

#51454(1)

CONTRACT AMENDMENT

Amendment #1	Original Contract CMS (CLIN) # 51454	Amendment CMS #62308
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1) PARTIES

This Amendment to the above-referenced Original Contract (hereinafter called the Contract) is entered into by and between San Luis Valley Irrigation District (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 "CWCBB").

11/4/13

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"). 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 for a water use efficiency grant for mapping and identification integrated with the system incentive program (SIP) project.

4) CONSIDERATION-COLORADO SPECIAL PROVISIONS

The Parties acknowledge that the mutual promises and covenants contained herein and other good and valuable consideration are sufficient and adequate to support this Amendment.

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. Each occurrence of Exhibit A is being replaced by Exhibit A-1.
- b. Exhibit A is being amended and the budget is being replaced by the budget specified in Exhibit A-1.
- c. 7. A. Maximum Amount

The maximum amount payable under this Contract to Contractor by the State is \$239,360, as determined by the State from available funds. This sentence is being replaced by: "The maximum amount payable under this Contract to Contractor by the state is \$391,215, as determined by the State from available funds." Payments to Contractor are limited to the unpaid obligated balance of the Contract set forth in Exhibit A-1.

Up to \$239,360 is payable in FY13
\$391,215 less the amount paid in FY2013, is payable in FY14.

7) START DATE

This Amendment shall take effect on the later of its Effective Date or November 30, 2013.

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 Rest of this page is intentionally left blank.

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 San Luis Valley Irrigation District President Randall K. Palmgren</p> <p> *Signature</p> <p>Date: <u>10/29/13</u></p>	<p>STATE OF COLORADO John W. Hickenlooper, Governor Dept of Natural Resources Mike King, Executive Director</p> <p> By: James Eklund, Director Colorado Water Conservation Board</p> <p>Date: <u>11-4-2013</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 Amendment 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
Robert Jaros, CPA, MBA, JD

By: _____
Susan Borup, DNR Controller

Date: _____

Exhibit A-1
Statement of Work
Rio Grande Cooperative Project
November 10, 2013

BACKGROUND

The San Luis Valley Irrigation District (SLVID) owns and operates the Rio Grande Dam and Reservoir on the Rio Grande in southwest Colorado. The dam is a 111-foot high earth and rock fill embankment with a crest elevation of 9470 feet. Key features of the project include the dam with a crest length of approximately 450 feet, an un-gated spillway at the right abutment of the dam, and a low level outlet that includes an 11-foot high by 15-foot wide tunnel with a multiple sluice gate control structure near the middle of the tunnel. The reservoir is approximately six miles in length and 0.50 miles in width, oriented in a roughly northwest-southeast direction and has a capacity of 52,192 acre-feet.

A comprehensive study for rehabilitation and/or enlargement of the dam and reservoir was conducted by D&A and CDM in 2007 and 2008 ("*Rio Grande Multi-Use Rehabilitation and Enlargement Study*," CDM, 2008). That study estimated costs of \$19.2 million for rehabilitation and \$33.2 million for enlargement. In addition, the District has previously conducted studies regarding operations of Rio Grande Reservoir. The Rio Grande Reservoir Multi-Use Project Studies (collectively "Multi-Use Studies") identified basin-wide benefits from the use of storage and re-operations of Rio Grande Reservoir. These studies also concluded that CPW can particularly benefit from storage in Rio Grande Reservoir as it relies upon storage to manage some of its water resources. In recent years, under a non-permanent lease agreement, CPW, the San Luis Valley Water Conservancy District and others have stored up to 10,000 AF of water in Rio Grande Reservoir. In addition, the benefits of compact storage for Rio Grande Compact compliance and basin administration were outlined. The Multi-Use Studies revealed that Rio Grande Reservoir must be rehabilitated in order to provide long-term regulation of CPW water rights and other basin water supplies as well as storage for compact compliance.

Construction of the dam began around 1908 with completion in 1914. The dam was constructed in a narrow valley between a massive volcanic formation known as Fish Canyon Tuff (at the right abutment) and a large rock slide that is a mixture of clays, sands, gravels, and large blocks of tuff (at the left abutment). The highly permeable rock slide material at the left abutment has been problematic since the first filling of the reservoir where seepage of the order of 1,500 gpm has been measured in the left abutment, with a total combined seepage of 2,500 gpm downstream of the dam. The seepage flow is responsive to reservoir elevation with flows increasing significantly at higher reservoir elevations (at gage 60 and above).

