benefits will include both direct benefits from storage recovery as well as any identifiable indirect benefits.

4. Runoff Prediction Tools – The ability to reliably anticipate storable runoff volume will increase the range of sediment management options. For example, if flushing is found to be a feasible option, the ability to maximize the average available reservoir head and/or reservoir release flows while still assuring full storage will increase the effectiveness of the flushing processes. Therefore, part of the Phase Two portion of the study will be to evaluate the potential for developing accurate runoff prediction models based on a combination of SNOTEL data, basin characteristics and climate forecasts. This work will consist of the following:

- a. Research the availability of existing runoff prediction models and their applicability.
- b. Make a preliminary correlation between historic SNOTEL records and runoff volume.

5. Investigate Funding Options – Research will be done to assure that all feasible sources of funding have been identified. These may include but not be limited to water users, the Colorado River Water Conservation District, State agencies and Federal Agencies.

6. Investigate Partnering Possibilities – There may be other entities which have an interest in pursuing sediment mitigation but are not in a position to contribute funding to the project. These entities might be able to contribute technical expertise, political support or administrative assistance. These groups might include, but are not be limited to, the U.S. Natural Resource Conservation Service, the U.S. Bureau of Reclamation, the U.S. Fish and Wildlife Service, the U.S. Geological Survey, the local Soil Conservation District, local water users groups, the Colorado Department of Health and Environment, the Colorado Division of Wildlife, the North Fork River Improvement Association and the Colorado Water Conservation Board. The potential interested parties will be identified and contacted to determine interest and ability to assist.

7. Meetings and Preparation of Report – Status and steering meetings will be held with the North Fork Water Conservancy District and other interest parties at selected intervals. A final report will be prepared which summarizes the investigations performed and their results, provides updated cost estimates for the alternatives, presents advantages and disadvantages of each alternative and presents conclusions and recommendations for future action.

A time schedule along with a schedule of costs and a detailed study cost estimate are included with this supplement.

	2008					2009												2010										
TASK ITEM:	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
PHASE ONE EVALUATION:																												
Review Existing Information	▬																											
Peer Review of Existing Studies	▬																											
Collection of Additional Data	▬	▬																										
Feasibility of Management Options		▬	▬	▬																								
Conceptual Designs and Cost Estimates			▬	▬	▬																							
Regulatory Constraints				▬	▬																							
Report and Meeting					▬																							
PHASE TWO EVALUATION:																												
Evaluation of Selected Options						▬	▬	▬	▬	▬	▬	▬																
Monitoring And Sampling						▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	▬	
Cost Benefit Analysis											▬	▬	▬	▬	▬													
Runoff Prediction Tools													▬	▬	▬													
Investigate Funding Options												▬	▬	▬	▬													
Investigate Partnering Possibilities												▬	▬	▬	▬													
Meetings And Preparation of Report															▬	▬	▬											
STATUS REPORTS			X		X				X				X			X		X			X		X		X		X	

NORTH FORK WATER CONSERVANCY DISTRICT
SEDIMENTATION MANAGEMENT STUDY FOR PAONIA RESERVOIR
SCHEDULE OF WORK ITEMS

FIGURE 1
4/17/2007
REVISED 12/10/2007
REVISED 7/16/2008
REVISED 8/14/2008

PAONIA RESERVOIR SEDIMENTATION MANAGEMENT STUDY COST ESTIMATE

[illegible]

PAYMENT

Invoicing shall be by task. The request for payment shall include: a description of the work accomplished; an estimate of the percent completion for individual tasks and for the entire project in relation to the percentage of budget spent. Costs incurred prior to the effective date of this purchase order are not reimbursable. Invoicing shall be based on actual costs utilizing the rates summarized above.

The last 5 percent of the project budget will be withheld until final project documentation is complete. All products, data and information developed as a result of this purchase order must be provided to CWCB in hard copy and electronic format as part of the project documentation.

CONTRACT AMENDMENT

Amendment #1 C150414	Original Contract CLIN # 09PDA00018	Amendment CMS # 26966
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1) PARTIES

This Amendment to the above-referenced Original Contract (hereinafter called the Contract) is entered into by and between Fire Mountain (hereinafter called "Contractor"), and the STATE OF COLORADO (hereinafter called the "State") acting by and through the Department of Natural Resources, Colorado Water Conservation Board, (hereinafter called the "DNR/CWCB").

2) EFFECTIVE DATE AND ENFORCEABILITY

This Amendment shall not be effective or enforceable until it is approved and signed by the Colorado State Controller or designee (hereinafter called the "Effective Date"), but shall be effective and enforceable thereafter in accordance with its provisions. The State shall not be liable to pay or reimburse Contractor for any performance hereunder, including, but not limited to costs or expenses incurred, or be bound by any provision hereof prior to the Effective Date.

3) FACTUAL RECITALS

The Parties entered into the Contract to perform the Paonia Reservoir Sedimentation Management Study.

