

February 6, 2008

Craig Erickson  
Bear Paw Development  
P.O. Box 170  
Havre, MT 59501

Dear Craig:

Enclosed is a copy of a finding of no significant impact (FONSI) and Exhibit 2-T for the proposed improvements to Harlem's water system. The proposed project includes water treatment plant, intake pump station and piping improvements to address some deficiencies with the existing system.

Please forward these documents to Mayor Kinyon for his signature, followed by publication of the FONSI in at least one issue of your local newspaper under legal advertising. Upon publication, please return proof of advertisement to me and to Frank Kromkowski of the Montana Department of Commerce. You do not have to print this letter. You should advertise this as soon as possible and follow the instructions previously provided by Mr. Kromkowski. Department of Environmental Quality procedures call 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) 444-7838.

Sincerely,

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Gary J. Wiens, P.E.  
Drinking Water State Revolving Fund Loan Program  
Technical and Financial Assistance Bureau

c: Frank Kromkowski, Montana Department of Commerce

## EXHIBIT 2-T

### COMBINED FONSI/NOI/RROF for SRF/CDBG funded projects

Date: February 6, 2008

#### COMBINED NOTICE OF FINDING OF NO SIGNIFICANT IMPACT and NOTICE TO PUBLIC OF REQUEST FOR RELEASE OF FUNDS (FONSI/NOI/RROF)

TO ALL INTERESTED GOVERNMENTAL AGENCIES AND PUBLIC GROUPS

On or about March 3, 2008, the City of Harlem will request the Montana Department of Commerce (DOC) to release Community Development Block Grant (CDBG) funds provided under Title I of the Housing and Community Development Act of 1974, as amended (PL 93-383) for the following project:

Project	City of Harlem Water Improvements Project
Location	Harlem, Montana
SRF Project Number	
Total Cost	\$2,321,000

As required by state and federal rules for determining whether an Environmental Impact Statement is necessary, an environmental review has been performed on the aforementioned project.

#### Project Summary

The community of Harlem, through its Preliminary Engineering Report (PER), has identified the need to upgrade its water treatment plant (WTP) to address several deficiencies with the existing system, including a lack of redundancy with both the raw water pump and the single solids clarifier, which are violations of MDEQ Circular 1.

Harlem's WTP is old and considered unsafe. The following is a summary of the serious deficiencies identified in the PER: 1) no redundancy with raw water pump; 2) Single solids clarifier lacks redundancy; 3) 1,250 feet of piping is buried too shallow and subject to freezing; 4) WTP has no chlorine leak detection system; 5) WTP motor control center is obsolete and replacement parts are no longer available; 6) WTP has no standby generator in case of extended power outage; and 7) Raw water pump is located within the 100-year flood plain of the Milk River.

The recommended alternative from the PER includes the following improvements:

- Wet well expansion and two new pumps at intake pump station
- Raise pump station 2' above floodplain
- Treated water pipeline for pump lubrication
- Additional piping for settling ponds
- Install a microfiltration unit at the Water Treatment Plant (WTP)
- Construct WTP addition to accommodate the microfiltration unit

- Replace obsolete motor control centers
- Replace obsolete and malfunctioning telephone alarm dialer
- Replace the radio telemetry system
- Install chlorine leak detector
- Replace 1,250 of 10-inch diameter yard piping with 6.5' of cover (within existing right-of-way)
- Install lighting and ventilation in basement of WTP
- General improvements to WTP

Finding of No Significant Impact

It has been determined that such request for release of funds will not constitute an action significantly affecting the quality of the human environment and accordingly the City of Harlem, and the DEQ have decided not to prepare an Environmental Impact Statement under the National Environmental Policy Act of 1969 (PL 91-190).

The reasons for the decision not to prepare such Statement are: The project will provide necessary improvements to the City of Harlem's water treatment plant and provide the residents of Harlem with a system that will ultimately reduce safety, health, and environmental hazards.

Environmentally sensitive characteristics such as wetlands, floodplains, and threatened or endangered species are not expected to be adversely impacted as a result of the proposed project. No significant negative long-term environmental impacts were identified.

