COLORADO WATER CONSERVATION BOARD

WATER SUPPLY RESERVE ACCOUNT
2006-2007 GRANT APPLICATION FORM

City of Las Animas Water System Improvements	Arkansas River Basin

Name of Water Activity/Project **River Basin Location**

$300,000		Basin Account		Yes
	X	Statewide Account		No

Amount of Funds Requested

Please Check Applicable Box

Approval Letter Signed By Roundtable Chair and Description of Results of Evaluation and Approval Process

*** 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 must be submitted in electronic format (Microsoft Word or Original PDF are preferred). The application can be emailed or a disc can be mailed to the address at the end of the application form. 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.

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

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

1. Applicant Name(s): City of Las Animas

Mailing Address: Box 468
Las Animas, Colorado 81054

Taxpayer ID#: 84-6000605 Email address: lacityclerk@southeastcolorado.net

Phone Numbers: Business (719) 456-1621

Home: N/A

Fax: (719) 456-1210

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

Name: Mr. Kenneth Wagner, Director of Public Works

Position/Title Director of Public Works

3. 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.

The City of Las Animas' governmental authority is that of a statutory city. The city was incorporated in 1886. The city provides general municipal services authorized under its statutory city enabling legislation. Those services include street maintenance, park and recreation, potable water, sanitary sewer service, mosquito control, storm water management, electric power, police protection and library services. The population of the city as of 2004 was 2,672 with its water service area population standing at 2,770. Based on a Preliminary Engineering Report dated March 2007, the population is projected to increase at a rate of 0.5% per year resulting in a year 2030 population within the city of 3,043 and the water service area of 3,155.

As of September 2006, the city has a total of 1,188 water customer taps, which breaks down to 1,046 residential taps and 142 commercial taps. Based on these users, the city's existing average day water demand is 429,682 gallons per day (gpd) with a maximum day demand of 935,000 gpd. Based on the fact the neighboring correctional facility is in the middle of an expansion coupled with the projected population increase, the city's corresponding water demands will increase. Increases are expected to jump to 546,700 gpd for an average day demand while the maximum day demand is anticipated to increase to 1,157,200 gpd by year 2030.

In order to meet this increase in demand, the city has both in place and is making provisions for upgrades to a wide range of facilities. Currently, the city derives its water supply from ground water sources, which consist of 11 wells. Out of the 11 wells, the city currently only uses seven of the wells for the city's potable water supply. These wells are classified as non-exempt, tributary wells, which require augmentation. Raw water is pump to the city's water treatment plant (WTP). Reverse osmosis treatment is provided at the WTP. The treated water flows into a large ground level storage tank. The potable water is then boosted into an

elevated water storage tank and the distribution system. The distribution system provides a network of piping throughout the city's service area. The elevated water storage tank provides gravity storage and maintains relatively constant pressures within the distribution system. In order to operate said facilities, the city has in place a user fee system that is based upon the consumption of water on a monthly basis. The city's current water rate and tap fee schedules are as indicated below.

WATER RATE SCHEDULE [1)]

Meter Size	Minimum Charge		Minimum Gallons of Water	Usage Surcharge
	In-City	Out-of-City		
¾"	$24.00	$48.00	3,000	$1.50/1,000 gallons for 3,001 to 30,000 gallons $3.00/1,000 gallons for 30,001 to 40,000 gallons $4.50/1,000 gallons for over 40,000 gallons
1"	$31.30	$62.60	5,000	$1.50/1,000 gallons for 5,001 to 35,000 gallons $3.00/1,000 gallons for 35,001 to 45,000 gallons $4.50/1,000 gallons for over 45,000 gallons
1½"	$47.80	$95.60	7,500	$1.50/1,000 gallons for 7,501 to 40,000 gallons $3.00/1,000 gallons for 40,001 to 50,000 gallons $4.50/1,000 gallons for over 50,000 gallons
2"	$64.30	$128.60	10,000	$1.50/1,000 gallons for 10,001 to 45,000 gallons $3.00/1,000 gallons for 45,001 to 60,000 gallons $4.50/1,000 gallons for over 60,000 gallons
3"	$242.50	$485.00	35,000	$1.50/1,000 gallons for 35,001 to 70,000 gallons $3.00/1,000 gallons for 70,001 to 100,000 gallons
4"	$308.50	$617.00	50,000	$1.50/1,000 gallons for 50,001 to 80,000 gallons $3.00/1,000 gallons for 80,001 to 120,000 gallons
6"	$462.50	$925.00	80,000	$1.50/1,000 gallons for 80,001 to 120,000 gallons $3.00/1,000 gallons for 120,001 to 160,000 gallons
Commercial and industrial, 2" and larger meters, no outside irrigation. Minimum charge as listed plus the following surcharge rate				$1.50/1,000 gallons up to 200,000 gallons $2.50/1,000 gallons for 200,000 to 800,000 gallons $3.25/1,000 gallons for over 800,000 gallons

