



**CLANCY WATER & SEWER DISTRICT**  
**2018 TSEP Grant Application**  
Water System Improvements

**June 2018**



**CLANCY WATER & SEWER DISTRICT**

**2018 TSEP Grant Application**  
Water System Improvements

Prepared by:



**June 2018**

# **CLANCY WATER & SEWER DISTRICT**

## **2018 TSEP Grant Application Water System Improvements**

**June 2018**

Prepared for:  
**Clancy Water & Sewer District**



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**2018 TSEP APPLICATION**  
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**UNIFORM APPLICATION FORM  
FOR MONTANA PUBLIC FACILITY PROJECTS**

(Please type or print legibly)

**SECTION A - CERTIFICATION**

To the best of my knowledge and belief, the information provided in this application and in the attached documents is true and correct.

Name (printed): David Leitheiser

Title (printed): District President

Chief Elected Official or Authorized Representative

Signature: David Leitheiser

Date: May 09, 2018

**SECTION B - SUMMARY INFORMATION**

1. NAME OF APPLICANT(S): Clancy Water and Sewer District

2. TYPE OF ENTITY: Water and Sewer District

3. FEDERAL TAX ID NUMBER: 68-0539241

4. TYPE OF PROJECT: Water System Improvements

5. SENATE AND HOUSE DISTRICTS: Senate District 38; House District 75

6. POPULATION SERVED BY PROJECT: 159 (Phase 1)

7. NUMBER OF HOUSEHOLDS SERVED BY PROJECT: 61 (Phase 1)

**1. CHIEF ELECTED OFFICIAL OR AUTHORIZED REPRESENTATIVE:**

**David Leitheiser**

(Name)  
District President  
(Title)  
Box 16 North Main  
(Street/PO Box)  
Clancy, MT 59634  
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406-949-8281  
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Dave2mt@bresnan.net  
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**3. PROJECT ENGINEER/ARCHITECT:  
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**7. CLERK/CHIEF FINANCIAL OFFICER:  
Bonnie Ramey**

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**2. PRIMARY ENTITY CONTACT PERSON:**

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**4. GRANT/LOAN ADMINISTRATOR:  
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**6. BOND COUNSEL:  
Bob Murdo**

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**8. ACCOUNTANT:  
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Jefferson County Treasurer  
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9. **BRIEF PROJECT SUMMARY:** (Refer to instructions and examples)

**Historical Information** -

The community of Clancy established a water and sewer district in 2015 to address infrastructure issues within the community, specifically wastewater issues at the time. The District does not have an existing public water supply system. The District is being served by individual onsite private wells. These private wells are in close proximity to private septic systems throughout the District, which has created a public health and safety issue.

A 2012 PER shows the individual septic systems are aging and failing at an increasing rate. The Jefferson County Health Department has been dealing with these issues related to safe drinking water for many years now. Well testing was recently performed and revealed elevated levels of Nitrates and Uranium. The District has reached the point where the water quality is a serious concern and the District is unable to grow in a reasonable and prudent manner.

This situation has brought the need for a public water supply system to the forefront. The local citizens are becoming more aware of their water quality issues and the potential health and safety hazards they face. Jefferson County and the Clancy Water and Sewer District Board of Directors have taken an active role to find solutions for this problem and have sought the assistance of Great West Engineering, Inc. to help in the preparation of a PER to identify alternatives.

**Problem** -

The 2018 PER provides a thorough description and detailed analysis of the current situation within the District as it relates to drinking water. The system deficiencies identified in the report include:

- The District does not have a central public water supply and currently utilizes individual onsite private wells that are aging and do not meet current design standards or supply safe drinking water. The drinking water wells are located within close proximity to failing private septic and drain field systems. Current DEQ regulations require 100-foot separation distance between the systems.
- Well testing was performed throughout the District and has revealed Nitrates are present in numerous wells. Nitrates are usually an indicator of human fecal waste. Elevated levels (greater than 2 mg/L) of Nitrates were found in 47% of the Clancy drinking wells. The Maximum Contaminant Level (MCL) of 10 mg/L as defined by the EPA, was exceeded in 18% of the Clancy drinking wells. The EPA established this drinking water standard to protect infants from Methemoglobinemia (blue baby syndrome). Blue baby

syndrome can be fatal to infants if left untreated. Elevated levels were also discovered in nearby Prickly Pear Creek and Clancy Creek.

- Well testing was performed throughout the District and has also revealed Uranium in numerous wells. Uranium occurs naturally in the environment and is a heavy metal. The testing discovered that 37% of Clancy drinking wells exceeded the EPA MCL of 30 µg/L. Exposure to elevated levels of Uranium can cause kidney damage and has been linked to cancer.
- A new centralized public water supply enhances public health and safety and would promote and allow for community and economic growth.

### **Proposed Solution –**

The 2018 Water PER analyzed a number of alternatives for the District to construct a centralized water system. The alternative screening process considered various alternatives for the water system improvements. The alternatives for the water system were separated by water supply, storage site, storage tank, and distribution system. After an initial evaluation, some alternatives were determined to be non-viable for the District and were eliminated from further review. A detailed list of the alternatives considered and decision matrix can be found in the 2018 PER.

Each of the alternatives listed above are analyzed in detail in this report. The preferred alternative is a combination of the alternatives that were analyzed. The District's highest priorities are protecting public health and safety and financial feasibility. With this goal in mind, the District's preferred alternatives are as follows:

- Clancy School Water Supply Site
- Marks Ranch Inc. Storage Site
- On-Grade Bolted Steel Glass-Lined Storage Tank
- Phased Non-Fire Flow Distribution System

The Clancy School Water Supply Site is the most central site to the District and is located near an area that has proven to have acceptable water quality and quantity. The Marks Ranch Inc. Storage Site is the most cost-effective storage site alternative analyzed. The site also does not require extensive easement agreements. The On-Grade Bolted Steel Glass-Lined Storage Tank is the most cost-effective storage tank alternative analyzed. It also requires the least amount of operation and maintenance. Phased Non-Fire Flow Distribution is cost effective and provides a provision to add fire flow in the future should it be desired. Phase 1 distribution improvements provides clean drinking water to that portion of the District most severely impacted by contaminated wells. The overall proposed project addresses the District's highest priorities, improves public health and safety, and is economically feasible.

**SECTION C - FINANCIAL INFORMATION**

1. **ESTIMATED TOTAL PROJECT COST:** \$2,911,358 (including bond reserve)

2. **PROPOSED FUNDING SOURCES** (List loans and grants from same funding source separately)  
 (Refer to the instructions and examples):

Source	Type of Funds	Amount	Status of Commitment	Loan Rates and Terms
DNRC	Grant	\$125,000	Applied for funding May 2018. Anticipated funding June 2019.	
TSEP	Grant	\$750,000	Applied for funding June 2019. Anticipated funding June 2019.	
CDBG	Grant	\$450,000	The District will apply for CDBG funds in Summer 2018. Anticipated funding November 2018	
SRF 50% Forgiveness	Grant	\$500,000	Discussed with SRF program. Final loan forgiveness amount dependent upon grant funding and SRF loan amount.	50% forgiveness, up to \$500,000.
SRF Loan	Loan	\$1,086,358	Discussed with SRF program. Final loan amount dependent upon grant funding and bids.	2.5% for up to 30 years. Bond reserve required.

### 3. FUNDING STRATEGY NARRATIVE

- Funding Strategy Narrative (**Complete and attach**)  
(Refer to the instructions. Answer each question individually.)
  - a. What are the conditions on the use of each source of funds?

#### Treasure State Endowment Program (TSEP)

TSEP is a state funded grant program administered by the Montana Department of Commerce (MDOC). TSEP provides financial assistance to local governments for infrastructure improvements. Grants can be obtained from TSEP for up to \$500,000 if the projected user rates are less than 125% of the target rate, \$625,000 if projected user rates are between 125% and 150% of the target rate, and up to \$750,000 if the projected user rates are over 150% of the target rate.

TSEP grant recipients are required to match the grant dollar for dollar, but the match may come from a variety of sources including other grants, loans, or cash contributions. Water projects are eligible for TSEP funds. The proposed project would increase the user rates in Clancy to 195.2% of the target rate, based on an assumed MHI of \$47,757 which will be determined when the income survey is finalized. Even based on the Clancy CDP MHI of \$75,000, the proposed user rates will be 174% of target rate. In either instance, the District is eligible for a TSEP grant of \$750,000.

#### DNRC Renewable Resources Grant and Loan Program (DNRC RRGL):

RRGL is a state program that is funded through interest accrues on the Resource Indemnity Trust Fund and the sale of Coal Severance Tax Bonds and is administered by the Montana Department of Natural Resources and Conservation (DNRC). The primary purpose of the RRGL is to enhance Montana's renewable resources. For public facilities projects that conserve, manage, develop, or protect renewable resources, grants of up to \$125,000 are available.

The Town will apply for a \$125,000 DNRC RRGL Grant in May of 218. The RRGL funds do not require a matching contribution but will be used as a portion of the required TSEP match.

#### Community Development Block Grant (CDBG)

CDBG is a federally funded program that is also administered by the Montana Department of Commerce (MDOC). The primary purpose of CDBG funds is to benefit low to moderate income (LMI) families. Hence, a municipality must have an LMI of 51% or greater. This is usually determined by the current Census. However, under certain circumstances, the MDOC may allow an income survey to be completed (such as there have been major economic changes since the Census or if a community is only slightly under the required LMI percentage). The CDBG grant funds can be applied for in an amount of up to \$450,000 with a limit of \$15,000 per LMI household, so a community needs 30 LMI households to apply for the maximum grant funds. The use of CDBG funds requires a 25% local match that can be provided through cash funds, loans, or a combination thereof.

The 2015 American Communities Survey data states that the Clancy CDP has a LMI of 27.1%. The District completed an income survey in 2018, to which they had a 67.5%

response rate (required by CDBG), that determined the actual LMI within the District boundaries is 53.8%. The District is eligible for and intends to apply for CDBG funding in summer 2018 (Appendix I).

Drinking Water State Revolving Fund (DWSRF):

SRF provides low-interest loan funds for both water and wastewater projects through the Drinking Water State Revolving Fund (DWSRF) and the Water Pollution Control State Revolving Fund (WPCSRF), respectively. The SRF program is administered by the Montana Department of Environmental Quality. Current loan terms include an interest rate of 2.75% for a 30-year hardship loan. SRF also has a limited amount of “principal forgiveness” funds available for projects. For water projects, 50% of the SRF funding for a project, up to \$500,000 may be obtained, depending on the availability of the funds.

The District qualifies for SRF, which is included in the funding package for this project. The maximum \$500,000 principal forgiveness amount is assumed with the remainder being SRF loan. The District has contacted DWSRF to be placed on the FY 2019 priority list and will apply for the loan funds in June 2018.

The following is a breakdown of the percentage of the project costs incurred by each program and is intended to demonstrate that the matching requirements for each program are satisfied.

TSEP Grant	\$750,000	26%
DNRC Grant	\$125,000	4%
CDBG	\$450,000	16%
SRF Loan Forgiveness	\$500,000	17%
SRF Loan	\$1,086,358	37%

b. When will each source of funds listed be available (month and year)?

TSEP Grant: Funds available for use on July 1, 2019.

DNRC Grant: Funds available for use on July 1, 2019.

CDBG Grant: The District will apply for CDBG funds in July 2018 and funds will be available in November 2018.

SRF Loan and Forgiveness: District has contacted DWSRF to be placed on the FY 2019 priority list and will apply for the loan funds in June 2018. Fund will be available once other funding is in place.

c. Is there any additional information on the level of commitment for each source of funds listed?

