SOUTHWEST BASINS ROUNDTABLE
STEVEN C HARRIS, CHAIR
% Southwestern Water Conservation District
841 East Second Avenue
Durango, Colorado 81301
970-247-1302

EMAILED January 11, 2007

Mr. Rick Brown
Chief, Intrastate Water Management and Development Section
Colorado Water Conservation Board
1580 Logan Street, Suite 600
Denver, Colorado 80203

SUBJECT: Water Supply Reserve Account Applications for the Southwest Basins Roundtable

Dear Mr. Brown:

The Southwest Basins Roundtable (Roundtable) is pleased to submit two applications, of five considered, for Water Supply Reserve Account (Account) funding for consideration at the March, 2007 CWCB Board Meeting. Both applications received unanimous approval by our roundtable during its January 10, 2007 meeting at the Dolores Water Conservancy District Offices in Cortez. This letter serves as the Roundtable's introduction and support for the applications described below and attached.

The evaluation process consisted of providing the completed applications to the Roundtable for review one week prior to the meeting. During the Roundtable meeting each of the applicants were allowed to present their application. After each presentation, the Roundtable members asked the applicant questions. The meeting minutes summarize the discussion of the applications.

After lengthy discussion on all of the applications and thorough review of the content of the applications in relation to the CWCB criteria, the San Juan Water Conservancy District and Goodman Point Water Association applications were unanimously approved for funding. Though all applications met important needs in our basin, the two approved at this time, were exceptional both in the content of the applications and the need for the projects. The justification for each project is explained below.

Since these are the first set of applications submitted to the CWCB for SB179 funding, the Southwest Basins Roundtable requests that the CWCB Interstate Water Management and Development Section work with our Roundtable and the applicants to further develop the enclosed applications so that they have the best opportunity to be approved for funding during the CWCB Board Meeting in March. We welcome any suggestions you have to improve these applications.

San Juan Water Conservancy District

The San Juan Water Conservancy District in partnership with the Pagosa Area Water and Sanitation District (PAWSD) have begun the 12 to 18 year process to construct Dry Gulch Reservoir (aka San Juan Reservoir in application) to provide municipal water to the Pagosa Springs area for the next 100 years. SJWCD and PAWSD have water rights for the reservoir and the diversion from the San Juan River to fill the reservoir, decreed in 2006. The details of the project are described in their application.

The application is attached to this letter as an email. The extensive supporting documents have been provided to you separately by SJWCD in December.

Due to the efforts of the volunteer Board President, SJWCD over the last two years has negotiated a land purchase agreement with the family who presently own most of the reservoir basin. SJWCD owning this land is absolutely critical to constructing this reservoir. The $1 million in funding, though a small portion of the overall Dry Gulch Reservoir construction cost of nearly $100 million, is extremely important at this time to secure the land purchase.

SJWCD and PAWSD have studied, over the past 20 years, enlargements and new reservoir sites that could potentially meet future water needs and identified one enlargement and the new Dry Gulch Reservoir. In 2007 PAWSD will be initiating construction of a small enlargement of the existing Stevens Reservoir from 800 acre-feet to about 1,800 acre-feet, after over 15 years of studies and permitting. This is the only existing reservoir that has the potential for enlargement. With enlargement of Stevens Reservoir, PAWSD will have about 3,900 acre-feet of usable storage.

PAWSD and SJWCD, based on water demand projections, have estimated additional storage is needed by 2015 but Dry Gulch Reservoir cannot be constructed and available for use until 2021 at the very earliest. The need is critical to proceed as quickly as possible with development of Dry Gulch Reservoir. SJWCD and PAWSD are in the process of initiating various types of fees that are planned to generate adequate funds to eventually construct Dry Gulch Reservoir but presently there are not adequate funds for the land purchase.

Dry Gulch Reservoir was included in the Statewide Water Supply Initiative Study report as “Major Identified Projects and Processes”.

The Southwest Roundtable highly recommends that the CWCB fund this critical project from the State “pool” of SB179 funds.

Goodman Point Water Association

The Goodman Point Water Association is a small group of homeowners about 8 miles west of Cortez who have organized themselves to attempt to extend service of the Montezuma Water Company rural water system to their homes. The Association has applied for funding from Rural Development which requires a Preliminary Engineering Report and Environmental Report. These studies are underway but the Association is $7,700 short of being able to fully fund the studies.

The application is attached to this email letter.

The Southwest Roundtable unanimously support providing $7,700 from our basin fund to assist the Association in completing the studies so they can continue the work to extend the water lines to serve their homes.

Though this project was not specifically identified in SWSI it does comply with the SWSI "Projects and Processes" to utilize the existing water rights and water supplies of Montezuma Water Company to meet water needs in Montezuma County.

The Southwest Roundtable highly recommends that the CWCB approve funding of this critical project from the Southwest Basin "pool" of SB179 funds.

Please contact me at 970-259-5322, steve@durangowater.com, if you have questions on the enclosed applications or wish discuss these applications in more detail.

Sincerely,

Steven C Harris, P.E.
Southwest Basins Roundtable Chair

Goodman Point Water Association

J.R. Berry, President
Keri Mustoe, Vice-President
Rodney Evans, Secretary-Treasurer
16345 County Road P
Cortez, Colorado 81321
Phone: (970) 759-9562
Email: JR.Berry@Hotmail.com

November 16, 2006

Southwest Basin, Attn: Steve Harris, Board Chairman
Colorado Water Conservation Board
Water Supply Reserve Account
2007 Grant Application RE: Summary Cover Letter

Attached is a Goodman Point Water Association Grant Request. We are requesting $7,700 to complete our funding for an Environmental Report and Preliminary Engineering Report. Total cost of the studies is $30,400. We have $15,200 in grant funding in hand and expect to secure another $7,500 from the USDA-Rural Development. The two studies will be performed by the following companies in partnership: Briliam Engineering Company, The Engineering Company, Woods Canyon Archeological Consultants, and Alta Environmental.

The studies will begin in November, 2006 and be completed in the April/May 2007 timeframe. The studies are necessary to negate a negative impact on the environment, pre-historical cultural resource sites, and to develop a general "scoping" of the project engineering requirements and project costs. They are also necessary to qualify for USDA-Rural Development grant/loan funding.

The project that the two studies will support involves extending two of Montezuma Water Company lines that terminate just outside the Goodman Point area. The extension of MWC lines will involve approximately ten miles of new 4" line with associated equipment such as lift pumps, storage tanks, etc. This project will provide the capacity for 100 taps in the Goodman Point area.

The residents of Goodman Point haul water for domestic purposes. We have no water available for structural fire protection or wildfire protection for the Canyon of the Ancients National Monument which borders Goodman Point to the South and West. Goodman Point is a low income area with a median household income of only $34,625 versus a State median household income of $49,793.

One can readily see that every dollar we can secure in grant funding is vitally important to this project. The residents of Goodman Point have a very limited capability to fund this project for domestic water out of pocket.

Your serious consideration of this request is most appreciated.

J. R. Berry
President, Goodman Point Water Association

COLORADO WATER CONSERVATION BOARD
WATER SUPPLY RESERVE ACCOUNT
2007 GRANT APPLICATION

Name of Water Activity/Project River Basin Location

Goodman Point Water Association-ER/PER Partial Funding; Southwest Basin

Please Check Applicable Box

No

Yes

Statewide Account__**No**____

Basin Account___**XXX__Ye**s)_____

Approval Letter Signed By_____

Roundtable Chair and Description of Results of
Evaluation and Approval Process _____

Amount of Funds Requested___$7,700_____

*** For the Basin Account, the Application Deadline is 60 Days Prior to the Bimonthly CWCB meeting.**

The CWCB meetings are posted at www.cwcb.state.co.us and are generally the third week of the month.

*** For the Statewide Account, the Application Deadline is 60 Days Prior to the March and September**

CWCB Board Meetings.

*** In completing the application you may attach additional sheets if the form does not provide adequate**

space. If additional sheets are attached please be sure to reference the section number of the application that you are addressing (i.e., A.1. etc.).

Instructions: This application form should be emailed, typed, or printed neatly. The Water Supply Reserve

Account Criteria and Guidelines can be found at http://cwcb.state.co.us/IWMD/. The criteria and guidelines should be reviewed and followed when completing this application. You may attach additional sheets as necessary to fully answer any question, or to provide additional information that you feel would be helpful in evaluating this application. Include with your application a cover letter summarizing your request for a grant.

If you have difficulty with any part of the application, contact Rick Brown of the Intrastate Water Management and Development (Colorado Water Conservation Board) for assistance, at (303) 866-3514 or email Rick at rick.brown@state.co.us.

Generally, the applicant is also the prospective owner and sponsor of the proposed water activity. If this is not the case, contact the Rick Brown before completing this application.

2

Part A. - Description of the Applicant (Project Sponsor or Owner);

1. Applicant Name(s): Goodman Point Water Association

Mailing address: 12190 Road 16 Cortez, CO. 81321

Taxpayer ID#: Email address: # 16-1770907 JR.Berry@Hotmail.com

Phone Numbers: Business: (970) 759-9562

Home: (970) 565-3227

Fax: (970) 565-5133

Person to contact regarding this application if different from above: 2.

Name: J.R. Berry

Position/Title President, Goodman Point Water Association

Provide a brief description of your organization below: Refer to Part 2 of criteria and guidance for required Information. Attach additional sheet(s) as needed.

GPWA is a non-profit Association organized under and by virtue of, and in accordance with the provisions of articles 20 through 29 of the Colorado Non-Profit Corporation Act (See attached articles of Incorporation, By-Laws, and Registration with the Colorado Secretary of State).

GPWA was organized in August, 2006, expressly and solely to develop (or cause to be developed) a domestic water supply to the residents of Goodman Point

Name of water activity/project: 1. GPWA Water Association Project

Part B. - Description of the Water Activity – Please Refer to Criteria and Guidance Document for Eligibly Criteria

Development of an Environmental Report and a Preliminary Engineering Report for a project to extend two of Montezuma Water Company's domestic line terminations, into the Goodman Point area. This will encompass approximately 10 miles of water line, and cover approximately 12 square miles. It will include a lift pump for the elevation gain, a water storage tank, and provide the capability to service 100 taps.

This request for $7,700 represents 25% of the funds required for the two studies ($30,400).

2. What is the purpose of this grant application? Check one.

Environmental compliance and feasibility study __XX__Environmental compliance and feasibility study

Technical assistance regarding permitting, feasibility studies, and environmental compliance

Studies or analysis of structural, nonstructural, consumptive, nonconsumptive water needs, projects, or activities (Please specify)

Structural and/or nonstructural water project or activity

Water Supply Reserve Account – Grant Application Form
Form Revised November 2006

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3. Please provide an overview of water project or activity to be funded including – type of activity, statement of what the activity is intended to accomplish, the need for the activity, the problems and opportunities to be addressed, expectations of the participants, why the activity is important, the service area or geographic location, and any relevant issues etc. Please include any relevant Tabor issues. Please refer to Part 2 of criteria and guidance document for additional detail on information to include.

This grant request is to provide 25% ($7,700) of the $30,400 needed to complete an Environmental Report and a Preliminary Engineering Report. These reports are necessary to
--negate damage to the environmental resources and cultural resources
--develop a preliminary "blueprint" of the project engineering aspects.
--These reports are also required by the USDA-Rural Development in order to qualify for grant/loan funding; and will be a positive factor in requesting construction funding from the Southwest 1177 Roundtable in 2007, and from other potential funding sources.

The ER and PER will help support the project to bring long needed domestic water to the households of Goodman Point so that hauling water to our homes (with health related issues) can be terminated.

Domestic Water in Goodman Point will also provide added fire protection for our homes and other structures as well as bring a water supply into this area to help fight wildfires in the Canyon of the Ancients National Monument which borders Goodman Point on the South and West. This area has "dry" lightning strikes and associated wildfires each fire season.

Goodman Point is an area in Montezuma County, approximately 9 miles West/North West of Cortez,. It is an area loosely defined by C.R. S on the North, C.R. 18 to the East, C.R. M on the South, and 1 to 2 miles West of C.R. 16. (see attached article developed by Crow Canyon on the history of Goodman Point, Montezuma County, Colorado.)

This area has attempted to obtain domestic water through Montezuma Water Company many times in the past 15 years and for whatever reason the timing was never quite right. Today, Montezuma Water has the line capacity and pressure to serve this area. GPWA needs the

studies and associated funding to begin the process of extending MWC's existing water lines.
The Montezuma Water Company's Board of Directors passed a resolution stating that they will build and service an expanded system into Goodman Point if we can get the project funded (copy attached).

Also, the Montezuma County Commissioners issued a resolution of support for this project (copy attached).

Options: This area was settled in the 1880s. The residents hauled their domestic water by horse and mule. Today, we still haul our domestic water, except by vehicle. Continuing to haul water into the 21st Century (with ample domestic water so close is simply not an option).

Drilling deep wells is not an option either. The Entrada Sands of the area simply don't yield sufficient volume to service the area.

GPWA has secured $15,200 in funds for these studies from the Southwestern Water Conservation District. Also, a grant application in the amount of $7,500 has been submitted to the USDA-Rural Development.

4. Please provide a brief narrative of any related or relevant previous studies.
N/A

5. Please provide a copy of the proposed scope of work. Please refer to Part 2 of the criteria and
guidance document for detailed requirements.
See attached Proposal from the four companies partnering on the two reports; Briliam Engineering, Woods Canyon Archeological Consultants, The Engineering Company, and Alta Environmental regarding the development of the Environmental Report and Preliminary Engineering Report.

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List the names and addresses of any technical or legal consultants retained to represent the applicant or to conduct investigations for the water activity/project.

Name	Address/Phone Number
Briliam Engineering (Patrick O'Brien)	(970) 731 9338 POB 3238 Pagosa Springs, CO. 81147
Woods Canyon Archeological Consultants (Jerry Fetterman)	(970) 562-4884 POB 253 Yellowjacket, CO 81335
Alta Environmental (Tom Rice)	(970) 749 6432 13095 C.R. 26 Cortez, CO. 81321
The Engineering Company (Thomas F. Ullmann)	(970) 484-7477 2310 East Prospect Ft. Collins, CO. 80525

Name Address/Phone Number

7

Water Availability and Sustainability – this information is needed to assess the viability and effectiveness of the water project or activity. Please provide a description of each water supply source to be utilized for the water activity. Each source should be described in terms of location, yield, extent of development, and water right status (the analysis should take into consideration a reasonable range of hydrologic variation).

Montezuma Water Company owns water rights that are used to provide service to members in 3 counties in Southwest Colorado. The water supply is the Dolores River and the Wells in Lost Canyon. Montezuma Water Company 's water treatment plant has a currently capacity of 4 million gallons per day and this past year at peak time the demand was 44% of plant capacity. At peak time MWC has used approximately 3% of their total water rights.

Montezuma Water Company is a non-profit 401-C12 that was formed in 1965. The company has 4084 members with approximately 450 miles of mainlines in Montezuma, Dolores and San Miguel counties. The

company has 12 storage tanks with 7 pump stations. In 2005 MWC was named Water Utility of the Year in the State of Colorado by the Colorado Rural Water Association. They currently have 20 employees and are governed by a 9 member Board of Directors.

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If you have not specifically and fully addressed the Evaluation Criteria found in Part 3 of the criteria and guidance document please provide additional detail here. Attach additional sheet(s) if needed.

a. **Funding from this Account will reduce the uncertainty that the water activity will be implemented. Goodman Point is a low income area. The State Demographics department has determined that the median household income of Goodman Point is $34,625 versus a state median household income of $49,793. This means that every dollar of grant funding is critical to getting domestic water to Goodman Point. Beyond the "study phase" looms the specter of project construction of costs between $600,000 and $1,000,000. It will be a significant challenge to obtain sufficient grants for this phase of the project to make the project affordable to the average household of Goodman Point.**

b. There is an urgency of need for the water activity and/or any compelling "window of opportunity" that may be missed without funding from this Account.