1) All water rates apply to residential, commercial and industrial users except as described in the last note in the table

The city is currently in the process of adjusting its user fees for the 6" water meter size. Tap fees for the water system are as follows:

WATER TAP FEE SCHEDULE [1)]

Meter Size	Tap Fee	
	In-City	Out-of-City
¾"	$750	$1,500
1"	$1,000	$2,000
1½"	$1,500	$3,000
2"	$2,000	$4,000
3"	$2,500	$5,000
4"	$4,000	$8,000
6"	$8,000	$16,000

1) All water tap fees apply to residential, commercial and industrial users

In addition to the fees mentioned above, the city also operates a bulk water loading station. The water made available through the station is charged for at the rate of $10.00 per 1,000 gallons of water. Furthermore, the city also has standard fees for water service calls for the connection and disconnection of services, a tampering fee and general regular and after-hours service fees. Given a typical year, the city generates 90% or more of its water revenues from user fees. The remaining portion is a combination of the interest income, tap fees and the "other" fees mentioned above. The last source of revenue available to the water system is a portion of the sales tax generated within the city. Las Animas assesses a 3% sales tax. Revenue from the sales tax is funneled into the general fund along with some specific funds contained within the city's overall governmental funds.

One of funds that is specifically the recipient of a portion (1/3 of the 3% assessment) of the sales tax revenues is the Infrastructure and Improvement Fund. This fund has been established to provide capital construction funds for the installation of infrastructure improvements. The water enterprise fund as well as other city funds have access to the Infrastructure and Improvement Fund for capital construction needs when authorized by the city council. The funds contained within the Infrastructure and Improvement Fund are generated from sales tax receipts and are restricted to the construction and improvement of the city's infrastructure.

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

1. Name of water activity project:

City of Las Animas Water System Improvements

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

[ ] 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)

[X] Structural and/or nonstructural water project or activity

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. Attach additional sheets as needed.

The City of Las Animas has undertaken a comprehensive Preliminary Engineering Report evaluating its water system. The study was expanded to cover the water treatment plant (WTP) as a result of the local correctional facility's proposed expansion that will more than double its capacity. Construction on the expansion is in progress. The net affect of the correctional facility attaining its inmate expansion will be the city's inability to provide sufficient treated water to all of its constituents during high demand periods. Such being the case, the city's existing WTP will need to be expanded through the addition of another reverse osmosis (RO) train or secondary recovery.

In addition, two of the seven wells the city relies upon for raw water are in need of replacement. Couple this with the fact that the city's raw water supply is limited by the piping arrangement between their wells and the WTP, such limits the total amount of raw water available to the city. Therefore, the city needs to bring one of the current abandoned wells back on line in conjunction with the installation of a transmission line extending to the WTP. This will require the old well to be redrilled and re-equipped. These improvements will enable the city to provide an adequate flow of water to meet the demands placed on the system.

In addition to the collection and treatment of its raw water, the city also has several areas throughout its water storage and distribution systems that require attention. The current configuration of the city's 2-million gallon ground level storage water tank is such that it may not be taken off line for repair and service and is not available for use in the event of a power outage. In order to eliminate these problems, new yard piping will be installed to provide the city with the ability to take the 2 million gallon tank off line. In addition a standby generator will be installed at the distribution system's pump house. The generator will provide the city with the ability to provide water from the ground level tank in the event of a power outage. A new 12-inch meter is also to be installed on the pump station's outlet piping to provide the city with the ability to monitor peak demands.

In addition to the above items, the city's project also includes the replacement of several segments of distribution piping including both new and replacement fire hydrants. Approximately 11% of the distribution piping still consists of cast iron piping dating back to the early 1900s. This piping has exceeded its life expectancy, experiences several problems and is undersized. The fire hydrants in need of replacement are sporadically located around the city. Additional hydrants will be incorporated into the system to address areas lacking adequate coverage.