4) CONSIDERATION

Consideration for this Amendment consists of the payments to be made hereunder and the obligations, promises, and agreements herein set forth.

5) LIMITS OF EFFECT

This Amendment is incorporated by reference into the Contract, and the Contract and all prior amendments thereto, if any, remain in full force and effect except as specifically modified herein.

6) MODIFICATIONS.

The Contract and all prior amendments thereto, if any, are modified as follows:

- a. **Paragraph 4.1 is amended to read as follows:** "This contract shall be effective upon approval by the Colorado State Controller, or designee, (the "Effective Date") and extend through February 28, 2013. Performance of this contract shall commence as soon as practicable after the Effective Date and shall be undertaken and performed in the sequence and manner set forth in Exhibit A "Scope of Work".
- b. The schedule for the Scope of Work attached to the Original Contract as Exhibit A, is replaced with the revised schedule attached hereto as Exhibit 2 and incorporated herein.
- c. **Indemnification**
The following indemnification section is added to the contract as section ##:
Contractor shall indemnify, save, and hold harmless the State, its employees and agents, against any and all claims, damages, liability and court awards including costs, expenses, and attorney fees and related costs, incurred as a result of any act or omission by Contractor, or its employees, agents, subcontractors, or assignees pursuant to the terms of this contract.
- d. **Special Provisions**
The Special Provisions in the original contract are replaced by the Special Provisions in section 9, below.

7) EFFECTIVE DATE OF AMENDMENT

The effective date hereof is upon approval of the State Controller or their delegate.

8) ORDER OF PRECEDENCE

Except for the Special Provisions, in the event of any conflict, inconsistency, variance, or contradiction between the provisions of this Amendment and any of the provisions of the Contract, the provisions of this Amendment shall in all respects supersede, govern, and control. The most recent version of the Special Provisions incorporated into the Contract or any amendment shall always control other provisions in the Contract or any amendments.

9) SPECIAL PROVISIONS

These Special Provisions apply to all contracts except where noted in *italics*.

1. CONTROLLER'S APPROVAL. CRS §24-30-202(1). This contract shall not be valid until it has been approved by the Colorado State Controller or designee.

2. FUND AVAILABILITY. CRS §24-30-202(5.5). Financial obligations of the State payable after the current fiscal year are contingent upon funds for that purpose being appropriated, budgeted, and otherwise made available.

3. GOVERNMENTAL IMMUNITY. No term or condition of this contract shall be construed or interpreted as a waiver, express or implied, of any of the immunities, rights, benefits, protections, or other provisions, of the Colorado Governmental Immunity Act, CRS §24-10-101 et seq., or the Federal Tort Claims Act, 28 U.S.C. §§1346(b) and 2671 et seq., as applicable now or hereafter amended.

4. INDEPENDENT CONTRACTOR. Contractor shall perform its duties hereunder as an independent contractor and not as an employee. Neither Contractor nor any agent or employee of Contractor shall be deemed to be an agent or employee of the State. Contractor and its employees and agents are not entitled to unemployment insurance or workers compensation benefits through the State and the State shall not pay for or otherwise provide such coverage for Contractor or any of its agents or employees. Unemployment insurance benefits will be available to Contractor and its employees and agents only if such coverage is made available by Contractor or a third party. Contractor shall pay when due all applicable employment taxes and income taxes and local head taxes incurred pursuant to this contract. Contractor shall not have authorization, express or implied, to bind the State to any agreement, liability or understanding, except as expressly set forth herein. Contractor 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 the State, and **(c)** be solely responsible for its acts and those of its employees and agents.

5. COMPLIANCE WITH LAW. Contractor 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.

6. CHOICE OF LAW. Colorado law, and rules and regulations issued pursuant thereto, shall be applied in the interpretation, execution, and enforcement of this contract. Any provision included or incorporated herein by reference which conflicts with said laws, rules, and regulations shall be null and void. Any provision incorporated herein by reference which purports to negate this or any other Special Provision 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. Any provision rendered null and void by the operation of this provision shall not invalidate the remainder of this contract, to the extent capable of execution.

7. BINDING ARBITRATION PROHIBITED. The State of Colorado does not agree to binding arbitration by any extra-judicial body or person. Any provision to the contrary in this contract or incorporated herein by reference shall be null and void.

8. SOFTWARE PIRACY PROHIBITION. Governor's Executive Order D 002 00. State or other public funds payable under this contract shall not be used for the acquisition, operation, or maintenance of computer software in violation of federal copyright laws or applicable licensing restrictions. Contractor hereby certifies and warrants that, during the term of this contract and any extensions, Contractor has and shall maintain in place appropriate systems and controls to prevent such improper use of public

funds. If the State determines that Contractor is in violation of this provision, the State may exercise any remedy available at law or in equity or under this contract, including, without limitation, immediate termination of this contract and any remedy consistent with federal copyright laws or applicable licensing restrictions.

