July 21, 2008

Mr. Howard Pippin, Mayor
Town of Saco, Montana
110 Nelson
Saco, MT 59261

RE: Town of Saco Water System Improvements Project

Dear Mayor Pippin:

Enclosed are copies of the Finding of No Significant Impact (FONSI) and of the Environmental Assessment (EA) for the Town's water system improvements project. Please print the FONSI in at least one publication of your local newspaper under legal advertising and return a copy of the proof of advertisement to this office. You do not have to print this letter or the EA. We recommend that you advertise this as soon as possible and allow for a 30-day comment period. Please have the FONSI, EA and Preliminary Engineering Report (PER) available to the public at your office during the comment period. We have distributed the FONSI to the enclosed list of agencies. If you have any questions regarding this process or the project in general, you can call me at 444-5325.

Sincerely,

Mark A. Smith, P.E.
Engineering Mgr.
DWSRF Loan Program
marks@mt.gov
406.444.5325

Encl

cc: Barry Damschen
Anna Miller, DNRC
Frank Kromkowski, CDBG

FINDING OF NO SIGNIFICANT IMPACT
FOR THE TOWN OF SACO, MONTANA
WATER SYSTEM IMPROVEMENTS

TO: ALL INTERESTED PERSONS

Date:	July 18, 2008
Action:	Funding Drinking Water System Improvements
Location of Project:	Town of Saco, Montana
DEQ SRF Loan:	$ 475,000
CDBG Grant:	$ 375,000
Local Funds	$ 63,000
Total Project Cost:	$ 913,000

An environmental assessment (EA) has been prepared by the Montana Department of Environmental Quality (DEQ) for proposed funding for improvements to the Town of Saco, Montana's water system. The proposed improvements include the installation of iron and manganese treatment and sodium hypochlorite disinfection equipment, drilling a new well, obtaining a back-up generator, installation of 13 service meters, and installation of approximately 3900 lineal feet of PVC water main, 5 new fire hydrants, and associated valves and fittings. The purpose of the project is to make improvements to the community's water supply system needed to protect public health.

The affected environment will primarily be the Town of Saco and the immediate vicinity. The human environment affected will include residents and visitors of the aforementioned areas. Based on the EA, the project is not expected to have any significant adverse impacts upon terrestrial and aquatic life or habitat, including endangered species, water quality or quantity, air quality, geological features, cultural or historical features, or social quality.

This project will be funded in part with a low interest loan through the Montana Drinking Water State Revolving Fund Program, administered by the Montana Department of Environmental Quality and the Montana Department of Natural Resources and Conservation. The loan will be repaid by a water system revenue bond.

The DEQ utilized the following references in completing its EA for this project: a Uniform Environmental Checklist for Montana Public Facility Projects and a Water System Preliminary Engineering Report (PER)dated May 2005, and updated PER dated January 2008. All three of these documents were prepared by Barry Damschen Consulting, LLC, the community's consulting engineer. In addition to these references, letters were sent to; Montana Department of Environmental Quality (MDEQ), Montana Department of Fish, Wildlife & Parks (FWP), Montana Department of Natural Resources & Conservation (DNRC) Floodplain Management, United States Fish and Wildlife Service (USFWS), United States Army Corps of Engineers (USACE), and Montana State Historic Preservation Office (SHPO), and the Montana Natural Heritage Program

(MNHP). Response letters have been received from the DNRC, Montana SHPO, MNHP, and MDEQ. These references are available for review upon request by contacting:

Mark Smith, P.E.
Montana DEQ
State Revolving Fund Program
P.O. Box 200901
Helena, MT 59620-0901
Phone (406) 444-5325
Email: marks@mt.gov

or

Howard Pippin, Mayor
Town of Saco, Montana
110 Nelson
Saco, MT 59261
(406) 527-3312

Comments on this finding or on the EA may be submitted to DEQ at the above address. After evaluating substantive comments, DEQ may revise the EA or determine if an EIS is necessary. This finding will stand if no substantive comments are received during the 30-day comment period or if substantive comments are received and evaluated and the environmental impacts are still determined to be non-significant.