The project is needed for multiple reasons. The city needs to be in a position where it can comfortably provide water service during high demand conditions. The city's WTP will be stretched beyond its capacity with the doubling in size of the local correctional facility. Furthermore, the city needs to have the facilities in place to obtain the raw water it is entitled to in addition to conveying said raw water to its water treatment plant. To accomplish such, the city needs the addition of a third reverse osmosis (RO) train in its WTP, needs to re-drill an existing well and install a new parallel transmission line to convey raw water to the WTP. This will bring an economic boost to an area suffering from years of natural disasters, economic hardship and the transfer of water rights out of the basin. Any form of job creation within the area and even the region is more than welcome and strongly pursued.

Currently, the city is unable to remove its 2.0 million gallon water storage tank from service. Such being the case, the city does not have the ability to perform general maintenance and service on the tank, which is in need of repair. Furthermore, the city does not have the ability to provide water during a power outage of long duration. Rectifying these situations requires the installation of an emergency generator for the distribution system pump station that draws water from the 2 million gallon tank as well as installing bypass piping around the tank. The need exists for the city to evaluate the total amount of water being supplied to its constituents in addition to having the ability to accurately determine its peak day and hourly demands. This requires the installation of a new meter at the distribution system pump building as well as meters on unmetered city uses.

Furthermore, 11% of the distribution system is approximately 100 years old and requires replacement. In addition, the city's piping underneath U.S. Highway 50 has been problematic and is need of replacement. The city has been proactive in replacing a large part of the city's fire hydrants; however, some of the existing fire hydrants still need replacement. This is coupled with the fact that there are areas of the city that fail to have needed fire hydrant coverage. As such, several new fire hydrants and supporting water line improvements are required to meet this need. The specific goals of the project include:

1. Installation of a third reverse osmosis train within the existing water treatment plant to meet all demands placed on the water system.

2. Provide raw water at the rate required to meet demand, which results in the need to bring an old well online coupled with the installation of a new transmission line to the water treatment plant.
3. Install meters on the remaining city facilities that are not metered.
4. Provide the means to bypass the existing 2.0 million gallon underground water storage tank, repair the tank and provide a means of pumping water from the tank to the distribution system within a long duration power outage.
5. Undertake distribution system improvements to eliminate old, deteriorating, undersized water mains and frequent pipeline failures
6. Replace existing and install new fire hydrants throughout the city for fire protection and system flushing.

The overall goal of the project is to bring about the provision of acceptable quantities of water with good water quality and the ability to convey the water to the constituents in the community with a system that is reasonable to operate and maintain. These facilities will bring about economic development within the city and the surrounding region by the doubling in size of the Corrections Corporation of America (CCA) Correctional Facility, the local correctional facility.

Currently, the city has secured a number of financial commitments for their project. They include a committed $800,000 in grant funds from the Colorado Department of Local Affairs through the Community Development Block Grant program, $812,000 in loan through the Colorado Water Resources and Power Development Authority's Disadvantaged Communities Program, a $10,000 grant from the Colorado Department of Public Health and Environment and a local commitment to the project of $400,000. This brings the total available funds up to $2,022,000. This results in the city falling short of its desired project budget of $2,472,000 by $450,000. In order to offset some of the funding deficit for the project, the city is hereby requesting $300,000 in the form of grant funds from the Roundtable.

Based on the nature of the funds thus far secured for the project, the city will be creating an enterprise fund with the water fund as described under TABOR. Such being the case, should the city receive state severance tax funds in excess of 10% of the funds total revenues, their enterprise fund status will be invalidated for that year. This will result in the city's inability to receive any additional grant funds within the water enterprise fund for that given year. Furthermore, in 1999 the voters of the City of Las Animas approved an ordinance authorizing the city, without creating any new tax or creating an increase in any current tax, to collect, retain and expend the full proceeds of all of the city's sales tax and use tax, nonfederal grants and other revenue from any other source, not withstanding any restriction on fiscal year spending, including without limitation of the restriction of Article X, Section 20 of the Colorado Constitution, effective January 1, 2000 for the use for expenditures for any lawful, municipal purposes. This action has effectively "debruced" the community. The action allows the city to retain excess revenues generated within the water fund, as well as to accept any state related grant assistance that may be available for the water fund as such activities have been preauthorized by virtue of the passage of the ballot question by the city's constituents.