An Environmental Review Record prepared by the aforementioned City of Harlem and an Environmental Assessment prepared by the DEQ documenting review of all project activities in respect to impacts on the environment are attached to this Finding of No Significant Impact and Request for Release of Funds. These documents are available for public scrutiny on the DEQ web site (<http://www.deq.state.mt.us/ea.asp>) and also available for public examination and copying upon request between the hours of 9:00 AM and 4:00 PM at the following locations:

Dept. of Environmental Quality 1520 East Sixth Avenue P.O. Box 200901 Helena, Montana 59620-0901	City of Harlem 10 First Avenue Southwest P.O. Box 579 Harlem, Montana 59526
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No further environmental review of such project is proposed to be conducted prior to the request for release of CDBG project funds.

Release of Funds

Anticipated funding for the project is through a combination of the following: a Community Development Block Grant (CDBG), Treasure State Endowment Program (*TSEP*) Grant, and a State Revolving Fund (SRF) Loan.

The City of Harlem will undertake the project described above with CDBG funds provided by DOC under Title I of the Housing and Community Development Act of 1974, as amended. The City is certifying to DOC that the City of Harlem and Jeremy Kinyon as approved by DOC, in his official capacity as Mayor and Environmental Certifying Officer, consents to accept the jurisdiction of the Federal courts if an action is brought to enforce responsibilities in relation to environmental reviews, decision-making, and action; and that these responsibilities have been

satisfied. The legal effect on the certification is that upon its approval, the City of Harlem may use the CDBG funds and DOC will have satisfied its responsibilities under the National Environmental Policy Act of 1969.

#### Public Comments and/ or Objections on Findings

For purposes of CDBG funding, all interested agencies, groups and persons disagreeing with the Finding of No Significant Impact are invited to submit written comments for consideration by the City of Harlem to the Harlem City Hall on or before February 28, 2008. All such comments so received will be considered and the City of Harlem will not request release of funds or take any administrative action on the project prior to the date specified in the preceding sentence.

Comments supporting or disagreeing with this decision may also be submitted to DEQ and DOC for consideration by March 21, 2008. DOC will accept an objection to its approval for State Release of Funds only if it is on one of the following bases:

1. that the certification was not in fact executed by the certifying officer or other officer of the applicant approved by DOC;
2. that the applicant's environmental review record for the project indicates omission of a required decision, finding, or step applicable to the project in the environmental review process;
3. the grant recipient has committed funds or incurred costs not authorized by 24 CFR Part 58 before approval of a release of funds by DOC; or
4. another Federal agency acting pursuant to 40 CFR Part 1504 has submitted a written finding that the project is unsatisfactory from the standpoint of environmental design.

Objections to be considered by DEQ and/or DOC must be prepared and submitted by March 21, 2008, in accordance with the required procedures (24 CFR Part 58) and may be addressed to one of the following agencies:

1. Department of Commerce, Community Development Division, Community Development Block Grant Program, 301 S. Park Avenue, P.O. Box 200523, Helena, Montana 59620-0523.
2. Department of Environmental Quality, Planning, Prevention & Assistance Division, 1520 East Sixth Avenue, P.O. Box 200901, Helena, Montana 59620-0901.

DOC will not consider objections to the release of funds on bases other than those stated above. After evaluating the objections and comments received, the agencies will make a final decision. However, no administrative action will be taken on the project for at least 30 calendar days after publication of the Finding of No Significant Impact. For CDBG funding purposes, no objection received after March 21, 2008, will be considered by DOC.

The following documents have been utilized by the DEQ and the City of Harlem in the preparation of this Environmental Assessment and Environmental Review Record:

1. City of Harlem Water System Preliminary Engineering Report, May 2006, prepared for the City of Harlem by Morrison Maierle, Inc. Billings, Montana.
2. Consolidated Environmental Assessment Form, City of Harlem Water System Improvements Project, September 26, 2007, prepared for the City of Harlem by Bear Paw Development Corporation of Northern Montana, Havre, Montana.
3. Uniform Application Form for Montana Public Facility Projects, July 12, 2007, submitted by the City of Harlem.