Goodman Point has tried to get domestic water to this area many times in the past 15 years and the timing was never right for the project to succeed. The residents of Goodman Point have been working with Montezuma Water Company for most of 2006 to restart the project. Montezuma Water Company is now "sitting on go" waiting for the funding to come through so this project can finally be implemented. Also, the Montezuma County Commissioners have endorsed this project with their support. The time is NOW for Goodman Point.

e.The length of time needed to implement the water activity;----- This project will be complete in the February/March 2007 timeframe. This includes the Environmental Report and the Preliminary Engineering Report on the proposed line expansion route.

f. The applicant has the expertise and ability to implement the proposed activity. The Briliam Engineering Company partnership

with Woods Canyon Archeological Consultants, Alta Environmental, and The Engineering Company was chosen from among four bids submitted.
Although they were not the "low bid", their combined partnership expertise presented the outstanding qualifications necessary to complete the ER and PER.

g. The applicant is providing matching funds and the amount of matching funds or is obtaining partial funding from other sources and the amount and source of such other funds, ----------
Goodman Point Water Association has already obtained $15,200 in grant funding from the Southwestern Water Conservation District. We have applied for, and expect to receive $7,500 in grant funding from the USDA-Rural Development. This leaves $7,700 in funding needed (the amount of this request) to fund the entire project.

h. The applicant has a demonstrated need for financial assistance based on the inability of difficulty obtaining funding elsewhere.
As mentioned above, Goodman Point has a low median household income ($34,625) versus a State average of $49,793. We need grant assistance. Further, we believe we have exhausted all other avenues for grants. A substantial amount of severance tax monies originated in this area (CO2, Oil, Gas) and we would like to see some of it returned to this area for Goodman Point's much needed domestic water.

n. This project will help approval of the enlargement of Montezuma Water Companies existing facility by expanding two of their existing lines that terminate just outside the Goodman Point area.

r The water activity provides a high level of benefit to Colorado in relationship to the amount of funds requested.
For the requested amount of $7,700, Goodman Point will have a complete Environmental Report and Preliminary Engineering Report covering over 10 miles of proposed water line expansion, and approximately 12 square miles of coverage. This will also make the Goodman Point Water Association eligible to apply for grants and loans from the USDA-Rural Development and other sources to help fund the construction project.

t. The water activity helps support the State's economic vitality and competitiveness in nation and international markets by instantly making over 12 square miles of rural "dry domestic area" extremely desirable for building and development by having domestic water. Goodman Point is a "high point" in the county with outstanding 360 degree views and will grow with the coming of domestic water. Further, providing domestic water to Goodman Point will double the taxable value of the Goodman Point area.

8.

Additional Information – If you feel you would like to add any additional pertinent information
please feel free to do so here.
9.
The above statements are true to the best of my knowledge:

Signature of Applicant:_____

Print Applicant's Name: J. R. Berry, President, GPWA
Project Title: Goodman Point Water Association ER and PER Project
Return this application to:
Mr. Rick Brown
Intrastate Water Management and Development Section
COLORADO WATER CONSERVATION BOARD
1580 Logan Street, Suite 600
Denver, CO 80203
To submit applications by Email, send to: rick.brown@state.co.us
Water Supply Reserve Account – Grant Application Form
Form Revised November 2006

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Reference Information
The following information is available via the internet. The reference information provide additional detail and background information regarding these criteria and guidelines and water policy issues affecting our state.
Colorado Water Conservation Board Policies Loan and Grant policies and information are available at - http://cwcb.state.co.us/Finance/
Water Supply Reserve Account Criteria and Guidelines – Create Link
Interbasin Compact Committee and Basin Roundtables
Interbasin Compact Committee By- laws and Charter – Create Link
Basin Roundtable By-laws – Create Link
Legislation
House Bill 1177 - Also known as the Water for the 21st Century Act – Create Link
House Bill 1400 – Adopted the Interbasin Compact Committee Charter – Create

Link
Senate Bill 179 – Created the Water Supply Reserve Account – Create Link
Statewide Water Supply Initiative
General Information - http://cwcb.state.co.us/IWMD/
Phase 1 Report - http://cwcb.state.co.us/IWMD/PhaseIReport.htm

Goodman Point Water Association
ER/PER Partial Funding Grant Application
November, 2006

List of Attachments to Summary Cover Letter and Grant Application

A. Goodman Point Articles of Incorporation registered with Colorado Secretary of State

B. Goodman Point Water Association Articles of Incorporation

C. By-Laws of Goodman Point Water Association

D. GPWA Financial Statement

E. GPWA Certificate of "Good Standing" from the Colorado Secretary of State

F. GPWA Registration with D&B for a D-U-N-S number.

G. GPWA Letter of Support-Montezuma County Commissioners

H. GPWA Letter of Support-Montezuma Water Company

I. Documentation of Accounting System used – Quickbooks

J. Goodman Point Historic Land-Use Study – by Crow Canyon Archeology

K. PER/ER Proposal – Briliam Engineering, The Engineering Company, Woods Canyon Archeological, Alta Environmental

A

E-Filed

Colorado Secretary of State
Date and Time: 09/23/2006 09:57 AM
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ABOVE SPACE FOR OFFICE USE ONLY

Articles of Incorporation for a Nonprofit Corporation

filed pursuant to §7-90-301, et seq. and §7-122-101 of the Colorado Revised Statutes (C.R.S)

1. Entity name: Goodman Point Water Association

(The name of a nonprofit corporation may, but need not, contain the term or abbreviation "corporation", "incorporated", "company", "limited", "corp.", "inc.", "co." or "ltd." §7-90-601, C.R.S.)

2. Use of Restricted Words *(if any of these terms are contained in an entity name, true name of an entity, trade name or trademark stated in this document, mark the applicable box)*:

☐ "bank" or "trust" or any derivative thereof
☐ "credit union" ☐ "savings and loan"
☐ "insurance", "casualty", "mutual", or "surety"

3. Principal office street address:

12190 CR 16
(Street name and number)

Cortez CO 81321
(City) *(State)* *(Postal/Zip Code)*

(Province – if applicable) United States
(Country – if not US)

4. Principal office mailing address: (if different from above)

16345 CR
(Street name and number or Post Office Box information)

Cortez CO 81321
(City) *(State)* *(Postal/Zip Code)*

(Province – if applicable) United States
(Country – if not US)

5. Registered agent: (if an individual):

Berry J.R.
(Last) *(First)* *(Middle)* *(Suffix)*

OR (if a business organization):

6. The person appointed as registered agent in the document has consented to being so appointed.

7. Registered agent street address:

12190 CR 16
(Street name and number)

Cortez CO 81321
(City) *(State)* *(Postal/Zip Code)*

8. Registered agent mailing address: (if different from above)

12190 CR 16
(Street name and number or Post Office Box information)

Cortez (City) | CO (State) | 81321 (Postal/Zip Code)

(Province – if applicable) | United States (Country – if not US)

9. If the corporation's period of duration is less than perpetual, state the date on which the period of duration expires: _____ (mm/dd/yyyy)

10. *(Optional)* Delayed effective date: _____ (mm/dd/yyyy)

11. Name(s) and address(es) of incorporator(s): (if an individual) Berry (Last) | J.R. (First) | (Middle) | (Suffix)

OR (if a business organization) _____

12190 CR 16
(Street name and number or Post Office Box information)

Cortez (City) | CO (State) | 81321 (Postal/Zip Code)

(Province – if applicable) | United States (Country – if not US)

(if an individual) Mustoe (Last) | Keri (First) | M (Middle) | (Suffix)

OR (if a business organization) _____

17250 CR P
(Street name and number or Post Office Box information)

Cortez (City) | CO (State) | 81321 (Postal/Zip Code)

(Province – if applicable) | United States (Country – if not US)

(if an individual) Evans (Last) | Rodney (First) | L (Middle) | (Suffix)

OR (if a business organization) _____

16345 CR P
(Street name and number or Post Office Box information)

Cortez (City) | CO (State) | 81321 (Postal/Zip Code)

(Province – if applicable) | United States (Country – if not US)

(If more than three incorporators, mark this box ☐ *and include an attachment stating the names and addresses of all incorporators.)*

12. The nonprofit corporation is formed under the Colorado Revised Nonprofit Corporation Act.

13. The corporation will ☑ **OR** will not ☐ have voting members.

14. A description of the distribution of assets upon dissolution is attached.

15. Additional information may be included pursuant to §7-122-102, C.R.S. and other organic statutes. If applicable, mark this box ☑ and include an attachment stating the additional information.

Notice:

Causing this document to be delivered to the secretary of state for filing shall constitute the affirmation or acknowledgment of each individual causing such delivery, under penalties of perjury, that the document is the individual's act and deed, or that the individual in good faith believes the document is the act and deed of the person on whose behalf the individual is causing the document to be delivered for filing, taken in conformity with the requirements of part 3 of article 90 of title 7, C.R.S., the constituent documents, and the organic statutes, and that the individual in good faith believes the facts stated in the document are true and the document complies with the requirements of that Part, the constituent documents, and the organic statutes.

This perjury notice applies to each individual who causes this document to be delivered to the secretary of state, whether or not such individual is named in the document as one who has caused it to be delivered.

16. Name(s) and address(es) of the individual(s) causing the document to be delivered for filing:

Evans	Rodney	L	
(Last)	*(First)*	*(Middle)*	*(Suffix)*

16345 CR P
(Street name and number or Post Office Box information)

Cortez	CO	81321
(City)	*(State)*	*(Postal/Zip Code)*

	United States
(Province – if applicable)	*(Country – if not US)*

(The document need not state the true name and address of more than one individual. However, if you wish to state the name and address of any additional individuals causing the document to be delivered for filing, mark this box ☐ and include an attachment stating the name and address of such individuals.)

Disclaimer:

This form, and any related instructions, are not intended to provide legal, business or tax advice, and are offered as a public service without representation or warranty. While this form is believed to satisfy minimum legal requirements as of its revision date, compliance with applicable law, as the same may be amended from time to time, remains the responsibility of the user of this form. Questions should be addressed to the user's attorney.

NOTICE:

This "image" is merely a display of information that was filed electronically. It is not an image that was created by optically scanning a paper document.

No such paper document was filed. Consequently, no copy of a paper document is available regarding this document.

Questions? Contact the Business Division. For contact information, please visit the Secretary of State's web site.

Click the following links to view attachments

Attachment 1
Addendum

Article Of Incorporation Of Goodman Point Water Association

A Non-profit Association

ADDENDUM:

If, and when, the Goodman Point Water Association should be dissolved, all available monies will be disbursed equally to the water tap owners of record. The Goodman Point Water Association will not be dissolved without a majority ruling by the membership of record.

B

ARTICLES OF INCORPORATION
OF
GOODMAN POINT WATER ASSOCIATION
A Non-Profit Association

KNOW ALL PERSONS BY THESE PRESENTS, that we, the undersigned, all residents of the County of Montezuma, State of Colorado, have, and do hereby, associate ourselves together for the purpose of forming and becoming a body, not for profit or pecuniary gain, under and by virtue of and in accordance with the provisions of Articles 20 through 29 of the Colorado Non-Profit Corporation Act, and we do hereby make, execute, acknowledge and adopt the following articles for such corporation, existing expressly for community development (Development Corporation).

FIRST: The Association name shall be Goodman Point Water Association.

SECOND: The term for which this Association is organized is perpetual. The death, removal, or resignation of any member of this Association shall not result in the dissolution of this Association.

THIRD: The objects and purposes for which this Association is formed and incorporated is as follows:

a. **To acquire by purchase, lease, contract, or otherwise a water supply system; and to own or acquire property, either real or personal, which may be necessary for, and incidental to the acquisition of supply, delivery, and sale of domestic and/or commercial water to rural property owners in the Goodman Point area of Montezuma County in the State of Colorado, and to do and conduct such business as shall be deemed prudent and practical therefore by the members, officers, and directors of this Association.**

b. **To make and enter into contracts and loans, and to conduct any lawful business whatsoever, and to do and transact any business not prohibited by law for an Association to do and perform when organized under the Colorado Statutes for a non-profit corporation, except that all such activities shall relate directly to the Objects and Purposes of this Association stated above.**

c. **To borrow money, either with or without giving security therefore, and to loan money, either with or without taking security therefore.**

FOURTH: The Board of Directors shall have the sole authority to make, adopt, and set, the standards, policies, and regulations concerning the construction and operation of the system and the delivery of water. It is anticipated that the system will be constructed by, and maintained by Montezuma Water Company via long

term lease, and will be governed by the same rules and regulations, fees, rates, etc to which other members of Montezuma Water Company are subjected. The Board of Directors shall also have the sole authority to set annual Association membership fees, USDA Rural Development loan repayment fees, special assessments to cover anticipated monetary shortages, or to refund to the membership, excess funds in the Association account. In the event of delinquency in the payment of fees, assessments, water charges, USDA-RD loan repayments or water usage charges, the Board of Directors shall have the power to enforce the collection thereof by either, or by any combination of the following remedies:

a. By personal action of debt brought against the delinquent member.

b. By withholding the delivery of water to the delinquent member.

FIFTH: The Officers of this Association shall be a President, a Vice-President, and a Secretary-Treasurer. All officers of the Association must be members of the Association. The term of office of the Officers of this Association shall be for a period of three (3) years, or until their successors are duly elected and qualified as provided in the bylaws.

SIXTH: This Association shall have no capital stock. There shall be only one class of membership. The evidence of membership shall be a Certificate of Membership. The interest, rights and obligations of all members of the association shall be equal, except as may be provided in the bylaws of this Association.

SEVENTH: The President, or the Vice-President in case of the absence of the President, together with the Secretary-Treasurer shall have the authority to convey or encumber the real and personal property of the Association and to make, execute, and acknowledge instruments of conveyance or encumbrances thereof. A two-thirds (2/3) vote of the Association membership, represented either in person, by proxy, or absentee ballot can resend any action of the Board of Directors.

EIGHTH: These articles of incorporation may be amended at any meeting of the members with a two-thirds (2/3) vote of the Association membership, represented either by proxy, ballot or in person.

NINTH: Bylaws of this Association for the management of its affairs shall be adopted by the members of the Association by a 2/3 vote present at the 8/15/06 meeting. The board of Directors shall be empowered to recommend amendments to the by laws.

TENTH: Cumulative voting shall not be allowed.

ELEVENTH: The principal office and registered office of said Association shall be

at 16345 CR P, Cortez, Colorado 81321, or at such other address in said County and State as the Board of Directors may designate from time to time, and the principal place of business shall be carried on in the County of Montezuma, State of Colorado. The registered agent at such address shall be the Secretary-Treasurer of the Association, named below, and may change from time to time as the Association member occupying the office of Secretary-Treasurer may change as permitted by election or appointment.

TWELFTH: The number of Directors of the Association shall be three (3), and their terms of office shall be for a period of three (3) years and staggered terms shall be implemented. Such Directors shall be members in good standing (not delinquent on any assessments, fees, dues, or loan payments) and each shall be elected by a majority vote of the membership of the Association present, or represented by proxy, or absentee ballot. The names and addresses of such Directors who shall manage the affairs of this Association until their successors are appointed/elected, and qualified, are as follows:

President:
NAME J.R. Berry
ADDRESS 12190 CR 16, Cortez, CO 81321

Signed: J R Berry

Vice-President:
NAME Keri Mustoe
ADDRESS 17250 CR P, Cortez, CO 81321

Signed: Keri M Mustoe

Secretary-Treasurer:
NAME Rodney L. Evans
ADDRESS 16345 CR P, Cortez, CO 81321

Signed: Rodney L. Evans

SUBSCRIBED AND SWORN TO BEFORE ME on this, the 18 day of August, 2006. in Cortez, Co.

Linda Bilyeu
Notary Public, State of Colorado
Term Exp 8-4-2008

C

BY-LAWS
OF
GOODMAN POINT WATER ASSOCIATION

Article I
Purpose and Name

The purpose, object and name for the Goodman Point Water Association (herein referred to as "Association", are set forth in the Articles of Incorporation approved by the voting membership on August 15, 2006.

Article II
Management

Section 2.1 The management of this Association shall be vested in a Board of Directors of three persons who possess the qualifications for voting membership in the Association.

Section 2.2 The Board of Directors shall have and exercise all the powers necessary to control the work and policy of this Association. No contract, debt, or obligation shall be binding unless contracted under the authority of the Board of Directors.

Section 2.3 The Board of Directors shall have the power to fill, for the unexpired term, all vacancies occurring in their number between annual elections.

Section 2.4 The Board of Directors shall have the sole authority to make, adopt, and set, the standards, policies, and regulations concerning the construction and operation of the system and the delivery of water.

Section 2.5 The Association, through its Board of Directors, may hold or dispose of such property, real or personal as may be given, devised, or bequeathed to it or entrusted to its care and keeping, and may purchase, acquire, and dispose of such property as may be necessary to carry out the purposes of the Association.