The District has contact Anna Miller at SRF to discuss the project. SRF cannot guarantee grant funds at this time, however, the District is eligible for principal forgiveness funds. The District also spoke with TSEP manager Becky Anseth and MDOC Engineer Richard Knatterud, PE about the project. TSEP indicated the program will support a public water system project that

supports an entire community (Appendix H).

- d. How will funding sources be coordinated with each other?

There are no specific program requirements that require coordination. The District will work with the procured engineer and grant administrator to administer project funds and will ensure the Town meets the requirement of each funding agency and coordinate financing as needed.

- e. Will interim-loan funds be required as part of the project? If yes, how will they be used and coordinated with other funding sources?

No interim-loan funds will be required for this project.

- f. What other sources of funds from public and private sources have been considered for this project? Explain why they are not being pursued or used for this project.

Due to the high cost of the proposed improvements, the District will aggressively seek assistance to fund the project in the form of grants and/or low-interest loans and has explored all potential opportunities. Below are funding opportunities the Clancy District considered but chose not to pursue.

#### USDA Rural Development (RD)

RD provides grant and loan funding to municipalities for water and wastewater projects that improve the quality of life and promote economic development in Rural America. Municipalities with a population of less than 10,000 are eligible to apply, though; priority is given to those with a population of less than 5,500.

Grant eligibility and loan interest rates are based on the community's median household income (MHI) and user rates. If the area to be served has a MHI of \$38,205 or lower and the project is necessary to alleviate a health and/or sanitation concern, up to 75% of the project costs are grant eligible. Up to 45% of the project costs are grant eligible if the planning area has an MHI between \$38,205 and \$47,757.

The 2015 American Communities Survey data states that the Clancy CDP has an MHI of \$75,000. The District is currently in the process of completing an income survey that will most likely drastically lower the MHI. However, it does not appear that the District will receive enough income surveys to qualify for RD grants and SRF with a lower interest rate and possibility of loan forgiveness is more appealing. Therefore, Rural Development grants/loans will not be pursued.

#### Montana Coal Board

The Coal Board provides grant funding to municipalities to provide adequately for the expansion of public services or facilities needed as a direct consequence of coal development activities. There is no maximum limit to the amount the Coal Board can fund, but available funding is very limited, so it is hard to receive win funds from the Coal Board, especially for large grants. The District cannot make a tie project to the impact of coal development, so a Coal Board application will not be prepared.

#### Economic Development Administration (EDA)

EDA provides grant funding for projects that are demonstrated to be needed for the placement of a new business. The amount of grant is dependent on the number of jobs created. Because the project would not directly create permanent, high paying jobs, the District chose not to apply for an EDA grant.

### INTERCAP

INTERCAP provides loan funds at a low cost, variable interest rate to local governments. INTERCAP is administered by the Montana Board of Investments and is very flexible in the variety of funding which would include both water and wastewater projects. There is no funding cycle (funds are always available), however, the maximum loan term is 10 years.

- g. If a particular source of funding is not obtained, how will the applicant proceed? Explain how the funding strategy will change if a particular source of funding is not received.

Without TSEP, CDBG and/or DNRC funding, the project user rates would go up to over 300% of target rate, making the project cost prohibitive. The District would reapply for funding in the next cycle.

The District completed an income survey which drastically lowers the MHI from \$75,000 to \$48,266.50 and indicates an LMI of 53.8%. The District received enough surveys to qualify for CDBG funding.

- h. What is the level of local financial participation in the project and is that level the maximum that the applicant can reasonably provide?

The District's funding package is 37% loan funding. The \$1,086,358 loan that District will be required to take out for this project is split among a relatively small amount of people, resulting in a high user rate. Based on the required debt service and operation and maintenance costs associated with the proposed project, the average sewer rate will be \$109 per month after the completion of the project, which is 195.2% of the District's assumed target rate and 174% of the target rate based on the Clancy CDP MHI of \$75,000, as established by the Department of Commerce. The significant rate increase, considering residents did not have an existing user rate, demonstrates that the District is willing to provide a substantial level of local financial commitment to the system.

#### **4. PROJECT BUDGET FORM**

- ☛ Project Budget Form **(Complete form on next page)**  
(Refer to the instructions and example)
- ☛ Project Budget Narrative **(Complete and attach)**  
(Refer to the instructions and example)

Completed by: Great West Engineering	Completed for: Clancy Water and Sewer District					Date: April, 2018
<b>ADMINISTRATIVE/FINANCIAL COSTS</b>	Source: TSEP Grant	Source: DNRC Grant	Source: CDBG Grant	Source: SRF Forgiveness	Source: SRF Loan	Total
Personnel Costs	\$3,500.00					\$3,500.00
Office Costs	\$3,500.00					\$3,500.00
Professional Services & Pre-Development Financing	\$10,000.00		\$10,000.00		\$30,000.00	\$50,000.00
Legal Costs	\$5,000.00		\$5,000.00			\$10,000.00
Audit Fees				\$15,000.00		\$15,000.00
Travel & Training	\$2,000.00		\$2,000.00			\$4,000.00
SRF Bond Reserve					\$25,358.00	\$25,358.00
Bond Counsel and Related Costs				\$7,500.00	\$7,500.00	\$15,000.00
<b>TOTAL ADMINISTRATIVE/FINANCIAL/PRE-DEVELOPMENT COSTS</b>	\$24,000.00	\$0.00	\$17,000.00	\$22,500.00	\$62,858.00	\$126,358.00
<b>ACTIVITY COSTS:</b>						
Land Acquisition		\$40,000.00				\$40,000.00
Geotechnical/Hydrogeological Investigation	\$40,000.00	\$45,000.00				\$85,000.00
Permitting		\$5,000.00				\$5,000.00
Engineering Additional Services - Water Rights - Cultural Resource Inventory - Wetlands Delineation			\$25,000.00	\$25,000.00	\$25,000.00	\$75,000.00
Pre-Development Financing					\$30,000.00	\$30,000.00
Engineering Design	\$101,000.00		\$101,000.00			\$202,000.00
Construction Engineering Services	\$101,000.00		\$101,000.00			\$202,000.00
2020 Construction Cost	\$484,000.00	\$35,000.00	\$206,000.00	\$452,500.00	\$773,409.00	\$1,950,909.00
Contingency*					\$195,091.00	\$195,091.00
<b>TOTAL ACTIVITY COSTS</b>	\$726,000.00	\$125,000.00	\$433,000.00	\$477,500.00	\$1,023,500.00	\$2,785,000.00
<b>TOTAL PROJECT COSTS</b>	\$750,000.00	\$125,000.00	\$450,000.00	\$500,000.00	\$1,086,358.00	\$2,911,358.00

## **ADMINISTRATIVE/FINANCIAL COSTS**

### **Personnel Costs - \$3,500**

The personnel portion of the budget is used to pay the District secretary and any assistants for time spent on project-related issues. Only services performed for the project beyond the normal duties of each position will be reimbursed under this budget item. Detailed time sheets outlining specific tasks performed will be provided. TSEP will be used to reimburse these costs.

### **Office Costs - \$3,500**

These costs include project specific costs including additional telephone and fax expenses, postage, and advertisements. TSEP funds will be used to reimburse office costs.

### **Professional Services - \$50,000**

Grant administration services will be provided by the Engineering consultant. Grant administration costs are provided for the administration of project funds from six funding sources. Services include tasks required to meet start up conditions for the funding program, completing funding draw-downs, maintaining the budget tracking and invoice tracking documents, completing progress reports, monitoring labor requirements, monitoring Equal Opportunity Requirements, etc. These costs will be provided by funds from TSEP, CDBG, SRF and will include professional service fees plus related expenses.

### **Legal Costs - \$10,000**

This account will be used for legal fees related to review of contracts, bid specifications, fees associated permitting, site opinions, and other legal advice required for the project. Legal costs will be paid with TSEP and CDBG funds.

### **Audit Fees - \$15,000**

This account will be used to meet the portion of the organizational audit that can be attributed to the project per the State and Federal Single Audit Acts. Funds for the audit will be provided by SRF Forgives loan.

### **Travel and Training - \$4,000**

This portion of the budget will be used for the District members and the grant administrator to travel to different workshops required by various funding agencies. Funds for this portion of the project budget will be paid by TSEP and CDBG

### **SRF Bond Reserve - \$25,358**

The State Revolving Fund requires a 10% annual reserve for debt coverage with its loans. This equates to \$25,358, to be paid for by the SRF loan.

### **Bond Counsel Costs - \$15,000**

\$15,000 has been budgeted for the costs of bond counsel and issuance. This item includes assistance from a financial advisor, bond counsel, bond printing, and registrar fees. Funds for this budget item will be provided by SRF Loan and forgiveness.

### **TOTAL ADMINISTRATIVE/FINANCIAL COSTS - \$126,358**

Administrative/Financial costs represent roughly 4% of the total project costs.

## **ACTIVITY COSTS**

### **Land Acquisition- \$40,000**

The District will need to purchase land to construct the new system. This will be paid for the DNRC grant.

### **Geotechnical/Hydrogeological Investigation- \$85,000**

Geotechnical/Hydrogeological Investigation will be required to ensure the acquired land is acceptable for the proposed project. This service will be paid for by TSEP and DNRC.

**Permitting- \$5,000**

This District will acquire all necessary state and federal permits for the construction of the system. Permitting will be paid for from the DNRC grant.

**Engineering Additional Services - \$75,000**

Additional engineering services will include water rights, cultural resource inventory, and wetlands delineation necessary for the construction of a new facility. These services will be paid from the CDBG grant, and SRF loan and forgiveness.

**Pre-Development Financing- \$30,000**

This portion will be for necessary pre-development financing and will be paid for with the SRF loan.

**Engineering Design - \$202,000**

This portion of the budget will be used for Engineering Design including the completion of design surveys, design plans, specifications, contract documents and plan submittals. These services will be paid from the TSEP and CDBG grants.

**Construction Management Services- 202,000**

Construction Management Services include bid services, construction management, inspection services, and closeout & warranty services. These services will be paid from the TSEP and CDBG grants.

**Construction - \$1,950,909**

This portion of the budget will cover construction of the proposed improvements. Funds for this activity will be paid by TSEP, DNRC, CDBG, and the SRF loan and forgiveness funds.

**Contingency - \$195,091**

Contingency funds represent 10% of the estimated total construction cost estimates. The WS-1 Alternative identified in the 2018 PER, could pose potential construction problems related to source development. Subsurface rock, high water table, limited access, or existing resource or site impairment issues are not anticipated with this alternative. Research and investigation for geotechnical and hydrogeological information for this site has not yet been performed and would be required prior to design to better estimate subterranean conditions. Well production and cost estimates are to be considered conservative approximations and would not be better understood until the appropriate investigation and research has been performed. Higher budgetary and contingency money has been estimated to address this situation. Funds for this activity will be paid by the SRF Loan.

**TOTAL ACTIVITY COSTS - \$2,785,000**

Activity costs represent about 96% of the total project costs.

**TOTAL PROJECT COSTS - \$2,911,358**

**5. CURRENT DEBT** (Refer to the instructions and example on pages 23-24)

This District does not have any current debt.

**6. CURRENT ASSETS** (Indicate if assets are obligated.) (Refer to the instructions on pages 23-24.)

The District does not have a centralized water or wastewater system and does not currently have any income, and therefore does not have assets, balance sheets, or income and expense statements.

Cash  
(Details) \_\_\_\_\_

\$ 0 \_\_\_\_\_

Investments (Details) _____	\$ <u>0</u> _____
Certificates of Deposit (Details) _____	\$ <u>0</u> _____
Accounts Receivable (Details) _____	\$ <u>0</u> _____
Any other current assets not specifically indicated above	\$ <u>0</u> _____

**7. BALANCE SHEET (Submit if applying to RD; contact the other programs to determine if or when this information is needed.)**

Balance Sheet (Check if attached)

The District does not currently have any financials.