Signed,

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Todd Teegarden, Chief
Technical & Financial Assistance Bureau

TOWN OF SACO, MONTANA
WATER SYSTEM IMPROVEMENTS

ENVIRONMENTAL ASSESSMENT

I. COVER SHEET

A. PROJECT IDENTIFICATION

Applicant:	Town of Saco, MT
Address:	110 Nelson Saco, MT 59261

B. CONTACT PERSON

Name:	Howard Pippin, Mayor Town of Saco
Address:	110 Nelson Saco, MT 59261
Telephone:	(406) 527-3312

C. ABSTRACT

The Town of Saco is located in north central Montana midway between Malta and Glasgow on US Highway No. 2. The Town's population, like most small towns in eastern Montana, is losing population. The Town in 2000 had a population of 224 and is projected to stabilize over the next 20 years. This compares to a population of 490 in 1960.

The Town's water system consists of one well located eight miles northwest of Saco, 8.4 miles of 6 inch diameter polyvinyl chloride (PVC) transmission main which transports the water from the well to Town, two storage tanks (a 100,000 gallon bolted steel on-grade tank located 2.4 north of Saco and an 80,000 gallon elevated steel tank located in Town), three miles of distribution system piping (mostly 6 inch diameter with some 4 inch) and miscellaneous gate valves and fire hydrants. The majority of the Town's distribution system consists of asbestos cement (AC) pipe constructed in the 1960s which replaced the original cast iron piping constructed around 1920. The well, 8.4 miles of PVC transmission main and the 100,000 gallon tank were constructed in 1986 and the Town's elevated tank was constructed with the original system in the 1920s. With the exception of 13 mobile homes, all of the users are metered. The water system serves a total 155 customers of which sixteen are residential users located outside the community along the 8.4 mile pipeline.

Deficiencies currently associated with the water system were identified in a May 2005 Preliminary Engineering Report (PER) prepared by Barry Damschen Consulting, LLC. The same firm updated the PER in January 2008 and deficiencies identified include the following:

- The existing water supply well is the only source of water.
- The well does not have a standby source of power in the event of a loss of electricity.
- The Town must drain one of the two storage tanks during the winter to keep them from freezing due to low water consumption. The older elevated tank located in Town is drained and the out-of-town tank is utilized. This creates extremely low flow rates and pressures during a fire fighting event since that transmission main can only provide approximately 300 gpm.

- The distribution system on the south side of the railroad tracks has only one 3 inch diameter supply line and 4 inch diameter distribution piping. Flow rates and pressure are low, particularly in the event of fire.
- There are a few locations on the north side of Saco that have inadequate sized mains or dead end mains. Flow rates and pressure are low, particularly in the event of fire.

Alternatives for remedying the system deficiencies were developed and an alternatives evaluation was completed in the 2005 PER, with additional analysis done by the Town and their engineer in 2008. Based on the analysis, specific water system improvements were recommended. These improvements were bid in late May, 2008. The bids received were over the project budget so the scope of work has been revised and the project will be re-bid. The recommended alternatives include the following improvements:

Supply

- Add a second well to the system to be located near the existing wellhouse. This well will provide a backup if the existing well becomes un-operational. A new pump should be placed in the existing well since the current one is likely near the end of its useful life. A standby generator should also be purchased in case the electricity is lost for an extended period of time. The generator should be a portable unit so that it can also be used to power the existing sewage lift station.

Water treatment

- Due to periodic positive coliform bacteria samples, the Town has decided to install a chlorine disinfection treatment system. It is anticipated that this treatment will mitigate the positive samples and control the formation of biofilms in the system.
- Because the water also contains high levels of manganese and small amounts of iron that form precipitates when chlorine is added, the Town has elected to install a sequestering treatment system. This type of treatment keeps the manganese and iron in suspension and prevents the precipitates from forming.

Storage

- Construct a new 125,000 gallon elevated storage tank and corresponding telemetry controls in Town to replace the 85 year old 80,000 gallon tank. This will provide additional fire flows and allow the Town to use this tank during the winter instead of the out-of-town tank. The out-of-town tank would continue to be used during the summer and drained during the winter. NOTE: THIS RECOMMENDATION IS NOT INCLUDED AS PART OF THE PROPOSED PROJECT BEING RE-BID.

