October 20, 2009

Sarah Peck, Secretary-Treasurer
Black Eagle Water & Sewer District
PO Box 1
Black Eagle, MT 59414

Dear Sarah:

Enclosed is a finding of no significant impact (FONSI) and an environmental assessment for the District’s SRF-ARRA stimulus funded 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 me. You do not have to print this letter or the environmental assessment. You should advertise this as soon as possible and allow for a 30-day public comment period.

If you have any comments on the FONSI or additional information that you think should be considered, please call me at (406) 444-5372.

Sincerely,

____________________
Thomas Slovarp, P.E.
Senior Engineer
Drinking Water State Revolving Fund Loan Program
Technical and Financial Assistance Bureau

Enclosure

c: John Juras, Thomas, Dean & Hoskins, Inc. w/encl.
FINDING OF NO SIGNIFICANT IMPACT
FOR
BLACK EAGLE WATER & SEWER DISTRICT
WATER SYSTEM IMPROVEMENTS

TO: ALL INTERESTED PERSONS

Date: October 20, 2009
Action: Funding Water Main Replacements
Location of Project: Black Eagle, Montana
DEQ Funding: $225,000
Total Project Cost: $465,000

An environmental review has been conducted by the Montana Department of Environmental Quality (DEQ) for proposed funding for improvements to the Black Eagle Water & Sewer District Water System. The proposed project is a water main replacement project. The purpose of the project is to replace old, brittle and undersized water mains in order to protect public health and the integrity of the drinking water infrastructure.

The affected environment will primarily be the area of Black Eagle, Montana and the immediate vicinity. The human environment affected will include residents and visitors of Black Eagle. Based on the environmental assessment, 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 ARRA stimulus funds 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. An Army Corps of Engineers WRDA grant will also fund some of the project.

In addition to these references, letters of inquiry were sent to the Montana Department of Fish, Wildlife & Parks, the United States Fish and Wildlife Service, the Montana Department of Natural Resources & Conservation, the United States Army Corps of Engineers, the Montana State Historic Preservation Office and the Montana Department of Environmental Quality.

References are available for review upon request by contacting:
Thomas Slovarp
Department of Environmental Quality
P.O. Box 200901
Helena, MT  59620-0901
Phone (406) 444-5372
Email: tslovarp@mt.gov

Or:

Sarah Peck, Secretary-Treasurer
Black Eagle Water & Sewer District
PO Box 1
Black Eagle, MT 59414
(406) 761-4408

Comments on this finding or on the EA may be submitted to DEQ at the above address. Comments must be postmarked no later than 30 days after the date of publication of this FONSI in the newspaper. After evaluating substantive comments received, DEQ will revise the EA or determine if an EIS is necessary. Otherwise, this finding of no significant impact will stand if no substantive comments are received during the comment period or if substantive comments are received and evaluated and the environmental impacts are still determined to be non-significant.

Signed,

______________________
Todd Teegarden, Chief
Technical & Financial Assistance Bureau

c: file
I. COVER SHEET

A. PROJECT IDENTIFICATION

Applicant: Black Eagle Water & Sewer District

Address: P.O. Box 1
Black Eagle, MT 59414

Project Number: DWSRF not assigned yet

B. CONTACT PERSON

Name: Charles Harant, Chairman

Address: Black Eagle Water & Sewer District
P.O. BOX 1
Black Eagle, MT 59414

Telephone: (406) 761-4408

C. ABSTRACT

The Water System Improvements Preliminary Engineering Reports for the Black Eagle Water & Sewer District (April 2006 & September 2009 Update) identified the distribution system (water mains) as the primary problem area for the water system. Old and undersized cast iron pipes have historically been brittle and broken due to nearby construction activity. The preliminary engineering report examined and recommended phases of improvements. In 2008 a water main replacement project (Phase I) took place which replaced many of these mains. Phase II, the subject of this environmental review, would replace remaining problem mains in Black Eagle. The improvements will reduce the overall maintenance requirements, increase system reliability, and will eliminate old, brittle and undersized water mains.

The approximate cost of the water distribution work is $464,694, of which $225,000 will be provided by ARRA stimulus funds from the Drinking Water State Revolving Fund (DWSRF) loan program. This funding consists of $124,900 in principal forgiveness and a loan of $100,100 at an interest rate of 0.75 percent and a loan period of 20 years. $219,000 will come from the WRDA Grant Program, and the District will provide $20,694.