**8. INCOME AND EXPENSE STATEMENT (Submit if applying to RD; contact the other programs to determine if or when this information is needed.)**

Income and Expense Statement (Check if attached)

**SECTION D - CENSUS INFORMATION**

**Do not fill in this section.** The following information will be completed by the receiving agency using data supplied by the U.S. Bureau of the Census and the U.S. Department of Housing and Urban Development based on Census data.

- 1. MEDIAN HOUSEHOLD INCOME \$ \_\_\_\_\_
- 2. LOW TO MODERATE INCOME PERSONS: The percent of the population at or below the level designated as low to moderate income. % \_\_\_\_\_
- 3. POVERTY: The percent of the population characterized as at or below the level designated as poverty. % \_\_\_\_\_

**SECTION E - SYSTEM INFORMATION** (Refer to instructions)

Number of unimproved properties in jurisdiction: \_\_\_\_\_

• **Complete and attach** the “System Information Worksheet.” The figures required for the items listed below that are denoted with an “☛” are computed using the “System Information Worksheet.” The letter in parenthesis following the “☛” denotes the location in the worksheet to find the figure to be inserted.

	<u>Current</u>	<u>Projected</u>
1. Total System Annual Revenue	\$ <u>0</u>	\$ <u>101,827.44</u>
2. Total System Annual Operation and Maintenance Costs	\$ <u>0</u>	\$ <u>44,700</u>
3. Total System Equivalent Dwelling Units* ☛ □(e) for current and (k) for projected	<u>0</u>	<u>78</u>
4. Total <b>Residential</b> Equivalent Dwelling Units* ☛ □(f) for current and (m) for projected	<u>0</u>	<u>78</u>
5. Annual Revenue from Residential Hookups	\$ <u>0</u>	\$ <u>102,024</u>
6. Percent of Total Annual Revenue from Residential Hookups	_____	<u>100%</u>
7. Average Monthly Residential Rate	\$ _____	\$ <u>108.79</u>
	<input type="checkbox"/> Check box if this is a flat rate.	<u>Projected</u> Average Monthly Residential Rate ☛ (w) or (x)
8. <u>Other System</u> Average Monthly Residential Rate	\$ <u>0</u>	\$ <u>0</u>

\* If this application is for a solid waste project, see instructions.

**SYSTEM INFORMATION WORKSHEET**  
(Refer to instructions)

**SUBSECTION 1 – EQUIVALENT DWELLING UNIT COMPUTATION**

Applicants with either a water and wastewater project must complete Section I, regardless of whether the applicant is served by a central water system or is planning to charge residential users a flat user fee. If the applicant is not served by a central water system, or it has water connections that provide service to multiple mixed uses, such as commercial and residential, refer to the instructions on page 26 for information on computing the number of EDU's. Applicants with solid waste projects are not required to complete Section I. Service connection diameters will be converted to EDU's according to the following table, with the exception of those situations noted on page 26:

<u>Service connection inside diameter (inches)</u>	<u>EDU's</u>
3/4" or smaller	1.00
1"	1.79
1-1/2"	4.00
2"	7.14
2-1/2"	11.16
3"	16.00
4"	28.57
5"	44.64
6"	64.29
7"	87.11
8"	113.78
9"	144.00
10"	177.78

**PART A. CURRENT WATER HOOKUP SUMMARY- N/A**

<u>Diameter</u> (inches)	<u>Current Total Hookups*</u>			<u>Diameter</u> (inches)	<u>Current Residential Hookups</u>		
	(a) <u>Total</u> <u>Number of</u> <u>Hookups</u>	(b) <u>EDU's per</u> <u>Hookup</u> (from table)	<u>Total EDU's</u> [(a) x (b)]		(c) <u>Number of</u> <u>Residential</u> <u>Hookups</u>	(d) <u>EDU's Per</u> <u>Hookup</u> (from table)	<u>Total</u> <u>Residential</u> <u>EDU's</u> [(c) x (d)]
0	0	0	0	0	0	0	0
<b>Totals</b>	<u>0</u>		<u>0</u> (e)		<u>0</u>		<u>0</u> (f)

\* Includes both residential and non-residential hookups

**PART B. PROJECTED WATER HOOKUP SUMMARY**

Diameter (inches)	Projected Total Hookups*			Diameter (inches)	Projected Residential Hookups		
	(g) Total Number of Hookups	(h) EDU's per Hookup (from table)	Total EDU's [(g) x (h)]		(i) Number of Residential Hookups	(j) EDU's Per Hookup (from table)	Total Residential EDU's [(i) x (j)]
3/4	83	1	83	3/4	83	1	83
1	5	1.79	9				
2	3	7.14	114				
Totals	<u>91</u>		<u>114</u> (k)		<u>83</u> (l)		<u>83</u> (m)

**Phase 1 of the project will only include 78 EDU's. At full buildout, there will be 114 EDUs.**

\* Includes both residential and non-residential hookups

Projected average EDU's per residential hookup:  $\frac{1.00 \text{ (n)}}{[(m)/(l)]}$

**Provide the following information if applying to the USDA RUS/RD program**

Total water system flows (sales) last twelve months \_\_\_\_\_ [gallons or cubic feet (circle one) for all connections listed in (a) above]

Total residential water flows (sales) last twelve months \_\_\_\_\_ [gallons or cubic feet (circle one) for all connections listed in (c) above]

NOTE: In some cases it is necessary to provide a detailed monthly split of the residential and non-residential sales. A sample spreadsheet is available on the Montana USDA Rural Development website at <http://www.rd.usda.gov/programs-services/water-waste-disposal-loan-grant-program/mt>.

**SUBSECTION 2 – PROJECTED AVERAGE MONTHLY RESIDENTIAL RATE COMPUTATION**

**Will debt be used to finance the project?** Yes  No  If no, skip to PART E.

If yes, how will debt for the project be secured:

- A. Revenue Bond X (complete Part A)
- B. General Obligation Bond \_\_\_\_\_ (complete Part B)
- C. Rural or Special Improvement District Bond \_\_\_\_\_ (complete Part C)
- D. Other (explain) \_\_\_\_\_ (complete Part D)

Debt (Loan) Amount: \$1,086,358 Interest Rate: 2.5% Terms: SRF Loan @ 2.5% for up to 30 years. This value includes a bond reserve equal to 1-year's payment. It is anticipated that SRF will also provide \$500,000 in forgiven loan funds, making the total SRF portion contribution \$1,586,358.

**COMPLETE THE APPLICABLE SECTIONS BELOW**

**PART A. REVENUE BOND SECURING DEBT OBLIGATION:**

1. Debt election held? Yes  No  If no, when will election be held (date) N/A
2. Annual debt service for newloan, including coverage: \$ 57,123 (i)
3. Monthly debt service for new loan, including coverage: (line i / 12) \$ 4,760.25 (ii)
4. Total number of projected EDU's after completion of project: 78 (Phase 1) (iii)
5. Average (per total projected EDU's) monthly debt service for new loan: (line ii / line iii) \$ 61.03 (iv)

**PART B. GENERAL OBLIGATION BOND SECURING DEBT OBLIGATION:**

1. Debt election held? Yes  No  If no, when will election be held? (date): \_\_\_\_\_
2. Amount of outstanding General Obligation Bonds \$ \_\_\_\_\_
3. Debt limitations of entity \_\_\_\_\_
4. Estimated average (per property) monthly assessment needed to repay debt (divide the annual assessment by 12 to obtain a monthly figure): \$ \_\_\_\_\_

**PART C. RURAL OR SPECIAL IMPROVEMENT DISTRICT BOND SECURING DEBT OBLIGATION:**

1. Type of special assessment:
  - a. SID
  - b. RID
  - c. Other (specify) \_\_\_\_\_
2. Proposed method of assessment:
  - a. Assessable Area \_\_\_\_\_
  - b. Area \_\_\_\_\_
  - c. Ad Valorem Tax \_\_\_\_\_
  - d. Lineal Front Footage \_\_\_\_\_
  - e. Combination of a. through d. above (explain) \_\_\_\_\_
3. Number of parcels in the district \_\_\_\_\_
4. What percentage of the property (based on the methods of assessment) within the district fits these descriptions?

TYPE OF PROPERTY	PERCENT DEVELOPED	PERCENT UNDEVELOPED
Commercial		
Industrial		
Single-Family Residential		
Multi-Family Residential		
Agricultural		

- Number of property owners in district \_\_\_\_\_
- Estimated average (per property) monthly assessment needed to repay debt (divide the annual assessment by 12 to obtain a monthly figure): \$ \_\_\_\_\_

**PART D. OTHER TYPE OF DEBT INSTRUMENT SECURING DEBT OBLIGATION THAT IS NOT INDICATED ABOVE**

- Explain how debt will be secured: \_\_\_\_\_  
\_\_\_\_\_
- Estimated average (per property) monthly cost to repay debt: \$ \_\_\_\_\_

**PART E. CALCULATION OF THE PROJECTED AVERAGE MONTHLY RESIDENTIAL USER RATE:**

- Estimated increase in average monthly debt service (per projected EDU, monthly assessment per property for General Obligation Bond or SID, or per customer for solid waste projects) as the result of this project. Enter \$0 if no increase is projected: \$61.03 \_\_\_\_\_ (o)  
[From Part A, B, C, or D]
- Estimated increase or decrease in total monthly operation and maintenance (O&M) costs (including depreciation and replacement reserves) as the result of this project: \$3,725 \_\_\_\_\_ (p)
- List and explain estimated increases or decreases in O&M costs, including depreciation and replacement reserves (Provide a reasonably detailed explanation regarding the reason for the increase or decrease):  
  
The currently does not have a centralized system and no existing O&M costs. The new systems O&M costs were determined in the 2018 PER.
- Estimated increase or decrease in monthly O&M costs (including depreciation and replacement reserves) (per projected EDU, monthly assessment per property for General Obligation Bond or SID, or per customer for solid waste projects) as the result of this project: \$ 47.76 \_\_\_\_\_ (q)  
[(p) / (k)]
- Estimated increase or decrease in total monthly costs (per projected EDU, monthly assessment per property for General Obligation Bond or SID, or per customer for solid waste projects) as the result of this project: \$108.79 \_\_\_\_\_ (r)  
[(o) + (q)]

6. Projected average EDU's per residential hookup: \$ 1 (s)  
[(n)]
7. Estimated increase or decrease in total monthly costs per average residential hookup/customer as the result of this project: \$ 108.79 (t)  
[(r) x (s)]
8. Existing average monthly residential debt service, including coverage and bond reserve (subtract any existing debt service if the loan will expire before the completion of the project): \$ 0 (u)
9. Existing average monthly residential O&M costs and replacement and depreciation reserves: \$ 0 (v)

*Note: (u) plus (v) should equal the current average monthly residential rate as stated in Section E, Line 7. If these amounts do not equal, provide an explanation of why the numbers differ.*

10. Projected average monthly residential user rate after completion of this project: \$ 108.79 (w)  
[(t) + (u) + (v)]
11. Projected flat user rate: \$ 0 (x)

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**PART THREE  
CLANCY WATER & SEWER DISTRICT  
RESPONSE TO STATUTORY PRIORITIES**

**General**

This part of the application is required to provide narrative responses to the Statutory Priorities/Application Ranking Issues established by the TSEP Program. It should be noted that although this section of the document addresses the individual TSEP Statutory Priorities, the 2018 Water Preliminary Engineering Report (PER) and other sections of this application, including the uniform application and appendices, must be considered when reading and analyzing these narrative responses. The follow provides a general description of the primary deficiencies identified in the 2018 PER.

- The District does not have a central public water supply and currently utilizes individual onsite private wells that are aging and do not meet current design standards or supply safe drinking water. The drinking water wells are located within close proximity to failing private septic and drain field systems. Current DEQ regulations require 100-foot separation distance between the systems.
  