Sincerely,

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Todd Teegarden P.E., Acting Bureau Chief  
Technical and Financial Assistance Bureau  
Planning, Prevention & Assistance Division  
Department of Environmental Quality

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Jeremy Kinyon  
Environmental Certifying Officer  
City of Harlem

CITY OF HARLEM  
DRINKING WATER SYSTEM IMPROVEMENTS

ENVIRONMENTAL ASSESSMENT

I. COVER SHEET

A. PROJECT IDENTIFICATION

Applicant: City of Harlem  
Address: P.O. Box 579  
Harlem, MT 59526

B. CONTACT PERSON

Name: Jeremy Kinyon, Mayor  
City of Harlem  
Address: P.O. Box 579  
Harlem, MT 59526  
Telephone: (406) 353-2361

C. ABSTRACT

The city of Harlem water system provides potable water to a population of 848, according to the 2000 census. In order to maintain satisfactory service to its customers, the city is undertaking improvements to its water supply and treatment facilities. The City of Harlem Water System Preliminary Engineering Report, prepared by Morrison Maierle, Inc., in May 2006, includes consideration of alternatives for improvements with estimated capital costs ranging from \$1,550,000 to \$3,549,000.

Raw water for the city's water system is pumped from a single intake in the Milk River to two earthen settling ponds with a combined capacity of 23 acre-feet. From there, water is pumped to the water treatment plant, where it is treated with conventional treatment processes of coagulation, flocculation, sedimentation, filtration and chlorination. The treatment plant's 100,000-gallon clearwell is supplemented by a 400,000-gallon concrete storage reservoir constructed in 1995 one-half mile north of the city. The distribution system consists of PVC, asbestos-cement and cast iron pipe with diameters ranging in size from 4 inches to 12 inches.

One of the conclusions of the 2006 preliminary engineering report was that the city's storage and distribution facilities do not need immediate capital improvements and that attention should be focused on the water supply and treatment facilities instead. The report's primary recommendation was to proceed

with a comprehensive project to construct improvements to the supply and treatment systems. The recommended alternative includes the following improvements:

1. Install new duplicate intake pumps with treated water pump lubrication,
2. Construct additional piping at the settling ponds to provide operational flexibility and prevent short circuiting,
3. Install a new package microfiltration facility in the location of the existing solids contact clarifier and sand filters,
4. Replace shallow bury yard piping that is susceptible to freezing, and
5. Construct other improvements at the water treatment plant, including structural repairs and upgrades to lighting, ventilation, roofing, painting, electrical and control systems.

The proposed water treatment system improvements will enable the city to maintain compliance with the Safe Drinking Water Act and will ensure that drinking water meeting state and federal regulations will continue to be safely and reliably provided to all consumers.

The project will be funded in part by a Drinking Water State Revolving Fund loan. 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 project. No significant long-term environmental impacts were identified during the preparation of this document.

D. COMMENT PERIOD

Thirty (30) calendar days.

II. PURPOSE AND NEED FOR ACTION

A. EXISTING WATER SUPPLY SYSTEM

The water treatment plant was originally constructed in the 1950s and has undergone several upgrades, including the addition of a standby filter and a flocculation/clarification unit (solids contact clarifier) and improvements to the river intake pump house. In 1988, surface washers were added to the filters, along with new pumps and chemical feed systems. No major modifications have been made to the plant since then. The 400,000-gallon treated water storage tank was constructed in 1995.

B. PROPOSED PROJECT

The proposed project includes the following improvements:

1. Intake pump station improvements, to include replacement of the intake pump, provision of treated water for pump lubrication and raising the pump station above the floodplain,
2. Additional piping between the settling ponds for operational flexibility,
3. Installation of a new microfiltration facility,
4. Replacement of shallow bury yard piping susceptible to freezing,
5. General plant improvements, including structural repairs, stair replacement, lighting and ventilation, roofing and painting,
6. New electronic and control systems, including replacement of obsolete motor control centers, malfunctioning alarm dialer, obsolete filter effluent turbidimeters and unreliable radio telemetry system, and
7. Addition of standby power.