<u>Location</u>
The City of Las Animas is located in southeastern Colorado's Arkansas Valley within Bent County. The general location of the community and its relationship to neighboring communities is shown on Figure 1 - General Vicinity Map. The planning area for the city's potable water system generally encompasses the incorporated area of the city together with a few, adjacent services around the periphery of the city together with the Bent County Correctional Facility (BCCF) owned and operated by the private Corrections Corporation of America (CCA). The general planning area is shown on Figure 2 - Area Map. Figure 2 has been taken from the Las Animas U.S. Geological Survey Quadrangle and depicts the street configurations within the community, general density of development within the area, general topography, U.S. Highway 50 and the Arkansas River. The scale of Figure 2 is approximately 1-inch equals 2,000 feet.

The city's potable water service area lies with Sections 3, 9, 10 and 11, Range 52 West, Township 23 South of the 6th Principal Meridian. Additional future demands on the city's water system will be brought about primarily

as a result of infilling within the corporate limits of the city as well as the proposed expansion of the CCA correctional facility. Reportedly, several areas within the city are suited for residential building renovation and reconstruction. Future adjacent development, which may be annexed into the community for service, is also a potential.

The City of Las Animas' governmental authority is that of a statutory city. The city was incorporated in 1886. The city provides general municipal services authorized under its statutory city enabling legislation. Those services include street maintenance, park and recreation, potable water, sanitary sewer service, mosquito control, storm water management, electric power, police protection and library services. The services provided by the city are anticipated to continue into the foreseeable future based upon its role as the governmental authority for the community. Other utility related services are provided by private enterprise including natural gas service through Kinder Morgan, telephone service provided by CenturyTel, and cablevision services through Charter Communications.

The City of Las Animas is the largest municipality in Bent County. The city serves as the county seat. The economic roots of the area lie within agriculture although in the last two decades diversification of the employment base has been pursued. While agricultural activities are still a primary employment base in the region, major employers in the area include the BCCF, a correctional facility owned and operated by the CCA; the Bent County Health Care Center; the Colorado Department of Corrections, Fort Lyons Correctional Facility; the M2P2, LLC, farrowing facility (formerly Bell Farms); Las Animas RE-1 School District, Bent County; and the City of Las Animas. Additional employment within the area consists of retail, commercial and service industries typical of a small rural city necessary to support itself and outlying smaller communities. Agricultural related activities still serve as a significant economic activity within the region.

Socio-Economic Characteristics

The City of Las Animas reflects land use patterns of typical rural communities. The majority of the community is zoned residential. Limited commercial activity occurs within the planning area. No industrial development exists within the planning area. Current land use practices are expected to continue. No major departure from the current land use patterns established within the city's service areas are envisioned. Representatives of the city indicate that the only significant development pressure comes by means of the doubling in size of the local correctional facility. Some growth is expected from this expansion; however, limited growth is anticipated to occur as a result of infilling within the service area.

The economic roots of the area are agricultural, although in the last decade diversification of the employment base has been pursued. While agriculture activities are still a portion of the employment base in the region, major employers in the area include the local school district, Bent County government, the City of Las Animas and banking institutions. Nearby employers include the Corrections Corporation of America (CCA) Correctional Facility and various other employers in the nearby cities of La Junta and Lamar. Agricultural related activities still serve as a major economic activity within the region.

In comparison with the rest of the State of Colorado, Las Animas falls significantly below the median state average for income. Based on the 2000 census data, the city's median household income is $26,157 compared to the state's average of $47,203. Based on 2005 data from the Colorado Department of Local Affairs, the statewide average monthly water bill was $34.68, while the city's average monthly bill is $35.90, already higher than the state average. Such being the case, the city simply does not have the additional debt capacity or retained earnings available to complete the additional water main replacements for the proposed project.

As part of the overall plan of the project, the city will provide the required water resources to the CCA Correctional Facility. This expansion of the local correctional facility will bring a much-needed economic boost and additional revenue not only to the City of Las Animas, but also to the surrounding region. The current estimate of the CCA's employees living inside Las Animas is approximately 37%. The remaining employees are scattered to La Junta and extend past Lamar. Therefore, all the communities and counties between these areas will see additional revenue from the correctional facility expansion. This aspect of the project has great potential

for aiding in diversifying the city's local economy and for bringing new, outside revenue into the city.

4. Please provide a brief narrative of any related or relevant previous studies. Attach additional sheets as needed.

Starting in January 2006, the City of Las Animas contracted with GMS, Inc. Consulting Engineers to evaluate their water system. In October of 2006, the contract was expanded to include evaluating the water treatment plant to determine if the city could meet the demands of the local correctional facility doubling in capacity. The study was completed in March of 2007. The study defined deficiencies throughout the water system and broke them into priorities.

