Montana Department of
ENVIRONMENTAL QUALITY

Brian Schweitzer, Governor
Richard H. Opper, Director

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FINDING OF NO SIGNIFICANT IMPACT FOR BIGFORK WATER AND SEWER DISTRICT WATER SYSTEM IMPROVEMENTS

TO: ALL INTERESTED PERSONS

Date:	July 12, 2012
Action:	Funding Water System Improvements
Location of Project:	Bigfork, Montana
DEQ Funding:	$2,447,000.
Total Project Cost:	$2,941,000.

An environmental assessment has been completed by the Montana Department of Environmental Quality (DEQ) for proposed funding for improvements to the Bigfork County Water and Sewer District Water System. The proposed project involves building an addition to a well house including new piping inside, installing a pump in a new well and installing 9,532 feet of 16-inch PVC pipe for drinking water transmission. The purpose of the project is to increase system reliability in order to protect public health and the integrity of the drinking water infrastructure.

The affected environment will primarily be the area of north of Bigfork, Montana and the immediate vicinity. The human environment affected will include customers of the Bigfork County Water and Sewer District and visitors to the Bigfork area. 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 low interest loans 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 DEQ utilized the following references in completing its environmental review of this project: Preliminary Engineering Report Bigfork Water and Sewer District Water System, April 2010; Bigfork Water and Sewer District 2012 Water System Improvements Project New Transmission Main and Well House Addition Basis of Design Report , January 2012; Project Manual for 2012 Water System Improvements Project Schedule 1: Wellhouse Addition Schedule 2: Water Transmission Main for the Bigfork Water and

Sewer District , January 2012; Engineering plans and drawings for 2012 Water System Improvements Project Schedule 1: Wellhouse Addition Schedule 2: Water Transmission Main for the Bigfork Water and Sewer District , January 2012; Uniform Application Form for Montana Public Facility Projects, June 4, 2012.

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 United States Environmental Protection Agency, the Montana State Historic Preservation Office and the Montana Department of Environmental Quality

References are available for review upon request by contacting:
Marc Golz
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Phone (406) 444-6770
Email: mgolz@mt.gov

Or:

Julie Spencer
Bigfork County Water and Sewer District
P.O. Box 1108
Bigfork, MT 59911
(406) 837-4572

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

Todd Teegarden, Chief
Technical & Financial Assistance Bureau

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BIGFORK WATER AND SEWER DISTRICT
WELL HOUSE AND TRANSMISSION MAIN PROJECT

ENVIRONMENTAL ASSESSMENT

I. COVER SHEET

A. PROJECT IDENTIFICATION

Applicant:	Bigfork County Water and Sewer District
Address:	P.O. Box 1108 Bigfork, MT 59911
Project Number:	DWSRF not assigned yet

B. CONTACT PERSON

Name:	Julie Spencer, District Manager
Address:	P.O. Box 1108 Bigfork, MT 59911
Telephone:	(406) 837-4572

C. ABSTRACT

Background

The Bigfork Water and Sewer District (the district) has identified several deficiencies related to all facets of its water system. The highest priority deficiencies are inadequate quantity of water supply and inadequate transmission and distribution piping. The district has applied for a Drinking Water State Revolving Fund loan (the loan) to help finance the project. A Preliminary Engineering Report for the district (April 2010) examined the entire water system and prioritized the water system deficiencies. The PER concluded that the district should drill and complete a new well, add on to the wellhouse in order to accommodate the piping necessary for the well and construct a new 16-inch transmission main to convey the water in parallel with an existing 12-inch transmission main to the community of Bigfork. The existing 12-inch main would have insufficient capacity for the combined water from the existing wells and the new well.

The Project

This project will: install a pump in the new well, build an addition to the well house including the piping for the new well and install 9,532 feet of 16-inch PVC transmission main. The new well has already been drilled and therefore drilling of the well is not part of the project.

The estimated cost of the project is $2,941,000. Up to $2,447,000 will be borrowed by the district from the Drinking Water State Revolving Fund (DWSRF) loan program and the remaining $494,000 coming from the district.

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.

The project will be constructed using standard construction methods including practices intended 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

This project is necessary in order to address deficiencies to help the Bigfork Water and Sewer 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 low water pressures during high flow events and the inability to provide sufficient water in certain areas at some times. If a transmission main breaks, the break could cause a complete loss of water service, and contamination of the system.

A sound distribution system is important for public health and safety. An additional transmission main will reduce the public health and safety risk which could result if the single transmission main to town were to fail.