9. EMPLOYEE FINANCIAL INTEREST/CONFLICT OF INTEREST. CRS §§24-18-201 and 24-50-507.

The signatories aver that to their knowledge, no employee of the State has any personal or beneficial interest whatsoever in the service or property described in this contract. Contractor has no interest and shall not acquire any interest, direct or indirect, that would conflict in any manner or degree with the performance of Contractor's services and Contractor shall not employ any person having such known interests.

10. VENDOR OFFSET. CRS §§24-30-202 (1) and 24-30-202.4. [Not Applicable to intergovernmental agreements] Subject to 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 child support 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.

11. PUBLIC CONTRACTS FOR SERVICES. CRS §8-17.5-101. [Not Applicable to agreements relating to the offer, issuance, or sale of securities, investment advisory services or fund management services, sponsored projects, intergovernmental agreements, or information technology services or products and services] Contractor certifies, warrants, and agrees that it does not knowingly employ or contract with an illegal alien who will perform work under this contract and will confirm the employment eligibility of all employees who are newly hired for employment in the United States to perform work under this contract, through participation in the E-Verify Program or the Department program established pursuant to CRS §8-17.5-102(5)(c), Contractor shall not knowingly employ or contract with an illegal alien to perform work under this contract or enter into a contract with a subcontractor that fails to certify to Contractor that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this contract. Contractor **(a)** shall not use E-Verify Program or Department program procedures to undertake pre-employment screening of job applicants while this contract is being performed, **(b)** shall notify the subcontractor and the contracting State agency within three days if Contractor has actual knowledge that a subcontractor is employing or contracting with an illegal alien for work under this contract, **(c)** shall terminate the subcontract if a subcontractor does not stop employing or contracting with the illegal alien within three days of receiving the notice, and **(d)** shall 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 Contractor participates in the Department program, Contractor shall deliver to the contracting State agency, Institution of Higher Education or political subdivision a written, notarized affirmation, affirming that Contractor has examined the legal work status of such employee, and shall comply with all of the other requirements of the Department program. If Contractor fails to comply with any requirement of this provision or CRS §8-17.5-101 et seq., the contracting State agency, institution of higher education or political subdivision may terminate this contract for breach and, if so terminated, Contractor shall be liable for damages.

12. PUBLIC CONTRACTS WITH NATURAL PERSONS. CRS §24-76.5-101. Contractor, 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 one form of identification required by CRS §24-76.5-103 prior to the effective date of this contract.

Revised 1-1-09

THE PARTIES HERETO HAVE EXECUTED THIS AMENDMENT

* Persons signing for Contractor hereby swear and affirm that they are authorized to act on Contractor's behalf and acknowledge that the State is relying on their representations to that effect.

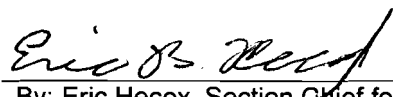
CONTRACTOR

Fire Mountain Canal and Reservoir Company

By: RANDALL W FISHER
Title: SECRETARY / TREASURER


*Signature

STATE OF COLORADO
Bill Ritter, Jr. GOVERNOR

By: 
By: Eric Hecox, Section Chief for Water Supply Planning

ALL CONTRACTS REQUIRE APPROVAL BY THE STATE CONTROLLER

CRS §24-30-202 requires the State Controller to approve all State Contracts. This Contract is not valid until signed and dated below by the State Controller or delegate. Contractor is not authorized to begin performance until such time. If Contractor begins performing prior thereto, the State of Colorado is not obligated to pay Contractor for such performance or for any goods and/or services provided hereunder.

STATE CONTROLLER
David J. McDermott, CPA

By: 

Susan Borup, Controller, Department of Natural Resources

Date: 12/28/10

	2010		2011												2012												2013	
TASK ITEM:	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
PHASE ONE EVALUATION:																												
Review Existing Information																												
Peer Review of Existing Studies																												
Collection of Additional Data																												
Feasibility of Management Options																												
Conceptual Designs and Cost Estimates																												
Regulatory Constraints																												
Report and Meeting																												
PHASE TWO EVALUATION:																												
Evaluation of Selected Options																												
Monitoring And Sampling																												
Cost Benefit Analysis																												
Runoff Prediction Tools																												
Investigate Funding Options																												
Investigate Partnering Possibilities																												
Meetings And Preparation of Report																												

NORTH FORK WATER CONSERVANCY DISTRICT SEDIMENTATION MANAGEMENT STUDY FOR PAONIA RESERVOIR SCHEDULE OF WORK ITEMS

EXHIBIT 2
 4/17/2007
 REVISED 12/10/2007
 REVISED 7/16/2008
 REVISED 8/14/2008
 REVISED 11/11/2010

PAONIA RESERVOIR SEDIMENTATION MANAGEMENT STUDY
SCOPE OF WORK AND STATUS UPDATE
NOVEMBER, 2010

This update is intended to provide information on several items:

1. Describe the project team and task divisions.
2. Identify changes which have been made to the original scope of work as the project has progressed.
3. Provide information on the current status of the work.
4. Itemize previous and expected future expenditures.
5. Present an updated schedule for completion.