Proper water treatment is essential for the protection of public health and safety. By upgrading facilities at the city's water treatment plant, adequately treated water will continue to be delivered to the users of the system and public health and safety with respect to the water supply will be ensured.

### III. ALTERNATIVES INCLUDING THE PROPOSED ACTION

#### A. WATER SUPPLY AND TREATMENT ALTERNATIVES

Seven alternatives for addressing the city's long-term water needs were considered. With the exception of the "do nothing" alternative, all of these alternatives include improvements 1, 2 and 4 through 7 of the selected project, but differ in the water source or type of treatment process.

1. **REHABILITATE EXISTING TREATMENT PLANT** – This alternative would include all of the elements of the proposed project, but would preserve the existing treatment process. Instead of installing a new microfiltration train, the existing rapid sand filters would be rehabilitated and a new solids contact clarifier would be constructed. The plant building would be expanded to house the new facilities.
2. **DEVELOP GROUNDWATER WITH TREATMENT** – Nearby wells were investigated to determine available water quantity and quality. Because of a high mineral content, treatment would be necessary to provide water of suitable quality. Two production wells would be required and a reverse osmosis or nanofiltration treatment system would be necessary.
3. **PURCHASE TREATED WATER FROM FORT BELKNAP AGENCY** – This alternative would involve the purchase of treated water. Fort

Belknap would expand its facilities to provide additional water, which would be piped through a new transmission main to the city of Harlem. When no agreement was reached after five meetings between city and Fort Belknap Indian Reservation officials, the Harlem city council voted to proceed with the microfiltration alternative instead.

4. **INSTALL MICROFILTRATION** – This alternative, the selected project, would include the installation of a microfiltration facility in the clarifier room of the treatment plant. The primary advantage of the microfiltration process would be its ability to remove particles 20 times smaller than sand filters of the existing plant, thus providing a barrier to most pathogens in the water. Chlorination would be the final pathogen barrier, and a chlorine residual would be maintained in the distribution system as a safeguard against recontamination.
5. **INSTALL BALLASTED SEDIMENTATION USING EXISTING FILTERS** – Ballasted sedimentation is a process involving the injection of microsand during the treatment process to accelerate the formation of floc particles. Under this alternative, ballasted sedimentation facilities would replace the existing solids contact clarifier. Expansion of the treatment plant building would be necessary, but not to the extent of Alternative 1. The existing filters would be retained.
6. **INSTALL BALLASTED SEDIMENTATION AND NEW FILTERS** – This alternative is similar to 5, but also incorporates the replacement of the existing sand filters with new rapid sand filters, offering improved performance.
7. **DO NOTHING** – Continued operation of the treatment plant is an option. However, there are significant risks with this alternative, including the possibility of a plant outage due to failure of critical plant components. Of primary concern is corrosion of steel process tanks and piping.

## B. CAPITAL COST COMPARISONS

Table 1 provides a capital cost comparison of the seven alternatives.

**Table 1. Alternative Evaluation**

Alternative	Estimated Capital Cost
Rehabilitate existing treatment plant	\$1,550,000

Develop groundwater with treatment	\$3,549,000
Purchase treated water from Fort Belknap Agency	Not determined
Install microfiltration	\$1,860,000
Install ballasted sedimentation using existing filters	\$2,712,000
Install ballasted sedimentation and new filters	\$3,193,000
Do nothing	\$0

These alternatives were further evaluated by assigning values to other criteria. The criteria were cost effectiveness, public acceptance, functional attributes, impacts to existing facilities, public health and safety, local economic effect, use of energy and resources, and environmental impacts. The results of this ranking are listed in Table 2.