Distribution

- Make improvements to the distribution system in several locations on the north side and totally replace and add a second railroad crossing on the south side. This includes five new fire hydrants and numerous isolation valves.

Water Conservation

- The Town should install meters to the 13 mobile homes that are currently unmetered. This ensures that all customers on the water system are billed fairly.

The project will be funded by a combination of a CDBG grant, an SRF loan, and local funds. This Environmental Assessment (EA) examines the work as described in the PER and the submitted State Revolving Fund Loan Application. Based on this review, environmentally sensitive characteristics such as wetlands, floodplains and threatened or endangered species are not expected to be adversely impacted as a consequence of the

proposed Phase I project. No significant long-term environmental impacts were identified.

Under Montana law (75-6-112, MCA), no person, including a municipality or county, may construct, extend, or use a public water system until the DEQ has reviewed and approved the plans and specifications for the project.

D. COMMENT PERIOD

Thirty (30) calendar days.

II. PURPOSE AND NEED FOR ACTION

The Town of Saco is located in north central Montana midway between Malta and Glasgow on US Highway No. 2. The Town's water system consists of one well located eight miles northwest of Saco, 8.4 miles of 6 inch diameter PVC transmission main which transports the water from the well to Town, two storage tanks (a 100,000 gallon bolted steel on-grade tank located 2.4 miles north of Saco and an 80,000 gallon elevated steel tank located in Town), three miles of distribution system piping (mostly 6 inch diameter with some 4 inch) and miscellaneous gate valves and fire hydrants. The majority of the Town's distribution system consists of A.C. pipe constructed in the 1960s which replaced the original cast iron piping constructed around 1920. The well, 8.4 miles of PVC transmission main and the 100,000 gallon tank were constructed in 1986 and the Town's elevated tank was constructed with the original system in the 1920s. With the exception of 13 mobile homes, all of the users are metered. The water system serves a total 155 customers of which sixteen are residential users located outside the community along the 8.4 mile pipeline.

The 2005 Preliminary Engineering Report (PER) and the 2008 Update to the PER identified the following deficiencies in the water system:

1. In recent years, the Town has experienced periodic positive coliform bacteria test samples. At least some of these positive samples have been attributed to the age and condition of the existing elevated storage tank. It is anticipated that the chlorination treatment equipment will be used to control the formation of biofilms, mitigate the impacts of stagnant water, and disinfect the system. Sodium hypochlorite feed equipment is proposed to be installed at the well pumphouse. The equipment will be sized to provide a minimum free chlorine residual of 2.0 mg/L in the distribution system, as required by DEQ standards. The actual feed rate can be varied considerably by adjusting the strength of the sodium hypochlorite in the solution feed tanks.

   Because the water contains high levels of manganese and small amounts of iron, precipitates will form if chlorination is added. Consequently a sequestering chemical should also be considered.

2. The existing water supply well constructed in 1986 provides sufficient quantity and quality of water. However, DEQ standards require that a minimum of two sources of groundwater must be provided. The existing single well does not meet this requirement. If the well and/or pump were to cease operating for more than 2 days, the Town would most likely have no supply of water for domestic purposes. Furthermore, it would be catastrophic if a fire were to occur during this period since the existing storage tanks could only provide sufficient water to fight a fire for approximately 2 hours.

3. The existing well has no backup power supply in case of a loss of power. DEQ standards require and auxiliary power supply be provided unless documentation is submitted that shows power outages are infrequent and of short duration and fire protection is not diminished by

power failure. Since both storage tanks utilize gravity discharge, fire protection can be provided without the well pumping water. However the possibility does exist that the well house could lose power during an extreme storm event. In fact, in the spring of 2005 power was lost to the communities of Turner and the outlying areas (located 50 miles northwest of Saco) for several days due to a snow and wind storm.

4. The Town has two water storage tanks, one tank located on a hill 2.4 miles north of Saco constructed in 1986, and an 80,000 gallon elevated tank located in Saco constructed in or about 1920. The Town only operates the out-of-town 100,000 gallon tank during the winter since the Town's water consumption is too low to prevent freezing if both tanks are in use. The in-town elevated tank cannot be used with the out-of-town tank off line since the radio telemetry system does not serve the elevated tank. The PER indicates that the Town should ideally have 150,000 gallons of storage during the winter and 212,000 gallons of storage during the summer to meet the average daily domestic demands and a fire flow of 1000 gpm for 2 hours. Based on that analysis the town does not have sufficient storage capacity in the existing tanks to satisfy all demand scenarios.