The total cost of the priorities were calculated at $5,018,283; however, if the four priorities were undertaken simultaneously, a cost savings would be recognized through reductions in engineering, construction observation, other engineering and administration related expenses. Thus the corresponding total project cost would be reduced to an estimated $4,729,029. Based on meetings with city representatives and assessing their ability to take on additional debt, the projects were reviewed from a financial impact basis. The project that evolved included the first two priorities of work coupled with activities 3.1, 3.2 and 3.3 from priority three. The corresponding cost estimate for the large combined project of $4,729,029 was reduced to $2,222,220 within this effort.

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. Attach additional sheets as needed.

Summary

The scope of work to be accomplished within this application includes the following:

1. Installation of a third reverse osmosis train or provide secondary recovery on the waste stream within the existing water treatment plant to meet all demands placed on the water system.
2. Provide raw water at the rate required to meet demand, which results in the need to bring one of the non-operational wells back online coupled with the installation of a new transmission line to the water treatment plant.
3. Install meters on the remaining city facilities that are not metered.
4. Provide the means to bypass the existing 2.0 million gallon underground water storage tank, repair the tank and provide a means of being able to pump water from the tank to the distribution system within a long duration power outage.
5. Undertake distribution system improvements to eliminate old, deteriorating, undersized water mains and frequent pipeline failures
6. Replace existing and install new fire hydrants throughout the city for fire protection and system flushing.

Goals

The goals of this project include the following:

1. Have the water collection facilities in place to produce enough water to meet demands placed on the water treatment plant.
2. Utilize the city's water resources to the maximum extent possible by re-drilling a well not currently used to benefit the city, county and state.
3. Have the necessary treatment capacity within the WTP to produce enough water meeting system demands.
4. Have the necessary treatment equipment in place to produce water meeting all water quality standards and rules.

5. Reduce the amount of operation and maintenance required of the distribution system thereby reducing costs for all users of the water system.
6. Provide the catalyst, water, for economic development and expansion for the city, county, surrounding area and region.

The stated goals will be accomplished through the installation of the referenced facilities. The facilities will: provide the city additional WTP capacity required to meet demands; eliminate old, brittle and failing piping throughout the distribution system; enable the city to operate and maintain their water system more cost effectively. All work will be installed by means of heavy machinery.

Participants

Participants in the Water System Improvements project include the City of Las Animas, GMS, Inc. Consulting Engineers, the Colorado Department of the Public Health and Environment, Colorado Department of Local Affairs, Colorado Water Resources and Power Development Authority, and an unknown contractor. The city has well-seasoned staff with a history of effectively maintaining the city's current infrastructure. Currently, the city employees six full-time personnel to operate and maintain the water system. GMS, Inc. will be working on behalf of the city as their consulting engineer on the project. GMS has been in the consulting engineering field since 1978. Their staff consists of six registered engineers, two registered engineers in training, three registered land surveyors, eight field staff plus three administrative support staff. GMS is known for their work in municipal and special district infrastructure including water, sanitary sewer, water resources, storm sewer, streetscape and water resources, in addition to aiding rural communities in obtaining and administrating the needed financial resources for their projects.

The various governmental agencies noted as participants are providing a substantial portion of the necessary financial resources to enable the city to undertake the stated project. As the proposed project has not yet been released for public bidding, a contractor has not been selected. Once bids have been received, the selected contractor will have his qualifications and references reviewed and the city and GMS, Inc. will verify he has the experience, ability, resources, and reputation to complete the proposed project.

Budget

Activities	Total Cost
Administration	
1. Advertising	500
2. Audit	3,500
3. Bond Counsel	8,000
4. Legal Counsel	1,000
5. Environmental Assessment Report	8,000
6. Technical, Managerial, Financial Capacity Assessment	8,000
Design/Contract Administration	176,314
Construction	
1. Water supply system	208,150
2. WTP upgrades	775,400
3. Distribution pumping building and 2.0 MG tank upgrades	127,000
4. Well building improvements and meter installations	64,200
5. Distribution system replacements, upgrades	745,237

Activities	Total Cost
Other Engineering	53,000
Construction Observation	105,000
Contingencies	188,699
TOTAL	$2,472,000

Project Schedule

PLAN OF ACTION AND IMPLEMENTATION SCHEDULE

Scheduled Event	Date
Submit Roundtable funding application	November, 2007
Authorize design preparation/permitting	October 2007
Design approval package	February 2007
Advertise project for bid	March 2008
Obtain Roundtable funding commitment	April 2008
Award Contracts	April 2008
Start Construction	May 2008
Complete Construction	November 2008