The dam was originally constructed with an unlined spillway at the right abutment. The spillway has been modified since its original construction by lengthening the crest of the spillway and lining the spillway deck and walls with concrete. A recent analysis on the spillway, performed by CDM in 2008, suggests that the spillway training walls are insufficient in height to pass the required 6,600 cfs design flow. The training wall height deficiencies exist at the entrance of the structure and continue throughout its length. The greatest concern with the spillway training wall heights exists on the left side. Any overflow of the left training walls has the potential to threaten the right abutment of the main dam. Based on the 2008 study, this appears at flows below the design flow of 6,600 cfs.

The dam safety and operational issues described above combined with the value of the reservoir for optimizing water use for multiple stakeholders in the basin have driven the District to move forward with the rehabilitation of the Rio Grande Dam and Reservoir. The District is a proponent of the Rio Grande Cooperative Project where the District works with multiple stakeholders in the State, primarily the Colorado Water Conservation Board and the Colorado Division of Parks and Wildlife to restore the full use of the reservoir. The project is made up of final design, program/project management and three primary construction components that address structural and/or operational deficiencies of the Reservoir, as described below:

Final Design

The rehabilitation of Rio Grande Reservoir requires that the proposed improvements be designed, managed, and inspected by a professional registered engineer in the State of Colorado. The engineering firm selected to conduct this work will provide overall project management, surveying, geotechnical exploration, geotechnical and hydraulic analysis, and the final design of the spillway, clay blanket liner, bypass tunnel and outlet works. The engineering firm will also provide cost estimating, QA/QC for the project, respond to State Engineer comments and assist with bidding and award for the project. ***This work is currently being conducted by SLVID under Contract C154210 at a cost of \$1,256,134, under its sub-consultant - Deer and Ault Consultants.***

Program/Project Management

The Rio Grande Cooperative Project involves the coordination and management of many different project components. Some of key project management issues that need to be addressed prior to the SLVID proceeding forward with construction, are 1) successful negotiation, feasibility analysis and exchange of land between the Forest Service and the SLVID, 2) storage accounts and operation modeling, 3) execution of storage agreements, and 4) overall stakeholder coordination and program management. The successful management of these key issues is vital to the overall success of the Project.

Primary Construction Components

1.) Upstream Clay Blanket - In order to reduce seepage through the rock slide formation at the left dam abutment, a clay blanket slope liner will be installed on the upstream side of the dam at the left abutment. The clay blanket, shown on Figure 1 in plan and Figure 2 in cross-section, will be a zoned fill placed over the rock slide and extending across the west abutment of the dam approximately 100 feet. The zones include a filter layer, low permeability clay core, and cover zone. This improvement is expected to substantially reduce seepage and allow full storage capability of the reservoir to be achieved. Clay liner materials will be obtained by borrowing and processing approximately 20,000 cubic yards of soil and rock material from reservoir property. These areas are described in Figure 1. Processing shall consist of screening various gradations from the existing landslide deposit, as described in Exhibit 1. ***The clay liner material for the construction component described above is currently being conducted under Contract C154213, under its sub-consultant - Brad Moore, at a cost of \$295,699.66.***

2.) Low Level Outlet - The existing low level outlet will be replaced with a hollow jet valve discharge structure at the downstream side of the dam. The existing low level outlet tunnel will continue to be used to provide conveyance between the upstream and downstream portals. The existing sluice gate control structure will either be demolished or abandoned in-place with a bypass tunnel providing conveyance around the structure; this is shown on Figure 1. Schedule constraints for the work and the uncertainty of the demolition costs (for removal of existing sluice gate control structure) suggest that the construction bidding process may be the best way to determine the

most economic solution. To that end, we recommend preparing the bidding documents with two options: Option 1 – Demolish Existing Sluice Gate Structure and Option 2 – Construct Bypass Tunnel and Abandon Sluice Gate Structure. The District can then select which option is most economic based on the results of the bidding. Another important element of the low level outlet works is the provision for the future addition of hydropower. To allow hydropower to be added in the future with minimal disturbance to the primary function of the project, a tap will be provided at the low level outlet (downstream of the tunnel portal) which can be used to route flows to future turbine generator units.