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 any problems, but would simply defer them to the future and allow problems to accumulate and perhaps increase in severity. As Bigfork grows the water supply quantity becomes more of an issue and the possibility of loss of water pressure and water system contamination and loss of water service will increase. The no-action alternative is not recommended because of these concerns for public health and safety.

Many other alternatives were considered and prioritized and can be found in the PER. These alternatives include future work that will need to be done, but must be phased in due to the ability of the Water and Sewer District to afford them.

2. PROPOSED ACTION

The project includes construction of an addition to the existing well house of approximately 500 square feet and all the piping, valves and meter for the new well and the exterior piping for two possible future wells and the installation of a pump in the new well. Also, the project includes the construction of a 16-inch water transmission main from the well house 2,142 feet south to Ramsfield Road then along said road on the North and under Montana Highway 35 for 1,364 feet, and then following Highway 35 on the east side for approximately 6,026 feet to the intersection of Highway 35 and Chapman Hill Road. (See Figure 2).

The water main replacements are to be constructed within the existing right-of-ways and are typically installed in the same locations as existing mains.

The total estimated cost for the project, including Administration, Construction Engineering and Contingencies, is approximately $2,941,000.

TABLE 2
WATER PROJECT AFFORDABILITY

Existing Monthly water service rate	$34.88
New monthly debt service and O&M increase	$ 8.27
Total monthly user cost[1]	$43.15
Monthly median household income (MHI)[2]	$3,009
User rate as a percentage of MHI	1.43 %

[1] Uniform Application for Montana Public Facility Projects
[2] Based on 2010 census data

IV. AFFECTED ENVIRONMENT

A. STUDY AREA

Bigfork is located in Western Central Montana on the northeast corner of Flathead Lake and east of the Flathead River. The location of Bigfork can be seen on the enclosed map in Figure 1.

The water transmission main will be installed within the existing rights-of-way or dedicated easements. Approximately 9,480 feet of 16-inch PVC pipe will be installed. Construction is scheduled to begin in Spring of 2013 and continue for approximately 5 months.

B. POPULATION AND FLOW PROJECTIONS

The population of Bigfork in the 2010 census was 1,421 people. However, the water and sewer district boundaries are not the same as the census boundaries. The population of the Water and Sewer District ranges from 2,500 in the winter to 3,200 in the summer. No significant growth is forecast as a result of the project, however the project is necessary to meet the demands associated with the growth rate in the area. Bigfork has seen rapid growth and the water infrastructure to supply the population has not kept up. Therefore, many water system needs have been identified and this project begins to address the highest priorities of

those needs.

The Standards for Water Works of MDEQ Circular DEQ 1 will be required to be met for both the design and construction of the project. 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 pipe bedding and sanitary protection of the water system and sanitary delivery of a temporary supply of water and disposal of wastewater during construction. Also, the well house addition and pump must meet the design standards of DEQ 1.

C. NATURAL FEATURES

Topography and Soils
Bigfork lies in a river valley on lacustrine plain on the north east shore of Flathead Lake and between the Flathead and Swan Rivers. A small part of town is located north of the river. The soils in the immediate project area are variable from gravelly loam to loamy fine sand. The elevation varies from 2900 to 3000 feet above mean sea level.

Land Use - The land use in the study area is primarily residential, recreational and agricultural and tourism related commercial development.

Groundwater and Surface Water -
The depth of Bigfork's existing two wells are approximately 300-feet. 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 Bigfork Water and Sewer District uses two wells that are located adjacent to the well house location shown on Figure 2.

The Flathead River is two miles west of Bigfork, the Swan River flows into town from the east and the community is adjacent to the northeast shore of Flathead Lake.

D. MAPS

Figure 1 shows the general location of Bigfork within the state of Montana. Figure 2 shows the location of the proposed improvements within the planning area.

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 project. All of the system improvements will be located within previously developed areas or within easements owned and/or maintained by the water and sewer district.

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

Soils Suitability, Topographic and Geologic Constraints- The soils are suitable for normal excavation and boring of water lines and no known topographical or geological constraints are present for the proposed water project. Based on the existing conditions and soils types 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 and operation of the project should have no significant adverse impact on endangered or threatened species, wildlife habitat, fish, or on other sensitive flora or fauna populations. The work will be accomplished on public rights-of-way or negotiated easements within previously developed areas and along existing roads.