Environmentally sensitive characteristics such as wetlands, floodplains, threatened or endangered species and historical sites are not expected to be adversely impacted as a result of the proposed project. Additional environmental impacts related to land use, water quality, air quality; public health, energy, noise, and growth were also assessed. No significant long-term environmental impacts were identified.
While planning this project the engineers discovered that railroad ballast from the Anaconda Smelter Site was brought in and placed in the area along Railroad Avenue on Montana Power property. This material is known to contain heavy metals. The project will encounter these soils during construction of the water line along Railroad Avenue (easement area from NorthWestern energy). The Department of Environmental Quality has indicated that any excavation materials should be used to backfill the trenches during construction and that no soils should be removed from the work area. Construction workers will need to have appropriate personal protection. The project will be constructed using standard construction methods and to minimize or eliminate pollutants during construction, best management practices will be implemented. A Stormwater Discharge General Permit and a construction-dewatering permit from the DEQ may be required prior to construction. No permits other than plan and specification review and approval are required from the State Revolving Fund (SRF) section of the DEQ for this project.

The DEQ, Technical & Financial Assistance Bureau, has prepared this Environmental Assessment (EA) to satisfy the requirements of the National Environmental Policy Act (NEPA) and the Montana Environmental Policy Act (MEPA).

D. COMMENT PERIOD

Thirty (30) calendar days

II. PURPOSE OF AND NEED FOR ACTION

A. WATER FACILITIES

The drinking water distribution system improvements are necessary in order to address deficiencies to help the Black Eagle Water & Sewer District (District) provide water users with a safe, reliable water supply. The main health and safety issue associated with the current water system is the risk of contamination from old and undersized mains, and low water pressures during high flow events and the inability to provide fire flows in certain areas. If a deteriorating water main breaks, the break could cause a loss of fire service, contamination, and a loss of water service.

A sound distribution system is important for public health and safety. Replacing these water mains will reduce the public health and safety risk to the residents and visitors of the District.

III. ALTERNATIVES INCLUDING THE PROPOSED ACTION AND COSTS

A. WATER DISTRIBUTION SYSTEM

1. NO ACTION

The “no action” alternative was not considered beyond initial screening. This alternative will not remedy the problems, but would simply defer them to the future and allow problems to accumulate and perhaps increase in severity. As water mains
deteriorate, the possibility of water system contamination and loss of water service will increase. Based on these concerns for public health and safety, the no action alternative was not recommended.

2. REPLACE ALL REMAINING DEFICIENT WATER MAINS IN ONE PROJECT

This alternative would include identifying and replacing all remaining cast iron water mains and their associated valves, fittings, and fire hydrants. Water service lines would be reconnected to the new mains if they were copper. Other service line materials would be identified and replaced from the main to the property line. Testing, disinfection, surface restoration, and related incidental work would be completed with the main replacements. Approximately 2800 linear feet of water mains would need to be replaced to complete this alternative.

3. REPLACE DEFICIENT WATER MAINS AS FUNDS BECOME AVAILABLE

Construction funding would be applied for to replace all remaining break-susceptible parts of the water system. If all construction funding can not be secured, then only the portion of work that was funded would be replaced in this next phase (Phase II) of a water main replacement project. This alternative includes identifying, prioritizing, and replacing the oldest and most vulnerable cast iron water mains and their associated valves, fittings, and fire hydrants. Water service lines would be reconnected to the new mains if they were copper or plastic. Other service line materials would be identified and replaced from the main to the property line.

4. PROPOSED ACTION

Number 2, Replace All Remaining Deficient Water Mains in One Project, is the recommended alternative for addressing the District’s water distribution system problems. Completing this work in one project will save money, reduce health and safety concerns, and is strongly supported by the public. The District determined that the mains shown in Figure 3 should be installed in this next phase due to their age and poor condition. If the project is implemented, that will bring the water mains in the area up to standards.

The water main replacements are to be constructed within the existing rights-of-way and are typically installed in the same locations as existing mains. An easement for main replacement along Railroad Avenue will be obtained from NorthWestern Energy.