3.) Spillway Improvements – In order to achieve the spillway capacity required by the State engineer's Office (SEO), the entrance training walls will require a substantial raise and the main channel training walls will require a roughly 2 to 6-foot raise. This is expected to be accomplished by a combination of cast-in-place concrete and perhaps shotcrete. Additionally, some of the existing spillway floor slabs will require replacement or rehabilitation due to the condition of the existing concrete.

The CWCB's 2012 Projects Bill authorized and appropriated a \$5 million grant to the SLVID to perform the design and other activities towards the rehabilitation of Rio Grande Reservoir, as part of the Rio Grande Cooperative Project. The 2012 Projects Bill also authorized an additional \$15 million towards the project, as a loan/grant combination, which will be determined by the CWCB board at a later date. CWCB is currently working with SLVID in spending the \$5 million grant funds, which will involve a number of different activities, such as; final design, project management, material and equipment purchase, and various construction activities, over the next few years.

The following Statement of Work will be conducted primarily by San Luis Valley Irrigation District's Sub-Contractor, DiNatale Water Consultants.

SCOPE OF WORK

Task 1 – Assistance with Negotiating a Land Exchange with the Forest Service

Description of Task: The purpose of this task is to assist with negotiating a land exchange with the Forest Service. The District would like to exchange part of its land near the reservoir for Forest Service land directly below the Rio Grande Reservoir dam. This task will be completed by the Rio Grande Cooperative Project Team (Project Team). The Project Team consists of the District, Western Land Group, Tod Smith, the District's attorney, Deere & Ault Consultants and DWC.

1. DWC will coordinate the efforts of the Project Team on securing a land exchange with the Forest Service. Western Land Group will be the lead on this effort.
 - a. Numerous meetings will be held with the Forest Service and Western Land Group to discuss the terms of exchange.
 - b. Development of an exchange proposal for the proposed land exchange.

Task Execution:
The Project Team

Assumptions:
Western Land Group will be the lead and primary contact with the Forest Service

Major Deliverables/Products:

1. Meetings with the Project Team and Forest Service about the land exchange.
2. Review and comment of the land exchange proposal prepared by Western Land Group.

Task 2 – Feasibility Analyses and Permitting for the Land Exchange

Description of Task: The purpose of this task is to perform a feasibility analysis addressing the environmental, technical and political issues associated with the land exchanges as well as address any additional permitting issues associated with a 404 permit, if required. This work product will be prepared for submittal to the Forest Service and its Third Party Contractor (3PC) retained to prepare the Environmental Analysis (EA) for the land exchange. It is intended that work generated for this task can also be used by the Army Corps of Engineers (Corps) for the preparation of a 404 permit, if required, for the outlet works construction.

1. Conduct meetings with the Project Team, Forest Service and the 3PC, the Corps and stakeholders (local and state) to discuss and address any issues or information related to the EA.
2. Coordinate the development of an Environmental Assessment or supporting work of any other 3PC consultants
 - a. Identify and address all pertinent environmental permitting issues.
 - b. Conduct oversight of construction and permitting.
 - c. Provide information on flows from potential operations and develop any new modeling that may be required.
3. Coordinate with the Project Team and Corps on any 404 permitting, if required.

Task Execution:

DiNatale Water Consultants

Assumptions:

DiNatale Water Consultants will develop draft information that can be used by the Forest Service and its 3PC for preparation of the Environmental Assessment.

Major Deliverables/Products:

1. Development and submission of feasibility analysis and other information to the Forest Service and its 3PC for preparation of the EA.

Task 3 – Stakeholder Coordination

Description of Task: The purpose of this task is to inform stakeholders regarding the basin-wide benefits from the use of storage and re-operations of Rio Grande Reservoir. Stakeholder understanding of the need for and benefits of the dam rehabilitation project is important to the success of the project.