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

Name	Address/Phone Number
Edward D. Meyer, P.E. GMS, Inc. Consulting Engineers	611 North Weber Street, Suite 300 Colorado Springs, Colorado 80903 Phone: (719) 475-2935 Fax: (719) 475-2938 E-mail: edmeyer@gmsengr.com
Mark MacDonnell Mr. Mark MacDonnell, Esquire	437 6th Street Las Animas, Colorado 81054 Phone: (719) 456-2624

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, or the water body to be affected by, the water activity. For water supply sources being utilized, describe its location, yield, extent of development, and water right status. For water bodies being affected, describe its location, extent of development, and the expected effect of the water activity on the water body, in either case, the analysis should take into consideration a reasonable range of hydrologic variation. Attach additional sheets as needed.

As with the majority of the communities in eastern Colorado, the City of Las Animas derives its water supply from ground water sources. The city currently operates seven ground water wells to supply the potable water system. These are shallow wells drawing ground water from the Arkansas River alluvium. Ground water from these wells is administered by the Colorado Department of Natural Resources, Office of the State Engineer. These wells are classified as non-exempt, tributary wells that require augmentation. This water source contains very high concentrations of minerals consisting primarily of sulfate, sodium, calcium and magnesium.

A review of the State Engineer's office database indicates that the city has absolute water rights for 11 wells. The 11 wells have a total adjudicated right in the amount of 15.38 cubic feet per second (cfs), or 6,900 gallons per minute (gpm). These rights were adjudicated in State Water Court Division No. 2 under Case No. W1577 on May 7, 1973. The appropriation dates (similar to priority dates for surface water) range from December 1906 for Well No. 6, up to July 25, 1967 for Well No. 5. The records do not indicate any annual limits on total water pumped. The original 11 wells in the court decree consist of the eight city wells and three additional wells located in the southwest quarter of the northwest quarter of Section 11; this being southeast of the city. These three wells, apparently no longer used, still retain their water rights under the decree. The actual locations of several of the city wells do not coincide with the locations listed in the State Engineer's database. This indicates that they have been replaced and/or relocated since the 1973 decree.

Very little information on the existing wells is available from the city. Individual well installation, equipping and test pumping reports are not available. Thus, it is not known when each well was actually constructed. If a well is original and has not been re-drilled, the likely installation date is around the date of appropriation as listed in the State Engineer's database. Each well is equipped with a submersible well pump. Hydraulic calculations estimate that the horsepower of the well pumps range from 15 to 30 hp, depending on the rated pumping capacity. This range of horsepower of the pump motors would typically require a 240-volt or 480-volt, 3-phase service.

Wells currently designated as Nos. 2 through 7 consist of a bored hole to a depth ranging from 26 to 36 feet deep. The hole is cased and has a well screen in the bottom. Static water levels are approximately 8 to 10 feet below the ground surface. These wells have a well cap on the top and are enclosed within an individual well house. The well houses consist of small masonry block buildings, each with a removable wood roof for access to the well pump. Well No. 1 consists of a 24-foot diameter hand-dug, concrete lined cistern installed around 1919. Discharge is through an in-ground meter vault. All of these wells are controlled by a supervisory control and data acquisition (SCADA) system to start and stop the wells based on a call from the WTP. According to the city staff, Wells 1, 6 and 7 are the best, most reliable producers.

Historically, each well was metered with monthly pumpage being reported to the State Engineer's office. However, in 2003 the state allowed the city to report the combined well pumpage using the WTP flow meters. Thus the existing meters at each well have not been calibrated in three years.

The following table is a summary of the information available on each of the city's 11 wells as adjudicated in the May 7, 1973 Water Court Decree for Case No. W1577.

TABLE 5
CITY OF LAS ANIMAS - EXISTING GROUND WATER WELLS

Well No.	Permit No.	Structure No.	Depth, ft.	Pumping Rate gpm[1)]	Absolute Right, Pumping Limit gpm	Appropriation Date	Actual Street Location
1	15297-R	5069	28	340	850	1919	6th & Cottonwood
2 [2)]	431-RF	6208	29	250	550	June 25, 1967	4th & Cottonwood [3)]
3	15299-R	5067	26	367	900	1948	1st & Elm
4	5469-F	5070	34	350	675	April 30, 1967	3rd & Vine [3)]
5	432-RF	5071	30	350	675	July 20,1967	2nd & Locust [3)]
6	15296-R	5072	33	400	1450	1906	8th & Ash
7	5350-F	5068	36	520	1150	March 31,1964	Ash south of 11th [3)]
8	2452-F	6207	-	0 [4)]	150	June 30, 1960	4th & McBride [3)]
-	21690-F	5839	-	-	245	1928	
-	29691-F	5840	-	-	260	1928	
-	29692-F	5873	-	-	18	1920	