<table>
<thead>
<tr>
<th>TABLE 2</th>
<th>WATER PROJECT AFFORDABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Monthly water service rate</td>
<td>$25.00</td>
</tr>
<tr>
<td>New monthly debt service and O&amp;M increase</td>
<td>$ 2.00</td>
</tr>
<tr>
<td>Total monthly user cost</td>
<td>$27.00</td>
</tr>
<tr>
<td>Monthly median household income (mMHI)</td>
<td>$1,961</td>
</tr>
<tr>
<td>User rate as a percentage of mMHI</td>
<td>1.38%</td>
</tr>
</tbody>
</table>

1 Uniform Application for Montana Public Facility Projects
IV. AFFECTED ENVIRONMENT

A. STUDY AREA

The District is located in Central Montana along the Missouri River. The location of the District can be seen on the enclosed map in Figure One.

Water main replacement will occur within the existing rights-of-way or dedicated easements within the District limits (See Figures Two & 3). Approximately 2,800 feet of water main will be installed. Construction is scheduled to begin in the Spring of 2010 and continue for approximately 3 months.
RECOMMENDED IMPROVEMENTS

FIGURE 3

THOMAS, DEAN & HOSKINS, INC.
ENGINEERING CONSULTANTS
B. POPULATION AND FLOW PROJECTIONS

The population of the District in the 2000 census was 914 people. Figure 3 shows the mains that will be affected by the replacement project. No significant growth is forecast as a result of the main replacement projects. The project simply replaces existing mains in existing developed areas.

The Standards for Water Works of MDEQ Circular DEQ 1 will be required to be met for both the design and construction of the replacement mains. The standards require that water mains be designed to maintain a minimum pressure of 20 pounds per square inch (psi) under all conditions of flow and 35 psi under normal conditions. The standards also govern pipe materials and bedding and sanitary protection of the water system and sanitary delivery of a temporary supply of water and disposal of wastewater during construction.

C. NATURAL FEATURES

Topography and Soils
The District lies in the Missouri River valley on a hillside north of the river. The soils in the immediate project area consist of primarily sandy and clayey deposits of Glacial Lake Great Falls with a lesser amount of areas of exposed bedrock. The District lies between ground elevations of 3300 and 3500 feet.

Land Use - The land use in the study area is primarily urban with scattered park land and vacant areas. No significant farm land, range land, forestland, or wetlands lie within the study area.

Groundwater and Surface Water -
The depth to groundwater in the study area varies both with location and season. If groundwater is present during construction, dewatering of trenches may require a construction dewatering permit. Also, if groundwater is encountered construction methods will be adjusted. No adverse impacts to groundwater are expected.

The District obtains its drinking water from the City of Great Falls, so no local groundwater is utilized for domestic water.

The Missouri River flows along and forms the border of most of the south edge of the District.

D. MAPS

Figure One shows the general location of the District within the state of Montana. Figure 3 shows the location of the proposed improvements within the District.
V. ENVIRONMENTAL IMPACTS OF PROPOSED PROJECT

A. DIRECT AND INDIRECT IMPACTS OF PROPOSED PROJECT

No adverse impacts to the environment are anticipated by implementation of the proposed main replacements. All of the system improvements will be located within the existing District rights-of-way (streets or alleys) or easements owned and/or maintained by the District.

Land Use- The land use in the study area is residential and commercial. No adverse affects to any of these uses is expected.

Soils Suitability, Topographic and Geologic Constraints- As mentioned in the abstract (Section I C above) there are some constraints related to soils in the project area. The area of the water main along Railroad Avenue contains railroad ballast which contains heavy metals. The Montana Department of Environmental Quality recommends that excavation soils be returned to the trench and no soil should be removed from the work area. Construction workers will need to have appropriate personal protection. These recommendations will be included in the proposed construction documents.

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

Fish and Wildlife and Biological Resources - The construction of the recommended improvements is not expected to impact endangered or threatened species. Since the work will be accomplished on public rights-of-way or negotiated easements. No construction related impacts are anticipated to wildlife habitats, fisheries or other animals.

The main replacements are taking place in developed roads and streets and should have no impact on sensitive plant species.

Water Resource Issues - No significant adverse impacts to surface or groundwater will result from the proposed project.

Floodplains and Wetlands – No floodplain in the project area.