Section 2.6 The Board of Directors shall have the control and management of the property of the Association, with power to borrow money for corporate purposes, and to enter into binding contracts on behalf of the Association.

Section 2.7 The Board of Directors shall meet monthly at such time and place as they shall determine. Two-thirds of the membership of the Board of Directors shall constitute a quorum... Any member who misses three consecutive meetings may be dropped as a Board Member, unless the Board approves such absences.

Section 2.8 Special Meetings of the Board of Directors may be called by the President, or may be called upon the written request of a member in good standing.

ARTICLE III
Officers and Their Duties

Section 3.1 The Officers of the Board of Directors as elected by the Membership, shall be a President, a Vice President and a Secretary/Treasurer, each of whom shall hold office for a term of three (3) years and staggered terms shall be implemented.

Section 3.2 The initial election term is a two-year term for the President, the Vice President is a three-year term and the Secretary/Treasurer one-year term, with the succeeding terms to be three years.

Section 3.4 Officers shall be elected from the members of the Association in good standing.

Section 3.5 The President shall preside at all meetings of the Board of Directors and of the Association. With the Secretary/Treasurer, he shall execute all legal papers, documents and instruments. The President shall appoint all committees.

Section 3.6 The Vice President shall act with all powers in the absence or disability of the President.

Section 3.7 The Secretary/Treasurer shall, together with the President and Vice President, execute such legal papers, documents, or instruments as authorized. The Secretary/Treasurer shall keep the Minutes of all meeting of the Association and of the Board of Directors. The Secretary/Treasurer shall have charge of the funds and securities of the Association, and shall cause them to be deposited in depositories approved by the Board of Directors. He/She shall see that accurate records are kept of the funds and shall make monthly reports to the Board of Directors. The Secretary/Treasurer and one other board member will sign all checks for the Association.

Section 3.8 The Secretary/Treasurer who is responsible for handing Association funds shall be bonded.

ARTICLE IV
Committees

Section 4.1 A Nominating Committee shall be comprised of three (3) members (appointed by the President), and the Board of Directors will be appointed two (2) months prior to the annual meeting, to nominate a candidate(s) to stand for election at the annual meeting.

Section 4.2 Any other committee may be appointed by the President or the Board of Directors as needed.

ARTICLE V
Election and Voting

Section 5.1 Terms of office of the Board of Directors shall be three (3) years and commence at the end of the annual meeting.

Section 5.2 The President shall appoint a Nominating Committee of three (3) members in good standing to work with the Board of Directors to screen candidates for the Board membership.

Section 5.3 At *least* one month prior to the date of election, ballots will be distributed to the members. Members may mail in the ballots to the Chairman of the Nominating Committee or vote in person at the annual meeting. Mail-in ballots will be opened and counted at the annual meeting by the Nominating Committee who will have charge of the election. If there is only one member nominated, ballots need not be mailed.

Section 5.4 Nominations may be made from the floor at the annual meeting.

Section 5.5 There shall be only one class of membership. The evidence of membership shall be a Certificate of Membership. The interest, rights, and obligations of all members of the association shall be equal, except as may be provided elsewhere in the by-laws of this Association.

Section 5.6 Only members in good standing may vote in elections.

Section 5.7 Voting memberships shall be one vote per paid tap with a limit of five votes per individual, household, or business entity, regardless of the number of taps held by the individual, household or business entity .

Section 5.8 All Board of Director Offices may be reelected for one additional term. No board member can be elected for more than two terms consecutively.

ARTICLE VI
Annual Meeting

Section 6.1 There shall be an Annual Meeting of the Association on the first Saturday in August, or at such a time as the Board of Directors may determine. The purpose of this meeting shall be to review the work of the Association, to develop fellowship among members, and to develop their united action in planning and carrying forward the program of the Association.

Section 6.2 The majority of the membership, comprising both those members present and those mail-in ballots shall constitute a quorum.

ARTICLE VII
Dues and Penalties

Section 7.1 It is anticipated that the water system will be constructed by the successful bidder, and maintained by Montezuma Water Company via long term lease, and will be governed by the same rules and regulations, fee, rates, etc. to which other members of Montezuma Water Company are subjected.

Section 7.2 The Board of Directors shall also have the sole authority to set annual Association member fees, loan repayment fees, special assessments to cover anticipated monetary shortages, or to refund to the membership, excess funds in the Association account.

Section 7.3 In the event of delinquency in the payment of fees, assessments, loan repayments, or water usage charges, the Board of Directors shall have the power to enforce the collection thereof by any or a combination of the following remedies:

a. By personal action of debt brought against the delinquent member.
b. By withholding the delivery of water to the delinquent member.
c. No member who is delinquent in payments may vote or hold office in the Association.
d. By withholding refunds or assessing a late charge to the delinquent member.

ARTICLE VIII
Membership and Fees

Section 8.1 For all tap subscribers who join the Association after the project financing has been established, the cost of membership will be set at Fifteen Hundred dollars ($1,500) per tap. This tap subscriber will also pay the current tap fees in effect by Montezuma Water Company. Additionally, the tap subscriber will pay the same project fees (per tap subscribed) to the Association as paid by the Charter members. Charter Association members will not be subject to these fees if adding additional taps, with the exception of regular (annual) Association dues paid per tap and Montezuma Water Company's current tap fees.

Section 8.. The construction fees generated from individuals who join the Association after the financing of the project is set, will be rebated to the Charter Association members in good standing.

Section 8.4 The cost of the tap and construction costs for the tap as well as the line on the tap subscriber's property is the responsibility of the tap subscriber.

Section 8.5 Late fees will be assessed by Board of Directors.

Section 8.6 Association membership dues shall be twenty-five dollars ($25) per tap for the first year of the Associations existence, and thirty dollars ($30) per tap annually thereafter unless modified by the Board of Directors.

ARTICLE IX
Procedures

Section 9.1 Unless provided otherwise in these Bylaws, procedure at all meeting shall be governed by Oleck's Parliamentary ***Law for Nonprofit Organizations.***

ARTICLE X
These bylaws may be amended as provided in the ***Articles of Incorporation***

These Bylaws were approved and adopted by the majority vote of the Association membership in the month of October, 2006.

J R Burns, President 10/31/06

Notary: Linda Bilger
term exp. 8-4-08
Signed in my Presence
10/31/06

D

Goodman Point Water Association
General Account

Treasurers Accounts 9/1/06 to 10/30/06

Receipts

Membership Dues	24 members @ $25	$ 600.00
Southwest Water Conservation District		20,000.00
Interest Accrued		- 0 -
Total to be accounted for		$20,600.00

Disbursements

By Warrant	$ 148.71
Bank Charges	1.80
Total Disbursements	150.51
Bank Balance 10.30/06	$20,499.49

Distribution of Disbursements

By Warrant	$ 90.55
Bank Checks	58.16
Bank Service Charge	1.80
Total Expenditures	$ 150.51

*NOTE

Goodman Point Water Association has no assets other than cash in Bank.

Rodney L. Evans Treasurer

Business Search Results

Click on the ID Number to select your record.

Found 1 matching record(s). Viewing page 1 of 1.

#	ID Number	Document Number	Name	Event	Status	Form	Formation Date
1	20061388596	20061388596	Goodman Point Water Association	Articles of Incorporation	Good Standing	DNC	09/23/2006

Previous Page

Subject: Fulfilled New DUNS Request - Tracking ID : 218308
From: govt@dnb.com
Date: Mon, 2 Oct 2006 18:20:01 -0400 (EDT)
To: kandrevans@fone.net

THIS IS AN AUTOMATED MESSAGE GENERATED BY THE D&B D-U-N-S REQUEST PORTAL.

D&B has fulfilled your D-U-N-S number request. CCR registration can begin in 24 hours by going to www.ccr.gov and clicking "Start New Registration".

For questions about the CCR registration process, please contact the CCR help desk at 888-227-2423.

For questions about your D&B D-U-N-S Number, call 866-705-5711.

Your D-U-N-S Number is 785824967
for
Goodman Point Water Association
12190 CR 16
Cortez,CO,81321
UNITED STATES OF AMERICA

G7

MONTEZUMA COUNTY
BOARD OF COMMISSIONERS

109 West Main Street, Room 302
Cortez, Colorado 81321
(970) 565-8317

Planning/Mapping	565-2801
Mike Preston	565-8525
Carla Harper	565-6061

October 23, 2006

Mr. J. R. Berry, President
Goodman Point Water Association
12190 C. R. 16
Cortez, Colorado 81321

Dear Mr. Berry:

Thank you for your letter of September 28, 2006, advising Montezuma County of your Association's intentions to initiate a project to bring domestic water to the Goodman Point area of Montezuma County.

Our understanding is that the project will tie onto two of Montezuma Water Company's existing water lines that terminate just outside the Goodman Point area and will include approximately ten miles of new water line together with associated equipment such as lift pumps, storage tanks, hydrants, etc.

We, the Commissioners of Montezuma Country, fully support your project to bring much needed domestic water to the households of Goodman Point. This should also enhance the water supply for fire protection of homes in the area as well as an increased water supply available for fighting wildfires in the Canyon of the Ancients National Monument that surrounds the Goodman Point area to the South and West.

We believe your Association is being responsible and prudent by performing both an Environmental Report and Preliminary Engineering Report prior to beginning construction.

Please remember that any use of county easements will require separate approval from the Montezuma County Board of County Commissioners. Please keep us informed as your plans progress.

Sincerely,

H. Dewayne Findley, Chair
Board of County Commissioners

cc: Mike Bauer, Manager, Montezuma Water Company
Jaki Polich, USDA Rural Development Manager

H

RESOLUTION OF BOARD OF DIRECTORS

I HEREBY CERTIFY that I am the duly appointed and qualified as Acting Secretary of **Montezuma Water Company** and the keeper of the records and corporate seal of said Corporation and that the following is a true and correct copy of a resolution duly adopted at a regular meeting of the Board of Directors of said

Corporation held in accordance with the By-Laws of said Corporation at its office at **209 Central Avenue, Dolores, CO** on the **12th** day of **September 2006**.

> "Be It Resolved, that **Montezuma Water Company** shall install mainlines, tank and pump station as deemed necessary and appropriate by the company in the Goodman Point area provided that the Goodman Point Water Association can fully fund such project, including contingencies"

In Witness Whereof, I have hereunto affixed my name as **Wayne Johnson** Acting Secretary and have caused the corporate seal of said Corporation to be hereto affixed this **12th day of September 2006.**

Acting Secretary

I **Tad Willbanks**, President of said Corporation, do hereby certify that the foregoing is a correct copy of a resolution adopted as above set forth.

President

1

Dear GOODMAN POINT WATER ASSOCIATION,

Thank you for placing an order with Intuit! We have received your order, and it is currently being processed.

Order Details

Order #: SBL20460922
Order Date: October 23 2006

1	QUICKBOOKS PRO 2007 FOR MAC DIRECT	$199.95

Subtotal:	$199.95
Sales Tax:	$7.03
Shipping:	$9.95
Total for this Order:	$216.93

Please Note:
Sales tax calculations are estimated; final sales tax calculation will comply with local regulations.

Billing/Shipping Information

Bill To: GOODMAN POINT WATER ASSOCIATION
16345 ROAD P
CORTEZ, CO 81321-9453

E-mail Address: KANDREVANS@FONE.NET

Payment Type: MASTERCARD *5152

Ship To: GOODMAN POINT WATER ASSOCIATION
16345 ROAD P
CORTEZ, CO 81321-9453

Shipping Method: Express

Expected Ship Date: October 24 2006 - October 27 2006

Expected Delivery Date: October 25 2006 - October 31 2006

We will send you an e-mail when your order has shipped.

Track Your Order

You can track the status of your order by going to our Order Status tool.

Contact us

If you have questions about your order or need additional help,

Quick Links

- Check your order status

4

The Goodman Point Historic Land-Use Study

Marjorie R. Connolly

Introduction

The Goodman Point community, located approximately 16 km (10 mi) west of Cortez, Colorado, consists of the residents of a number of widely dispersed homes and farms. Homesteading in the Goodman Point area began in 1911 and continued into the 1960s, though at a decreasing rate after 1925. Between 1911 and 1925, Goodman Point developed into a farming community supporting over 160 people. These settlers cleared the sagebrush, pinyon, and juniper and supported their families with dry-land crops.

On U.S. Geological Survey (USGS) topographic maps, the label "Goodman Point" is applied only to the area between Sand and Goodman canyons, but residents of the area apply the term somewhat more broadly. Locally, the Goodman Point area is defined on the south by the rims of McElmo Canyon and lower Sand and Goodman canyons, and on the north by Yellow Jacket Canyon and Dawson Draw (Figure 4.1). The eastern boundary begins at the western rim of Trail Canyon, and the western boundary is located past Sand Canyon, where private lands give way to lands administered by the Bureau of Land Management. Thus defined, the Goodman Point area encompasses approximately 75 km^2 (29 mi^2).

The Goodman Point study area ranges in elevation from approximately 1750 m (5750 ft) in the bottom of Goodman Canyon at the southern edge of the study area to approximately 2180 m (7160 ft) on the divide between Sand and Goodman canyons, near the McElmo Canyon rim. The study area is centered on the McElmo dome, a structural uplift with a north-northeast dipping axis. The surface of this feature is formed on the Lower Cretaceous Dakota Sandstone, which is locally overlain by eolian-deposited silts and dissected by canyons draining south to McElmo Creek or northeast to Yellow Jacket Canyon. Elevations on the McElmo dome are highest on Goodman Point proper—the divide between Goodman and Sand canyons, just north of where the uplifted rocks are truncated by McElmo Canyon. From this point, the surface of the dome slopes both east and west, and more gradually along its axis to the north-northeast.

Deep, rich eolian soils and an average annual precipitation exceeding 14 in per year make the Goodman Point area one of the most productive farming locations in Montezuma County. When Anglo settlement began, it was an area of open sage parks on the deeper upland soils, surrounded by stands of pinyon and juniper trees occupying the canyon rims as well as some of the deep soil areas.

In 1983, the Crow Canyon Archaeological Center began a long-term archaeological research program that focused on the Sand Canyon locality, an approximately 200 km^2 area around Sand Canyon and Goodman Point pueblos (Figure 1.2). The Sand Canyon locality includes the Goodman Point study area defined for this report (Figure 4.1). Prehistoric Anasazi communities occupied the Goodman Point area for at least 700 years (Adler, this volume)—from the A.D. 500s or 600s through most of the 1200s. Surveys by Crow Canyon Center archaeologists and other researchers in the study area have revealed abundant evidence of habitation and limited-activity sites, as well as prehistoric reservoirs, agricultural features such as checkdams, and traces of a road that appears to have extended from near the head of Sand Canyon to the area just north of the Goodman Point Ruin (Adler, this volume; Adler 1988, 1990). These sites are located on privately owned farms and on public lands administered by the Bureau of Land Management and the National Park Service.