Fauna - Fauna in the area consists of typical mammalian species found in the intermountain west, including mule deer, whitetail deer, elk, moose, coyote, rabbit, skunk, rodents and others. Black bear, grizzly bear and the grey wolf are notable species near the planning area but do not normally inhabit the immediate vicinity where construction will take place. Common bird species include the black-billed magpie, American robin, Canadian goose, osprey, bald eagle, blackbird, sparrow, warbler, common waterfowl, other raptors, game birds and others.

Vegetation - Vegetation types in the area consists of introduced and native species of landscaping trees, shrubs and grasses and areas of natural vegetation including major pine, fir and spruce ecozones. In addition, there are riparian and wetland areas along the Flathead and Swan Rivers. This project will not be near these rivers.

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

Floodplains and Wetlands – No adverse impacts to the floodplain are expected. The Bigfork Water and Sewer District's boundaries encompass the Swan River's 100-year flood plain in the area; however this project is well away from that floodplain and will have no significant adverse impact on the floodplain.

Cultural Resources & Historical Sites – The State Historic Preservation Office referenced earlier cultural resource inventories done in the area and 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 - The population served by this water system is not considered to be disadvantaged either by minority or income status. 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. The project includes installation of a backup power generator which will use fossil fuels during routine operation for testing and when in use during power outages. Electricity use will increase as a result of the new well pump.

Public Health – Public health impacts will be improved due to improved water pressures in the water distribution system. Also, the system will be more reliable since there will be two transmission mains conveying water. Currently, if the only transmission main were to fail the system would be without water if it could not be repaired before the storage tanks were depleted.

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 area has had a fairly high growth rate historically and this has resulted in the capacity of the water system being inadequate. This project will directly alleviate some of the highest priority problems within the water system.

Roadways – The pipeline will be bored under State Highways. The specifications require that no closure to a public or private road shall occur without written permission of the proper authority. Rules and regulations of the federal, state and county authorities regarding closing or restricting the use of public roadways shall be complied with.

B. UNAVOIDABLE ADVERSE IMPACTS

The transmission main will be constructed along secondary roads and State Highway 35. 550 feet of asphalt and 2360 feet of gravel road restoration will be required and the remainder will be general surface restoration off the roadsides. Also, access and travel will be given consideration to avoid excess disruption during construction. Short-term water outages and temporary above ground water supply is unlikely to 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 should it be necessary. 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 while providing for some continued

future growth and should have no significant negative cumulative effects on resources, ecosystems or human communities.

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

A public hearing regarding this project was held Monday April 12th, 2010. Discussion at the meeting focused on the preliminary engineering report, including a discussion of the current situation, water system deficiencies and alternatives for solving those deficiencies. There were no public comments.

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:

1. Preliminary Engineering Report Bigfork Water and Sewer District Water System, April 2010, prepared for the Water and Sewer District by Morrison-Maierle, Inc. Kalispell, Montana.
2. Bigfork Water and Sewer District 2012 Water System Improvements Projects New Transmission Main and Well House Addition Basis of Design Report , January 2012, prepared by Morrison-Maierle, Inc. Kalispell, Montana.
3. Project Manual for 2012 Water System Improvements Project Schedule 1: Wellhouse Addition Schedule 2: Water Transmission Main for the Bigfork Water and Sewer District , January 2012, prepared by Morrison-Maierle, Inc. Kalispell, Montana.
4. Engineering plans and drawings for 2012 Water System Improvements Project Schedule 1: Wellhouse Addition Schedule 2: Water Transmission Main for the Bigfork Water and Sewer District , January 2012, prepared by Morrison-Maierle, Inc. Kalispell, Montana.
5. Uniform Application Form for Montana Public Facility Projects, June 4, 2012, Bigfork County Water and Sewer District applicant.

IX. AGENCIES CONSULTED

The following agencies were contacted in a letter dated April 13, 2010 in regard to the PER for the proposed project:

1. The Montana Department of Fish Wildlife and Parks (FWP). Did not have specific comments on the project and no concerns about impacts to fisheries habitat or wildlife.
2. The U. S. Fish and Wildlife Service (FWS) was contacted about the proposed project and determined that "there are unlikely to be any significant adverse effects upon fish, wildlife or habitat resources under the purview of the U.S. fish and Wildlife Service."

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 was asked in a letter by the project consultant for comments on the proposed project. The U.S. Army Corps of Engineers has responded, indicating when a USACE 404 permit is required. The USACE stated that the project area should be reviewed by a qualified wetland delineator to determine if wetlands and jurisdictional waters are present. The applicant utilized US Fish and Wildlife Service wetlands mapping and did not identify any wetlands within the construction area for the project.
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 is also reviewing plans and specifications and will ensure compliance with State design standards.