1. Conduct meetings and presentations with stakeholders about the benefits of the dam rehabilitation project.
 - a. Coordinate with local and state environmental organizations.
 - b. Provide presentations of modeled flows

Task Execution:

DiNatale Water Consultants

Assumptions:

Major Deliverables/Products:

1. Development of stakeholder outreach presentations and documents.

Task 4 – Storage Accounts and Operations (River Ware and Rio Grande Decision Support System) Modeling

Description of Task: The purpose of this task is to refine the River Ware and *Rio Grande Decision Support System (RGDSS)* modeling efforts associated with the Rio Grande Cooperative Project, to include additional features, including river administration, *storage and replacement of stream depletions due to groundwater pumping in the Rio Grande Basin* and *compact operations*.

1. Refine and improve the existing River Ware and *Rio Grande Decision Support System (RGDSS)* models to include:
 - a. River administration
 - b. Benefits of dam rehabilitation including increased storage and re-operation
 - c. Additional water rights and storage accounts for compact storage, river administration, Town of Monte Vista, San Luis Valley Water Conservancy District, Groundwater Management Sub districts and other potential storage leaseholders
 - d. *Perform enhancements and calibration runs to the RGDSS groundwater model, run model, develop response functions, and assist with public workshops.*
2. Coordinate with CPW on model inputs and results and present model results to CPW and DNR directors
3. Coordinate with other potential leaseholders on model inputs

Task Execution:

DiNatale Water Consultants

Assumptions:

All necessary data for model refinement and river administration will be provided by the potential leaseholders, *consultants and SEO*.

Major Deliverables/Products:

1. Presentation of model results to *SEO*, CPW and DNR directors.

Task 5 – Storage Agreements

Description of Task: The purpose of this task is to assist with the negotiation and development of storage agreements in the Rio Grande Reservoir. The rehabilitation of the reservoir provides the ability for long-term regulation of stakeholder water rights and other basin water supplies as well as storage for compact compliance.

1. Assist with negotiating storage agreements with CPW, water districts and other stakeholders.
2. Provide advice on issues related to participants and storage agreements for multi-use facilities.

Task Execution:

DiNatale Water Consultants

Assumptions:

All necessary data for model refinement and river administration will be provided.

Major Deliverables/Products:

1. Completed storage agreements with all pertinent parties.

Task 6 – Program Management, Coordination and Reporting

Description of Task: This task includes program management, grant administration and reporting, coordination of consulting team and meetings with CWCB staff and other stakeholders as needed. Progress reporting to CWCB will occur every 6 months.

1. CWCB will be provided a progress report every 6 months, beginning from the date of the executed contract. The progress report will describe the completion or partial completion of the tasks identified in the statement of work including a description of any major issues that have occurred and any corrective action taken to address these issues.
2. Project coordination meetings with the consulting team (Deere and Ault, attorneys and other consultants) and informational meetings with CWCB staff will be held throughout the project.
3. Program oversight and work coordination amongst the Project Team will occur throughout the project.

Task Execution:

DiNatale Water Consultants

Major Deliverables/Products:

1. Progress reports and grants reimbursement requests to CWCB.

Schedule

All the tasks described above will be authorized by the SLVID. The work under these tasks will occur over the entire duration of the Project, which will commence upon execution of this contract and are anticipated to be complete by June 30, 2014.

Compensation

The contract work described above is on a time and material basis with a not to exceed amount of **\$391,215**. The attached spreadsheet provides a detailed breakdown of the costs associated with each task. It is understood by the parties that as the project evolves and additional data is obtained, that tasks and their associated schedules and costs may be modified (decreased or increased) to reflect current needs for successful completion of the work. It is understood that the SLVID will not exceed the estimated total without first obtaining a fully amendment to the Contract.

PERFORMANCE MONITORING

Performance monitoring for the contract shall include the following:

- (a) Performance measures and standards

The CWCB will have monthly meetings with the vendor and the Construction Co to make sure the project is being completed in a timely manner.

(b) Accountability.

Regular reporting of project status will occur monthly with the CWCB project manager and the lead project manager from the vendor and the Construction Co.

(c) Monitoring Requirements

The CWCB will have access to all the plans associated with the Rio Grande Dam and Reservoir rehabilitation and enlargement, and will be copied on all progress reports. Each invoice will include information regarding the each portion of the task completed, the units and costs associated with each.