The team selected to conduct this investigation included a joint effort by Engineering and Hydrosystems, Inc. (now Golder Associates) led by Dr. George Annandale along with Western Engineers, Inc. led by Bruce Marvin, P.E. Dr. Annandale is a globally recognized expert on reservoir sedimentation. Western Engineers is located geographically close to the project and has conducted preliminary studies on various aspects of the Paonia Reservoir sedimentation problem. Dr. Annandale was a research partner in developing the RESCON method and software for the World Bank. The RESCON model is intended to provide a preliminary evaluation of sediment management options and compare those options based on an economic optimization mathematical function which ranks the viability of each option considered. The RESCON model is based on the assumption that current water storage supplies must be maintained (life cycle analysis as opposed to design life analysis). The work provided by Golder Associates primarily involves conducting the feasibility analyses of options. They also are providing consultation regarding drainage basin sediment yield reduction feasibility. Functions provided by Western Engineers includes providing hydrologic data, conducting geotechnical investigations, sediment sampling, conceptual designs, cost estimating and investigating permitting/environmental requirements.

The original proposal included performing the work in two phases. The first phase is to consist of identifying and evaluating possible mitigation options at a feasibility level in order to narrow the focus to the two or three most feasible alternatives. The objective of the first phase of the study is to assess the potential technical feasibility of alternative sediment management techniques, identify the most economical alternative, and identify potential fatal flaws. This phase also included researching regulatory requirements associated with optional sediment management techniques. Phase One scope of work includes the following:

1. Review Existing Information – Existing information includes original construction documents, established operation and maintenance procedures, sediment surveys performed by

the U.S. Bureau of Reclamation, as well as sampling and studies performed by the U.S. Geologic Survey, the Colorado Department of Health and Environment and the U.S. Forest Service. The initial step of the study includes research and familiarization with these and any other documents discovered. This work has been completed.

2. Peer Review of Previous Studies – This item consisted of a review by Golder of previous work conducted by Western Engineers. This item has been fully completed.

3. Collection of Additional Data - This task entailed collecting hydrologic data, drilling and sampling test holes, conducting laboratory tests on recovered samples, and sampling and testing stream flow for sediment concentration. This work has been completed except for laboratory testing related to final disposition of the sediment including organic carbon, agronomic characteristics and hazardous constituents. Since, based on analyses to date, dredging does not appear to be one of the more feasible options, performance of these tests has been deferred for Phase Two work as needed.

4. Feasibility Evaluation of Optional Sediment Management Techniques – The original proposal indicated that the following range of possible mitigation options would be considered and evaluated:

- a. Pressure Flushing – Pressure flushing is executed with a high water surface elevation in the reservoir and entails opening a low-level gate at the dam. This option is not being considered because it does not differ substantially in effect from the drawdown flushing option.
- b. Drawdown Flushing – Drawdown flushing is used to remove deposited sediment from the reservoir bed by erosion with the reservoir drawn down. Preliminary analyses have been made of this option based on the installation of one or two low-level outlets. However it is desired to refine these preliminary evaluations prior to completion of the Phase One report in accordance with the following considerations:
 - i. Investigate an option in which the volume of flushing water matches the normal demand releases from reservoir storage (run of the river). Previous flushing models have been based on storage releases being made specifically for flushing.
 - ii. Estimate flushing benefits using the existing outlet configuration.
 - iii. Evaluate the potential benefits and costs associated with mechanically-assisted flushing during which flushing channels would be re-routed or expanded.
- c. Reservoir Routing – This option entails creating flow conditions in the reservoir during high flows that will, ideally, transport incoming sediment through the reservoir without deposition. This technique has yet to be evaluated and will be done so for both the existing outlet configuration and the addition of a low level outlet.
- d. Mechanical Dredging – Mechanical dredging involves using a mechanical dredge to loosen sediment material, pump it into a discharge line and transport the dredged slurry to a sedimentation basin where it can be settled and decanted. Preliminary analyses have been made of this option. However the following elements are yet to be completed prior to release of the Phase One report:

- i. Identification of potential disposal sites and the implications associated with each site.
 - ii. Potential for marketable aggregate production and identification of possible markets.
 - iii. Refinement of the cost estimates.
 - e. Hydro-Suction – This option is similar in concept to mechanical dredging except that the removal of the sediment from the reservoir basin is done without a pump based on the siphon effect due to the difference in elevation between the reservoir level and the downstream discharge point. This option has been investigated on a preliminary basis. However it is desired to refine these preliminary evaluations prior to completion of the Phase One report in accordance with the following considerations:
 - i. Investigate an option in which the volume of hydrosuction water matches the normal demand releases from reservoir storage (run of the river). Previous hydrosuction models have been based on storage releases being made specifically to maintain a constant hydrosuction release.
 - ii. Investigate the potential for making low-cost modifications to the existing outlet configuration (rather than installing a low-level outlet) that would accommodate hydrosuction discharges.
 - iii. Evaluate the potential for making hydrosuction discharges over the spillway.
 - f. Reduction of Basin Sediment Yield – This work has consisted of examining the drainage basin from fly-overs, geologic maps and aerial photos. This portion of the work has been completed.
 - g. An option which has been recommended for consideration prior to completion of the Phase One report but which was not included in the original proposal is the effect of combining drawdown flushing with hydrosuction without making modifications to the outlet works. This analysis has yet to be completed.
 - h. Another option which was not included in the original proposal but which should be considered in the Phase One report is the no-action option. The evaluation of this option has yet to be completed.
5. The original proposal did not include any Phase One work related to monitoring the rate of sediment accumulation. However, as will be discussed in subsequent paragraphs, it has become apparent that some consideration of monitoring options should be performed as part of the Phase One work.
6. Conceptual designs and associated cost estimates have been provided for work items completed but are yet to be done for items listed above which are not yet finished.
7. Investigate Regulatory Constraints – Some preliminary contacts have been made with regulating agencies but the bulk of that work is yet to be completed.
8. A preliminary Phase One report has been prepared, presented and discussed. The final Phase One report will include the work items yet to be completed as previously discussed. The objective will be to agree on two or three selected sediment management techniques that should be investigated in more detail in Phase Two.

Phase Two work will consist of refining the selected options by obtaining more comprehensive supporting data, performing more detailed engineering analyses, refining cost estimates and further pursuing needed permits. Because the actual scope of the Phase Two work will be somewhat dependent on the results of the Phase One analyses, there is some uncertainty regarding the details of the Phase Two work and associated costs. However, since much of the Phase One work has been completed, the degree of uncertainty has been reduced and the originally anticipated Phase Two scope of work has been adjusted as indicated below:

1. Preparation of Numeric Sediment Transport Model and Evaluation – Because the effectiveness of flushing and dredging options is highly dependent on sediment transport characteristics, this will still be an important work item.
2. The Phase One work included estimating the value of the water. However, the resulting value was found to be quite low relative to estimates from other projects throughout the United States. The water value is a critical parameter in the RESCON process. Therefore, the Phase Two work has been expanded to include a more robust evaluation of water value.
3. Dredging Disposal Sites – Based on evaluations performed to date, the dredging option appears to be significantly less cost effective than other options. However, it is possible that some of the investigations yet to be completed (such as marketable by-products) may improve the viability of this option. More detailed evaluation of the dredging option will be performed in Phase Two only if it is selected as one of the more optimal alternatives.
4. Drainage Basin Yield Reduction – At this point, it does not appear that further Phase Two investigation into drainage basin yield reduction will be justified. However, it was a minor part of the original Phase Two proposed scope of work.
5. Preliminary designs will be performed for installation of a low-level outlet gate. This work will include collaboration with the U.S. Bureau of Reclamation which retains safety and technical oversight of the facility.
6. Monitoring and Sampling – This work item included in the original proposal was specifically oriented toward installation, calibration and maintenance of automated turbidity monitoring stations. During the course of the Phase One work performed to date, it has become apparent that other options should be considered. Therefore, as previously mentioned some additional work has been included in Phase One for such preliminary investigations. More detailed analysis (and installation, if appropriate) will be conducted as part of the Phase Two work.
7. Cost/Benefit Analysis – A cost/benefit analysis will be performed for each of the selected mitigation methods evaluated. Costs will include construction costs, life-cycle costs and any other indirect costs. Benefits will include both direct benefits from storage recovery as well as any identifiable indirect benefits.

8. Investigate Funding Options – Research will be done to assure that all feasible sources of funding have been identified. These may include but not be limited to water users, the Colorado River Water Conservation District, State agencies and Federal Agencies.

9. Investigate Partnering Possibilities – There may be other entities which have an interest in pursuing sediment mitigation but are not in a position to contribute funding to the project. These entities might be able to contribute technical expertise, political support or administrative assistance. These groups might include, but not be limited to, the U.S. Natural Resource Conservation Service, the U.S. Bureau of Reclamation, the U.S. Fish and Wildlife Service, the U.S. Geological Survey, the local Soil Conservation District, local water users groups, the Colorado Department of Health and Environment, the Colorado Division of Wildlife, the North Fork River Improvement Association and the Colorado Water Conservation Board. The potential interested parties will be identified and contacted to determine interest and ability to assist.