5. The distribution system consists of approximately 16,000 lineal feet of A.C. pipe, mostly constructed in the 1960s. The distribution system that serves the 17 residences on the south side of the railroad tracks is only fed by a single 3 inch diameter main. The 4 inch diameter mains serving this area are inadequate to meet all conditions of flow, including fire flows. The distribution system in the majority of Town (north side of the railroad tracks) is able to meet domestic demands and fire flows except in 4 locations where dead end mains exist or are less than 6 inch diameter pipe.

6. The Town's well house contains a flow meter and all but 13 residences on the distribution system have individual service meters. In order to ensure that everyone is billed fairly the Town should consider installing meters on these 13 mobile homes that are not metered. This would require installing meter pits rather than the conventional meters that are installed in basements or crawl spaces.

Proper water supply, treatment, transmission, storage and distribution systems are important for public health and safety. Instigating most of the changes recommended in the PER will reduce the public health and safety risk to the residents and visitors of Saco, Montana.

III. ALTERNATIVES INCLUDING THE PROPOSED ACTION AND COSTS

Alternatives analyzed in the 2005 Water System PER and the 2008 Update include the "do nothing" option or improving or repairing the existing problems identified with the water supply, water quality, storage and distribution systems.

The PER examined the capital costs and net present worth costs of the viable alternatives to correct the water system problems. In addition to cost analysis the PER included an impact analysis of the alternatives based on O&M complexity, environmental impacts, public health and safety, operational flexibility, ease of implementation, and current need. A score for each criterion was assigned, ranging from 1 to 4 with a higher score equating the greater benefit. The alternative with the highest relative score represented the most favorable alternative. A summary of the results for each component of the water system will follow.

Treatment System

Alternatives to address the coliform bacteria events that were considered included do nothing or install a sodium hypochlorite disinfection system. Chlorine is one of the most effective disinfectants, but gas chlorination was not really considered as an option primarily due to operator safety

concerns, and it is typically utilized when greater volumes are needed. Doing nothing was not a viable option since this would likely not resolve the positive coliform samples. The sodium hypochlorite system was the best option for this application.

New Well & Pumphouse Improvements

A number of alternatives were considered to provide a secondary source of water. These included 1) do nothing, 2) develop an existing test well into a production well, 3) drill a new well, or 4) employ a surface water source. Doing nothing does not provide a secondary water supply. A surface water supply could be quickly eliminated as an option due to the need for very complex and expensive treatment facilities, plus the extreme difficulty involved in securing surface water rights. The PERs determined that the existing test well construction would likely not satisfy DEQ design requirements for production wells. Therefore, the only viable option is to drill a new well

Storage Improvements

Several alternatives were previously considered to address this component of the Town's water system. These included 1) maintain the existing in-town tank and add a telemetry system, 2) construct a new transmission main from the out-of-town tank to Saco and replace the in-town tank in 10 years, 3) replace the in-town storage tank with a new elevated steel tank or 4) do nothing. The Town had originally selected to build a new elevated tank in town, however, the bids received for a new tank exceeded the project budget. Consequently, the scope of work has been reduced for purposes of re-bidding the project and the Town has elected to do nothing. Instead, they will continue to drain the existing elevated tank during the winter and utilize the other out-of-town tank until some future date.

Distribution Improvements

Two basic alternatives existed to correct these deficiencies, which were to do nothing or replace the existing under-sized distribution mains. The Town has chosen the recommended alternative to replace the mains.

Auxiliary Power

Three alternatives for auxiliary power were considered. These consisted of do nothing, install an on-site generator at the pumphouse, or obtain a portable trailer mounted generator. A portable generator was selected for two reasons: 1) The Town has a sewage lift station that also does not have standby power. The new generator will be able to service this facility as well. 2) An on-site generator would require enlarging the existing pumphouse. This added expense would increase the generator cost by approximately $10,000.