(d) Noncompliance Resolution

In the event of a noncompliance issue the CWCB project manager will contact both the San Luis Valley Irrigation Dist project manager and the construction company's project manager and discuss the problem and work towards a resolution. If this does not work then the issue will be escalated to the Director of the CWCB and the President of the construction Company and the President of the San Luis Valley Irrigation Dist. The CWCB project manager will notify the DNR Purchasing Director and the Assistant Director of the Department. The DNR Assistant Director or the Deputy Director will try and resolve the issue.

RIO GRANDE COOPERATIVE PROJECT BUDGET

DINatale Water Consultants Project Budget for Rio Grande Cooperative Project									
Tasks	DINatale Water Senior Engineer	DINatale Water Senior Consultant	DINatale Water Resources Engineer II	DINatale Water Resources I/ Word Processing/ Graphic Design	Subtotal Hours	RGDSS Subcontractor	Subtotal Task		
	\$175	\$140	\$105	\$80				Estimated Hours	
Task 1 -- Assistance with Negotiating a Land Exchange with the Forest Service	88	48	80		216		\$30,520		
Task 2 -- Feasibility Analyses and Permitting for the Land Exchange	160	80	120	100	460		\$59,800		
Task 3 -- Stakeholder Coordination	96	48	60		204		\$29,820		
Task 4 -- Storage Accounts and Operations (RiverWare & RGDSS) Modeling	100	20	240	60	420	146,720	\$197,020		
Task 5 -- Storage Agreements	65	24	24		113		\$17,255		
Task 6 -- Program Management, Coordination and Reporting	110	60	120	60	350		\$45,050		
Subtotal Hours	619	280	644	220	1763	146,720			
Subtotal Labor	\$108,325	\$39,200	\$67,620	\$17,600		\$146,720	\$379,465		
Reimbursable Expenses							\$11,750		
Total							391,215		

San Luis Valley Irrigation District

Kelly DiNatale
DiNatale Water Consultants, Inc.
506 Juniper
Boulder, Co. 80302

Dear Kelly,

Enclosed you will find a signed copy of the agreement between the San Luis Valley Irrigation District and DiNatale Water Consultants, Inc. for your continued work on the Rio Grande Reservoir Reoperation and Optimization Model.

Thank you,

Amy S. Dean
District Secretary

AGREEMENT FOR CONSULTING SERVICES

Refinements to Rio Grande Reservoir Reoperation and Optimization Model

THIS AGREEMENT is made and entered into this 8th day of April, 2009, by and between the SAN LUIS VALLEY IRRIGATION DISTRICT, an Irrigation District created and operated pursuant to the Irrigation District Law of 1905, CRS § 37-41-101 *et seq.* (hereinafter called the "District") and DiNatale Water Consultants, Inc. (hereinafter called "Consultant").

W I T N E S S E T H:

WHEREAS, District desires to engage the services of Consultant in accordance with the terms and conditions of this Agreement; and

WHEREAS, Consultant is specially trained and possesses certain skills, experience, education and competency to perform those services as hereinafter set forth, and Consultant is able and willing to provide such services under the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the compensation to be paid hereunder and the mutual agreements hereinafter set forth, the parties agree as follows:

1. PERFORMANCE OF SERVICES

The District does hereby engage Consultant to perform and provide the services hereinafter set forth, and the Consultant does hereby agree to perform such services in accordance with the terms and conditions hereof. Consultant shall provide the expense of all materials, equipment and personnel required to perform its services as set forth in Exhibit A attached hereto and incorporated herein by this reference.

2. SCOPE OF SERVICES

The Consultant shall provide those services described and set forth on Exhibit A.

3. TERM OF AGREEMENT

This Agreement shall become effective on the date set forth above, and shall remain in full force and effect until the earlier of the completion of the Scope of Services, unless sooner terminated as hereinafter provided.

4. COMPENSATION

As compensation for the services to be performed by Consultant hereunder, District will pay Consultant the amounts set forth on Exhibit B in the manner and method described on Exhibit B attached hereto and incorporated herein by this reference.

5. PERSONAL PERFORMANCE

Consultant's obligation to provide the services under this Agreement is personal, and the Consultant expressly understands and agrees that the services to be performed shall not be assigned or transferred. It is further agreed that Consultant shall not engage the services of other persons, by subcontract or otherwise, to provide or assist in providing such services without the express written consent of District.