Cultural Resources & Historical Sites – Since the proposed construction sites occur within previous disturbed areas, the State Historic Preservation Office indicated that there is a low likelihood that cultural properties in the area will be impacted by the type of work contemplated in this report.

Socio-Economic Issues - No adverse human health or socio-economic impacts are expected as a result of these main replacement projects.

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 must be specified during construction to control dust, thus minimizing this problem. No long-term air quality problems will result from this project.

Energy - During construction of the proposed project, additional energy will be consumed, resulting in a direct short-term increased demand on this resource.
Public Health – Public health impacts will be improved due to less leaks in the water distribution system.

Noise - Short-term impacts from excessive noise levels may occur during the construction activities. The construction period will be limited to normal daylight hours to avoid early morning or late evening construction related disturbances. In the long-term, no increase in noise levels associated with this project will occur.

Growth - No significant growth is forecast as a result of the main replacement projects. The project replaces existing mains in existing developed areas.

B. UNAVOIDABLE ADVERSE IMPACTS

All of the lines will be constructed within the street right-of-way or alley ways; therefore street surface restoration will be required. Also, access to and from homes during construction will take special consideration. Short-term water outages and temporary above ground water supply will likely be necessary during construction. DEQ 1 design standards require that the specifications cover temporary supply of water to residents in a safe and sanitary manner. 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.

C. CUMULATIVE IMPACTS

This project addresses the existing water system needs and will have no negative cumulative effects on resources, ecosystems or human communities. The projected growth due to this project is little to none and is not expected to cause cumulative effects.

VI. AGENCY ACTION, APPLICABLE REGULATIONS, AND PERMITTING AUTHORITIES

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

All appropriate easements and access will be addressed with regards to the water system infrastructure.

VII. PUBLIC PARTICIPATION

Public hearings regarding this project were held April 7th, 2004 and March 1, 2006 in the Black Eagle Civic Center. The District trustees and members were fully in favor of the project. A public hearing was held October 7, 2009. The scope and financial aspects of the project were discussed. It was a consensus of the attendees that a rate increase was worthwhile.

VIII. REFERENCE DOCUMENTS

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


IX. **AGENCIES CONSULTED**

The following agencies have been contacted by letter of inquiry in regard to the PER, which determined the basis for the proposed water main replacement project:

1. The Montana Department of Fish Wildlife and Parks (FWP) was asked in a letter by the project consultant for comments on the project. No comments were received. There will be no impacts to fisheries habitat or wildlife.

2. The U. S. Fish and Wildlife Service (FWS) was contacted about the proposed project and no comments were received.

3. The Montana State Historic Preservation Office (SHPO) considered the impacts of the proposed project on historical sites and determined there is a low likelihood cultural properties will be impacted. The Montana State Historic Preservation Office asks to be contacted and the site investigated should cultural materials be inadvertently discovered during construction.

4. The U. S. Army Corps of Engineers will be providing a WRDA grant of $219,000 for the project. The project will not include work within wetlands or waters of the U.S. and no USACE Section 404 permit will be needed.

5. Department of Natural Resources and Conservation (DNRC) was asked in a letter by the project consultant for comments on the proposed project. The DNRC has not responded.

6. The Montana Department of Environmental Quality – Drinking Water SRF Program reviewed the proposed project and concluded the project was eligible for funding. The DEQ will also review plans and specifications and ensure compliance with State design standards.

**Recommendation for Further Environmental Analysis:**

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

**Rationale for Recommendation:** Through the Preliminary Engineering Reports (PER), prepared by Thomas, Dean & Hoskins and Delta Engineering and the other reference documents listed above in Section VIII and the input from the agencies that responded to the letters of inquiry (Section IX) and comments from the public process involved, no significant adverse impacts should occur from the proposed action; 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, 17.4.608, 17.4.609 and 17.4.610. This EA is the appropriate level of analysis because there will be no significant adverse impacts. A Finding of No Significant Impact (FONSI) will be issued and legally advertised in the local newspaper and distributed to a list of interested entities. Comments regarding the project will be received for 30 days before final approval is granted.
EA Prepared By:

__________________________ ____________________
Thomas Slovarp, P.E. Date

Approved By:

__________________________ ____________________
Mark Smith, P.E. Date