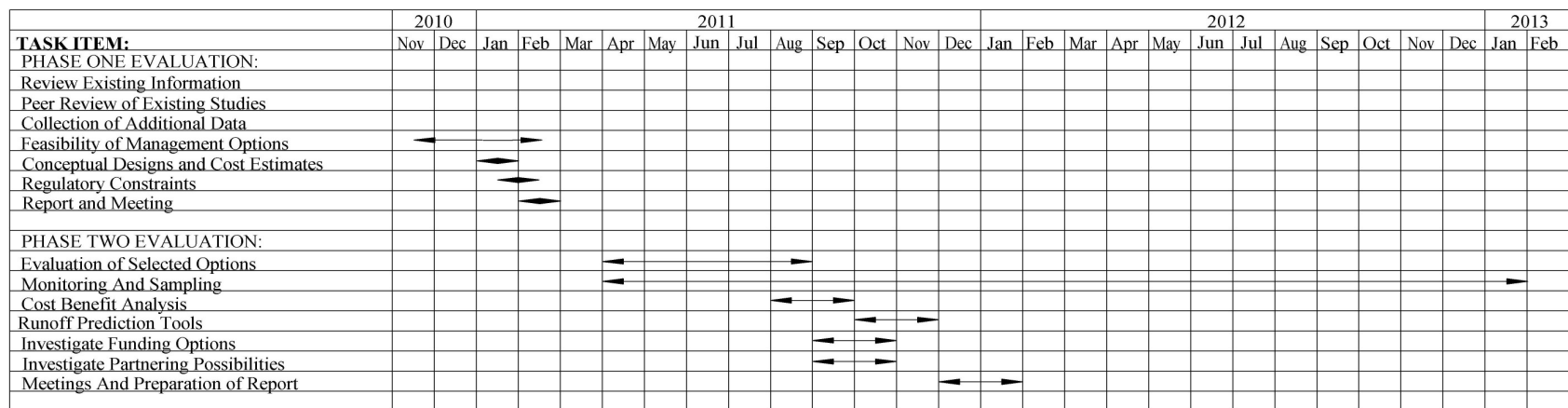
10. Meetings and Preparation of Report – Status and steering meetings will be held with the North Fork Water Conservancy District and other interest parties at selected intervals. A final report will be prepared which summarizes the investigations performed and their results, provides updated costs estimates for the alternatives, presents advantages and disadvantages of each alternative and presents conclusions and recommendations for future action.

Table 1 includes a summary of the Phase One costs. It should be noted that the costs for all of the additional Phase One work previously described are shown on Table 1 under items “Feasibility of Management Options” or “Phase One Report and Meeting” and coming from the contingency amount. It is seen that, after completion of the Phase One work, it is estimated that \$28,898 of the contingency amount will have been expended. That represents about 70 percent of the total original contingency amount (\$41,177) compared with a total original Phase One proposed cost at about 32 percent of the combined Phase One and Phase Two amounts. In other words, the Phase One work will have consumed a disproportionate amount of the total contingency.

The modified schedule is included on Figure 1. The bulk of the Phase Two work will be completed in 2011 or early 2012. However, the schedule extends beyond that to include periodic stream sampling, sediment surveys, instrument calibration and monitoring.

TABLE 1
SUMMARY OF PHASE ONE COSTS

WORK ITEM	PROPOSED AMOUNT	ACTUAL TO-DATE BILLED AMOUNT	ESTIMATED REMAINING AMOUNT	AMOUNT TAKEN FROM CONTINGENCY
Review Existing Information	\$ 4,305	\$ 4,296	\$ 9	\$ 0
Peer review of Existing Studies	\$ 2,960	\$ 2,343	\$ 617	\$ 0
Collection of Additional Data	\$ 26,865	\$ 26,219	\$ 646	\$ 0
Feasibility of Management Options	\$ 23,190	\$ 18,427	\$ 22,223	\$ 17,280
Conceptual Designs and Cost Estimates	\$ 9,090	\$ 6,436	\$ 2,654	\$ 0
Regulatory Constraints	\$ 10,480	\$ 5,487	\$ 4,993	\$ 0
Phase One Report and Meeting	\$ 11,680	\$ 9,239	\$ 3,631	\$ 1,190
Transportation, Copying, Misc	\$ n/a	\$ 695	\$ n/a	\$ 0
Contingency	\$ n/a	\$ 10,428	\$ n/a	\$ 10,428
TOTALS	\$ 88,570	\$ 83,570	\$ 34,773	\$ 28,898



NORTH FORK WATER CONSERVANCY DISTRICT SEDIMENTATION MANAGEMENT STUDY FOR PAONIA RESERVOIR SCHEDULE OF WORK ITEMS

FIGURE 1
 4/17/2007
 REVISED 12/10/2007
 REVISED 7/16/2008
 REVISED 8/14/2008
 REVISED 11/11/2010

STATE OF COLORADO

Colorado Water Conservation Board Department of Natural Resources

1313 Sherman Street, Room 721
Denver, Colorado 80203
Phone: (303) 866-3441
Fax: (303) 866-4474
www.cwcb.state.co.us



February 28, 2013

Fire Mountain Canal and Reservoir Company
Mr. Randall W. Fisher, Secretary/Treasurer
PO Box 1120
Paonia, CO 81428-1128

Bill Ritter, Jr.
Governor

Mike King
DNR Executive Director

Jennifer L. Gimbel
CWCB Director

**RE: Amendment #2 – Extension Request for Paonia Reservoir Sedimentation
Management Study**

Dear Randy:

This letter is to inform you that the contract request for the WSRA grant extension for the above named project was signed on February 26, 2013. A signed original copy of the amendment contract will be mailed to you.