- Well testing was performed throughout the District and has revealed Nitrates are present in numerous wells. Nitrates are usually an indicator of human fecal waste. Elevated levels (greater than 2 mg/L) of Nitrates were found in 47% of the Clancy drinking wells. The Maximum Contaminant Level (MCL) of 10 mg/L as defined by the EPA, was exceeded in 18% of the Clancy drinking wells. The EPA established this drinking water standard to protect infants from Methemoglobinemia (blue baby syndrome). Blue baby syndrome can be fatal to infants if left untreated. Elevated levels were also discovered in nearby Prickly Pear Creek and Clancy Creek.
  
- Well testing was performed throughout the District and has also revealed Uranium in numerous wells. Uranium occurs naturally in the environment and is a heavy metal. The testing discovered that 37% of Clancy drinking wells exceeded the EPA MCL of 30 µg/L. Exposure to elevated levels of Uranium can cause kidney damage and has been linked to cancer.

- A new centralized public water supply enhances public health and safety and would promote and allow for community and economic growth.

The following pages provides responses to the TSEP Statutory Priorities and outlines the critical need for the proposed project to solve an urgent and serious public health and safety concern.

## **STATUTORY PRIORITY #1**

*Projects that solve urgent and serious public health or safety problems, or that enable local governments to meet state or federal health or safety standards.*

The 2018 Water System Preliminary Engineering Report included as Part 4 of this application defines the need for the proposed project and how it will protect the health and safety of the residents of Clancy.

Health and safety is the primary concern for the District and the proposed project will allow the District to elevate this urgent and serious public health and safety problem related to individual private onsite wells. A majority of the water being supplied by individual private onsite wells are contaminated with nitrates, uranium, and bacteria, as a result of failing septic systems and their close proximity with wells. In 2012, the Clancy Water and Sewer District (before it was officially formed) completed a wastewater PER to develop a plan to eliminate the individual septic systems and reduce the contamination in local ground and surface waters. Unfortunately, the project lacked support and after multiple failed attempts at creating the District and moving the project forward, it was ultimately put on hold. Since that time, the issue with contaminated drinking wells has been recognized and prioritized, as this situation poses a significant and immediate threat to public health and safety.

Section 4.1 of the 2018 PER states:

*Based on the 2018 Construction Application Guidelines for TSEP, deficiencies that may be scored at a level 5 for Statutory Priority #1 include “a community where the water system has a groundwater source with consistently documented nitrate levels above the MCL. Continued use of the contaminated groundwater source has a high probability of resulting in illness”.*

The primary source of drinking water for the District is groundwater, supplied from individual household water wells. Drinking water wells water quality data collected in 2011 and 2012 found that some of the wells were contaminated with nitrate. In some wells, nitrate concentrations were greater than the EPA drinking water quality Maximum Contaminant Level (MCL) of 10 mg/L. This standard has been set to protect infants from methemoglobinemia (blue baby syndrome). Methemoglobinemia may cause serious illness to infants less than six months old and if untreated, can be deadly. Elevated levels of nitrate (greater than 2 mg/L) were measured in 47% of the Clancy drinking water wells sampled. The United States Environmental Protection Agency Maximum Contaminant Level of 10 mg/L was exceeded in 18% of the Clancy drinking water wells sampled. In addition to nitrate contamination, two of the ten wells sampled were found positive for total coliform bacteria. Total coliform concentrations ranged from 1.0 MPN (Most Probable Number) to 792 MPN. Nineteen drinking water wells were sampled for uranium analysis. Thirty-seven percent of the Clancy drinking water wells exceeded the EPA Maximum Contaminant Level of 30 µg/L.

The PER also notes:

Per the Jefferson County Sanitarian, many of these onsite septic systems are failing, posing a serious health risk to the District. Some of these septic systems are in close proximity (less than 100 feet) to drinking water wells, and the small lot sizes do not allow for replacement of the drain fields or failing systems.

As a result, inadequately treated wastewater is contaminating local drinking water wells. Typical components of raw sewage entering the septic systems are dissolved solids (TDS), biochemical oxygen demand (BOD), coliform bacteria, nitrogen and phosphorous. In addition to these conventional pollutants, the raw sewage may also contain pharmaceuticals and personal care products. A typical septic system consists of a septic tank and drain field. The purpose of a septic system is to first reduce TDS and BOD concentrations, then convert organic nitrogen to ammonia, and finally reduce coliform bacteria. As septic water flows through the vadose zone, microbes may convert ammonia to nitrate through a process called nitrification. The existing systems are not treating as designed and thus entering private water wells.

The District understands the need to address the septic systems, has attempted to do so in the past, and would like to try again. However, the immediate threat to public health and safety is related to contaminated drinking water in existing private wells, and thus creation of a community water system is a priority at this time.

In addition, the Jefferson County Sanitarian, Megan Bullock, stresses the urgent public health concern of the Town's water. In her letter of support included in Appendix J, Ms. Bullock writes:

The public's health is of great concern to me with many of the tested water sources having nitrates and uranium exceeding the EPA maximum contaminant level. By having an isotope analysis done, we were also able to determine the likely cause of elevated nitrates to be of human origin. Surface waters in the vicinity of Clancy also showed signs of degradation.

While wastewater continues to be an issue and must ultimately be addressed to remedy the problem, safe drinking water has become the utmost priority for the District. A community water system will provide the residents with safe water and remove the threat to the public's health and safety while the District continues to work on addressing the wastewater issues. Financing a water system will only be possible with grants.

As documented and supported in the 2018 Water PER, the proposed project will solve an urgent public health and safety concern and a centralized system will ensure the citizens of Clancy have clean, safe, reliable drinking water.

## **STATUTORY PRIORITY #2**

*Projects that reflect greater need for financial assistance than other projects.*

TSEP will use information and statistics from the U.S. Census Bureau, Montana Department of Revenue and the submitted Uniform Application to complete the assessment of Statutory Priority 2.

According to the Montana Department of Commerce website, the Median Household Income (MHI) for the Clancy CDP is \$75,000. However, the District completed an income survey focused on residents within the District boundary. The survey was completed with assistance from Erinn Zindt with the Midwest Assistance Program and the results are included in Appendix I. Of the 77 surveys distributed, 52 were returned, a 67.5% return rate, which meets the minimum CDBG requirements for a qualifying survey (67% return rate). The results of the survey indicate an MHI of \$48,266.50. Based on a target rate analysis as determined by the Montana Department of Commerce (1.4% of MHI for water only), the target rate for users in the Clancy Water and Sewer District is \$56.31 per month. With the proposed funding package, users will be paying over 193% of target rate. Without TSEP funding, this would go up to around 270% and the project would become cost prohibitive.

### **STATUTORY PRIORITY #3**

*Projects that incorporate appropriate, cost-effective technical design and that provide thorough, long-term solutions to community public facility needs.*

The District's response to Statutory Priority #3 is provided in the 2018 Water System PER, included as Part 4 of this application.

## STATUTORY PRIORITY #4

*Projects that reflect substantial past efforts to ensure sound, effective long-term comprehensive land use planning, long term fiscal planning and management of public facilities and that attempt to resolve the infrastructure problem with local resources.*

- a. Have there been substantial past efforts to deal with public facilities problems through a long-term commitment to capital improvements planning and budgeting?

The Clancy Water and Sewer District was formed in 2015 to address infrastructure issues within the community. As a relatively new District and a small community, the District itself does not have formal planning documents, but has taken the first step, forming a District, to deal with public facilities issues and ensure long-term solutions. In addition, as a small community with limited resources, Clancy relies on Jefferson County planning documents to help guide capital improvement planning and budgeting.

Jefferson County capital planning documents include (Excerpts included in Appendix E):

- 2003 Growth Policy and subsequent 2009 update. The County Planning Board, in conjunction with the County Planner, is in the process of updating the Growth Policy.
- 2012-2017 Southwestern Montana Comprehensive Economic Development Strategy
- 2011 Jefferson County Predisaster Mitigation Plan and 2016 update
- 2012 Jefferson County-Clancy Wastewater PER
- 2015 Tri-County Regional Community Wildfire Protection Plan
- Jefferson County Bridge Preliminary Engineering Reports and Bridge Inventories, and projects over the last 20 years.

The County has also taken proactive steps to develop and adopt zoning regulations for northern Jefferson County to address rapid residential growth occurring in that portion of the County. The regulations were updated in 2013 and are being continuously evaluated. Jefferson County has had a Planning Board for almost 30 years, and the active Board works hard to promote responsible development, growth, and land uses in Jefferson County.

In addition, the Jefferson Local Development Corporation (JLDC) works to promote the general welfare and community development within the County. JLDC works with County officials, partners, and the public to ensure the County and its communities thrive and develop in an economically and socially sustainable manner.

Jefferson County has a strong tradition of planning with regards to land use and community development and has demonstrated a long-term commitment to capital improvement planning and budgeting for all its communities, including Clancy.

- b. Has the applicant demonstrated a long-term commitment to community planning in order to provide public facilities and services that are adequate and cost effective?

The Clancy Water and Sewer District is only a District and thus is responsible for planning for water and sewer infrastructure only. The District's efforts date back to pre-2012 as they prepared for and then went on to complete the 2012 Wastewater PER. This document was really the start of the District's planning efforts to ensure public services that are adequate, cost effective, and capable of protecting public health and safety of Clancy residents. Although the wastewater project did not come to fruition, the District continued forward, planning for the proposed water project through much discussion in regular board meetings and completion of the Water System PER.

Jefferson County continuously demonstrates long-term commitment to planning to provide adequate public facility and services to its communities. The planning documents listed above all advance the County's goals of providing long-term community planning in an effort to ensure reliable public services and facilities.

The project proposed by the Clancy District, and supported by Jefferson County, shows the County and District's commitment to long-term investment and planning to ensure safe, reliable public facilities.

As mentioned above, as a relatively newly formed entity, the District has taken the first step to preparing the Water PER to address issues with its public facilities and ensure cost effective services.

- c. Is the proposed project consistent with current plans (such as a local capital improvements plan, growth policy, transportation plan, zoning regulations, subdivision regulations, needs assessments or other development-related plan) adopted by the applicant?

The proposed project advances the goals on current County plans, including the Jefferson County Growth Policy and CEDS. Jefferson County is one of the fastest growing counties in Montana. As such, the County planning board, through the Growth Policy is "committed to developing programs and strategies that will provide for and facilitate this growth and retain the rural character and sense of community of small towns" (Jefferson County Growth Policy, Appendix E, P.5). To this end, the goal of the Growth Policy is to help guide and manage community change to best serve County citizen's overall long-term interests (Jefferson County Growth Policy, Appendix E, P. 5).

One of the Growth Policy's Economic Development goals is to sustain and strengthen the economic well-being of Jefferson County's citizens. An objective of this goal includes assisting in the development of necessary public infrastructure in support of economic development (Jefferson County Growth Policy, Appendix E, P. 13). Reliable, long-term business and economic growth is founded on solid public infrastructure and institutions.

Without a clean, reliable water supply, adequate and safe disposal of wastewater, and quality streets, along with other infrastructure and community services, businesses and the economy cannot sufficiently thrive or grow. While it may not be immediate, ultimately, capital improvements, like the proposed project, will lead to improvements that support and strengthen business in a community and encourage economic development.

In addition, the Growth Policy notes that of all the towns in the County, Clancy has evolved the most over the years. After years of the economic stimulus from the mining and railroad industry, today, Clancy continues to attract families moving to enjoy small-town lure while making a living in Helena (Jefferson County Growth Policy, Appendix E, p. 16). As Helena grows, Clancy continues to grow as a bedroom community to Helena, and the infrastructure must keep up with growth to ensure public health and safety and the environment are protected.