The following agency was contacted by letter sent May 21, 2012 in regard to the project:

7. The United States Environmental Protection Agency Montana Office. No comments have been provided by the USEPA.

Recommendation for Further Environmental Analysis:

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

Rationale for Recommendation: Through the Preliminary Engineering Report (PER), prepared by Morrison-Maierle, Inc. 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:

Marc Golz, P.E. — Date: 7/12/2012

Approved By:

Mark Smith, P.E. — Date: 7/12/12

Fig. 1: Bigfork WSD Transmission Main & Well House Addition Project

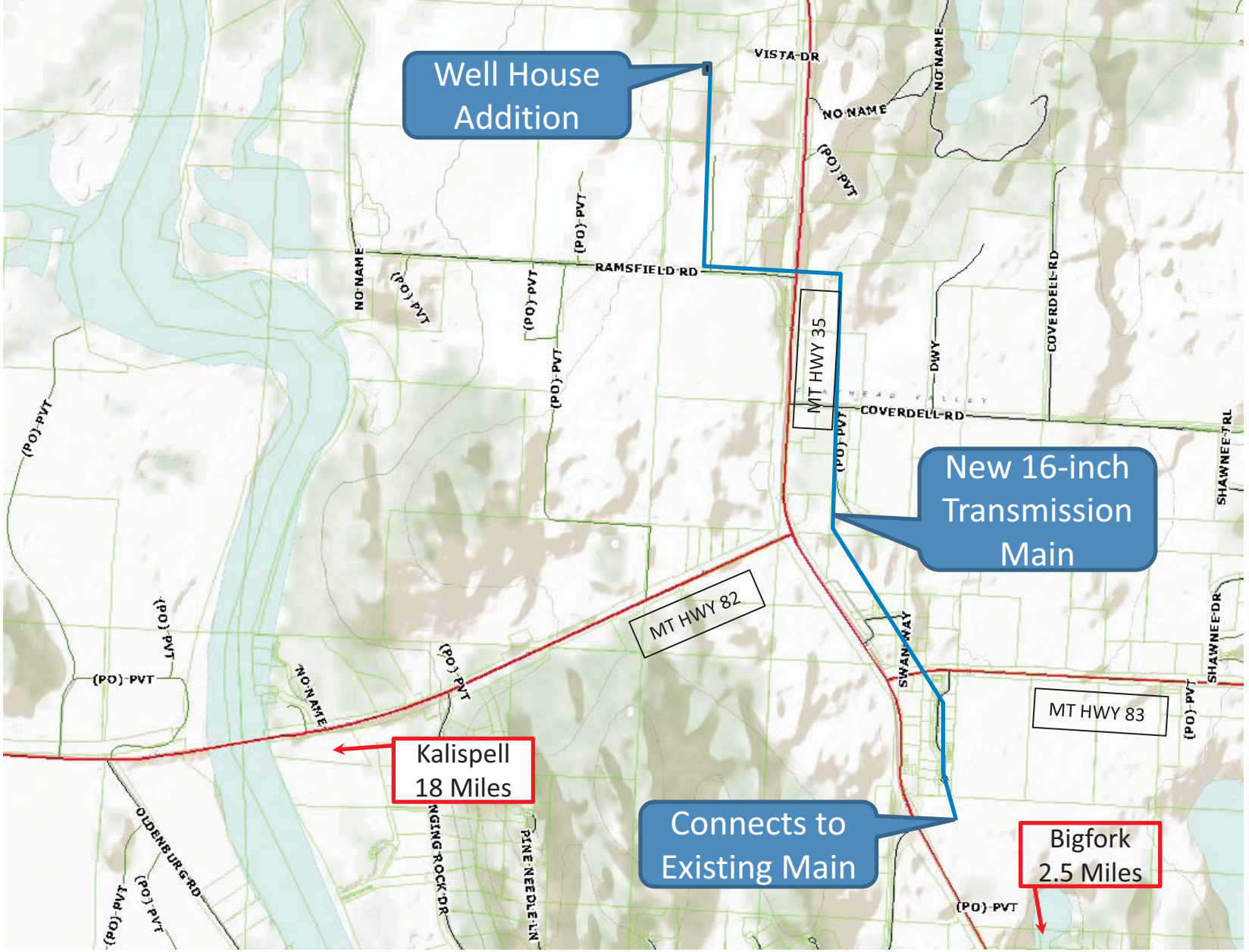

Fig. 2: Bigfork WSD Transmission Main & Well House Addition Project