1. gpm = Gallons per minute
2. Currently being replaced
3. State Engineer database record of location is not consistent with current location
4. Abandoned
5. Located in SW ¼ of NW ¼ Section 11

Only Well Nos. 1 through 7 are active. Well No. 8 has been abandoned; however, this well is to be redrilled within the proposed project. The three wells without well numbers are not currently used for the city's water supply.

As a result of the proposed improvements, the city will increase its available water collection capabilities in addition to its production of water meeting the drinking water standards. This will provide the means to the city provide potable water to the city customers including the expansion of the CCA Correctional Facility. The CCA facility expansion will bring needed economic development to the lower portions of the Arkansas River Valley. Improvements to the city's distribution system will result in a reduction of operation and maintenance cost, which will lower costs for the city's overall users. The repairs, improvements and modifications stated above have been prioritized as needed by the city and critical to the future development, life and sustainability of the city's water system.

8. 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.

Promoting Collaboration and Cooperation

The water system improvements project being undertaken by the city will have a positive impact on Bent, Otero and Prowers Counties as a whole in addition to the various communities up and down the Valley. The positive impact will come in the form of economic development. The Lower Arkansas Valley has experienced significant departures of some of its largest employers, several natural disasters in the form of drought, blizzards and tornados, and its water resources being purchased and transported for development along the Front Range. This has resulted in a depressed economy for a number of years. As a result of the project, job creation will occur not only at the correctional facility, but also the various service industries required to service the jobs associated with the correctional facility.

The water project is required due to the fact the city will not be able to meet the maximum day water demand with its current facilities. Therefore, the only cost-effective means to provide water to meet the demand is by improving and replacing a portion of the city's water collection system and expanding the WTP. This results in the city using their current water resources more effectively and encourages surrounding communities to follow suit.

Furthermore, the city is aggressively trying to tighten up its water distribution system to bring down the volume of water loss. This effectively reduces the water demand on the entire system and will result in cost savings, saving staff time, and promotes conservation by the city's constituents.

Facilitating Water Activity Implementation

As a result of the various funding agency requirements, the city has pursued all reasonable available financing. The agencies involved with the project include the Colorado Department of Local Affairs, Colorado Department of Public Health and Environment, and the Colorado Water Resources and Power Development Authority. As a result of the allocated funds from the said agencies, the city is still falling short of its desired total project budget by $450,000. This amount cannot be absorbed by the city due to the significant cost. Furthermore, the city is already contributing $400,000 of local match to the project.

Given the magnitude of remaining capital funds required to undertake the project, the city simple does not have the additional debt capacity or the retained earnings to proceed with all aspects of the project. Furthermore, no other governmental agency will provide additional grant funds of the magnitude requested to supplement the project budget. Therefore, a sizable portion of the proposed project will not be realized if the Roundtable funds are not committed, specifically the distribution replacement portions of the project will be reduced.

As a result of undertaking the current proposed water project in addition to a significant concurrent sanitary sewer collection project, the city is demonstrating that it has the expertise to undertake a project of this

magnitude. To further aid in the process, the city will be contracting with GMS, Inc. to perform all engineering, administration and construction oversight. This will ensure that the project will meet its goals, be properly designed and constructed and that the administration of the project runs smoothly.

The city has the ability to provide some in-kind contributions and is planning to provide some of those services. Those services include restoring the various roadway surfaces to their original or better condition. This will have a sizable impact on extending the amount of available funds within the project. Any in-kind work outside of this will be limited due to the other duties and requirements of city staff, although there is a willingness to undertake more of the construction aspects of the project if possible.

Meeting Water Management Goals, Objectives, and Identified Water Needs

The proposed project will have impacts on the city's potable water consumption. First, by the expansion of the CCA Correctional Facility, water consumption will increase by the expanded demand. This demand is easily met by the city's existing water rights; however, the city will have to re-drill an abandoned well and provide additional treatment units within its WTP. The other impact will be positive. They will come about through the elimination of old deteriorating piping within the water distribution system. This will tighten up the distribution system and eliminate leakage within it thereby reducing water demand. This will reduce costs, the amount of treated water produced and the amount of water pump from the wells. Furthermore, this project will result in the city using its water rights much more efficiently and effectively.