In 1989, the Crow Canyon Archaeological Center initiated an oral history project involving older residents of Goodman Point. It was expected that these residents'

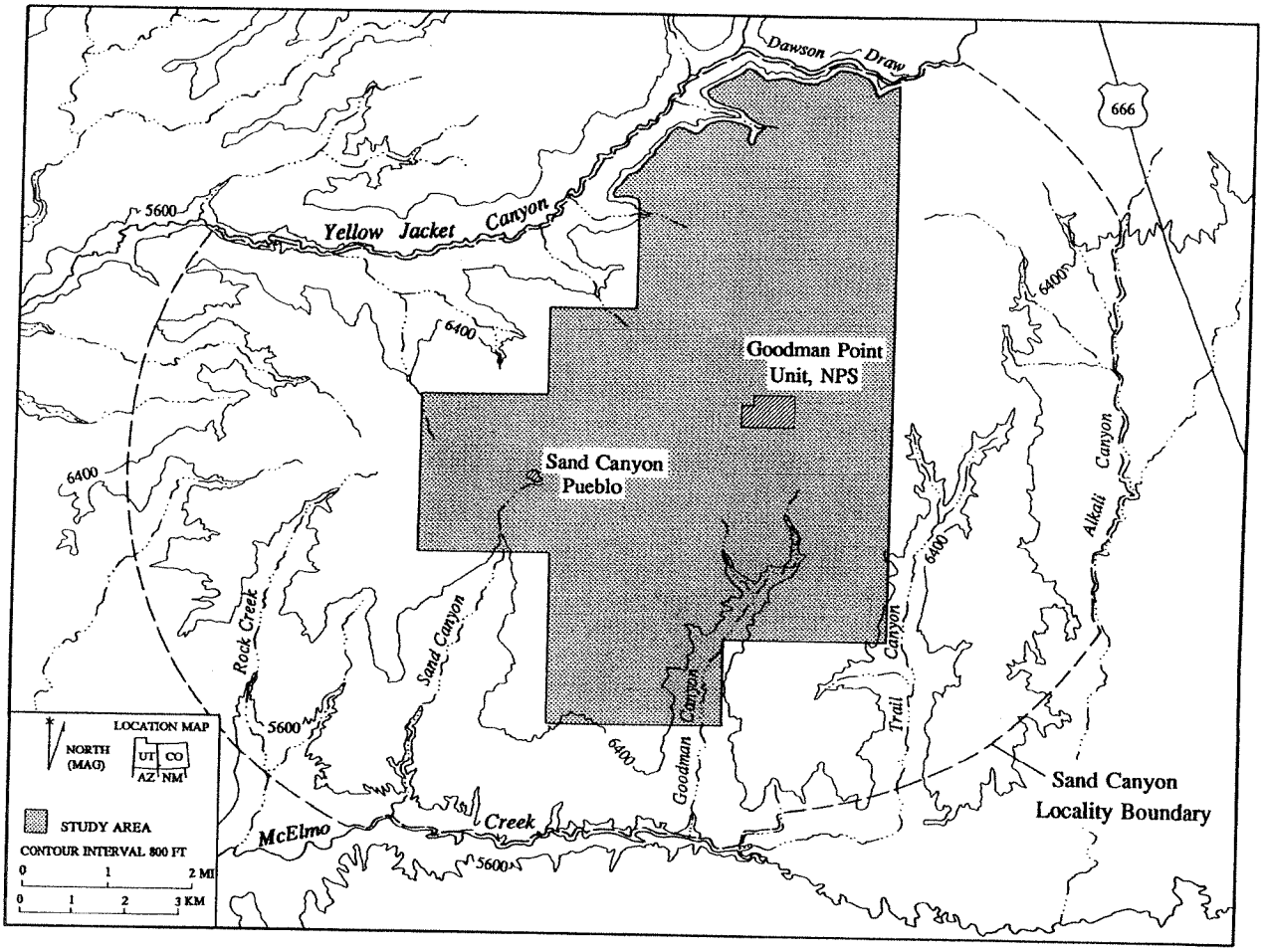

Figure 4.1. Goodman Point historic land-use study area.

recollections of homesteading and dry farming in the area would be helpful in understanding the earlier response of Anasazi farmers to the same challenges—finding suitable soil, farming in a semiarid region with a highly variable climate, and finding reliable domestic water sources. Furthermore, since 1911, historic land use has significantly altered the archaeological resources of the area. No one knows more about this transformation than the residents of Goodman Point. The older residents gained an intimate understanding of the archaeological resources when they cleared the lands for agricultural use. Through informal meetings, questionnaires, and taped interviews, the Center hoped to accomplish the following goals:

- Understand the criteria and techniques farmers used in selecting their land for homesteading and for farming
- Document the location of early homesteads and the identities of the families that settled them
- Learn about crop selection and successes and failures in farming
- Identify local water sources
- Document the impact of farming on archaeological sites
- Record current residents' perceptions of archaeology

Methods

The Goodman Point oral history project was carried out during 1989 and early 1990, under the direction of the author (Connolly 1990). Funding assistance was provided by the Colorado Endowment for the Humanities, the Ballantine Family Charitable Fund, and the Crow Canyon Archaeological Center. An initial search for literature on Anglo settlement in the Goodman Point area provided few sources of information. No reference to early farming practices on Goodman Point was found. Documents at the Cortez office of the Soil Conservation Service and at the Center for Southwest Studies at Fort Lewis College in Durango contained no specific reference to the immediate study area. However, climate and crop production records

for Montezuma County as a whole were located at the Soil Conservation Service office, and these records served as reliable cross-checks for information obtained from the informants.

The fieldwork for this study was conducted from December 1989 through February 1990. A questionnaire (Connolly 1990: Appendix A) was developed by the project director and reviewed by the Crow Canyon staff. The questionnaire was designed to gain insight into three areas: early homesteading, farming practices, and land use effects on archaeological sites.

The project director conducted all interviews in the informants' homes. For each interview, USGS topographic maps were used to record the location of homesteads, springs, and ruins. Every individual from the Goodman Point community who could recall the early days in the study area and who was still living in Montezuma County was contacted. Everyone who was contacted agreed to be interviewed and was friendly and helpful. Fifteen people were interviewed: Leslie Black, Steve Chappell, Lucile Everett, Edith Flanagan, Laura Fulks, Marie Graves, Lois Hearne, Alex Martin, Oscar Martin, Birney Seitz, Luther Shields, Catherine Stanley, Ford Stanley, Theron Story, and Dorothy Willbanks. Eight of these individuals are children of the first homesteaders. Six others moved to Goodman Point in the late 1920s with their parents, who had purchased land from the original homesteaders. One respondent was born in the 1940s. Although the people interviewed represent only a small number of the families who lived on Goodman Point prior to 1930, they were able to contribute a great deal of information about the early years of settlement, farming, and community formation. In the material that follows, these informants are often referred to collectively as "residents." This implies that they represent the larger group of early-day (pre-1930) residents of the Goodman Point community, many of whom are now deceased or have moved away.

Interviews with nine of the informants were tape-recorded. The tapes and transcriptions are permanently stored at the Montezuma Valley Historical Society, the Crow Canyon Archaeological Center, and the Cortez Public Library. A file was established for each person interviewed. The file includes a biographical data sheet, an interview release form, and a map.

After each interview, the responses to the questions were recorded in numerical order on a chart. The chart organized the data so that responses could more easily be compared. Below, responses to the questions are summarized in a descriptive manner, although occasionally direct quotes from individuals are provided. The chart and field notes are archived at the Crow Canyon Archaeological Center. The interview results are reported here by subject category: homesteading, farming practices, and archaeological sites.

Homesteading

From the late 1870s to 1900, a large portion of the land in Montezuma County was used for grazing. The earliest land applications on Goodman Point were made by cattlemen. Goodman Point was named after Henry Goodman, a rancher from Dolores who lived in the area in the late 1800s. Although Goodman never legally applied for any land, his name appears on the first surveyors' maps of Goodman Point in 1889. James P. Gallaway, a prominent rancher from Paradox Valley, applied for land north of Sand Canyon in 1892. By 1910, the cattle industry had been restricted to private and federally approved public lands, and new areas were opened to homesteading in Montezuma County.

The Homestead Act of 1862 allowed anyone who was 21 years of age or the head of a household to homestead up to 160 acres of public land. The Rio Grande Southern Railroad and the irrigation projects sponsored by the Montezuma Valley Water Supply Company attracted new settlers to Montezuma Valley. Between 1911 and 1925, over 62 people filed for land on Goodman Point. The dry-farming successes of the initial settlers encouraged their friends and relatives to settle in the area as well. The community grew quickly; by 1920 the population was approximately 160 people. Figure 4.2 shows the locations of homesteads settled in the period 1911–1925. This map is adapted from one kindly prepared for the oral history project by Ford Stanley, a resident of the Goodman Point community. The names of the homesteading families are given in Table 4.1.

The Goodman Point Archaeological Reserve (Figure 4.2) was a full section of land that had been set aside in 1889 to preserve the Goodman Point Ruin and other sites located close to it (National Park Service 1990). Consequently, it was not available for homesteading in the early period of settlement in the Goodman Point area. This was one of the first instances of archaeological preservation by the U.S. government. Approximately 143 acres of the original 640-acre Reserve were designated as a unit of Hovenweep National Monument in 1951 and 1952 (National Park Service 1990). Of the nearly 500 acres removed from the Reserve at that time, the majority was retained in public ownership under the Bureau of Land Management, but approximately 160 acres located just south and west of the monument unit were released for acquisition by private landowners.

As land in the Goodman Point area was settled, families arrived from Arkansas, California, Kansas, Michigan, Oklahoma, Texas, Washington, and West Virginia. The first priorities of the homesteaders were to construct a home, cistern, and root cellar and to plant a garden. Ten to 20 acres were quickly cleared to meet the requirements of the Homestead Act. The approximate locations of the earliest houses are shown in Figure 4.2.

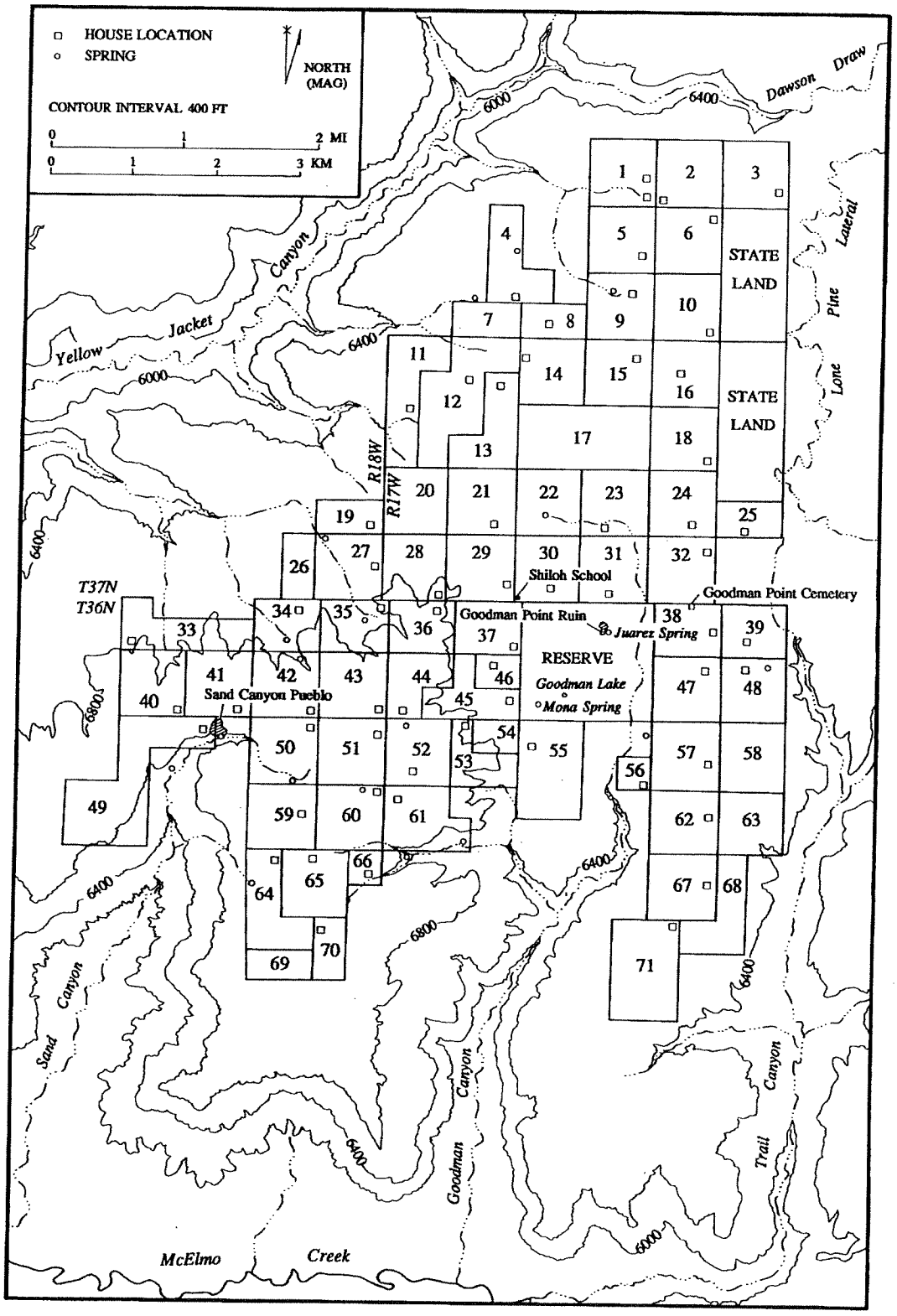

Figure 4.2. Homesteads of Goodman Point, 1911–1925. See Table 4.1 for the names of homesteading families.

Table 4.1. Homesteading Families of Goodman Point

Homestead[a]	Homesteading Family	Offspring
1	Bill and Viola Ferguson	Dorothy
2	Walker	
3	Carl Hinman	
4	Theodore and Lilly Belle Walton	Pearl, Max, Noble, Flossie, Earl, Sallie
5	Max Walton	
6	Dunn	
7	Kenneth Rowley	
8	Rowley	
9	Tom Tyghe	Sydney, Anne, Harry, Tommy
10	Hoyt	
11	Cook	
12	Thomas and Margaret Martin	May, Lenard, Lela, Alex, Oscar (O.J.), Elbert, Claude, Edith
13	Lovell and Annie Chastain	Hugh
14	Earl Walton	
15	Clark	
16	Scot	
17	Zane	
18	Scot	
19	Cook	
20	Annie Chastain	
21	Jake and Sally Plemons	Basil, Zelma, Ernest, Cicero, Lewie, Joe
22	Elmer and Madia Mays	Kenneth, Ivan
23	Rena Cook	
24	Robert and Ida North	Niles, Ruth
25	Carraway Rice	
26	George and Earl Cook	Rena, Jim, Goff, Betty
27	McEwen	
28	Washington Fulks	
29	Ray Rowley	
30	William and Ethel McGechie	Bill, Onis
31	John and Liberty Fulks	Ione, Jim, Lyod, John, Joe
32	Thomas and Isabelle Rice	Carraway, Minnie
33	Harles	
34	Shelby and Ava Harles	
35	Gus Lightfoot	
36	Seitz	
37	Eldarado and Nellie Seitz	Merle, Mona, Eva, Ralph, Birney
38	Lige and Linnie Phillips	Opal, Clyde, Royal, Johnny
39	Samuel Stone	
40	Jim and Dot Johnson	
41	Don and Blanche Johnson	Paul, Lucile
42	Dacus Wallace	
43	Emma Berryman	
44	Comisky	
45	Charlie Flagg	
46	Shelby and Ava Harles	
47	Minnie Rice	
48	John and Leona Gregory	Marie, Johnny, Gladys, Norma Jean, Ermadine, Uyla Belle
49	Everett and Mary Williams	Wilbert
50	Rayford Berryman	
51	Pearl and Mina Black	Mary, Marshall, Clyde, Ruth
52	Eagen	
53	Conoley	
54	Flagg	
55	Jim and Fannie Layman	Mollie, Linnie, Dole, Cole, Gole, Clyde, Harvey, Bessie
56	Lewis Matson	
57	William and Donye Conoley	Eloise, Malcom, Orrel, Lois
58	Thurogh North	
59	J.H. Farmer	
60	Effie Berryman	
61	Alcy Baker	
62	Glen Fields	John
63	Elsie Finley	
64	John and Audra Stanley	Omar, Harry, Ollis, Ford, Leslie, Dean
65	Straton and Sally Hutchinson	
66	Lawrence Mahon	
67	Joe and Mollie Phillips	
68	Frederick Schnaufer	
69	Howard Hutchinson	
70	Lewis and Edith Hutchinson	
71	James and Frances Finley	Lela, Mildred, Virgil, Bessie

[a] See Figure 4.2 for the location of each homestead.

By 1913, the first schoolhouse was constructed on land donated by the McGechie family. It was named the Shiloh School (Figure 4.2). Forty-six students attended classes the first year. The schoolhouse also functioned as a Baptist church and as a community center for such activities as Ladies' Club meetings and school programs. The Goodman Point Baseball Team games were played at Goodman Lake. Although dances were not common on Goodman Point, residents often met to play music and sing songs at neighbors' homes. A post office was established in 1915 at Bud Fulks's home. It was named the Renaraye Post Office in honor of Rena Cook and Raye Rowley, two Goodman Point residents.

Informants were asked six questions about homesteading. The goals of the questions were to develop a chronology of the homesteads, to understand where the people came from, to learn how they heard of Goodman Point and why they moved there, and to record the criteria used in selecting a homestead.

1. When did your family first move to Goodman Point?

The Seitz family arrived in 1911. The Terrys, Fulkses, and Blacks came in 1912. The Conoleys, Gregorys, and Martins homesteaded in 1913. The Stanleys and Hutchinsons arrived in 1914. The Johnson family homesteaded in 1915. The Shieldses and Storys settled in 1926, buying land from previous homesteaders.