**Table 2. Comparative Summary Evaluation**

<b>Alternative</b>	<b>Weighted Rank Total</b>
Rehabilitate existing treatment plant	109
Develop groundwater with treatment	82
Purchase treated water from Fort Belknap Agency	Not rated
Install microfiltration	110
Install ballasted sedimentation using existing filters	82
Install ballasted sedimentation and new filters	82
Do nothing	66

The two top rated alternatives were rehabilitation of the existing treatment plant and installation of a new microfiltration facility. Although these two alternatives were close in the comparative evaluation, the city council chose the microfiltration process because of its superior particle removal and reduced labor and chemical costs.

#### C. TOTAL ESTIMATED COSTS

The total estimated construction cost of the proposed project, including administrative, engineering and construction contingency, is \$2,321,000, based on implementation of the microfiltration alternative. The city has secured a \$450,000 Community Development Block Grant and a \$750,000 Treasure State Endowment Program grant. The remaining project funds will be provided by a \$1,121,000 low-interest loan from the Drinking Water State Revolving Fund program.

#### IV. AFFECTED ENVIRONMENT

##### A. PLANNING AREA

The city of Harlem is located in central Blaine County on U.S. Highway 2, 45 miles east of Havre and 110 miles west of Glasgow. Fort Belknap is three miles southeast of Harlem on the Fort Belknap Indian Reservation. The Milk River, which parallels U.S. Highway 2, is two miles south of the city limits.

Based on U.S. Census data, the service area population in 2000 was 848. Of the three population projections presented in the preliminary engineering report, the city council chose the steady population projection, which assumes that the service area population will remain stable at 800 through 2025.

Construction of the proposed project is expected to take an estimated six months following the award of a contract. Bid opening is anticipated in late summer or early fall of 2008, with construction in fall and winter.

##### B. FLOW PROJECTIONS

Projected water use is based on the water demands developed by Morrison Maierle in the City of Harlem Water System Preliminary Engineering Report, May 2006. Table 4-13 of that report lists a 2025 average day demand of 0.114 MGD and a maximum day demand of 0.327 MGD.

##### C. NATURAL FEATURES

Harlem is located on a flat plain sloping south to the Milk River. Soils in the Harlem area are silty clays and silty clay loams. Land use within the city is

primarily residential and commercial. Surrounding land use is mostly agricultural, such as farmland, hayland and pasture.

Harlem's climate is typical of the continental weather patterns of the great plains of north central Montana. Summers months are warm to hot with occasional high humidity. Winter months are often cold with occasional sub-zero temperatures caused by Arctic air masses from Canada. Fall and spring months are transition periods with variable weather. Temperatures range from an average maximum of 25 degrees F. and an average minimum of 1 degree F. in January to an average maximum of 86 degrees F. and an average minimum of 53 degree F. in July. Average annual precipitation is 11.6 inches, with May, June and July the wettest months.

The city's water treatment plant is outside of the 500-year floodplain, as defined by the Federal Emergency Management Agency maps. The storage ponds and pump station are within the 100-year floodplain boundaries, although the dikes of the storage ponds are high enough to keep out floodwaters. The pump station in its present configuration is subject to inundation by the 100-year flood. As part of the proposed project, the pump station would be raised two feet above the 100-year flood elevation.

During preparation of the preliminary engineering report, a search of the Montana Natural Resource Information System website showed some palustrine wetlands near the storage ponds and east of the water treatment plant. Construction and operation of the proposed facilities is not expected to affect these wetlands.

The U.S. Fish & Wildlife Service identifies seven species in Montana as endangered and eight species as threatened. The endangered animal species include the whooping crane, Eskimo curlew, black-footed ferret, pallid sturgeon, white sturgeon, least tern and gray wolf. Threatened animal species in the state include the grizzly bear, bald eagle, Canada lynx, piping plover and bull trout. Threatened plant species are the Spalding's catch-fly, water howellia and Ute Ladies'-tresses. Additionally, three animal species, the warm springs beetle, yellow-billed cuckoo and arctic grayling, and one plant species, the slender moonwort, are listed as candidate species for a threatened or endangered designation. No impact on any of these species is anticipated as a consequence of the proposed project.

Construction will take place on the sites of existing water system facilities. No native vegetation is expected to be disturbed by the construction. Similarly, the site does not provide prime habitat for wildlife, and as a result no impacts on wildlife are anticipated.