The affects of the project will literally breath new life into the city's water system and the economy. If the improvements are not undertaken, the city will not be able to meet future water demands, will fail to have the ability to effectively operate and maintain their water system, and will eventually have a proliferation of leaks, and operation and maintenance costs will grow exponentially. This being said, the city will eventually have to undergo the project regardless of the associated capital costs. Now is the time to replace as much of distribution system as possible to reduce the overall costs and realize economy of scale within the project.

As previously stated, should the requested amount of $300,000 not be approved for the City of Las Animas' water project, a sizeable portion of the water distribution system work will not be undertaken. This will result in additional operation and maintenance costs for the city in the years to come. Furthermore, the city will also have to produce additional water as a result of the increase in leaks as the distribution system continues to deteriorate with time. This is an ineffective way to operate a distribution system. Therefore, the city is aggressively trying to be proactive in addressing the problems prior to the problems becoming a crisis.

The project will not only provide the capacity to meet future demands, but will provide additional capacity within the collection and treatment sides of the water system. This provides the city an opportunity to provide water to other industries. A few years ago, the city was asked if they had water available to provide service to a large scale hog farm. The city did not have the facilities in place at the time, which resulted in the hog farm locating to another area. Should this type of request be made in the future, the city would have the available water and facilities in place as a result of this project, and could therefore expand and diversify its economy that much more. Thus this project not only brings immediate economic benefit, but also provides the city great opportunity to continue to expand the local and regional economy.

The proposed project is focused on existing facilities. All proposed replacements, improvements and modifications are to be located within existing rights-of-way, easements, buildings and other various city-owned facilities. The improvements will effectively enlarge the current WTP and increase available water to the WTP. In contrast, the water distribution system will maintain its current configuration, but will have larger diameter pipe installed, as needed, to meet demand and water flow requirements.

Water Activity Addresses Issues of Statewide Value

One of the goals of this project is to increase the amount of capacity within the city's current WTP. The expansion will directly result from the local correction facility expanding its facilities; however, the expansion brings much added value and opportunity to the city. As previously stated, a few years ago the city was

approached to supply water to a hog farm. Given the city's capacity capabilities and the desired amount of water requested at that time, the city was unable to provide the requested amount of water. The hog farm located elsewhere, resulting in the loss of a potentially significant addition to the local and regional economy. With this being said, the additional capacity resulting from this project, should a new industry request water in the future, means the city will be well-suited to meet such a request. This would impact the economy in a very positive way, which is highly desirable in the Lower Arkansas River Valley.

Therefore, this project brings not only added benefit to the City of Las Animas, but to the surrounding communities, counties and the State of Colorado. This will directly bring added benefit to the State of Colorado from increased revenue and taxes, provide an economic boost in an economically distressed area and aid in better managing the water resources within the state.

9. Additional Information – If you feel you would like to add any additional pertinent information please feel free to do so here. Attach additional sheets as needed.

The above statements are true to the best of my knowledge:
Signature of Applicant:

Print Applicant's Name: Mr. Lawrence Sena, Mayor

Project Title: Water System Improvements

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

Reference Information

The following information is available via the internet. The reference information provides additional detail and background information regarding these criteria and guidelines and water policy issues affecting our state.

Sample Contract and Purchase Order – http://cwcb.state.co.us/IWMD/tools.htm

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 – http://cwcb.state.co.us/IWMD/tools.htm#Water_Supply_Reserve_Account

Interbasin Compact Committee and Basin Roundtables

Interbasin Compact Committee By-laws and Charter – http://dnr.state.co.us/Home/ColoradoWaterforthe21stCentury/Interbasin+Compact+Committee/IbccHomePage.htm

Basin Roundtable By-laws – http://dnr.state.co.us/Home/ColoradoWaterforthe21stCentury/IbccHome.htm

Legislation

House Bill 05-1177 - Also known as the Water for the 21st Century Act – http://cwcb.state.co.us/IWMD/statutes.htm

House Bill 06-1400 – Adopted the Interbasin Compact Committee Charter – http://cwcb.state.co.us/IWMD/statutes.htm

Senate Bill 06-179 – Created the Water Supply Reserve Account – http://cwcb.state.co.us/IWMD/statutes.htm

Statewide Water Supply Initiative

General Information - http://cwcb.state.co.us/IWMD/

Phase 1 Report - http://cwcb.state.co.us/IWMD/PhaseIReport.htm