2. What was your family's background?

The Fulks, Terry, and Gregory families moved from Texas. The Martin, Story, and Shields families came from Arkansas, and the Seitzes from Oklahoma. The Stanley family came from West Virginia via Kansas. The Johnsons moved from Kansas and the Blacks from Missouri.

Through the course of the interviews, information was noted concerning the origins of other families whose relatives could not be located. The Chastains and Walkers came from Arkansas. The Finleys and Hutchinsons moved from Kansas. Lewis Matson arrived from Michigan. The Harles and Zane families moved from Oklahoma. From Texas came the Baker, Berryman, Conoley, Cook, Field, Lightfoot, Phillips, and Plemons families. The Waltons moved from Washington, and the Rowleys from West Virginia.

3. How and why did your family pick Goodman Point as a place to live?

Three of the individuals responding to this question had no recollection of why their families moved. The remaining twelve said that their families moved to Goodman Point at the suggestion of a relative. News spread quickly of the good soil and the opportunity for a more prosperous life. The county records show that by 1915 the Black, Chastain, Comisky, Eagen, Gregory, Rowley, Stone, and Seitz men had all filed on the land.

Eldarado Seitz moved his family to Colorado in 1908, looking for a better climate for his children's health. They first homesteaded south of Cortez, but in 1911, after noting the storm clouds building up on Ute Mountain and the rain falling on Goodman Point, Seitz became one of the first men to homestead on Goodman Point.

The Johnson family was inspired to move to Colorado by an uncle, who was a prospector. He visited Montezuma County and wrote home to his relatives, encouraging them to come out.

4. Why did your family pick its homesite?

The earliest homesites were chosen to receive protection from the north wind and for their proximity to water. The families who arrived after 1915 chose homesteads wherever the land wasn't already claimed.

5. What were the dependable water sources in the early days?

Informants located 20 springs in the study area (Figure 4.2). All the early residents hauled water from Goodman Lake or the Lone Pine Lateral. Goodman Lake, located south of the Goodman Point Ruin, was a good source for livestock water. Residents drove their teams into the lake and filled water barrels. No one could recall a time when Goodman Lake dried up.

Flowing from Narraguinnep Reservoir in a westerly direction and then south to Trail Canyon, the Lone Pine Lateral was the most reliable drinking water source. This canal was built about 1907 by the Montezuma Valley Water Supply Company. Other water sources frequently cited were Mona Spring, close to Goodman Lake, and Juarez Spring, located at Goodman Pueblo. Other springs located at the heads of small canyons were used throughout the year by families. One example is the spring located within the confines of Sand Canyon Pueblo, used by the Johnson family, which homesteaded the land just north of the site.

At most homes, cisterns were built in order to store rainwater and melted winter snows. The Martin and Shields families, on homesteads located close to Dawson Draw, dug wells by hand. They hit water between 10 and 30 ft below the surface.

6. Was the land altered significantly before 1920 by the cattlemen?

This question drew the least response. Some of the residents could recall sheep and cattle roaming freely, but their first impression of the land was that it was almost all sagebrush with scattered pinyon and juniper trees. Luther Shields said, "Years ago, I talked to the old-timers who lived out in this country. They brought in herds of cattle from Texas and overgrazed the grassland. It was nearly all sagebrush when we came in."

Summary

Between 1911 and 1925, 62 people filed for land in the Goodman Point area, and a dry-land farming community rapidly developed that supported over 160 people, a school, a church, and a post office. People moved to this area from their previous homes for economic reasons. The factors that made Goodman Point their destination were generally social, usually word-of-mouth recommendations from one relative to another.

Once in the Goodman Point area, both economic and social factors were considered in choosing a homestead location, along with the availability of land, proximity to water, and protection from the weather. Goodman Lake and the Lone Pine Lateral were the most dependable water sources. In addition, residents identified 20 springs. At most homes, cisterns were used to store rainwater and melted winter snow.

Farming Practices, 1911–1930

Early farms on Goodman Point were small, self-sufficient family operations. The land was cleared by hand, using a grubbing hoe and an axe. After some land had been cleared, a large garden, fruit trees, and a small amount of corn were planted. The corn was for livestock feed. Although the family farms were self-sufficient, it was common for a family member to work in town or out of state for wages.

From 1910 through 1930, corn, cane, potatoes, and pinto beans were grown for sale or trade. Corn was the most abundant crop in the early years. Two varieties, Swadely Yellow Dent and Australian White Flint, were successful. In 1918, the county agricultural agent located a market for pinto beans and arranged for a carload of beans to be shipped to the East by train. Gradually, pinto beans became established as the main cash crop.

By the end of the 1920s, the Goodman Point farmers began using tractors, and the amount of land under cultivation again increased. As people turned to tractors, corn production declined because there were fewer farm animals to feed. In the 1930s, modern farm machinery was introduced, including large threshers, combines, and tractors.

Today the land is prepared in the same manner as in the early days of farm machinery. After fall harvest the ground is tilled 8 in deep. In the following spring, when the ground is dry enough to work, the farmers prepare the soil by disking it twice before planting. This works the soil to a depth of 4 to 5 in and breaks it up into clods. The thin layer of dust and small lumps of soil that are left on top help preserve the moisture in the soil. This process creates what is referred to as a clod mulch. Corn is planted between May 1 and 15. Beans are planted in early June because they are less resistant to frost. Corn and bean seeds are planted 3 to 4 in deep. The land is cultivated and harrowed to keep it loose and free of weeds. A good yield for beans is 10 to 12 sacks per acre. A sack is equal to 100 pounds. During a poor year, each acre will produce only ½ to 3 sacks of beans. Forty bushels of corn per acre is considered a good yield.

1. What were the best lands for farming? Pinyon and juniper? Sagebrush? What were the best locations?

All but 3 of the 15 informants believed that sage and timber lands produce equal yields. The three who disagreed believed that the organic matter deposited by the trees makes the timber land soil more productive than the sage land. Corn and potatoes were always planted on the newest ground cleared. Beans need "cleaner" ground that has been tilled longer. Residents believe that north-sloping fields and land at the bottom of hollows produce the greatest yields.

2. When Goodman Point was first settled, how was the land cleared? With tools? Fire? How long did it take?

In the 1910s, the land was cleared with a grubbing hoe and a shovel. The roots of the sagebrush, pinyon, and juniper were dug out. The children would help the farmers by piling the sagebrush and timber, which then was burned. The Stanley brothers dug up 600 trees in two months. A good hard worker could grub an acre a day. Only three men, Lewis Matson, Ken Rowley, and Shelby Harles, were known for that type of stamina. More commonly, it would take two people to clear an acre of land in one day.

Teams of horses were also employed. A drag, such as a railroad tie, would scrape the vegetation. The material that didn't loosen would be grubbed out and burned.

3. If you had your choice, what lands would you clear?

Everyone questioned felt that the sage-covered land was the best choice because it was easiest to dig out the roots.

4. What were the first crops that were planted on a new homestead?

The first crops planted were in the family garden. They included cabbage, corn, carrots, green beans, onions, radishes, rhubarb, squash, turnips, and potatoes. These vegetables all stored well in a root cellar.

5. What were the early sources for seeds?

The most common seed source was the Henry Fields Company in Shenandoah, Iowa. Seeds were ordered from this company from the 1910s to the present. Harry Rogers's store in Arriola also was a seed source. Additionally, many people saved corn, bean, and watermelon seeds from their own crops. Two people had samples of beans that they have been growing since their families moved out on the Point. One bean was an "Arkansas" bean and the other a brightly colored "Anasazi" bean.

6. What are the requirements for a good crop? Can it ever be too wet?

The overwhelming response to the first question was that adequate winter snow and summer rain are required for a good crop. Moisture is considered the most important element in dry-land farming. Rain in the fall can hurt a crop because it delays the harvest. In 1957, it rained all spring and summer. The beans were not planted until the middle of June. The crop is usually cut in early to middle September and left to "cure," or dry, for a week before the beans are threshed. In 1957, several of the farmers were three to four weeks late cutting the crop, because of the wet weather. The vines were so heavy that it took twice as long for the beans to cure out. When they finally could be harvested, the farmers reaped 12 sacks to the acre, but many could not finish harvesting before the snow came. In January of 1958, they returned to the fields during a dry spell. The unharvested beans had to be removed for the next season. The farmers plowed the beans up onto the top of the snow and harvested them. They averaged 6 sacks to the acre. The beans had swelled as big as a person's thumb and sold for only about half the normal price.

7. How were the crops protected? Did your family use scarecrows? Pesticides? Fertilizers?

Three people recalled the use of scarecrows in gardens. Only one early use of pesticides was noted. Strychnine mixed with flour was employed to kill pinyon jays. The birds were a problem because they ate the tops of the corn husks. No one used fertilizers in the early days. In later years when combines came into use, the bean hulls were placed back into the soil. Chemical fertilizers have been used with wheat, but haven't proven to be cost effective.

8. What types of insect and animal problems were there? What wild animals were seen in the early days?

In the early years, problems with insects were minimal. Since the 1950s, people have had problems with grasshoppers and cutworms. The animals most commonly seen in the early days were coyote, mountain lion, bobcat, fox, jackrabbit, and porcupine. Of all the animals mentioned, porcupines caused the most damage, as they would eat the blossoms off the beans closest to the edges of the fields. Porcupines were frequently shot. Jackrabbits also caused crop damage, and in the 1930s a few communal jackrabbit drives were organized. The farmers would spread out across the country, drive the rabbits into a designated area, and then shoot them. Other pest animals included deer, prairie dogs, owls, and hawks. The large birds would eat the chickens.

9. How did dry beans become established as a major crop?

Helen Martin (Alex's wife) grew up in the Yellow Jacket area. She says her father, Floyd Cummings, was the first person to plant pinto beans in the Montezuma Valley. In the early 1910s, he ordered garden beans from Henry Fields, but they were out of that particular variety so the company substituted the order with pinto beans. They produced so well that he planted a larger patch the next year.

Pearl Black is credited as the first person to grow pinto beans on Goodman Point. The Blacks homesteaded in 1912. The Stanleys planted ½ acre of pinto beans in 1916, and by 1922 they had enlarged their plot to 10 acres. In 1927, Eldarado Seitz planted 70 acres of beans. The first bean planted was called a San Juan pinto or a Mexican bean. It had spots on it and a definite stripe up the side. It was the predominant bean planted until a few years ago, when the farmers switched to the Cahone variety. They always save seed to be planted for the following year's crop.

Red, white, and black beans were also grown on Goodman Point. Half of the informants recalled their parents growing a variety now referred to as "Anasazi beans" in the family garden. They were brighter than the present-day Anasazi beans. Leslie Black has been growing a bean of this type all her life. [Author's note: What has recently come to be called the "Anasazi bean" in Montezuma County appears to be the same as a variety called "Jacob's pole bean" elsewhere.] Yearly, Edith Flanagan plants an "Arkansas bean" that her parents brought out with them. It looks like a small pinto bean.

10. What were the best and worst years for farming?

Oscar Martin summed up the best years for farming by stating, "The best years were the sevens. It started in 1927, and it followed through every [tenth] year until 1977. [The years] 1927, 1937, 1947, 1957, and 1967 were all good years."

The years 1927 and 1947 were cited as the best ones for farming. The beans produced 10 to 12 sacks per acre. The women interviewed could easily recall 1947 because it was the year that they could afford to buy extra household items.

The years 1934 and 1951 were the driest years anyone could remember. Birney Seitz said, "In 1934, we had to sell our livestock except our work animals. It was so dry, we didn't raise anything. It was worse than last summer [1989]. All the springs—everything went dry. You could walk across the Dolores River without getting your feet wet. It didn't rain or snow."

For all those questioned, 1951 was a year of almost total crop failure. The fall of 1950 was dry and the winter produced little snow. By spring, only 1½ in of moisture had been received since the beginning of the previous fall. Beans came up, but they never produced. When harvest came, in most areas the farmers didn't even make back their seed. Oscar Martin recalls harvesting a total of 10 sacks of beans from 30 acres.

11. How and when were new farm machines introduced?

A team of one to three horses pulling a walking/turning plow could plow 3 acres a day. The land was harrowed 6 to 8 in deep. The seeds (beans and corn) were planted 3 to 4 in deep.

Luther Shields recalled the first time he ever saw a bean harvest. It was in 1925 at Pearl Black's house. "I can remember how they tried to cut the beans with an old horse cutter. It drug them down. So, the farmers jumped in and pulled them by hand [about 30 acres]. Then, they hauled the beans up to a big spot of hard ground by the original Black place. They hooked an old disk to the horse team. They drove round and round over those beans. Next, they took pitchforks and tossed the hulls up in the air. That's how they winnowed those beans! They sacked them up, and it ended up to be 300 sacks. That was my first experience in the bean business!"

A few families had purchased tractors and brought them to Goodman Point by the late 1920s. The first tractor on the Point was an International Farm-All Regular with spade lugs. At the same time, small Wade threshing machines arrived. They were powered by automobiles. The rear wheel of the car was removed, and a pulley was attached to the axle so the car powered the threshing machine. The beans were scooped into the threshing machine by hand and then sacked.

By the mid-1930s, almost all the farmers had tractors. The International Farm-All F-20 Row Crop tractor and the John Deere Row Crop tractor were the most popular models. These tractors had rubber tires and two-row planters. Although several families moved off Goodman Point during the Great Depression, it is interesting to note that all the remaining families purchased tractors in the 1930s.

The Universal Thresher, a larger machine, was used in the early 1930s. The beans were shocked (cut) and left to dry in the field. They were then loaded onto wagons pulled by teams or a tractor and taken to the threshing machine, which separated the beans from the hulls.

At threshing time, approximately 20 neighbors and relatives worked together. The work party was organized by the landowner and machine operator. When they were finished at one farm, they would move on together to the next field. In the early days, beans were threshed, sacked, and loaded all at the same time by the work party. Today, the beans are sacked by the warehouses.

The combine came into use in the 1930s. The earliest one on the Point was the International Combine Model #42. The threshing machine continued to be used into the early 1950s. It was preferred by farmers who used the bean hulls for cattle feed.

12. What clues to the weather were used?

All the people interviewed looked to the Ute Mountain as a weather guide. "Mom said you couldn't plant corn until all the snow was off Ute Mountain." It was time to plant beans when there was "a warm feeling in the air." One farmer said he waits until the deerbrush (cliffrose, *Purshia stansburiana* [Torrey] Henrickson) starts to bloom on the McElmo Canyon rim, then he knows it's time to plant beans.

Three of the project participants said their parents were "moon planters." Birney Seitz said that his dad wouldn't plant anything that grew below the ground unless it was by the dark of the moon (new moon).

13. Does the length of time a field is in use affect crop production?

Everyone replied yes. Some responses included:

"The land gets sorrier over time."

"This land has worn out."

"The land goes downhill."

"Yes, that's why I switched to alfalfa."

"If I ever wanted a piece of land, I'd rather have the new land than any other. It would raise better crops, and it was weed-free."

"If you grow beans on the same land year after year, it wears out in about 25–30 years."

The early farmers didn't rotate their crops or rest their fields often. Today farmers rotate their fields, and some have placed their land in the Federal Land Bank Program.

14. What do you consider the most important factors for successful farming? Winter snows? Rainfall? Depth of soils? Timing of frosts?

Everyone responded that winter snows and summer rainfall were the most critical factors.

15. Annually, what affected crop production levels the most?

Again, the answer was winter snows and summer rain. Good farming practices, such as knowing when and how to prepare the soils, were also mentioned.

Summary

In historic times, portions of the Goodman Point area have been farmed since 1911. The amount of land cleared for farming grew rapidly in the initial period of settlement, and more slowly thereafter, though some new lands continue to be brought into cultivation. For example, pinyon-juniper forest on the edges of fields is still being cleared today as fields are expanded. The questions asked of residents dealt with some of the important details of dry-land farming and focused on the production of corn and beans because these crops were also grown in prehistoric times.

Early settlers preferred sagebrush-covered lands because they were easiest to clear, though most informants did not think they were necessarily more productive than the pinyon/juniper-covered lands. The most productive

lands were thought to be those on north-facing slopes or in hollows, presumably because of greater retention of soil moisture in these locations.

When a homestead was established, family vegetable gardens were planted first. The crops grown by the first homesteaders included corn and potatoes, in addition to the vegetables grown in family gardens. Corn was necessary for livestock feed, potatoes were grown for food or trade, and the family vegetable garden provided food to live on. Problems with insects, disease, and animal pests were minimal on the newly cleared lands.