## V. ENVIRONMENTAL IMPACTS OF PROPOSED PROJECT

### A. DIRECT AND INDIRECT ENVIRONMENTAL IMPACTS

1. Housing and Commercial Development – Developed land use within the city limits is a mix of residential and commercial. The proposed improvements are not expected to have an impact on housing and commercial development.
2. Future Land Use – No adverse impacts to land use are expected from the proposed project.
3. Floodplains and Wetlands – As discussed previously, the water treatment plant site does not lie within the 100-year or 500-year floodplain. The storage ponds are within the 100-year floodplain, but are protected from flooding by dikes. Improvements to the pump station would raise it above the 100-year floodplain. Furthermore, the small size of this structure should not significantly constrict or obstruct flows during floods. Small palustrine wetlands have been identified near the proposed construction site, but no impacts on these wetlands are anticipated as part of this project.
4. Cultural Resources – In a letter dated August 27, 2007, Pete Brown, historic architecture specialist for the Montana Historical Society, wrote that the city's water treatment plant is probably not eligible for the National Register as an historic property. Since the construction site is previously-disturbed land, there is a low probability that cultural properties will be impacted. Therefore, a cultural resource inventory was not conducted. The state Historic Preservation Office will be immediately contacted in the event any cultural resources are identified during construction.
5. Fish and Wildlife – No impacts on biological resources in the area are anticipated by the proposed project.
6. Water Quality – Impacts on water quality are expected to be minor and short-term. Short-term impacts on water quality can be controlled through proper construction practices.
7. Air Quality - Short-term negative impacts on air quality may 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.

8. Public Health – The proposed project is not expected to have adverse impacts on public health, and should instead enhance public health by upgrading water supply facilities.
9. Energy - During construction of the proposed project, additional energy will be consumed, causing a direct short-term impact on this resource.
10. Noise - Short-term impacts from increased noise levels may occur during construction of the proposed project improvements. Construction activities are anticipated to last no more than twelve months and will occur only during daylight hours. After assessing the project's compliance with noise abatement and control standards, it was noted that there is no highway within 1000 feet or railroad within 3000 feet of the project area. There are two airports within 15 miles, but neither is capable of supporting jet aircraft.
11. Hazardous Facilities – There are aboveground and buried utilities in the vicinity of the water treatment plant, but no known hazardous waste sites or flammable hazards are located in the project area.
12. Airport Runway Clear Zones – Gary Gates of the Federal Aviation Administration was contacted regarding the project's potential impacts on the Fort Belknap Agency Airport. Mr. Gates had no concerns regarding the proposed project.

#### B. UNAVOIDABLE ADVERSE IMPACTS

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

#### VI. PUBLIC PARTICIPATION

The proposed project was discussed at public hearings held by the city council on November 7, 2005, and March 29, 2006. In addition, the possibility of connection to the Fort Belknap water system was considered during a February 28, 2006, meeting. Although some participants expressed concern about the effect of the construction on water rates, there was general support for the project at these meetings. On April 3, 2006, the city council voted to pursue funding for the project and on April 10, 2006, the council declared its intent to pursue the project.

VII. REFERENCE DOCUMENTS

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

- A. City of Harlem Water System Preliminary Engineering Report, May 2006, prepared for the city of Harlem by Morrison Maierle, Inc. Billings, Montana.
- B. Consolidated Environmental Assessment Form, City of Harlem Water System Improvements Project, September 26, 2007, prepared for the city of Harlem by Bear Paw Development Corporation of Northern Montana, Havre, Montana.
- C. Uniform Application Form for Montana Public Facility Projects, July 12, 2007, submitted by the city of Harlem.

VIII. RECOMMENDATION FOR FURTHER ENVIRONMENTAL ANALYSIS

EIS       More Detailed EA       No Further Analysis

EA prepared by:

\_\_\_\_\_

Name

\_\_\_\_\_

Date

EA reviewed by:

\_\_\_\_\_

Name

\_\_\_\_\_

Date