6. INSURANCE; INDEMNIFICATION

Consultant agrees to maintain such insurance as will fully protect Consultant from any and all claims by employees of the Consultant under the Workers' Compensation laws of the State of Colorado and similar laws relating to employer's liability;

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 Consultant shall immediately obtain additional insurance to restore the full aggregate limit and furnish to the District a certificate or other document satisfactory to the District showing compliance with this provision.

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.

Consultant will provide District with certificates of insurance evidencing coverage as set forth above. The certificates shall give District thirty (30) days notice in the event of cancellation of Consultant's policies. All comprehensive general liability insurance required hereunder shall name District as an additional insured.

Consultant shall indemnify and hold harmless the District from and against, and shall assume full responsibility for, the payment of all federal, state and local taxes or contributions imposed or required under employment insurance, social security and income tax laws with respect to Consultant and Consultant's employees engaged in the performance of work under this Agreement. Consultant specifically agrees and understands by execution of this Agreement to save harmless and indemnify District, its directors, employees, officers and agents against all loss, liability, damage and expenses caused by negligent acts, errors and omissions arising out of the services of Consultant hereunder.

7. AWARE OF LAWS

Consultant agrees at all times to comply with ordinances, laws, orders, rules and regulations which are relevant to the Consultant's work and services to be performed hereunder.

8. STANDARD OF PERFORMANCE

Consultant shall be responsible to perform at the level of competency presently maintained by other practicing professionals in the same type of work for the professional and technical soundness, accuracy and adequacy of all designs, drawings, specifications and other work and materials furnished under this Agreement. This provision is not intended to reduce any standard otherwise imposed by law.

9. INDEPENDENT CONTRACTOR

The Consultant, for all purposes arising out of this Agreement, is an independent contractor and shall not be termed an employee of District. It is expressly understood and agreed that Consultant shall not be entitled to any benefits to which District's employees are entitled, including, but not limited to, overtime, retirement benefits, worker's compensation, injury leave or other leave benefits.

10. CONFIDENTIALITY

Any and all reports, information, data, statistics, forms, designs, plans, procedures, systems, studies and any other communication or form of knowledge given to or prepared or assembled by Consultant under this Agreement shall be kept as confidential and shall only be made available to the District and the Colorado Water Conservation Board unless the District provides prior written approval.

11. OWNERSHIP OF MATERIAL

All reports, studies, information, data, statistics, forms, designs, plans, procedures, systems and any other materials or properties produced under this Agreement shall be the sole and exclusive property of District. No such materials or properties produced in whole or in part under this Agreement shall be subject to private use, copyright or patent right by Consultant without the express written consent of District. District shall have unrestricted authority to publish, disclose, distribute and otherwise use, copyright or patent in whole or in part any of such reports, studies, data, statistics, forms or other materials or properties produced under this Agreement. Any reuse without specific written verification or adaptation by Consultant will be at District's sole risk and without liability to Consultant.

12. TERMINATION

This Agreement may be terminated by either party upon seven (7) days written notice, in which event Consultant shall be compensated for work performed to the date of such termination.

13. NOTICE

Any notice or notices required or permitted to be given pursuant to this Agreement may be personally served on the other party by the party giving such notice or may be served by certified mail, postage prepaid, return receipt requested, to the following addresses:

To the District: San Luis Valley Irrigation District
c/o Travis Smith, Superintendent
PO Box 637
Center, CO. 81125

To the Consultant: DiNatale Water Consultants, Inc.
Attn: Kelly DiNatale
506 Juniper
Boulder, CO. 80302

14. ATTORNEY'S FEES

If the parties become involved in litigation arising out of this Agreement or the performance thereof, the court in such litigation shall award reasonable costs and expenses, including attorneys' fees, to the prevailing party, to be paid by the other party to this Agreement.

15. APPLICABLE LAW

This Agreement shall be construed and interpreted in accordance with the laws of the State of Colorado. Venue shall be proper in District Court for Rio Grande County.

16. ENTIRE AGREEMENT

This Agreement constitutes the entire agreement between the parties covering the subject matter. No modifications or amendments shall be valid unless in writing and signed by all of the parties.

SAN LUIS VALLEY IRRIGATION
DISTRICT

DINATALE WATER CONSULTANTS, INC.