During the early 1910s, pinto beans were introduced into the area. Gradually, with the establishment of eastern markets for the beans and the advent of tractors, pinto beans became the principal cash crop.

Although crop yields have varied over the years, it is significant that 1951 was the only year of virtually total crop failure. Residents agree that the land is being exhausted by repeated seasons of growing beans. New farming techniques, which include rotating crops and resting fields, are now employed. There is general agreement that moisture is the most important factor in crop success, and that both winter and summer moisture are essential.

Archaeological Sites

The questions in this section were designed with two goals in mind. The first was to acquire specific data from the Goodman Point residents regarding site locations and the clearing of prehistoric sites from agricultural land. The second goal was to better understand attitudes toward the archaeological sites and to determine how these attitudes may have changed over time in the Goodman Point community.

1. Where are the archaeological sites on your land?

Residents were able to mark the locations of 100 sites on USGS 7.5 minute quad maps of the study area (Connolly 1990: Figure 5). Everyone identified the location of the sites by the presence of rubble mounds. From residents' descriptions, these sites date to the Pueblo II and III (A.D. 900 through 1300) time periods. Isolated finds that were mentioned included arrowheads, axeheads, whole pots, canteens, mugs, manos, and metates.

2. Have you ever seen any evidence of prehistoric roads, lakes, or farms?

All the residents knew of the prehistoric road (Connolly 1990: Figure 6) which ran from "the large site above Sand Canyon" (5MT3925—named the Casa Negra site by Crow Canyon archaeologists [Adler, this volume; Adler 1988, 1990]) to the "ruins east of the schoolhouse" (and just north of the present Goodman Point Unit of the National Park Service; see Adler 1988, 1990). It is possible that this road had a branch. Two residents said that the road ended at Goodman Point Ruin (5MT604) itself rather than in the cluster of sites north of it. One resident mentioned that the prehistoric road ended at Goodman Lake.

Of the main road Ford Stanley said, "It's probably 12 to 14 feet wide by about 1½ to 2 feet deep." Birney Seitz noted, "It was a big scooped-out place as wide as this room [about 12 ft wide]. It went right across from that big ruin south of Fulks's old homestead [Goodman Point Ruin, 5MT604]. It went right across from that ruin, just as straight as you could go. Across our place and up across Stanley's, Marshall Black's, and up to that big ruin over there [Casa Negra, 5MT3925]."

Leslie Black said that the road goes right under her house. Her son Stanley, a former employee of the Soil Conservation Service, generously shared his October 27, 1954, aerial photo of the Black farm. The photo clearly depicts the prehistoric road running northeast from Casa Negra across the Black and Seitz properties toward the ruins east of the schoolhouse (5MT3807).

The possible existence of two other prehistoric roads was noted. The first is a road that may run from a spring south of Casa Negra to the McElmo Canyon rim. The second possible road runs in a northwesterly direction from Goodman Point toward Dawson Draw (Yellow Jacket Canyon).

Two prehistoric lakes were mentioned. Goodman Lake is believed by many, but not all, residents to have been constructed prehistorically. It consists of an earthen dam that floods approximately 1 acre and holds water year around. Moqui Lake (5MT1736), located 5 mi west of Sand Canyon, consisted of a low rock and earthen dam. Residents stated that the reservoir was largely destroyed by Bureau of Land Management chaining in the 1960s. Everyone who responded to this question believed that Moqui Lake was a prehistoric reservoir.

Birney Seitz said you could see the remains of an Anasazi ruin and farm terraces in the SW ¼ of the NE ¼ of Section 6, Township 37N, Range 17W. Birney said, "There was a ruin up there in the southwest corner. I never did clear it up. There was a place that was terraced, about an acre squared. When we cleared it up, you could see the terraces where they had put them, about an acre square—kind of like they do with contouring. They had this little garden spot on the northeast slope where they raised their corn."

These farm terraces were located on top of the mesa and were identified by lines of stone. Steve Chappell, the current landowner, does not recall seeing any of these terraces.

3. How were the sites cleared? When? Where is the masonry?

Residents recalled removing 25 sites from their property (Connolly 1990: Figure 7). In the early days, the farmers

would plow around the sites. Five people remembered removing a total of seven sites by hand. They would pick up the rocks and haul them off in a wagon. The rocks were used for fences, foundations, dams, and dikes to prevent erosion.

Beginning in the 1940s, bulldozers were used to clear sites. Eighteen sites were identified by residents as having been moved by bulldozers. The rocks were either used in dam construction or pushed off the edge of a field. Two residents recalled burying sites with a bulldozer. They dug a hole and placed all the rocks from the site in the hole.

The ruin located east of the schoolhouse and north of Goodman Point Ruin (5MT3807, now owned by Colorado Mountain College) was bulldozed in the 1960s. Prior to bulldozing, it was described as a large rubble mound measuring 5 to 6 ft in height. Residents said that a large amount of pottery was found at the ruin.

4. What types of artifacts did people find?

From talking with residents and viewing private collections, it was learned that people dug most often in the midden areas and masonry-lined pit structures. Shovels and probes were used to examine the ruins. Residents kindly showed their collections, which included Pueblo I through Pueblo III (A.D. 750–1300) gray ware and white ware vessels, arrowheads, other projectile points, pendants, beads, sandals, corn, beans, axes, manos, metates, and bone tools. Arrowheads were found and collected more frequently than any other type of artifact.

Artifacts were frequently unearthed in fields during plowing. Stone axes were the most commonly collected artifacts from the fields. Five private collections consisted of wooden crates filled with axes and manos. Three of the five collections had between 70 and 100 of these artifacts. (In the Mesa Verde area, ground-stone axes are most common in the Pueblo III period [Mills 1987].) The remaining two collections consisted of approximately 30 to 50 axes and manos. Sherds, arrowheads, and an occasional whole pot were also noted in the personal collections. One present-day farmer says he often plows up burnt corn from clay-lined firepits.

Five residents interviewed were particularly knowledgeable about Anasazi prehistory, architecture, artifacts, and pottery types. These residents had whole vessels in their collections and could identify the locations from which they were recovered. The residents all knew and remembered Cliff Chappell, who had often excavated on Goodman Point. He amassed a large collection of artifacts, known as the Chappell Collection, which is now housed at the Anasazi Heritage Center (Olsen 1988). A large percentage of his collection appears to have come from ruins in the Goodman Point area.

5. What were the first homesteaders' attitudes toward the sites?

People felt that their parents had a great respect for the ruins. In the beginning years on the farm, people worked so hard clearing the land and planting crops that they really didn't pay much attention to the ruins.

Ford Stanley said, "You know, way back then, when we homesteaded, all summer long we had plenty of work to do. We had a baseball team to play on Saturdays. When you grub sagebrush or trees all week, you kind of want to rest on Sundays."

As time passed and homesteads were established, people's interest in the ruins began to grow. This was particularly true for the younger-generation residents of Goodman Point, who explored the cliff dwellings in Yellow Jacket and Sand canyons.

6. What do you think about archaeology now?

No attempt was made to categorize or quantify the responses to this question. The following comments are taken directly from the taped interviews:

"We probably should have preserved more."

"It's okay. I just wasn't interested in it. We didn't know anything about it in those days. It's just new to me now, the digging and the studying."

"I like to go and watch it. Talk to them [the archaeologists]."

"There's a whole lot they're doing nowadays. So much of it is guesswork, but that doesn't keep them from being interested."

"I respect it. I think to a degree we're getting carried away with it, but on the other hand, it's part of history. Now this Sand Canyon deal is supposed to go on for 10 years. It's all right because it's not hurting anybody. The land already belongs to the government. What I object to a lot is what's on an individual's land should be that individual's business. If he wants to turn it over or let the archaeologists dig it, then that's his business. I don't feel he should be harmed by what he does on his own land."

"It's fine for people who like it."

"The Park Service and the oil companies talked about putting a road in Sand Canyon in 1923. That was the last I ever heard about it. I guess that would have been too expensive, because they would have had to protect the ruins and have a guide. I feel sorry that they haven't protected those ruins over the years."

Summary

Archaeological sites were recognized by residents by the presence of rubble mounds. From the descriptions of these sites, it appears that most if not all date to the Pueblo II and Pueblo III periods. Residents identified 100 sites in the study area. Among the sites recalled by the residents were one prehistoric road, two possible prehistoric roads, one terraced farming area, one prehistoric reservoir, and one possible prehistoric reservoir.

Of the sites identified, residents recalled that 25 were removed by hand or bulldozer in land clearing or farm improvement. The masonry rubble was reused in dams, fences, or foundations or pushed to the edges of fields. Farming has had significant impact on larger, more obvious archaeological sites on Goodman Point. Many smaller or more subtly expressed sites (e.g., limited-activity sites, jacal structures, outdoor hearths) may have been destroyed.

Goodman Point residents have a great deal of respect for the Anasazi culture. Many are knowledgeable about, and interested in, the prehistory of the area. Several people expressed concern over the deterioration of ruins in their lifetimes. These people, and the knowledge they have about dry-land farming and about the area's archaeological sites, represent a human resource that has been underutilized by researchers.

K

GOODMAN POINT WATER ASSOCIATION

Request for Proposal
Preliminary Engineering Report
Environmental Report

October 10th, 2006

BRILIAM ENGINEERING
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October 10, 2006

Attention: Mr. J.R. Berry
Goodman Point Water Association
12190 C.R. 16
Cortez, CO 81321

RE: **Request for Proposals for Preliminary Engineering Report and Environmental Report**

Dear Mr. Berry:

Briliam Engineering is pleased to submit this proposal to provide Professional Services to the Goodman Point Water Association. The purpose of the requested services is to provide professional consulting engineering and environmental assessment services for the development of a Preliminary Engineering Report (PER) and a Environmental Report (ER) in the USDA-RD format for the water line extensions, water storage tank, and water booster station. The **Briliam Engineering** team is well-qualified to be responsive in every aspect in executing these reports.

MANAGEMENT SUMMARY

Project Team

Our project team is a combination of very qualified engineering and environmental assessment professionals that have experience with similarly scoped projects. A brief summary of these projects include Montezuma Water Company, Pagosa Area Water and Sanitation District, Town of Bayfield, City of Canon City, City of Fort Morgan, City of Florence, and the Town of Eaton.

Our team consists of the following consultants:

Briliam Engineering
The Engineering Company
Woods Canyon Archeological
Alta Environmental

The following is a summary of the resources that will be assigned to this project.

Patrick O'Brien, P.E.	Briliam Engineering	Responsible Charge Engineer
Victoria Schmitt, P.E.	Briliam Engineering	Project Engineer
Tom Ullman, P.E.	The Engineering Co.	Hydraulics Engineer
Terry Howes, P.E.	The Engineering Co.	Quality Control
Jerry Fetterman	Woods Canyon Archeological	Environmental Assessment
Tom Rice	Alta Environmental Assessments	Environmental Assessment

Similar Project Experience

As identified in the proposal, our project team has specific experience with the USDA-RD processes, in addition to completing several projects of similar scope.

Familiarity – Goodman Point

Although Briliam Engineering does not have any experience with Goodman Point area, both Woods Canyon Archeological and Alta Environmental Assessments are very familiar with the Goodman Point area. These resources are critical to the development of the Environmental Report portion of the project so that the Engineering Report will take into account the potential alignment issues for the placement of the proposed water lines, water storage tank, and water booster pump station.

Costs and Milestones

As discussed in the RFP, and identified in the proposal, the project work may start sometime in December depending upon the approvals processes. Our fee schedule for the work includes the costs associated with the development of the Preliminary Engineering Report (PER) and the Environmental Report (ER) in the USDA-RD formats. These costs are as follows:

Preliminary Engineering Report	$16,362.00
Environmental Report	$14,135.10
Total Fee Schedule	$30,497.10

We appreciate the opportunity to provide this proposal, and we look forward to having an opportunity to work with the Goodman Point Water Association on this project. Please contact me if you have any questions.

Sincerely,

Patrick J O'Brien, P.E.
Briliam Engineering

S:\Proposals\Goodman\Master RFP Packet\Transmittal Letter 10.10.06.doc

Project Description

PROJECT APPROACH

Due to the length of the extension of the water line, the installation of the water storage tank, and the installation of a water booster pump station there is a possibility the Association will need to investigate the need for a chlorine booster station depending upon the chlorine residual at the end of the distribution system. Based upon the chlorine demand through the system this requirement will be identified as a potential cost in the preliminary engineering report.

USDA-RD Project Requirements

The USDA-RD process requires submission of a variety of forms and reports that must be approved prior to authorization of any funding. In addition, it is imperative to communicate extensively with Rural Development to provide the necessary information needed for review and funding consideration.

Our team experience will allow us to provide the necessary engineering documents and support to the Water Company to assist you in obtaining a timely loan approval. To accomplish this we will perform the following tasks:

1. Meet with State Rural Development officials to discuss the project, application requirements, and anticipated time frames. This meeting would be scheduled immediately after notice to proceed.

2. Develop a Preliminary Engineering Report (PER) that is consistent with the RUS requirements. The report requirements include environmental assessment, alternative evaluations, and considerable cost estimating and financial analysis. The report includes the following sections:
    a. General
    b. Project Planning Area
    c. Existing Facilities
    d. Need for Project
    e. Alternatives Considered
    f. Proposed Project (Recommended Alternative)
    g. Conclusion and Recommendation

3. Develop an Environmental Report (ER) that is consistent with the RD requirements. At this time, we believe a categorical exclusion can be obtained for the environmental portion of the ER due to the limited impact, whereas the archeological will require a full assessment and report

4. Attend multiple meetings with Rural Development officials throughout the process to assure that we are meeting the expectations of the agency.

Briliam Engineering of Pagosa Springs and The Engineering Company (TEC) of Fort Collins are proposing to provide engineering services to the Goodman Point Water Association. Our two firms and our engineers have worked together many times over the years and have developed a good working relationship. The advantage to the Association of working with our team is that our two firms combined provide the staff size to quickly complete the large volume of work required for the project. Also, the location of Briliam Engineering allows for quick responses to the needs of the Association. We feel that this team approach will allow us to produce a quality project within the Association's expectations of schedule and cost.

Both TEC and Briliam are municipal engineering firms. Our clientele are primarily municipalities and water and sanitation districts that provide water and wastewater utility service. We are not land development engineers who "dabble" in municipal engineering. We feel that hiring a municipal engineering team, with local ties, is of greater value to the Association.

One of the key elements of the project will be the staging of the construction work. The project will need to be staged over several years due to the short construction season. It will be important to break up the collection system construction into logical pieces and time frames to minimize disruption to Town streets, homes, and businesses.

The Archaeological Review will consist of a Class I and Class III pedestrian survey of the proposed project to determine the effect of the project would have on significant cultural resource properties. The report detailing the results of the review will follow standards and guidelines for cultural resource reports provided by the Colorado State Historic Preservation Office. It will serve as the background for Section 106 consultation (in accordance and compliance with the National Historic Preservation Act) between USDA-RUS and the State Historic Preservation Office.

Team Experience and Resumes

BRILIAM ENGINEERING

Briliam Engineering was established in 2002 in Pagosa Springs to meet the increasing need for local water and wastewater treatment specialists in the four corners area. The firm is comprised of three Professional Engineers, a former plant operator, an administrative manager, and field support personnel. Briliam commonly teams with other specialty firms to create a design team specific to a client's needs.

The experience of Briliam's professional engineering staff was developed at Denver firms and on national projects. Briliam's engineers specialize in municipal engineering for the planning, design, and construction of water and wastewater treatment facilities; water distribution systems, storage tanks, and booster pump stations; and sewer collection systems and lift stations.

THE ENGINEERING COMPANY

The Engineering Company is a multifaceted civil engineering firm comprised of Professional Engineers and support staff organized to provide services to clients in the following fields:

- Water and Wastewater Treatment
- Water and Wastewater Distribution and Collection Systems
- Geographic Information Systems (GIS) Implementation and Mapping
- Development Review: Surveying, Engineering, and Site Planning
- Construction Administration and Management
- Drainage and Hydrology, Small Dams, and Containments
- Rate Studies and Cost-of-Service Analysis
- Comprehensive Engineering Feasibility Studies
- Paving and Transportation Facilities
- Municipal and Regional Master Planning
- Land Surveying, Legal Descriptions, and GPS

Warren Mesloh and Tom Ullmann established the firm in 1985 in order to provide thorough, experienced, and comprehensive engineering services with a high degree of personal commitment to, and contact with, their clients. TEC maintains its office in Fort Collins, Colorado, and employs an experienced staff of approximately 40 professional, technical, and support personnel.