With the executed extension, you are now able to proceed with the project and begin invoicing the State of Colorado for costs incurred through August 22, 2013. Upon receipt of your invoice(s), the State of Colorado will provide payment no later than 45 days. I wish you much success in your project.

Sincerely,

/s/

Todd Doherty
Colorado Water Conservation Board
Water Supply Planning Section
1580 Logan Street, Suite 200
Denver, CO 80203
Phone: 303-866-3441 x3210
Mobile: 720-214-3262
Todd.doherty@state.co.us
www.cwcb.state.co.us and www.ibcc.state.co.us

CONTRACT AMENDMENT

Amendment #2 C150414	Original Contract CLIN# 09PDA00018//CMS#26966	Amendment CMS # 53449
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1) PARTIES

This Amendment to the above-referenced Original Contract (hereinafter called the Contract) is entered into by and between Fire Mountain Canal & Reservoir Company (hereinafter called "Contractor"), and the STATE OF COLORADO (hereinafter called the "State") acting by and through the Department of Natural Resources, Colorado Water Conservation Board, (hereinafter called the "CWCB").

2) EFFECTIVE DATE AND ENFORCEABILITY

This Amendment shall not be effective or enforceable until it is approved and signed by the Colorado State Controller or designee (hereinafter called the "Effective Date"), but shall be effective and enforceable thereafter in accordance with its provisions. The State shall not be liable to pay or reimburse Contractor for any performance hereunder, including, but not limited to costs or expenses incurred, or be bound by any provision hereof prior to the Effective Date.

3) FACTUAL RECITALS

The Parties entered into the Contract to perform the Paonia Reservoir Sedimentation Management Study.

4) CONSIDERATION

Consideration for this Amendment consists of the payments to be made hereunder and the obligations, promises, and agreements herein set forth.

5) LIMITS OF EFFECT

This Amendment is incorporated by reference into the Contract, and the Contract and all prior amendments thereto, if any, remain in full force and effect except as specifically modified herein.

6) MODIFICATIONS.

The Contract and all prior amendments thereto, if any, are modified as follows:

- a. **Paragraph 4.1 is amended to read as follows:** "This contract shall be effective upon approval by the Colorado State Controller, or designee, (the "Effective Date") and extend through August 22, 2013. Performance of this contract shall commence as soon as practicable after the Effective Date and shall be undertaken and performed in the sequence and manner set forth in Exhibit A "Scope of Work".
- b. The Schedule that was included in the Original Contract's Scope of Work shall be replaced by the updated schedule attached hereto as **Exhibit 3**.

7) EFFECTIVE DATE OF AMENDMENT

The effective date hereof is upon approval of the State Controller or their delegate.

8) ORDER OF PRECEDENCE

Except for the Special Provisions, in the event of any conflict, inconsistency, variance, or contradiction between the provisions of this Amendment and any of the provisions of the Contract, the provisions of this Amendment shall in all respects supersede, govern, and control. The most recent version of the Special Provisions incorporated into the Contract or any amendment shall always control other provisions in the Contract or any amendments.

9) AVAILABLE FUNDS

Financial obligations of the state payable after the current fiscal year are contingent upon funds for that purpose being appropriated, budgeted, or otherwise made available.

THE PARTIES HERETO HAVE EXECUTED THIS AMENDMENT

* Persons signing for Contractor hereby swear and affirm that they are authorized to act on Contractor's behalf and acknowledge that the State is relying on their representations to that effect.

CONTRACTOR
Fire Mountain Canal and Reservoir Company

By: RANDALL W FISHER
Title: SECY / TRSAS.



*Signature

Date: 2/14/2013

STATE OF COLORADO
John W. Hickenlooper, GOVERNOR
Mike King, Department of Natural Resources

By: Rebecca J. Mitchell
By: Rebecca Mitchell, Section Chief, Water Supply
Planning Section CWCB

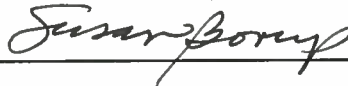
Date: 2/15/13

ALL CONTRACTS REQUIRE APPROVAL BY THE STATE CONTROLLER

CRS §24-30-202 requires the State Controller to approve all State Contracts. This Contract is not valid until signed and dated below by the State Controller or delegate. Contractor is not authorized to begin performance until such time. If Contractor begins performing prior thereto, the State of Colorado is not obligated to pay Contractor for such performance or for any goods and/or services provided hereunder.