Since it is never planned to operate both wells at the same time, the generator will not be sized to run them both simultaneously. The new pump house electrical system will include a receptacle and a manual transfer switch to connect to the generator.

Water Conservation
The PERs recommended water meters be installed at the 13 service connections that are unmetered. The only other alternative is to do nothing. The town has elected to install the meters at these residences.

Table 1 below shows the estimated project costs for all components of the recommended water system improvements.

TABLE 1 RECOMMENDED CONSTRUCTION IMPROVEMENTS		
ITEM	**DESCRIPTION**	**ESTIMATED COST**
Treatment	Install sodium hypochlorite disinfection and polyphosphate sequestering treatment	$16,000
New well	Drill and develop new well, install new pumps, piping & pumphouse improvements	$82,000
Distribution	Replace existing under-sized mains, including boring under railroad tracks, gas main crossings, exploratory excavation, etc.	$293,000
Back-up Generator	Provide trailer mounted generator	$35,000
Meters	Install13 meter pits and meters	$10,000
Misc.	Mobilization, bonds, insurance, project sign, tank drain, fencing, electrical and telemetry	$111,000
Total Water Improvements Construction Costs		**$547,000**

The estimated project construction costs seen in Table 1 do not include costs for legal, administration, engineering, contingency, and other related costs. These have been estimated to consist of the following amounts:

Legal & other costs……$30,000
Local administration……...$1,000
Engineering (design, bidding, grant & loan application and administration, construction inspection)…….$245,000
Contingency……...$80,000
Pipe bedding (provided by Town)……..$10,000

Subtotal…….**$366,000**

Total Project Cost……$913,000

For the proposed project, the Town of Saco intends to utilize funding sources consisting of:

$ 375,000 Grant – Montana Department of Commerce/Community Development Block Grant (CDBG)
$ 475,000 Loan – Montana Department of Environmental Quality, State Revolving Fund Loan Program (SRF)

$ 63,000 Local funds

$ 913,000 Total Project Funding

USER RATES

The monthly water rate is on a graduated system ($9.14 base rate per month for the first 1000 gallons, $4.57 per 1000 gallons from 1000-5000 gallons, and $0.81 per 1000 gallons above 5000 gallons per month). The average monthly water bill is $22.71 per month.

The wastewater system consists of 8 inch diameter gravity collection mains, a central package lift station, and a two cell lagoon. The current wastewater user rate is a flat rate of $11.00 per month.

The Town intends to fund the local share of the proposed water system project through its own reserve account. Monthly user charges are NOT EXPECTED TO INCREASE as a result of this project. Principal and interest payments on the anticipated SRF loan can be covered from the revenues generated by the current average rate of $22.71 per month.

IV. AFFECTED ENVIRONMENT

A. STUDY AREA

The planning area for the PER includes the area within the Town of Saco, midway between Malta and Glasgow, Montana on US Highway 2, and the area on which its water system is located. The existing well is located six miles northwest of Town in Section 21, T32N, R33E. The transmission main travels east from the well approximately 5 miles along county road right -of-way, then south approximately 3.4 miles along highway 243 into Saco.

B. POPULATION AND FLOW PROJECTIONS

Population Projections

The community was founded in the early 1900s as a farming community with direct access to the railroad which brought settlers to the west. The Town serves as a local hub for the farmers and ranchers, and houses the elementary and high school for the community and neighboring residents. Approximately 90 students are enrolled at the school. The school system is the major employer of the community having 30 teachers, administrators, and miscellaneous employees.

The 2000 census indicated a population of 224 for the Town of Saco. Like most communities along the Hiline (US Hwy 2) and eastern Montana, the population is declining. In fact, the current population is less than half of the 1960 population of 490. It is projected that the population of the Town will remain stable in the future.

Flow Projections

The 2005 and 2008 Water System PERs includes the analysis of current and future water demands and examines the source and storage capacity of the water system. These demand rates are based on the evaluation of existing data, and are listed in Table 2 below.