Since initiating operations, TEC has provided services to clients in both the public and private sectors throughout the Rocky Mountain and Midwest arenas. Projects undertaken by the firm are widely varied in size and complexity and range from small utility studies or feasibility analyses to street design and multi-process water and/or wastewater treatment facilities for entire municipalities. In addition to working regularly on project-specific contracts, we are currently performing, or have recently completed, on-call consulting/engineering services for over three dozen municipalities, government agencies, and special districts within the Rocky Mountain region.

Key Personnel

Patrick J. O'Brien, PE, Principal – Briliam Engineering

Patrick O'Brien has been involved in the planning, design, and construction of municipal and industrial water and wastewater treatment facilities ranging in size from 10,000 to 40 million GPD, water distribution and booster pump stations and sanitary sewer collection systems and lift stations. He has also performed the hydraulic analysis of water and sanitary sewer systems and the analysis of water and sewer rates. The types of projects he has worked on ranged from multidiscipline design-built to modified design-build to conventional design-bid-construct contracts. His role in these projects has included project manager, project engineer, and construction manager.
Mr. O'Brien is a registered Professional Engineer in New Mexico and Colorado. Patrick grew up in New Mexico and is a graduate of New Mexico State University in Las Cruces, where he received a Bachelor of Science degree in Civil Engineering and pursued graduate level coursework in Environmental Engineering at Colorado State University in Ft. Collins, Colorado.

Patrick's involvement with the American Water Works Association includes membership on the Small Systems Committee and the role of Southwest Colorado Teleconference Coordinator for the Education Committee. He is also a member of the Water Environment Federation and the Nation Society of Professional Engineers.

Victoria Schmitt, PE, Project Engineer – Briliam Engineering

Victoria Schmitt has eight years of engineering experience in the development and evaluation of design alternatives and preparation of design drawings and specifications for potable water supply, wastewater, and stormwater systems. For water systems, Ms. Schmitt's experience includes the evaluation of water quality and availability and design of treatment plants and distribution systems, including water storage tanks. She is currently entering the construction phase of a one million gallon glass-lined steel water storage tank. For sewer systems, Ms. Schmitt's experience includes the design of lift stations and forcemains, including those for high-pressure systems. Ms. Schmitt has served as Resident Engineer on construction projects. She has been responsible for construction oversight, change order management, procurement, quality control, submittal review, budgeting, and scheduling.

Ms. Schmitt has served as Resident Engineer on a variety of design/build construction projects. She has bee responsible for construction and subcontractor oversight, change order management, procurement, quality control, submittal review, budgeting, and scheduling.

Victoria received her Bachelor of Science degree in Civil Engineering in 1997 from the University of Colorado in Denver, Colorado and then went on to pursue her Masters of Science in Environmental Engineering at the University of Colorado in Boulder, Colorado

She is a registered Professional Engineer in Colorado and is a member of American Water Works Association and American Society of Civil Engineers.

Thomas F. Ullmann, PE, CCE, Principal– The Engineering Company

As principal of the firm with over 35 years experience in water and wastewater engineering, Mr. Ullmann has been involved in the analysis and design of water treatment, water distribution, wastewater treatment, and sewerage systems as well as storm drainage master planning and rate studies for water and sewer utilities. His expertise includes the development of spreadsheet models for the analysis of water and sewer rates, the hydraulic analysis of water treatment and pumping systems, and the hydraulic analysis of water distribution and wastewater collection systems.

Mr. Ullmann is a registered Professional Engineer in Colorado, and Wyoming. In 1969 he received his Bachelor of Science degree in Civil Engineering from University of Colorado in Boulder, Colorado. He pursued graduate courses in Water/Waste during 1975-76, at Colorado State University in Fort Collins, Colorado.

Thomas is a member of American Waterworks Association, American Council of Engineering Companies and ACEC of Colorado.

Terry G. Howes, PE, PLS – The Engineering Company

Terry Howes has over 45 years of professional civil-sanitary engineering experience. He has supervised the performances of feasibility studies, rate studies, project funding, preliminary planning, design, preparation of plans and specifications, engineering administration of construction, on-site project representation, start-up of operations, operator training, preparation of operation and maintenance manuals, operations monitoring, and rehabilitation of existing facilities.

Mr. Howes has worked on all facets of water distribution, treatment, and storage projects over his career, including thirty (30) water storage reservoirs, twenty (20) water treatments plants, and twenty-eight (28) water supply wells. He is currently working on the construction phase of a 30-mgd water treatment plant in Carter Lake near Berthoud, Colorado, and the construction phase of a 4-mgd water treatment, storage, and distribution project near Lander, Wyoming. Terry designed and inspected 20 miles of 6-inch water line from north of Mancos into Mesa Verde National Park.

Terry is a registered Professional Engineer in Colorado and Missouri. In 1960, he received his Bachelor of Science degree in Civil Engineering from Kansas State University in Manhattan, Kansas. Terry is a member of American Water Works Association, Water Environment Federation and American Society of Civil Engineers.

Woods Canyon Archaeological Consultants, Inc.

Jerry Fetterman will be leading the project for Woods Canyon, a company he started in 1981. He has over 30 years of experience conducting projects for both private and public clients. Jerry is a member of Colorado Archaeological Society, Colorado Council for Professional Archaeologists, Society of American Archaeology Utah Professional Archaeological Council, and New Mexico Archaeological Council. Jerry has conducted numerous cultural resource management projects in the Rocky Mountains, including current work for Kinder Morgan on Burro Point, and has lived in Montezuma County for nearly 30 years.

Alta Environmental Assessments

Tim Rice will be leading the project for Alta Environmental Assessments. He received is Bachelor of Arts in Humanities with relevant coursework in Biological Evolution, Anthropological/Global Issues, Cultural Anthropology, Environmental Geology, and Physical Geology. Tim is a certified Water Operator for public water systems in Colorado and Utah, as well as a Red Carded Wildland Fire Archaeologist.

Client References

1 MG Water Storage Tank
Town of Bayfield, Colorado – Briliam Engineering

The Town of Bayfield has had less than a day's supply of potable water storage and faced a public health challenge in when a 2002 area fire degraded the Town's water supply. As a result, the Town applied for and received a state grant to construct. The goals for water storage were (1) to maximize new storage at existing storage site and (2) to construct a tank with a long design life and low maintenance. A site of two existing water storage tanks was selected for the new tank. This provided a cost-effective integration with the distribution system. Siting, however, was a challenge due to the limited space available for the tank, its location at the edge of a steep embankment, and tight construction and operating conditions.

Briliam coordinated a team of experts to address geotechnical conditions, topographic and boundary issues, and structural design. Where the Town's goal was a minimum of 600,000 gallons of additional storage, Briliam created a design allowing for 950,000 gallons of additional storage. The selected design included a glass-fused-to-steel tank, a material that requires nominal maintenance; a tank mixing system to address upcoming regulations; an overflow structure; and a hydraulic operation that will maximize the contribution of the new tank to the existing distribution system. Briliam addressed regulatory requirement, which were especially stringent due to the project funding.

Reference:

Justin Clifton, Town Manager, (970) 884-9544
Town Hall, 11 W. Mill Street, Bayfield, CO 81122

Lumberton Mutual Domestic Water Consumers Association, Lumberton, New Mexico – Briliam Engineering

The Lumberton Mutual Domestic Water Consumers Association owns and operates a 36,000-GPD microfiltration membrane water treatment facility and water distribution system. Briliam Engineering has completed the design and construction of the project and provides process optimization services for the Association. The facilities included pretreatment, chemical feed systems, facility structure, and miscellaneous site work.

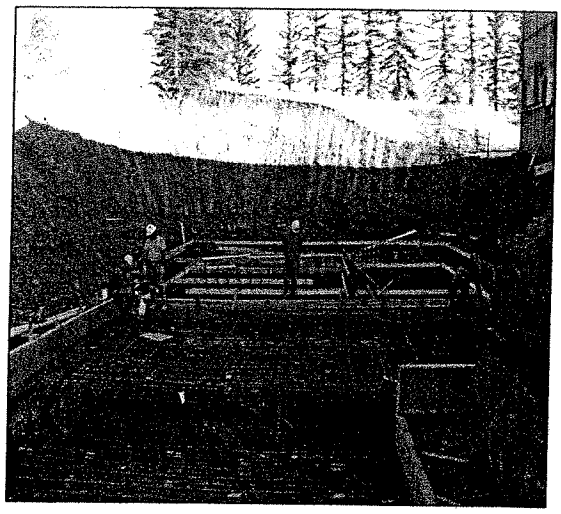
Reference:

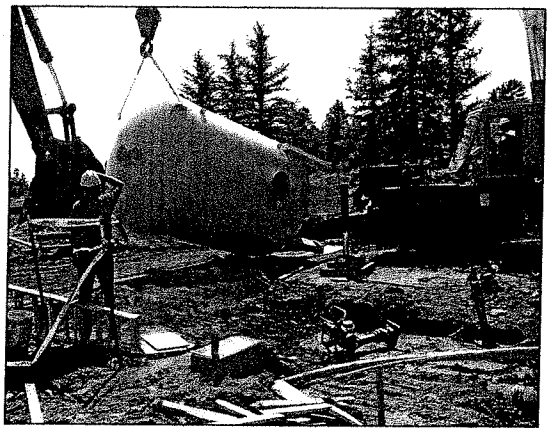
Michelle Gomez, President, (505) 756-4172

Lumberton Mutual Domestic Water Consumers Association, Lumberton, NM

Pagosa Springs Water and Sanitation District, Pagosa Springs, Colorado – Briliam Engineering

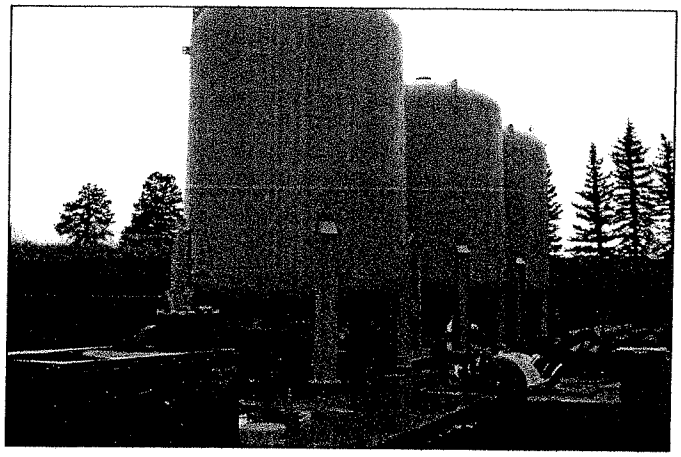
Briliam Engineering provides professional engineering services to the District on a variety of water and wastewater projects, including the design of wastewater lift stations; decommissioning of wastewater lagoons; and a design report for the replacement of a lagoon system with a mechanical wastewater treatment facility; the design of a granular activated carbon filtration system and clearwell for the 2 MGD Hatcher WTP, and the hydraulic modeling of the entire District's wastewater collection system.





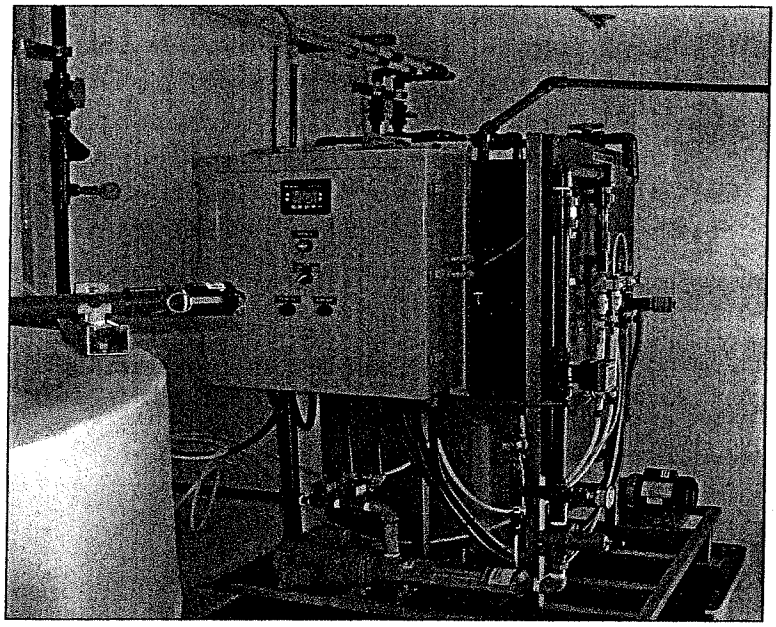
Reference:

Gene Tautges, Assistant Manager, (970) 731-2691
Pagosa Area Water and Sanitation District,
PO Box 4632, Pagosa Springs, CO 81157



Montezuma Water Company, Dolores, Colorado – Briliam Engineering

The Montezuma Water Company owns and operates a 4-million-GPD water filtration treatment facility. Briliam Engineering has completed the design and construction of a plant improvements project which included incorporating a chlorine dioxide feed system into the existing plant.



Reference:

Conrad Hover, Operations Foreman, (970) 882-7480

Montezuma Water Company, 209 Central Avenue, Dolores, CO 81323

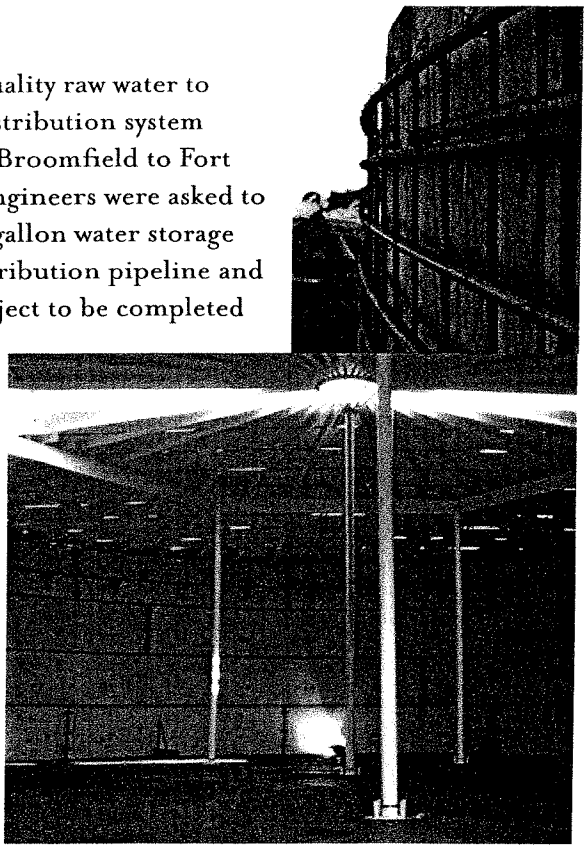
Fort Morgan
Water System Improvements

City of Fort Morgan, Colorado

PRINCIPAL IN CHARGE
Tom Ullmann
PROJECT MANAGER
Tom Ullmann
FIELD ENGINEER
Mark Rayome

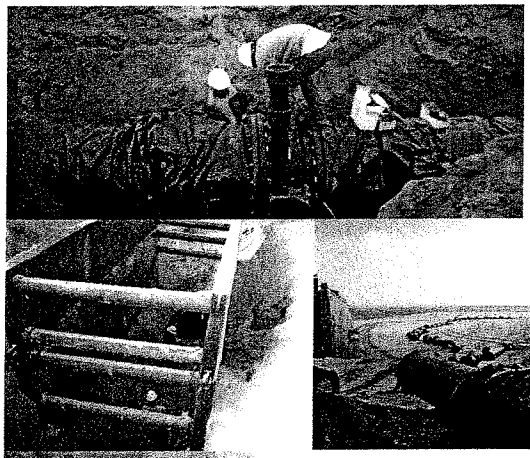
THE PROBLEM

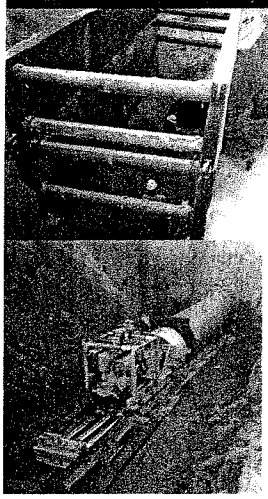
The City of Fort Morgan needed a new supply of high quality raw water to replace its supply of contaminated well water. A water distribution system was needed to get the source water from Carter Lake via Broomfield to Fort Morgan. A new treatment plant was also needed. TEC engineers were asked to design 14 miles of 30-inch pipeline and a five-million-gallon water storage reservoir, as well as oversee the entire finished water distribution pipeline and treatment plant design project. The City needed the project to be completed at the earliest date possible.