By: Randall K. Palmgren
Title: President

By: Kelly DiNatale
Title: PRESIDENT

ACKNOWLEDGED:

ATTEST:

By: Greg S. Dean
Title: District Secretary

By: James A. Whitely
Title: _____

Tax Identification Number: 84-6002934

Tax Identification No. 26-4088648



DiNatale Water Consultants, Inc.

Kelly DiNatale, PE, D.WRE, BCEE

506 Juniper Avenue • Boulder, CO 80304 • 303-349-3468 • kelly@dinatalewater.com • dinatalewater.com

EXHIBIT A

Rio Grande Reservoir Reoperation and Optimization Model Scope of Work

San Luis Valley Irrigation District

Task 1. Refine Inputs and Modeling Needs for the Reservoir Reoperation and Optimization Model

Tasks:

- Engineer will conduct 2 modeling workshop with Division Engineer and representatives of water users, including the Rio Grande Water Users and Rio Grande Water Conservation District, to refine water use data and beneficial Model enhancements including: water rights data, Compact deliveries and flow projections, curtailments, stream gains and losses, direct flow storage utilization, and potential demands from groundwater management subdistricts.
- Engineer will conduct 2 modeling workshops with potential storage pool holders, including Division Engineer (Compact Storage), Division of Wildlife, and San Luis Valley Water Conservancy District to refine long-term storage needs and water delivery scenarios to best address water use needs and potentially meeting stream flow and riparian demands.
- Engineer will conduct 2 modeling workshops with environmental group representatives and U.S. Forest Service to refine and determine how to best optimize available flows to better meet fish, riparian and other environmental needs and quantify the benefits of the modeled changes.
- Engineer will summarize key workshop recommendations and meet with HELTON AND WILLIAMSEN modeler to review recommendations and provide additional direction to HELTON AND WILLIAMSEN.
- Engineer will present results of the project at one Rio Grande Basin Roundtable meeting and at one SLVID Board of Directors meeting.

Assumptions:

- At least 2 meetings per trip to the San Luis Valley can be scheduled.
- 4 trips total to the San Luis Valley.

DiNatale Water Consultants Scope of Work for Rio Grande Reservoir

- Several of these workshops will be attended by the HELTON AND WILLIAMSEN. DiNatale Water will coordinate with HELTON AND WILLIAMSEN on workshop scheduling and preparation of materials for the workshops.

Deliverables:

- Workshop notes and key recommendations for modeling enhancements, including a prioritization of modeling recommendations from the workshops that are within the HELTON AND WILLIAMSEN scope of work.

Task 1 Cost: \$14,300

Task 2. Implement Model Enhancements

Tasks:

The model developed in Phase II of the Rio Grande Reservoir Project will be refined in the following areas based on feedback received from the modeling workshops with various interests and participants. HELTON AND WILLIAMSEN, under separate contract, will be responsible for implementing model enhancements. DiNatale Water will provide technical direction and model review to HELTON AND WILLIAMSEN during this model enhancement phase. Participants most likely to provide key information for each refinement are shown in parentheses.

- Covert model from a monthly model to a daily model as recommended at the Rio Grande Water Users Association meeting in January 2009.
- Add a simplified representation of water rights and deliveries
- Include dynamic curtailment calculations given available Compact storage and streamflow forecasting
- Implement refined stream gains and loss data
- Include stream flow forecasting
- Dynamically link hydropower analysis to Model
- Develop more detailed and quantifiable environmental flow analysis
- Implement other relevant data gathered from Division Engineer, water user organizations, storage participants and land use and environmental interests as time and budget permit.

Assumptions:

- Information on water rights (in particular a reasonable separation of junior and senior rights at priority 216A) is available

DiNatale Water Consultants Scope of Work for Rio Grande Reservoir

- Methodology and tools used by the Division 3 Engineer in using stream forecasting for Compact administration will be available for use
- Participation from environmental interests to quantify environmental benefits
- HELTON AND WILLIAMSEN, under separate contract with the District, will be responsible for implementing model enhancements. DiNatale Water will assist HELTON AND WILLIAMSEN by providing technical direction and model review during the implementation of the conceptual modeling enhancements but HELTON AND WILLIAMSEN will have responsibility for model code implementation and conversion to a daily time step model.
- Any assistance that may be required from outside consultants who are familiar with specific aspects of the Rio Grande basin is included in HELTON AND WILLIAMSEN contract.