STATE CONTROLLER
David J. McDermott, CPA

By: _____



Name and Title: Susan Borup, DNR Controller

Date: _____

2/26/13

	2013											
TASK ITEM:	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
PHASE ONE EVALUATION:												
Review Existing Information												
Peer Review of Existing Studies												
Collection of Additional Data												
Feasibility of Management Options												
Conceptual Designs and Cost Estimates												
Regulatory Constraints												
Report and Meeting												
PHASE TWO EVALUATION:												
Evaluation of Selected Options	←						→					
Monitoring And Sampling		←					→					
Cost Benefit Analysis												
Runoff Prediction Tools												
Investigate Funding Options												
Investigate Partnering Possibilities												
Meetings And Preparation of Report	←						→					

FIRE MOUNTAIN CANAL COMPANY AND NORTH FORK WATER CONSERVANCY DISTRICT SEDIMENTATION MANAGEMENT STUDY FOR PAONIA RESERVOIR SCHEDULE OF WORK ITEMS

NOTE: Project work will not be complete by the end of the shown schedule period.
Fire Mountain Canal Company anticipates initiating an additional contract amendment application in order to complete the project.

EXHIBIT 3
4/17/2007
REVISED 12/10/2007
REVISED 7/16/2008
REVISED 8/14/2008
REVISED 11/11/2010
REVISED 02/04/2013
REVISED 02/22/2013

CONTRACT AMENDMENT

Amendment #3 C150414	Original Contract CLIN#09PDA00018 Amend #1CMS #26966 Amend #2CMS#53449	Amendment CMS # 59726
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1) PARTIES

This Amendment to the above-referenced Original Contract (hereinafter called the Contract) is entered into by and between Fire Mountain Canal & Reservoir Company (hereinafter called "Contractor"), and the STATE OF COLORADO (hereinafter called the "State") acting by and through the Department of Natural Resources, Colorado Water Conservation Board, (hereinafter called the "CWCB").

2) EFFECTIVE DATE AND ENFORCEABILITY

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3) FACTUAL RECITALS

The Parties entered into the Contract to perform the Paonia Reservoir Sedimentation Management Study.

4) CONSIDERATION

Consideration for this Amendment consists of the payments to be made hereunder and the obligations, promises, and agreements herein set forth.

5) LIMITS OF EFFECT

This Amendment is incorporated by reference into the Contract, and the Contract and all prior amendments thereto, if any, remain in full force and effect except as specifically modified herein.

6) MODIFICATIONS.

The Contract and all prior amendments thereto, if any, are modified as follows:

- a. **Paragraph 4.1 is amended to read as follows:** "This contract shall be effective upon approval by the Colorado State Controller, or designee, (the "Effective Date") and extend through June 30, 2015. Performance of this contract shall commence as soon as practicable after the Effective Date and shall be undertaken and performed in the sequence and manner set forth in Exhibit A "Scope of Work".
- b. The Schedule that was included in the Original Contract's Scope of Work shall be replaced by the updated schedule attached hereto as **Exhibit 4**.

7) EFFECTIVE DATE OF AMENDMENT

The effective date hereof is upon approval of the State Controller or their delegate.

8) ORDER OF PRECEDENCE

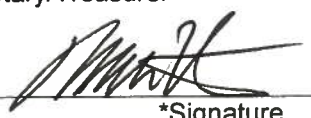
Except for the Special Provisions, in the event of any conflict, inconsistency, variance, or contradiction between the provisions of this Amendment and any of the provisions of the Contract, the provisions of this Amendment shall in all respects supersede, govern, and control. The most recent version of the Special Provisions incorporated into the Contract or any amendment shall always control other provisions in the Contract or any amendments.

9) AVAILABLE FUNDS

Financial obligations of the state payable after the current fiscal year are contingent upon funds for that purpose being appropriated, budgeted, or otherwise made available.


THE PARTIES HERETO HAVE EXECUTED THIS AMENDMENT

*** Persons signing for Contractor hereby swear and affirm that they are authorized to act on Contractor's behalf and acknowledge that the State is relying on their representations to that effect.**

<p>CONTRACTOR Fire Mountain Canal and Reservoir Company</p> <p>By: Randall W Fisher Title: Secretary/Treasurer</p> <p> *Signature</p> <p>Date: <u>8/5/2013</u></p>	<p>STATE OF COLORADO John W. Hickenlooper, GOVERNOR Mike King, Department of Natural Resources</p> <p>By:  By: Rebecca Mitchell, Section Chief, Water Supply Planning Section CWCB</p> <p>Date: <u>8/6/13</u></p>
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ALL CONTRACTS REQUIRE APPROVAL BY THE STATE CONTROLLER

CRS §24-30-202 requires the State Controller to approve all State Contracts. This Contract is not valid until signed and dated below by the State Controller or delegate. Contractor is not authorized to begin performance until such time. If Contractor begins performing prior thereto, the State of Colorado is not obligated to pay Contractor for such performance or for any goods and/or services provided hereunder.

<p>STATE CONTROLLER <i>Robert Jaros</i> David J. McDermott, CPA, MBA, JD</p> <p>By: </p> <p>Name and Title: Susan Borup, DNR Controller</p> <p>Date: <u>8/9/13</u></p>