TABLE 2 TOWN OF SACO, MONTANA CURRENT AND FUTURE WATER DEMANDS				
	Winter		Summer	
Condition	**Demand (gpd)**	**Demand (gpm)**	**Demand (gpd)**	**Demand (gpm)**
Avg. Daily	35,300	24	92,000	64
Max. Daily	63,600	44	165,400	115
Max. Hourly	127,200	88	330,700	230

The PER examined the existing Saco water source capacity and the established water rights and determined the water supply system was capable of meeting current and future needs. This analysis was based on a review of the Montana Department of Environmental Quality (DEQ) design standards effective at the time of review. Again, the purpose of the second new well is for redundancy.

C. NATURAL FEATURES

Soils

The predominant soils in the Saco area are Bowdoin clays. Other soils, primarily along Beaver Creek are Lost River and Harlake soils. The Bowdoin soils have severe limitations for building sites primarily due to shrink/swell potential. These soils percolate slowly and are not very suitable for sanitary facilities other than perhaps for lining lagoons. They are similarly not good soils for agricultural uses due to high clay content, slow permeability, and excessive salt accumulations.

Topography and Geology

The Saco area is underlain by glacial debris left by the retreat of continental glaciers over 12,000 years ago. These deposits consist of an unsorted mix of sand to boulder sized fragments in a matrix of silt and clay. The glacial till ranges from a few feet to many tens of feet thick. Underlying the till are marine and inter-tidal deposits of Cretaceous aged (141 to 65 million years ago) Montana group. These rocks comprise siltstone, sandstone and shale deposits of varying thickness, depending upon the depositional environment. Some of the Montana group units host hydrocarbon and coal deposits. Alluvial deposits are localized in the Milk River and Beaver Creek Valleys. According to a USGS open file report, the Saco well is located in the Claggett formation.

The Source Water Delineation and Assessment Report prepared for Saco by the MDEQ in 2005 indicates that the Saco well draws from groundwater found in semiconfined and unconsolidated alluvium, likely recharged by infiltration of precipitation in the immediate area. The aquifer was found to have moderate sensitivity to potential contamination. A Sanitary Survey Inspection completed by the MDEQ in 2002 indicated that the groundwater supplying the well is not under the direct influence of surface water and is therefore classified as groundwater.

Topography in the Saco area is relatively flat with little relief within the community. Drainages caused by the Milk River and Beaver Creek are located to the south and northwest respectively.

Land Use

The immediate land use in the Town is primarily residential. There are a total of 155 service connections to the water system, and approximately 20 of these are commercial, including the school. The community is surrounded by rangelands and agricultural lands.

Floodplains and Wetlands

To prevent the flood water of Beaver Creek from entering the Town, the Corps of Engineers constructed an earthen dike around the community in 1958. The Corps has ultimate authority of the dike but the Town must maintain it. In order for the run-off water to exit the community, the Corps installed a pump station in the southeastern portion of the community when the dike was built. The Town also operates and maintains the pump station which appears to be in good condition.

A review of the US Army Corps of Engineers' database for status of communities indicates that there are no special flood hazard areas within the Town of Saco and therefore no FEMA maps were prepared for the community. Flood hazards would exist in proximity to the surface water streams located south of Town but the proposed water system improvements are not planned to be located in this area.

There are no known wetlands within the project area.

Historical/Cultural Resources

The Montana State Historic Preservation Office (SHPO) was contacted to determine whether there are significant historical and cultural resources in the area. Their response stated that according to records, there have been several previously recorded historic sites within the Town. Any structure over fifty years old is considered historic and they requested that if/when the elevated storage tank is replaced that it be formally recorded.

There have been a few previously conducted cultural resource inventories done in the area. SHPO stated there is a low likelihood that any cultural properties would be impacted and that another cultural resource inventory is unwarranted at this time. As requested, should cultural materials be discovered during construction, SHPO will be contacted and the site investigated.

Biological Resources

Fauna of the general area consists of typical mammalian species found in eastern Montana prairies including antelope, mule deer, whitetail deer, coyote, rabbit, skunk, rodents and others. Common bird species include the black-billed magpie, American robin, blackbird, sparrow, meadowlark, game birds, waterfowl, and others. The Montana Natural Heritage Program identified one species, the greater sage grouse, as potentially at risk due to limited and/or declining numbers, range, and/or habitat, even though it may be abundant in some areas. Since the proposed construction will take place in existing street rights-of way and previously disturbed areas, no impact on this species is anticipated as a consequence of the project.