An additional goal of the Growth Policy is the project natural resources, including ground and surface water (Jefferson County Growth Policy, Appendix E, p. 10). Ultimately, the installation of a centralized water system presents environmental, social, and economic benefits for local residents by improving water quality, energy efficiency, fire suppression, reducing public health and safety risks associated with contaminated drinking water, and providing a utility that can more efficiently accept growth in the District. The proposed project will support the Growth Policy's overall goal of guiding and managing community change to best serve County citizen's overall long-term interests.

In the 2012 CEDS, which includes Jefferson County, the second goal is to ensure communities are appealing and healthy places to live and work. The first objective under this goal is to "assist communities to ensure they have proper infrastructure to meet to needs of residents and the business community" (CEDS, Appendix E, p. 23). Under this objective, the CEDS recommends utilizing existing funding to leverage local dollars for completion of critical infrastructure projects (CEDS, Appendix E, p. 23). Throughout the CEDS the plan notes the importance of sound infrastructure for economic development and the economic strength of Montana communities. Within the Action Plan section for Jefferson County, improvements to water and sewer infrastructure is an identified strategic activity that supports the achievement of the regional economic development strategy (CEDS, Appendix E, p. 29). Finally, sound, resilient infrastructure is critical in the face of disaster and economic recovery (CEDS, Appendix E, p. 33).

The Wildfire section of the 2011 Jefferson County Pre-Disaster Mitigation (PDM) Plan also mentions that many subdivisions within Jefferson County do not have water supply capable of suppressing a major fire. According to the Plan, Clancy is in a "Very High" risk Wild Urban Interface (Appendix E, p. 36-37). The Plan recommends promoting adequate water supply to aid in fire protection (Appendix E, p. 41). The proposed project will allow the community

of Clancy to have adequate water for fire protection in the future, increasing public health and safety.

In addition to the community planning documents, the proposed project is supported by a number of natural resource plans including the State Water Plan and the Upper Missouri Basin 2014 Water Plan. For example, the Upper Missouri Basin 2014 Water Plan addresses public water systems, and the need to characterize and measure water use. The Plan notes that in smaller municipalities water use estimates are based on what might be considered typical per capita water use, rather than the actual use at a particular location. The Plan recommends methods to better characterize water use for smaller municipal system and for domestic users (Appendix E, p. 75). The construction of the centralized system will allow the District to better characterize, track, and manage water use, allowing the basin as a whole to understand water use and needs.

Overall, the proposed project is consistent with County planning documents and the County's effort and goals of planning for capital investments.

- d. Have reasonable operation and maintenance budgets been maintained over the long-term, including adequate reserves for repair and replacement?

The District currently does not have a community water system and relies on individual wells, therefore there has no system Operation and Maintenance (O&M) budget. Section 7.6 of the 2018 PER (Part 4) outlines the estimated annual operating budget and O&M for the new system. The O&M budget in the PER and the rate structure set up by the District will ensure proper long-term management of the system.

- e. Have there been substantial efforts to solve the system's problems or to proactively maintain the system?

The District does not currently have a central water system, therefore the only maintenance has been on individual wells, which is the responsibility of private homeowners. However, the community of Clancy has been discussing the proposed project for quite some time, as seen in the meeting minutes from the past year (Appendix D). The District has been evaluating the issues with their water and discussing solutions to ensure it's residents have safe, reliable drinking water.

- f. Are the problems a result of inadequate operation and maintenance practices?

As mentioned above, as a new system, the problems are not a result of inadequate operation and maintenance (O&M), as there is no existing system. The issues, as presented in the 2018 Water PER, are a result of private wells and septic systems being used in the community. O&M of the existing on-site water systems is limited to what is

done by the private owners. A centralized water system will allow the District to manage the system to ensure proper O&M and provide safe, reliable drinking water.

- g. Is the applicant current with financial reporting and auditing requirements?  
Is the applicant in good standing in the audit reports?

The District filed its articles of incorporation in April 2015 (Appendix F) and has not yet been required to prepare an Annual Financial Report (AFR) or audit for the Montana Department of Administration's Local Government Services Bureau.

- h. Is there any other pertinent information that might influence the scoring of this statutory priority?

There is no other pertinent information for this statutory priority.

## STATUTORY PRIORITY #5

*Projects that enable local governments to obtain funds from sources other than TSEP*

- a. Has the applicant made serious efforts to thoroughly seek out, analyze, and secure the firm commitment of alternative or additional funds from all appropriate public or private sources, to finance or assist in financing the proposed project?

The District, with assistance from Great West Engineering, has developed a competitive funding package which will enable the District to construct the project and keep user rates reasonable. As outlined in detail in the Uniform Application, included in Part 2 of this application, sources of funding which were examined for this project include the following:

- Treasure State Endowment Program (TSEP)
- Department of Natural Resources and Conservation (DNRC)
- Community Development Block Grant Program (CDBG)
- State Revolving Fund (SRF)
- Rural Development (RD)
- Montana Coal Board
- Economic Development Administration (EDA)
- INTERCAP

Each funding program has unique eligibility requirements and selected funding was based on program eligibility, median household income, and loan rates and terms. A detailed description of the chosen funding options can be found in the Uniform Application (Part 2). Potential public funding sources include:

### Treasure State Endowment Program (TSEP)

The proposed project would increase the user rates in Clancy to 193.2% of the target rate, based on an assumed MHI of \$48,266.50 determined by the 2018 income survey. The District is eligible for a TSEP grant of \$750,000.

### DNRC Renewable Resources Grant and Loan Program (DNRC RRGL):

The Town applied for a \$125,000 DNRC RRGL Grant in May 2018. Although RRGL funds are extremely competitive, the proposed project offers significant renewable resource benefits. Development of a new public water system is a sustainable utility management practice that increases the resiliency of the water resource. The installation of a centralized water system presents environmental benefits by improving water quality, conserving water, and improving energy efficiency.

### Community Development Block Grant (CDBG)

The 2015 American Communities Survey data states that the Clancy CDP has a LMI of 27.1%. The District completed an income survey in 2018, to which they had a 67.5% response rate (required by CDBG), that determined the actual LMI within the District boundaries is 53.8%. The District is eligible for and intends to apply for CDBG funding in summer 2018 (Appendix I).

### Drinking Water State Revolving Fund (DWSRF):

Great West Engineering submitted the SRF Survey Form to MT DEQ on May 6, 2018 to have the project included in DEQ's Drinking Water State Revolving Fund Intended Use Plan and Project Priority List (Appendix H). DNRC Financial Advisor Anna Miller confirmed that the proposed project is eligible for Principal Forgiveness in an April 2, 2018 email (Appendix H).

Below are funding opportunities the Clancy District considered but chose not to pursue;

### USDA Rural Development (RD)

RD provides grant and loan funding to municipalities for water and wastewater projects that improve the quality of life and promote economic development in Rural America.

Municipalities with a population of less than 10,000 are eligible to apply, though priority is given to those with a population of less than 5,500.

Grant eligibility and loan interest rates are based on the community's median household income (MHI) and user rates. If the area to be served has a MHI of \$38,205 or lower and the project is necessary to alleviate a health and/or sanitation concern, up to 75% of the project costs are grant eligible. Up to 45% of the project costs are grant eligible if the planning area has an MHI between \$38,205 and \$47,757.

The 2015 American Communities Survey data states that the Clancy CDP has an MHI of \$75,000. The District completed an income survey that indicates an MHI of \$48,266.50. The District did not receive enough income surveys to qualify for RD grants and the MHI determined from the survey is higher than \$47,757 (maximum income eligible for RD grant funds). SRF with a lower interest rate and possibility of loan forgiveness is more appealing. Therefore, Rural Development grants/loans will not be pursued.

### Montana Coal Board

The Coal Board provides grant funding to municipalities to provide adequately for the expansion of public services or facilities needed as a direct consequence of coal development activities. There is no maximum limit to the amount the Coal Board can fund, but available funding is very limited, so it is hard to receive funds from the Coal Board, especially for large grants. The District cannot tie the project to the impact of coal development, so a Coal Board application will not be prepared.

### Economic Development Administration (EDA)

EDA provides grant funding for projects that are demonstrated to be needed for the placement of a new business. The amount of grant is dependent on the number of jobs created. Because the project would not directly create permanent, high paying jobs, the District chose not to apply for an EDA grant.

### INTERCAP

INTERCAP provides loan funds at a low cost, variable interest rate to local governments. INTERCAP is administered by the Montana Board of Investments and is very flexible in the variety of funding which would include both water and wastewater projects. There is no funding cycle (funds are always available), however, the maximum loan term is 10 years. The short term makes this option financially prohibitive as annual payments and thus user rates would be more than the community could afford.

#### *b.* How viable is the proposed funding package?

Each of the agencies has been contacted and the project is eligible and appears to be a strong candidate for funding. The project offers significant public health and safety benefits that fit well with the Treasure State Endowment Program. The District also spoke with TSEP manager Becky Anseth and MDOC Engineer Richard Knatterud, PE about the project. TSEP indicated the program will support a public water system project that supports an entire community. The District has contacted Anna Miller at SRF to discuss the project. SRF cannot guarantee grant funds at this time, however, the District is eligible for principal forgiveness funds (Appendix H).

The District also submitted a DNRC RRGL grant application in May 2018. The proposed project offers significant renewable resource benefits, a requirement for the program, and is a competitive application. In addition, the District will apply for CDBG funds in summer 2018. The District completed an income survey drastically lowers the MHI from \$75,000 to \$48,266.50 and indicates an LMI of 53.8%. The District received enough surveys to qualify for CDBG funding.

#### *c.* Is the TSEP grant critical to keeping the project moving forward and obtaining funds from sources other than TSEP?

TSEP funding is critical for the proposed project. Without TSEP funding, the project user rates would increase to 270% of target rate, making the project cost prohibitive. The District would reapply for funding in the next cycle.

- d. *Does the TSEP grant result in a cost effective, long term solution for the community public facility needs? If yes, explain the timeframes and result of the impacts, how and who the project in the community benefitted?*

TSEP funding will allow the District to construct a community water system, which, once completed, will immediately provide a long-term, cost-effective solution to the District's drinking water issues. The proposed project will benefit all District residents by providing them with safe, reliable drinking water. As mentioned above, without TSEP funding, the project user rates would increase to 270% of target rate, making the project cost prohibitive

- e. Is there any other pertinent information that might influence the scoring of this statutory priority?

The District's funding package is 37% loan funding. The \$1,086,358 loan that District will be required to take out for this project is split among a relatively small amount of people, resulting in a high user rate. Based on the required debt service and operation and maintenance costs associated with the proposed project, the average sewer rate will be \$109 per month after the completion of the project, which is 193.2% of the District's target rate based on the income survey results, and 174% of the target rate based on the Clancy CDP MHI of \$75,000, as established by the Department of Commerce. The significant rate increase, considering residents did not have an existing user rate, demonstrates the District's need for public assistance.

## STATUTORY PRIORITY #6

*Projects that provide long-term, full-time job opportunities for Montanans, that provide public facilities necessary for the expansion of a business that has a high potential for financial success, or that maintains or encourages expansion of the tax base.*

- a. Will the proposed TSEP project directly result in the creation or retention of a substantial number of long-term, full-time jobs for Montanans?

The project will result in the hiring of a full-time operator and a part-time administrator.

- b. Will the proposed TSEP project directly result in a business expansion? Is the business expansion dependent upon the proposed project in order to proceed?

Although the project is supported by Clancy businesses (Appendix J) the project will not directly lead to business expansion.

- c. Has the applicant provided a business plan for the specific firm(s) to be expanded as a result of the proposed TSEP project? If yes, is it a realistic, well-reasoned business expansion proposal and does it clearly demonstrate that the firm to be assisted by the proposed public facilities has a high potential for financial success if TSEP funds are received?

No, the project will not lead to business expansion.