Shown above is the exterior and the interior of one of the new water storage tanks.

Sandy soil and rock layers made this enormous pipeline a construction challenge.





A safety wall was erected during pipe installation, and a borer was used to drill through rock.

THE SOLUTION

In order to expedite the arrival of high-quality drinking water to the City of Fort Morgan, TEC pioneered a unique "design-build" relationship with the general contractor. Once selected, the general contractor assisted the design team during preliminary design in developing cost estimates and technical process selection. The next step was for the contractor to set a "guaranteed maximum price." This process of sharing ideas during the preliminary design phase resulted in savings to both the client and the contractor. Construction was greatly expedited because work could begin even before the entire project reached the final design phase. This project was in part funded by RUS.

Florence
Water System Improvements

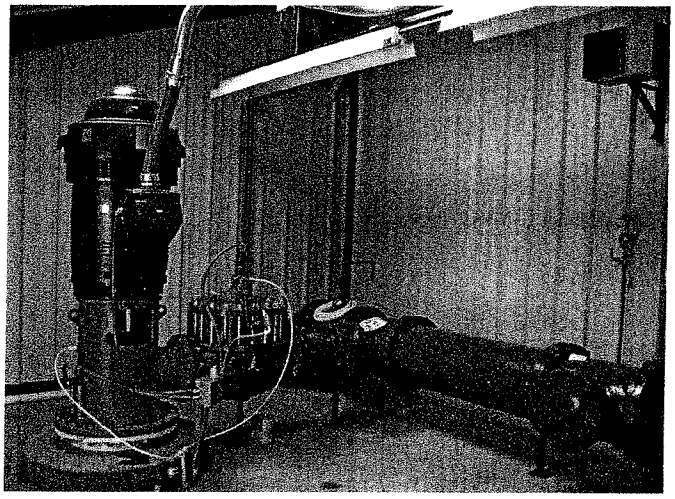
City of Florence, Colorado

PRINCIPAL IN CHARGE
Brian Zick
PROJECT MANAGER
Richard Saxton
RESIDENT ENGINEER
Eric Larson

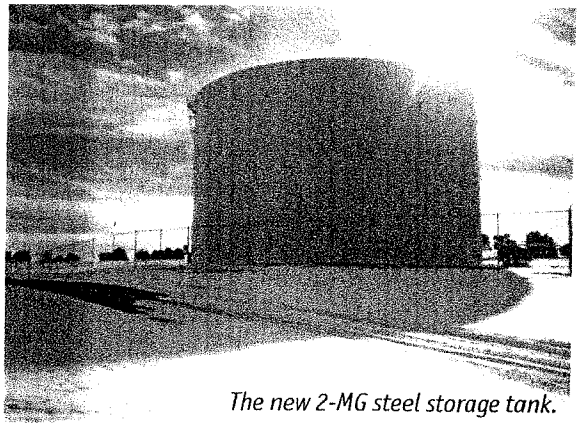
THE PROBLEM

The City of Florence asked The Engineering Company to develop a water system master plan and then design and oversee construction of the recommended improvements. These included 44,000 linear feet of water mains ranging from 12-inch to 24-inch in diameter, a 2-MG water storage reservoir, and a raw water pumping station rated for 3 mgd, expandable to 6 mgd.

Construction workers placing the 18-inch new water main across Coal Creek.



The 3-mgd vertical turbine pump in the newly constructed raw water pump station.



The new 2-MG steel storage tank.

THE SOLUTION

These three projects were designed and constructed simultaneously. TEC assisted the City in securing a loan from the Colorado Drinking Water Revolving Fund, which included working with State agencies to have the project classified as eligible for this loan.

TEC dedicated a team of personnel to work on these projects to ensure consistency, quality, and a punctual delivery of the project.

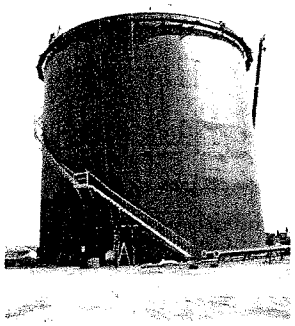
Eaton Water Storage Tank

Town of Eaton, Colorado

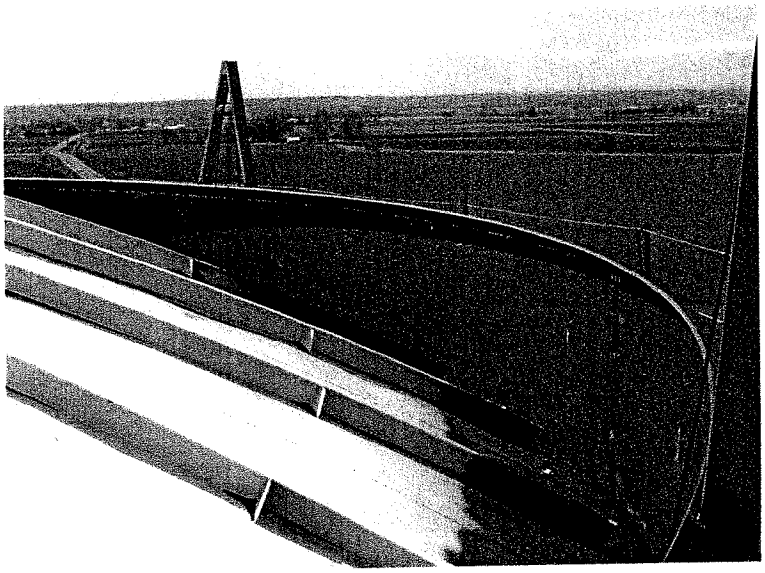
PRINCIPAL IN CHARGE
Tom Ullmann
PROJECT MANAGER
Eric Larson
PROJECT ENGINEER
Chris Matkins

THE PROBLEM

The water system demand in the Town of Eaton had exceeded the recommended storage volume. The Town needed an additional 2.0 million gallons of storage in order to supply current and future consumer demands.

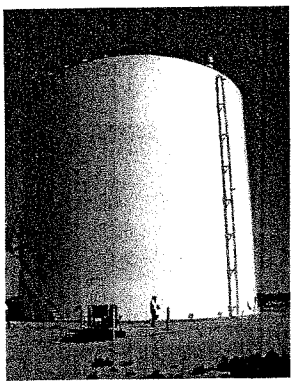


The new Eaton tank near the end of construction.



The tank's roof was constructed inside the tank and then raised into place using forced air from inside the tank.

Tom and Chris on roof-raising day.



The completed tank for the Town of Eaton.

THE SOLUTION

TEC engineers worked with the Town of Eaton to select a tank site that would be beneficial to the operation and growth of the Town's water distribution system. The tank was placed in proximity to the future 30-inch water line to be built by the North Weld County Water District, Eaton's water supplier. In addition, the tank site is on the opposite side of Eaton from the existing storage tank. This configuration is beneficial to system operation because the Town is fed from two directions. On-site soils were a challenge at the construction location due to their high settlement potential. To make the site work for the design, the soils in question were removed and structural fill was placed under the tank foundation.

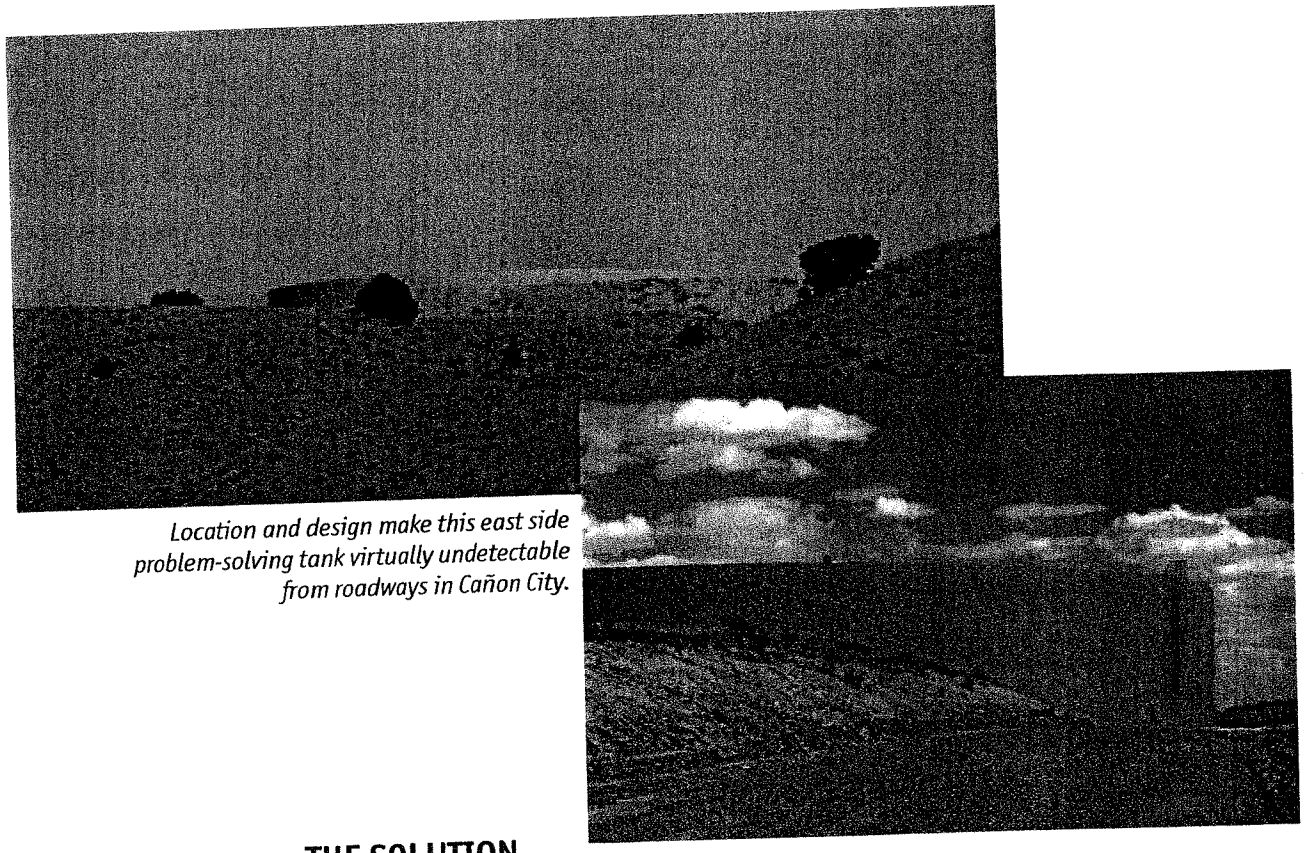
Cañon City
East Side Water Tank

City of Cañon City, Colorado

PRINCIPAL IN CHARGE
Tom Ullmann
PROJECT MANAGER
Terry Howes
RESIDENT ENGINEER
Brian Dieke

THE PROBLEM

A privately owned water storage tank, supplied by City water, was the source of water pressure problems for Cañon City's east side residents. The resulting low water pressure and pressure fluctuations required a correction to the City's distribution system.



Location and design make this east side problem-solving tank virtually undetectable from roadways in Cañon City.

THE SOLUTION

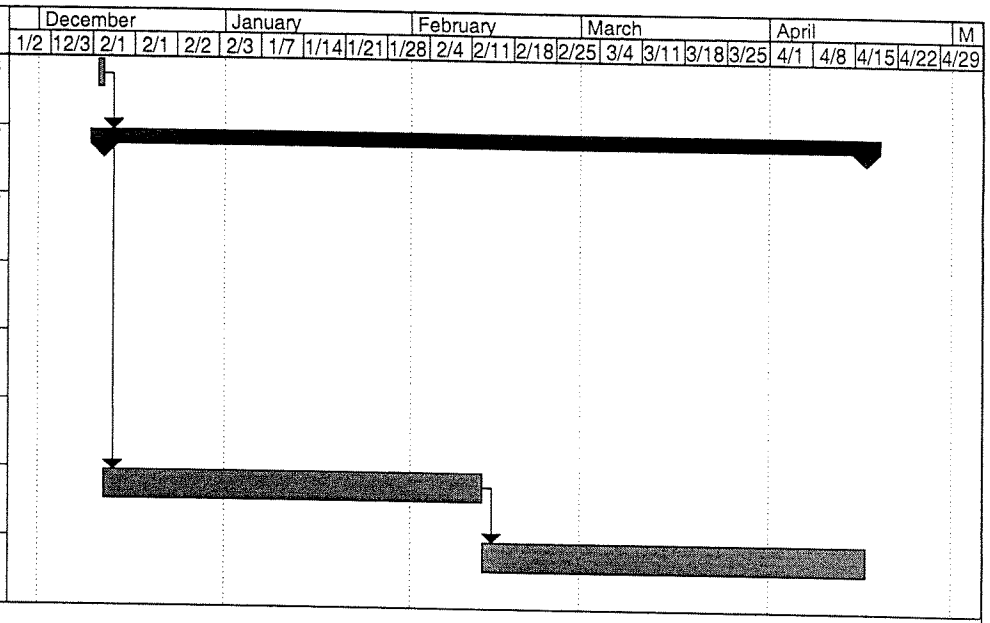
A new five-million-gallon, steel water storage tank was built on the east side of Cañon City with one mile of 20-inch PVC water main to serve it. The tank was built on a city owned site, on top of a steep hill. The site itself was a challenge during construction because the road to it had 20–27 percent grades. Attention to placement and paint color resulted in a tank that is virtually undetectable from roadways in Cañon City.

Schedule/Statement

Attached is the preliminary schedule for the completion of the Preliminary Engineering Report and the Environmental Report.

Our team is prepared to meet the preliminary schedule outlined in the attached Gantt Chart.

ID		Task Name	Duration	Start	Finish
1		Notice to Proceed	1 day?	Mon 12/11/06	Mon 12/11/06
2		**Correspondence & Meetings**	**90 days?**	**Tue 12/12/06**	**Mon 4/16/07**
3		USDA-RD	90 days	Tue 12/12/06	Mon 4/16/07
4		Goodman Point Water Association	1 day?	Tue 12/12/06	Tue 12/12/06
5		CDPHE	1 day?	Tue 12/12/06	Tue 12/12/06
6		QA/QC	1 day?	Tue 12/12/06	Tue 12/12/06
7		Environmental Report	45 days	Tue 12/12/06	Mon 2/12/07
8		Preliminary Design Report	45 days?	Tue 2/13/07	Mon 4/16/07



Project: Goodman 10.10.06.mpp
Date: Tue 10/10/06

Task
Split
Progress
Milestone
Summary
Project Summary
External Tasks
External Milestone
Deadline

Fee Schedule

Exclusions

Archeological

- No testing
- No monitoring
- No research design or excavation
- No more than 20 sites
- No more than 2 days on reroutes

Goodman Point Water Company
Proposal for Professional Services -
Preliminary Engineering Report (PER) & Environmental Report (ER)
Fee Estimate

Coorespondence & Meetings	QA/QC $120	Project Manager $90	Project Engineer $82	Drafting $60	Admin. Staff $35	Total Fee
USDA-RD		4	12			16
Goodman Point Water Association		2	12			14
CDPHE		2	4			6
QA/QC	2					2
Total Projected Hours	2	8	28			38
Total Projected Fee	$240.00	$720.00	$2,296.00	$0.00		$3,256.00

Preliminary Design Report						
General		1	4			5
Review of Water Quality Regulations and Future System Impacts		2	8			10
Existing Facilities		2	8	4		14
Need for the Project		2	32			34
Alternatives Considered		2	32	8		42
Proposed Project (Recommended Alternative)		2	12			14
Conclusion and Recommendations		2	32	12		46
QA/QC	4					4
Total Projected Hours	4	13	128	24		169
Total Projected Fee	$480.00	$1,170.00	$10,496.00	$1,440.00		$13,106.00

Environmental Report		Mark Up	
Woods Canyon Archeological	$8,474.00	5%	$8,897.70
Alta Environmental Assessments	$4,988.00	5%	$5,237.40

Total Proposed Fee	**$30,497.10**