Vegetation

Vegetation types of the general area include typical species found in eastern Montana prairies including native grasses, weeds, cactus and sagebrush. Agricultural use in the area generally includes livestock grazing and farming of hay and small grain crops. The Montana Natural Heritage Program identified one plant species, the hot spring phacelia, at high risk because of extremely limited and/or rapidly declining numbers, range, and/or habitat, making it highly vulnerable to extirpation in the state. Since the proposed

construction will take place in existing street rights-of way and previously disturbed areas, no impact on this species is anticipated as a consequence of the project.

Surface Water and Groundwater

The Milk River is located to the south of Saco and Beaver Creek is to the northwest. No work is proposed to take place near these surface waters.

With respect to groundwater, the Saco well is completed to a depth of 68 in the Claggett formation, as mentioned previously. It draws from groundwater found in semiconfined and unconsolidated alluvium, likely recharged by infiltration of precipitation in the immediate area.

Socio-Economic/Environmental Justice

The Town's original water system was constructed in the 1920s. A new well, 8.4 miles of PVC transmission main and the 100,000 gallon tank were constructed in 1986. The majority of the Town's distribution system consists of A.C. pipe constructed in the 1960s which replaced the original cast iron piping constructed around 1920. The water system serves a total 155 customers of which sixteen are residential users located outside the community along the 8.4 mile transmission main.

The Town in 2000 had a population of 224 and this is projected to remain stable over the next 20 years.

V. DIRECT AND INDIRECT ENVIRONMENTAL IMPACTS OF PROPOSED PROJECT

No adverse impacts to the environment are anticipated by implementation of the proposed water system improvements. All of the well and pumphouse work, and distribution system improvements will be located within existing easements and right-of-ways. These are in previously disturbed areas and are where existing water system facilities are located.

Soils Suitability, topographic and Geologic Constraints

No soil, topography or geological constraints are present for the proposed water project. Based on the existing conditions and soils types, the indirect impacts of the proposed water project will have no significant effect on the soils or topography.

Land Use

The new well and distribution work will be done within existing streets and right-of-ways and will therefore have no impact.

Floodplains and Wetlands

The proposed water improvements project does not include work within floodplain or wetland areas and will not have a direct impact on these resources. The proposed water system improvements are not being done to facilitate growth and will have no indirect impacts to these resources.

Historical/Cultural Resources

The Montana State Historic Preservation Office (SHPO) was contacted to determine whether there are significant historical and cultural resources in the area. There have been a few previously conducted cultural resource inventories done in the area. SHPO stated there is a low likelihood that any cultural properties would be impacted and that another cultural resource inventory is unwarranted at this time.

As requested, should cultural materials be discovered during construction, SHPO will be contacted and the site investigated. These requirements are contained in the project specifications.

Biological Resources and Vegetation

There will be no direct impact to biological resources or vegetation. All of the work will be performed within existing easements and right-of-ways. These are in previously disturbed areas and are where existing water system facilities are located. The proposed water system improvements are not being done to facilitate growth and will have no indirect impacts to these resources.

Surface Water and Groundwater

The new well should have no impact to surface or groundwater. It is proposed only for redundancy should the existing well become unavailable. No increase in total groundwater withdrawal is proposed so no additional water rights are necessary. It will not be necessary to run the two wells simultaneously, but they will instead be alternated to ensure good working condition of both.

The proposed system improvements will replace or improve the existing distribution system and will have no impact to surface or groundwater resources.

Socio-Economic/Environmental Justice and Public Health

There is no known disproportionate increase in environmental or public health impacts to minority and low-income persons due to the proposed water improvements project. All persons would benefit from the enhanced water system from both a public health and safety basis and an economic basis. Water system improvements are important for public health and fire protection of residential areas.

Air Quality

Short-term negative impacts on the air quality will occur from heavy equipment, dust and exhaust fumes during project construction. Proper construction practices and dust abatement measures will be implemented during construction to control dust, thus minimizing this problem.

Energy

During construction of the proposed project, additional energy will be consumed, resulting in a direct short-term increased demand on this resource. There will be no long term impacts to this resource as a result of the project.

Noise

Short-term impacts from increased noise levels will occur during construction of the proposed project improvements. Construction activities are anticipated to last 90 days and will occur only during daylight hours.