- d. Will the proposed TSEP project maintain or encourage expansion of the private property tax base?

Properties with contaminated wells could likely not be sold, and empty lots in the District can't be developed under the current conditions. The contamination of wells throughout the District significantly reduces property values and will make it nearly impossible to sell property. The development of a safe, reliable, centralized water system will encourage both residential growth and property values, as well as commercial growth.

- e. What local economic impact will the TSEP project provide for or the impact if the TSEP funding is not awarded and the project not built?

Upon completion of the proposed project business owners and residents of Clancy will have a drinking water system that provides clean, affordable water supply. Having a central water system will have a significant economic impact on the community of Clancy. As noted above, the Jefferson County Growth Policy and Southwestern Montana CEDS stress the importance of reliable infrastructure for economic development. Economic development and strength is

grounded on solid public infrastructure. Without a clean, reliable water supply businesses and the economy cannot sufficiently thrive or grow. The investment from the Treasure State Endowment Program in Clancy's water system will protect public health and help strengthen the Town's economy.

Without TSEP funding, the project user rates would increase to 270% of target rate, making the project cost prohibitive.

- f. Is there any other pertinent information that might influence the scoring of this statutory priority?

There is no other pertinent information for this statutory priority.

## STATUTORY PRIORITY #7

*Projects that are high local priorities and have strong community support.*

- a. Has the applicant encouraged active citizen participation, including at least one public hearing or meeting held not more than 12 months prior to the date of the application, to discuss the proposed TSEP project and receive comments from the affected community residents?

There has been significant outreach and public participation for the project. The District held a public hearing on March 27 and May 22, 2018 to discuss the PER, environmental, and grant funding (Appendix D). Collette Anderson and Brent Pilon of Great West Engineering presented the information in the PER, including existing conditions, alternatives analysis, costs, funding strategies, and financial impact to users. They also discussed the environmental assessment. They took questions and public comments and generally the need for the project was understood.

There were concerns regarding the cost of the project, however, Ms. Anderson and Mr. Pilon stressed the need for the proposed project, and that the District will be pursuing as many viable funding opportunities as possible. Concerns were also expressed regarding construction disturbance along Main Street for construction of the proposed transmission main. It was explained that any disturbance would be required to be restored to existing conditions. One resident expressed confusion over the District's decision to pursue a water system project rather than solving the root cause of the issues by constructing a community sewer system. Some of the history and explanation of the District's unsuccessful attempts at a wastewater project were explained, along with the immediate need of the water system to protect public health and safety. The District has also been discussing the issues with its water at monthly meetings for over two years (See Appendix D).

In addition, the District set up a project website to keep the public informed about the status of the PER, public meetings, funding, and will be updated throughout the life of the project. The project website is [www.clancyinfrastructure.com](http://www.clancyinfrastructure.com).

- b. Has the applicant informed local citizens and affected property owners of the estimated cost per household of any anticipated increases in taxes, special assessments, or user charges that would result from the proposed project?

At the public meetings described above, the public was presented with the various funding scenarios in the PER. At the meetings, Ms. Anderson and Mr. Pilon presented a range of user rates based on different funding sources. The community has been informed of the increase in user costs for the project.

- c. Are the local citizens and affected property owners in support of the proposed project?

The County Sanitarian, some local residents, board members, and business owners are supportive of the proposed project. Appendix J documents letters of support from County officials and local businesses. Local citizens support the Districts efforts to provide safe, reliable drinking water, and as discussed above, the Town has been discussing this issue for quite some time (Appendix D).

- d. Is there any other pertinent information that might influence the scoring of this statutory priority?

There is no other pertinent information for this statutory priority.

# **PART FOUR**

2018 Water Preliminary Engineering Report  
(Attached Separately)

# **Appendix A**

## Resolutions

**A RESOLUTION OF THE CLANCY WATER & SEWER DISTRICT  
TO AUTHORIZE THE SUBMISSION OF  
AN APPLICATION FOR GRANT FUNDING FROM THE TREASURE STATE  
ENDOWMENT PROGRAM  
FOR THE WATER SYSTEM IMPROVEMENTS PROJECT**

**WHEREAS**, the Clancy Water & Sewer District is applying to the Montana Department Commerce for financial assistance from the Treasure State Endowment Program (TSEP) to construct Water System Improvements:

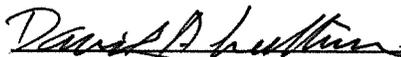
**WHEREAS**, the Clancy Water & Sewer District has the legal jurisdiction and authority to construct, finance, operate, and maintain its drinking water system;

That the Clancy Water & Sewer District agrees to comply with all State laws and regulations and the requirements described in TSEP Application Guidelines and those that will be described in the TSEP Project Administration Manual;

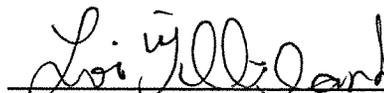
That the Clancy Water & Sewer District commits to provide matching funds as proposed in the TSEP application; and

That Dave Leitheiser, District President, is authorized to submit this request to the Montana Department of Commerce, on behalf of the Clancy Water & Sewer District, to act on its behalf and to provide such additional information as may be required.

**PASSED AND ADOPTED** by the Clancy Water & Sewer District at a regular meeting thereof held on the 22<sup>nd</sup> day of May 2018.

  
\_\_\_\_\_  
Dave Leitheiser, President

May 22, 2018  
Date

  
\_\_\_\_\_  
Lori Gilliland, Secretary

May 22, 2018  
Date

Resolution No. 2018-1

**A RESOLUTION OF THE CLANCY WATER AND SEWER DISTRICT TO ADOPT A DETAILED PRELIMINARY ENGINEERING REPORT CONDUCTED AND PREPARED BY GREAT WEST ENGINEERING, INC.**

**WHEREAS**, Great West Engineering did submit a detailed Preliminary Engineering Report to the Clancy Water and Sewer District describing the current situation related to drinking water in Clancy; developed, evaluated, and recommended preferred alternatives for improvements, and

**WHEREAS**, the Clancy Water and Sewer District's Board of Directors did meet with Great West Engineering to review and approve said Preliminary Engineering Report; and

**WHEREAS**, the Clancy Water and Sewer District has conducted a public hearing, and Great West Engineering has incorporated information from the hearing in the Preliminary Engineering Report.

**NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS:** The Clancy Water and Sewer District's Board of Directors have reviewed the Preliminary Engineering Report (PER) and submitted change requests necessary to effectuate the acceptance of the PER and hereby declares the document acceptable to the Clancy Water and Sewer District; and

That Dave Leitheiser, District President, is authorized to execute and attest any documents required to adopt the PER and effectuate its submission to the appropriate governing agencies:

**PASSED AND ADOPTED** by the Clancy Water and Sewer District at a regular meeting thereof held on the 24<sup>th</sup> Day of April, 2018.

David A. Leitheiser  
Dave Leitheiser, President

APRIL 24, 2018  
Date

Lori Gilliland  
Lori Gilliland, Secretary

April 24, 2018  
Date

**A RESOLUTION OF THE CLANCY WATER & SEWER  
DISTRICT TO ACCEPT THE FINDINGS OF THE ENVIRONMENTAL  
ASSESSMENT AND DETERMINATION THAT THE PREPARATION OF  
AN ENVIRONMENTAL IMPACT STATEMENT IS NOT NECESSARY  
FOR THE WATER SYSTEM IMPROVEMENTS PROJECT**

**WHEREAS**, the Clancy Water & Sewer District has completed an assessment to identify potential environmental impacts of construction of a public drinking water system to serve the District;

**WHEREAS**, the draft Environmental Assessment was made available for public comment and the findings were presented and reviewed at a public meeting held in Clancy on May 22, 2018;

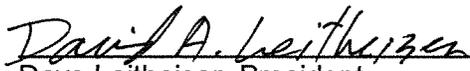
**WHEREAS**, public comment was received;

**WHEREAS**, the Clancy Water & Sewer District has determined that the construction of improvements water system will not affect the quality of the human environment, and accordingly the District's Board of Directors has established that an Environmental Impact Statement is not necessary;

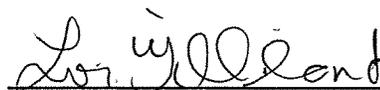
**NOW, THEREFORE, BE IT RESOLVED** by the Clancy Water & Sewer District as follows;

The Clancy Water & Sewer District's Board of Directors adopt the final Environmental Assessment for the construction of a public drinking water system to serve the District.

**PASSED AND ADOPTED** by the Clancy Water & Sewer District at a regular meeting thereof held on the 22<sup>nd</sup> day of May, 2018.

  
\_\_\_\_\_  
Dave Leitheiser, President

May 22, 2018  
Date

  
\_\_\_\_\_  
Lori Gilliland, Secretary

May 22, 2018  
Date

**Appendix B**  
Project Management &  
Schedule

**CLANCY WATER AND SEWER DISTRICT  
WATER SYSTEM CONSTRUCTION**

**PROJECT MANAGEMENT PLAN**

**I. ADMINISTRATIVE STRUCTURE**

The Clancy Water and Sewer District (District) is an incorporated special unit of local government located in Jefferson County, Montana. The District will own and operate the new water system. This Plan identifies each person who will be involved with the administration the District's 2021 Biennium Treasure State Endowment Program Grant, Renewable Resource Grant, SRF funding, and the County's 2018 CDBG Public Facilities Grant for the construction of a water system for the District.

David Leitheiser, District President, will have responsibility for all official contracts with Treasure State Endowment Program (TSEP), SRF, the Montana Department of Natural Resources and Conservation (DNRC). TSEP, DNRC, and SRF will each provide funding for the project. Contact: (406) 949-8281, Dave2mt@bresnan.net

The Jefferson County Commissioners, as the County's chief elected officials, are authorized to approve and execute all CDBG Program documents associated with the CDBG Public Facilities grant.

Jefferson County Commissioner Bob Mullen will serve as the County's liaison with the Montana Department of Commerce, District, and Great West Engineering. Contact: 406-225-4026, bmullen@jeffersoncounty-mt.gov.

Jefferson County and the District will enter into an Interlocal Agreement for the Community Development Block Grant (CDBG) funds awarded to the County for the construction of the District's new water system.

The County Commissioners will have ultimate authority and responsibility for the management of project activities and expenditures of CDBG funds. The Board of Directors of District will make recommendations to the Commission. However, final approval of all contracts and drawdown requests associated with the usage of CDBG funds will be the responsibility of the County Commission.

District's Board of Directors will have responsibility for the management of project activities and expenditures of funds other than CDBG. Final approval of all contracts and drawdown requests with the usage of matching funds will be the responsibility of the Board of Directors. The District's liaison for this project will be David Leitheiser.

Jefferson County Clerk & Recorder Bonnie Ramey will be responsible for management of, and record keeping for the CDBG funds received for the project.

The Jefferson County Commissioners will designate County Sanitarian Megan Bullock to act as the County's Environmental Certifying Official responsible for all activities associated with the environmental review process the County will complete for the 2018 CDBG grant awarded to the project.

Lori Gilliland, District Clerk/Treasurer, will be the project's Fiscal Contact for the District and will be responsible for record keeping for TSEP, RRGL, and SRF funds allocated to the project. Contact: 406-81-2716, LGilliland@mt.gov.

Craig Erickson of Great West Engineering will be designated as Project Administrator and be responsible for overall project administration and assure compliance with applicable federal and state requirements for the CDBG, TSEP, DNRC, and SRF grants and loan that have been awarded to the project. The Project Administrator will serve as the County's and District's liaison with the Montana Department of Commerce Treasure State Endowment Program, Montana Department of Natural Resources and Conservation, and SRF for the project. Contact: 406-495-6189, cerickson@greatwesteng.com

Steve Haddon, Jefferson County's Attorney, as the County's and District's legal counsel, will review and advise the Commissioners and the District regarding any proposed contractual agreements associated with the project funds and provides other legal guidance as requested. Contact: 406-225-4010, shaddon@jeffersoncounty-mt.gov.