Deliverables:

- Initial draft of technical Memorandum (TM) describing modeling methods, assumptions and results from enhancements listed above, as well as the use of the model will be prepared by HELTON AND WILLIAMSEN. TM will be approximately 15 pages in length, plus figures and tables. DiNatale Water will provide review and comments on the Draft TM. The draft will be made available for comment from participants of the modeling workshops, and a final draft will be prepared by HELTON AND WILLIAMSEN after the close of the comment period. DiNatale Water will also provide review and comments on final TM.
- Reservoir Reoperation and Optimization Model will be provided by HELTON AND WILLIAMSEN in electronic format.

Task 2 Cost: \$19,200

Task 3. Hydropower Evaluation

Tasks:

- Assist URS and attorney retained by the District in technical review and addressing other issues pertaining to hydropower usage including legal issues, permitting, existing power infrastructure evaluation, and investigation into available hydropower technical options.

Assumptions:

- Cooperation from local power company to assess existing infrastructure
- Legal analysis required from qualified attorney is not included in this scope but paid for separately by the District

DINatale Water Consultants Scope of Work for Rio Grande Reservoir

Deliverables:

- Provide technical direction and input to technical Memorandum to be developed by URS addressing all issues listed above.

Task 3 Cost: \$7,200

Project Cost Summary Table

	Hours Sr. Engineer			
Hourly Rate	\$160	Labor (\$)	ODC (\$)	Total (\$)
Task 1 (Workshops)	80	\$12,800	\$1,500	\$14,300
Task 2 (Enhancements)	120	\$19,200	\$0	\$ 19,200
Task 3 (Hydropower)	45	\$7,200	\$0	\$7,200
Total	245	\$ 39,200	\$ 1,500	\$ 40,700

Notes:

ODC = Other Direct Costs, which include reproductions and four trips to the San Luis Valley

DiNatale Water Consultants Scope of Work for Rio Grande Reservoir

Project Schedule

Task and Activity	Expected Completion in Days from Notice to Proceed
Coordinate and hold workshops with water users, pool holders, governmental agencies and environmental interests. Assist HELTON AND WILLIAMSEN in running Model, listen to desired functionality, discuss approach, solutions and methods to incorporate desired functionality. (Task 1, partial completion)	60
Provide technical direction and detailed model review to HELTON AND WILLIAMSEN on initial modeling enhancements based on Meeting I (Task 2, partial completion)	90
Coordinate and hold Workshop II with water users, pool holders, governmental agencies and environmental interests to discuss and evaluate enhancements made from Workshop I. Discuss any further refinements and provide technical direction and model enhancement to HELTON AND WILLIAMSEN (Task 1, partial completion)	120
Assist HELTON AND WILLIAMSEN in completion of modeling enhancements from Meetings I and II (Task 2, completed)	150
Assist URS in completion of hydropower evaluation, including legal, infrastructure and potential funding opportunities (Task 3)	150
Present results to BRT and SLVID board (Task 1, completed)	180

EXHIBIT B
COMPENSATION SCHEDULE

Refinements to Rio Grande Reservoir Reoperation and Optimization Model

Based on the scope of the project and project budget as set forth in the attached Exhibit A, a total budgeted amount of \$40,700.00 for Refinements to Rio Grande Reservoir Reoperation and Optimization Model has been established for compensation of the Consultant. This amount shall include time, materials, and subcontractors' fees necessary for the Consultant to provide the services described in Exhibit A. Reimbursable costs including, but are not limited to, travel expenses, long distance communications, postage, reproduction, photographs, etc., are included in the project budget. Consultant shall not exceed the budgeted amount without prior written authorization of the District, which District is under no obligation to give. Verbal authorization shall not be deemed valid.

Consultant shall provide the District an invoice for the work completed during a month on or before the 5th day of the following month. Work performed or material supplied will be supported by appropriate back up data which will include all vendor invoices and an itemization of time spent for work done. Upon approval of the invoice by the District, the invoice shall be submitted by the District to the CWCB for payment. Upon approval of the invoice by the CWCB, payment will be forwarded to the Consultant. Work performed or material supplied will be supported by appropriate back up data which will include all vendor invoices and an itemization of time spent for work done.

ACKNOWLEDGED:

Kelly DiNatale
Project Manager