A. UNAVOIDABLE ADVERSE IMPACTS

Short-term construction related impacts, such as noise, dust and traffic disruption, will occur but should be minimized through proper construction management. Energy consumption during construction cannot be avoided.

B. CUMMULATIVE IMPACTS

This project addresses the existing water utility needs and will have no subsequent negative cumulative effects on resources, ecosystems or human communities. The projected growth of the Town of Saco over the next 20 years is expected to stabilize and is not expected to cause cumulative effects beyond the capacity of the resources. Further environmental analysis would be required for any discussion of cumulative impacts beyond this scope and time frame.

VI. PUBLIC PARTICIPATION

The 2005 Water System PER and 2008 PER Update recommendations were considered by the Town Council, pursuant to obtaining affordable financing and not raising user rates. Upon completion of the draft PER, the Town Council sent a 4 page fact sheet to all Saco residents informing them of the results of the study. This fact sheet also invited them to a public meeting to obtain their input and comments on the recommendations. The public meeting was held on May 11, 2005 and was attended by approximately a dozen residents. The PER includes a copy of the fact sheet provided to the residents.

VII. AGENCY ACTION, APPLICABLE REGULATIONS, AND PERMITTING AUTHORITIES

All water system improvements have been designed to meet Montana DEQ requirements. Proper State regulatory review and approval of the project plans and specifications will be obtained. All applicable local, federal and state permits will be acquired including, but not limited to, a stormwater discharge permit and a construction-dewatering permit if needed.

All appropriate easements and access have been addressed with regards to the water system infrastructure.

VIII. REFERENCE DOCUMENTS

The following documents were utilized in the environmental review of this project and are considered to be part of the project file:

A. Preliminary Engineering Report (PER) for Water System Improvements Prepared for the Town of Saco, Montana, May 2005, prepared by Barry Damschen Consulting LLC, Helena, Montana.
B. Water System Improvements Preliminary Engineering Report (PER) Update Prepared for the Town of Saco, Montana, January 2008, prepared by Barry Damschen Consulting LLC, Helena, Montana.
C. Uniform Environmental Checklist for Montana Public Facility Projects, May 2005, prepared by Barry Damschen Consulting LLC, Helena, Montana.

IX. AGENCIES CONSULTED

The following agencies were contacted regarding the proposed construction of this project:

A. The Montana Department of Fish, Wildlife and Parks was asked in a letter by the project consultant for comments on the proposed project. No response was received.
B. The U.S. Fish and Wildlife Service was asked in a letter by the project consultant for comments on the proposed project. No response was received.

C. The U.S. Army Corps of Engineers was asked in a letter by the project consultant for comments on the proposed project. No response was received.

D. The Montana Department of Natural Resources and Conservation was asked in a letter by the project consultant for comments on the proposed project. DNRC provided some floodplain mapping information .

E. The Montana Natural Heritage Program was contacted regarding the proposed project. In a response received April 25, 2005, they provided maps and information regarding one plant and one animal species that inhabit the general area that are considered potentially at risk. However, the proposed construction will take place in existing street rights-of-way and previously disturbed areas, so no impact on these species are anticipated as a consequence of the project.

F. The Montana Historical Society's Historic Preservation Office was asked in a letter by the project consultant for comments on the proposed project. A response dated May 13, 2005, was received, which states, "We feel that there is a low likelihood that any other cultural properties will be impacted. We, therefore, feel that a recommendation for a cultural resource inventory is unwarranted at this time. However, should cultural materials be inadvertently discovered during this project we would ask that our office be contacted and the site investigated."

X. RECOMMENDATION FOR FURTURE ENVIRONMENTAL ANALYSIS

[ ] EIS [ ] More Detailed EA [X] No Further Analysis

Rationale for Recommendation: Through this EA, The Montana DEQ has verified that none of the impacts of the Town of Saco Water System Improvements Project are significant. Therefore, an environmental impact statement is not required. The environmental review was conducted in accordance with the Administrative Rules of Montana (ARM) 17.4.607 thru 17.4.610.

EA Prepared By:

Mark A. Smith, P.E. Date

EA Reviewed By:

Marc Golz, P.E. Date