The District has completed a formal procurement process to hire an engineer for designing and supervising the construction of water system improvements project. Collette Anderson, P.E. of Great West Engineering, Project Manager, will be responsible for construction-related activities including preparation of final design, plans and specifications, as well as construction inspection. Contractor compliance, scheduling, and payment requests will also be subject to the Project Manager's review and approval. Contact: 406-495-6160, ctanderson@greatwesteng.com.

The Project Administrator, the District's Clerk/Treasurer, and a representative of Jefferson County and the District will attend the TSEP and CDBG Grant Administration Workshops.

## **II. PROJECT MANAGEMENT**

- A. The Project Administrator, Craig Erickson, will be responsible for:
  - 1. Administration of all grant funding including TSEP, CDBG, DNRC, and SRF.
  - 2. Preparing the environmental review to assure full compliance with the National and Montana Environmental Policy Acts, completion of the statutory checklist, and any other applicable environmental requirements. The Project Administrator will also be responsible for preparing any legal notices required to be published for the environmental review process and conducting any required public hearings or informational meetings.

3. Preparing a request for release of funds to DOC.
4. Developing a contract with DOC and assisting the County and District with all requirements related to efficient project start-up and implementation. The project implementation schedule is attached. The Project Administrator will inform the County, District, and DOC regarding any significant changes to this timetable.
5. Establishing and maintaining complete and accurate project files and preparing all documentation, quarterly project progress reports, and reports incidental to the administration of the grant.
6. Reviewing all proposed project expenditures or requests for payment to ensure their propriety and proper allocation of costs to the TSEP and CDBG budgets.
7. In cooperation with the County Clerk & Recorders and the District's Clerk/Treasurer, processing payment requests and preparing drawdown requests to DOC, DNRC, and SRF, including the Request for Payment and Status of Funds Report and the Project Progress Report. The Project Administrator will coordinate funding with the other matching funds involved in the project.
8. Serving as the designated labor standards officer and assuring compliance with all applicable labor standards requirements. Responsibilities will include the review of weekly payroll reports to ensure compliance with Davis-Bacon prevailing wage requirements; periodic visits to the construction site to assure that required equal opportunity, labor standards, and Davis-Bacon wage determinations have been posted; and conducting on-site interviews with construction personnel to document Davis-Bacon compliance.
9. Ensuring compliance with applicable civil rights requirements, including preparation of an equal opportunity plan and a fair housing resolution, which will be adopted by the County and District, as needed.
10. Preparing all required performance reports and closeout documents for submittal to DOC.

B. The Project Manager will have the following duties:

1. Final Design.
2. Act as the Project's liaison with all plan review, approval permitting agencies. Prepare all required information to secure needed permits for the project.
3. Monitoring the subcontractor selection process, including the bid advertising,

tabulation, and award process for conformance to CDBG requirements. The Manager will review the construction contract provisions for CDBG compliance and will request DOC clearance of the lowest and second lowest bidders before a contract is awarded.

4. Attending the preconstruction conference and monthly construction progress meetings for the project.
5. Prepare the construction bid package in conformance with applicable CDBG, TSEP, DNRC, and SRF requirements and supervise the bid advertising, tabulation, and award process, including the preparation of the advertisements for bid solicitation, conduct the bid opening, and issue the notice to proceed.
6. Conduct the preconstruction conference.
7. Supervise of construction activities and preparation of field inspection reports.
8. Hold periodic progress meetings at which contractor's request for payment will be reviewed. Review and certify all claims for payment from the contractor.
9. At the completion of the project, certify to the County and District that all work was completed according to the project plans and specifications and provide project completion and project closeout oversight and documentation.
10. Attending County Commission and/or District meetings to provide project status reports and representing the CDBG, TSEP, DNRC, and SRF project at any other public meetings, as deemed necessary by the Commissioner's or District.

### **III. FINANCIAL MANAGEMENT**

- A. The District's Clerk/Treasurer's financial responsibilities will be as follows:
  1. Managing the transfer of TSEP, DNRC, and SRF to the District's bank account and disbursing those funds based on claims and supporting documents approved by the Project Manager, Project Administrator, County Commission, and Board of Directors.
  2. With the assistance of the Project Administrator, preparing the Request for Payment and Status of Funds Reports to be submitted to CDBG, TSEP, DNRC, and SRF. No expenditures will be made without the approval of the Board of Directors at a regular meeting. Electronic copies of *all* project related documents will be submitted to the Commissioners and Clerk & Recorder.

3. Entering all project transactions into the Grant Recipient's existing accounting system, and preparing checks/warrants for approved expenditures.
4. With the assistance of the Grant Manager, preparing the Request for Payment and accompanying draw reports and documentation to be submitted to Department.
5. With the assistance of the Grant Manager, preparing the final financial reports for project closeout.
6. The Grant Manager and Clerk-Treasurer will review all proposed expenditures of TSEP funds and will prepare requests for reimbursement, which will be signed by the officials cited in the signatory form. All disbursements will be handled in accordance with the Grant Recipient's established claim review procedures. Before submitting the claim to the Clerk-Treasurer, the Grant Manager will attach a certification to each claim stating that the proposed expenditure is an eligible expense of the Grant Recipient's TSEP project and consistent with the project budget. The Council will review all claims before approving them.
7. Financial record keeping will be done in conformance with state law. The original financial documents (claims with attached supporting material) will be retained in the Grant Recipient's offices.
8. Appropriate documentation of administrative costs will be maintained by the Grant Manager and the Clerk-Treasurer to document all time worked on the TSEP project that will be compensated with TSEP funds.

B. The County Clerk & Recorder's responsibilities will be as follows:

1. Enter all project transactions into the County's existing accounting system (BARS), and prepare checks/warrants for approved expenditures.
2. With the assistance of the Project Administrator, make for submittal to the DOC, the Requests for Payment and Status of Funds Reports, and provide a copy of each warrant produced by the County to pay each vendor. The District board members must approve all expenditures before two members of the County Commission signs a CDBG drawdown request.
3. With the assistance of the Project Administrator, preparing the final financial reports for project closeout for the CDBG Program.

C. The Project Administrator, Clerk & Recorder, and/or District's Clerk/Treasurer, and Project Manager will review all proposed expenditures of project funds and will prepare drawdown requests, which will be signed by the officials cited above.

All disbursements will follow the County's established and/or District's claim review procedures. Before submitting the request to the Clerk & Recorder, and/or the District's General Manager, the Project Administrator will attach a certification to each claim stating that the proposed expenditure is an eligible expense of the County's CDBG or District's matching funds project and consistent with the appropriate project budget. The District must approve all expenditures and payment requests. After their approval, the Commissioners will formally accept all claims and costs of the CDBG grant funds.

- C. Financial record keeping will conform to the recommendations of the DOC/Local Government Services Bureau as described in Chapter 4 of the CDBG Administration Manual. The original financial documents (claims with attached supporting material) will be retained either in the County's offices with copies sent to the District or the District's offices with copies forwarded to the County.
- D. The payment of CDBG funds by the DOC will reimburse County funds disbursed to pay project related claims that have been approved as previously described in this document. Reimbursement of County payments will be based on the actual rate of disbursement. Proper documentation to be submitted with each CDBG Request for Funds will include, when appropriate, invoices, contractor applications for payment, certified payrolls from each contractor and subcontractor and copies of the warrants Jefferson County produced to pay each vendor.

#### **IV. PROGRAM INCOME**

The proposed project will not generate program income from the CDBG funds awarded to the County.

#### **V. IMPLEMENTATION SCHEDULE**

A quarterly implementation schedule for the project, which lists the critical steps that are necessary for CDBG, TSEP, DNRC, and SRF funding, is attached. The Project Administrator will be responsible for monitoring the project's status and compliance with this schedule, which will be updated when the County's CDBG contract with DOC is completed. The Project Administrator will prepare a detailed construction schedule when the final construction cost is known.

**VI. APPROVAL**

This Management Plan for the Clancy Water and Sewer District and Jefferson County water system construction project.

**Clancy Water and Sewer District**

**Jefferson County**

\_\_\_\_\_  
David Leitheiser

\_\_\_\_\_  
Bob Mullen

\_\_\_\_\_  
Cory Kirsch

\_\_\_\_\_  
Leonard Wortman

Improvements project is accepted and approved by:

ATTEST:

\_\_\_\_\_  
Clerk and Recorder

**CLANCY WATER & SEWER DISTRICT  
WATER IMPROVEMENT PROJECT  
PROJECT IMPLEMENTATION SCHEDULE**

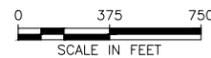
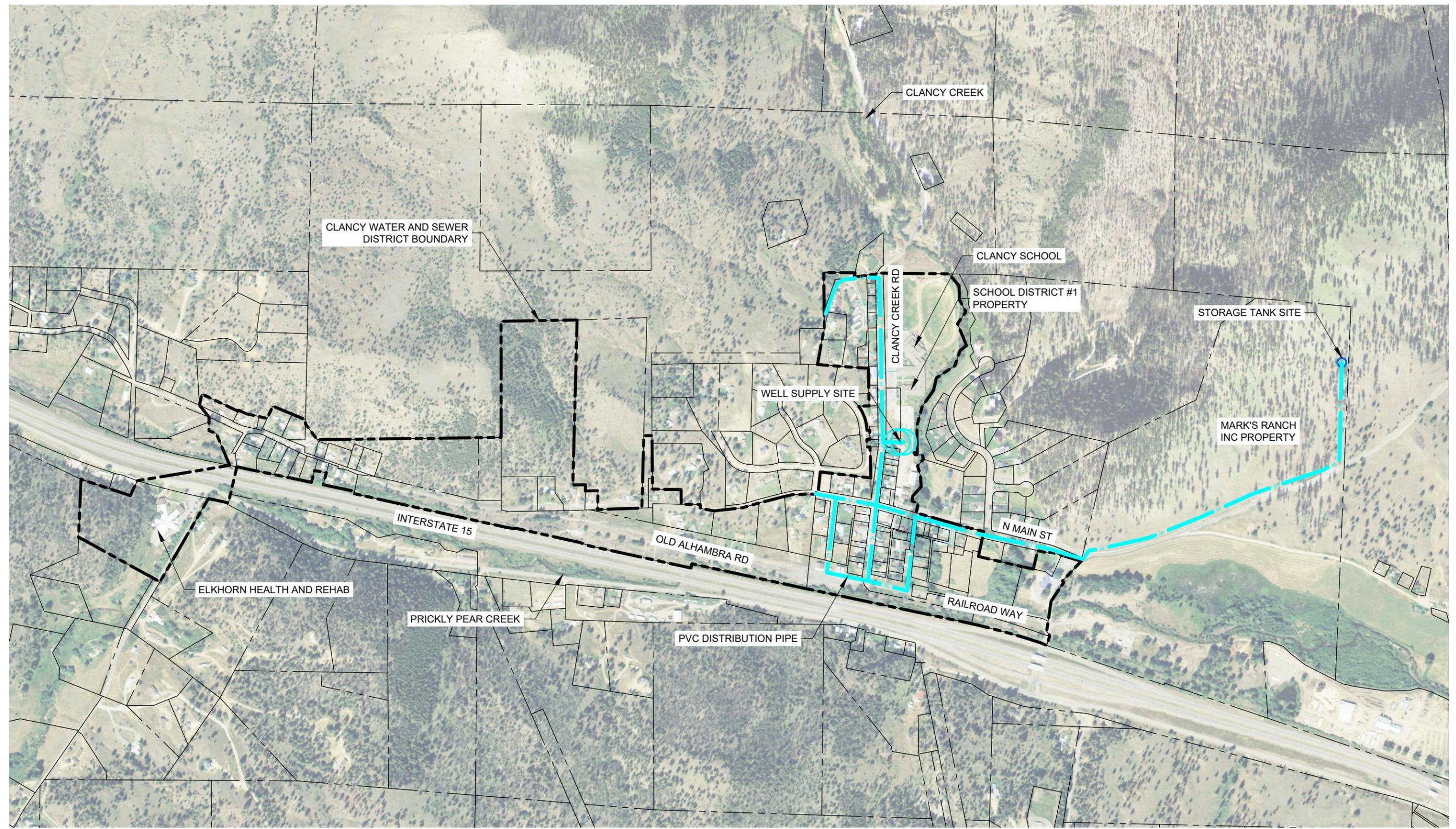
TASK	QUARTERS, 2019				QUARTERS, 2020				QUARTERS, 2021			
	1st J F M	2nd A M J	3rd J A S	4th O N D	1st J F M	2nd A M J	3rd J A S	4th O N D	1st J F M	2nd A M J	3rd J A S	4th O N D
<b><u>PROJECT DESIGN</u></b>												
Commence Final Design			YX									
Complete Project Design				X		Y						
Submit Plans to DEQ				X		Y						
Prepare Bid Documents					X		Y					
Water Rights					X	X				X		
<b><u>ADVERTISEMENT FOR CONST. BID</u></b>												
Review Contract Requirements					X					Y		
Public Bid Advertisement					X					Y		
Open Bids & Examine Proposals					X					Y		
Request Contr. Debarment Review					X					Y		
Select Contractor & Award Bid					X					Y		
Conduct Pre-const. Conference						X				Y		
Issue Notice to Proceed to Contractor												
<b><u>PROJECT CONSTRUCTION</u></b>												
Begin Construction						X					Y	
Monitor Engineer & Contractor						X					Y	
Conduct Labor Compliance Reviews						X					Y	
Hold Const. Progress Meetings						X					Y	
Final Inspection											YX	
<b><u>PROJECT CLOSE OUT</u></b>												
Submit Final Drawdown												Z
Project Completion Report												Z
Contract End date												Z

Well work represented with **X**  
Distribution and Tank work represented with **Y**  
**Z** represents overall project work

# Appendix C

## Maps

F:\1-17225-Clancy W&S District Water PER\CADD 1-17225\Exhibits\PER Exhibits\1-17225-Figure 7-1-Clancy School, Marks Ranch Inc, Bolted Steel, Phased Fire Flow-Phase 1.dwg



**Figure 7-1**  
**Clancy School Well Supply, Mark's**  
**Ranch Inc Storage Site, Bolted Steel,**  
**Phased Fire Flow-Phase 1**

CLANCY WATER AND SEWER DISTRICT  
 PRELIMINARY ENGINEERING REPORT

# **Appendix D**

## **Public Participation**

# Clancyinfrastructure.com

## About the Project

The community of Clancy established a water and sewer district in 2015 to address infrastructure issues within the community, specifically wastewater issues at the time. The community does not have a central water or wastewater systems, and all 107 households are on individual wells and septic systems.

Testing has indicated elevated nitrate concentrations and positive bacteria tests on a number of individual wells. Twenty (20) individual wells were sampled, fourteen (14) showed elevated nitrate levels, two (2) of which have levels of greater than 10 mg/L, which is the maximum contaminant limit established by the Safe Drinking Water Act. Also, seven (7) of the well water samples have had a positive test for coliform bacteria.

The suspected cause of the high nitrate and bacteria levels is the high density of individual septic systems contaminating the drinking water wells. Excessive nitrate levels in the water is a public health and safety concern for the community and needs to be addressed. The PER will allow the District to evaluate alternatives to protect public health and safety and install a system that will better manage the community's water supply.

The PER will identify alternatives to putting in a new centralized water system for the District. A variety of systems will be evaluated based on technical feasibility, environmental and land use considerations, and cost of the system and operation. The alternatives may include new supply wells, water storage, and water distribution. The PER will prioritize the alternatives and make a recommendation to the District about the most appropriate system for the community. Evaluating alternatives of installing a centralized water system is the first step to addressing the excessive nitrate and bacteria levels in the District's water and protecting public safety.

## Public Meeting Schedule

There are no upcoming events at this time.

## Pages

- About the Project
- Comment on Project
- Download Project Documents
- Project Funding
- Project Schedule
- Sample Page
- Welcome

## Thanks for Visiting

This website has been developed to keep you informed on whats going on with Clancy's Infrastructure.

## Project Funding

There are a number State and Federal grant and loan opportunities which provide funding for infrastructure projects. Grant and low-interest loan programs can help reduce the financial burden of large construction projects. Each funding agency has specific requirements and some opportunities will fit a project better than others.

The District will not apply for project funding this cycle (May 2018). Below is a list of potential funding opportunities the District may choose to apply to in the future.

### Treasure State Endowment Program (TSEP)

TSEP is a state funded grant program administered by the Montana Department of Commerce (MDOC). TSEP provides financial assistance to local governments for infrastructure improvements. Grants can be obtained from TSEP for up to \$500,000 if the projected user rates are less than 125% of the target rate, \$425,000 if projected user rates are between 125% and 150% of the target rate, and up to \$750,000 if the projected user rates are over 150% of the target rate. TSEP grant recipients are required to match the grant dollar for dollar, but the match may come from a variety of sources including other grants, loans, or cash contributions.

### Renewable Resource Grant and Loan Program (RRGL)

Funded through interest accrued on the Resource Indemnity Trust Fund and the sale of Coal Severance Tax Bonds, RRGL is a state program administered by the Montana Department of Natural Resources and Conservation (DNRC). RRGL's primary purpose is to conserve, manage, develop, or protect Montana's renewable resources. Grants of up to \$125,000 are available for projects that meet one or more of these objectives.

### State Revolving Fund (SRF)

SRF provides low-interest loan funds for solid waste projects through the Water Pollution Control State Revolving Fund (WPCSRF). The SRF program is administered by the Montana Department of Environmental Quality. Current loan terms include an interest rate of 2.5% for a 20-year period.

### USDA Rural Development (RD)

RD provides grant and loan funding to districts, municipalities and counties for infrastructure projects that improve the quality of life and promote economic development in Rural America. Communities with populations less than 10,000 are eligible to apply; however, RD gives the highest priority to projects that serve rural areas with populations equal to or less than 1,000.

## Public Meeting Schedule

There are no upcoming events at this time.

## Project Schedule

The project schedule will be updated as the PER is developed.

TASK	MONTH / YEAR
Prepare Draft PER	March-April 2018
Public Hearings: PER, Environmental and Funding	TBD
Final PER completed	May 2018
Prepare and submit Grant and Loan Applications (TSEP, RRGL, RD, & SRF are potential funding sources)	April 2018-July 2018
Notice of Award for funding	May 2019
Preliminary Design	Fall 2019
Project Bidding	Spring 2020
Construction	Summer 2020
Project closeout	Fall 2020

This is a draft schedule and subject to change depending on project development and available funding.

## Public Meeting Schedule

There are no upcoming events at this time.

## Pages

- About the Project
- Comment on Project
- Download Project Documents
- Project Funding
- Project Schedule
- Sample Page
- Welcome
- What's a PER?

## Thanks for Visiting

This website has been developed to keep you informed on whats going on with Clancy's infrastructure.

## Pages

- About the Project

## Thanks for Visiting

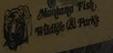
This website has been developed to keep you

RAILROAD  
LEGAL TENDER

PARK LAKE  
CLANCY CR

  
**GAL TENDER**  
PUB & BISTRO  
Scenic Historic Clancy

**CLANCY  
WATER / SEWER  
DISTRICT**  
**BOARD MEETING**  
**TODAY 6:30 p.m.**  
**AT THE RED  
SCHOOL HOUSE**

**ATTENTION HUNTERS**  
Hunting of  
**ANTLERED MULE  
DEER BUCK**  
In this hunting  
district is by  
**SPECIAL PERMIT  
ONLY**  
This hunting district is:  


## LEGAL NOTICE - PUBLIC HEARING

The Clancy Water and Sewer District will hold a public hearing on May 22, 2018 at 6:30 p.m., at the Clancy Library located at 3 North Main Street. The District Board has scheduled the hearing to obtain public comments regarding applications to the State of Montana's Treasure State Endowment Program, Drinking Water State Revolving Fund, and Community Development Block Grant Program. Also, the public will be given the opportunity to comment on an assessment of the potential environmental impact of the proposed improvements.

At the public hearing, a representative of Great West Engineering will describe the proposed project, potential impact of the project on user rates, and the draft environmental assessment. All interested persons will be given the opportunity to ask questions and to express their opinions regarding the project, funding, and the project's impact on the environment.

Comments may be given orally at the hearing or submitted in writing by the end of the public hearing. Visit [www.clancyinfrastructure.com](http://www.clancyinfrastructure.com) for more project information and to view the draft Preliminary Engineering Report and draft Environmental Assessment.

The District will make reasonable accommodation for any known disability that may interfere with a person's ability to participate in this public hearing. Persons needing an accommodation must notify Megan Bullock at (406) 225-4126 no later than May 17, 2018 to allow adequate time to make needed arrangements. You may also write to the District via email at [clancywsd@gmail.com](mailto:clancywsd@gmail.com) to make your request known or to comment on the proposed project.

Clancy Water and Sewer District  
Clancy, Montana

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Dave Leitheiser, President

Publish: The Boulder Monitor

May 9, 2018  
May 16, 2018

# WATER SYSTEM IMPROVEMENTS

CLANCY WATER AND SEWER DISTRICT  
PUBLIC MEETING

May 22, 2018

[www.clancyinfrastructure.com](http://www.clancyinfrastructure.com)





CLANCY WATER AND SEWER DISTRICT  
 Water System Improvements PER  
 Public Hearing  
 May 22, 2018  
 Sign-In Sheet

Name	Company	email	Telephone
heidi wiland	prod member	gilliland82@gmail	406-477-222
Megan Ballcock	Jeff Co	webullocks@jeffersoncounty	225-4126
Donna Hosmer	resident		406-431-6782
Bill Hammer	Resident	bhammer@hotmail.com	428-933-5742
Dave Leithiser	resident	dave2mt@bresnan.net	406-949-8281
Carole Wise	Resident, member	qunferm@icloud.com	406-465-3569
Bob Johnson	Boards Member	bob.johnson@ashgrove.com	437-3680
John Davis	Resident	jdavis@mt.gov	(360)621-6733
Bob Monka	land owner	bob.monka@monka.com	933-5589
Kynora Rogstad	Jeff Co Resident	kynora.rogstad@gmail.com	202-6395



CLANCY WATER AND SEWER DISTRICT  
 Water System Improvements PER  
 Public Hearing  
 May 22, 2018  
 Sign-In Sheet

Name	Company	email	Telephone
Jason Madland <del>Jason Madland</del>	Public	<del>Waterboy8898@gmail.com</del> waterboy8898@gmail.com	406-461-5772
Jane Hamman	Library Board	Jane.hamman@ad.com	933-8203
Cory Kirsch	Jefferson Co.		949-3346
Pete Backlund	Best Price	pbacklund@gmail.com	406-465-2390

# WATER SYSTEM IMPROVEMENTS

CLANCY WATER AND SEWER DISTRICT  
PUBLIC MEETING

April 12, 2018

[www.clancyinfrastructure.com](http://www.clancyinfrastructure.com)



# WHY ARE WE HERE

## ➤ **Public Health and Safety**

- Private wells serving residents are contaminated
- 20 wells sampled
- 14 had elevated nitrate levels
  - 2 of these had nitrate levels greater than EPA MCL of 10 mg/L
- 7 tested positive for coliform bacteria and elevated Uranium levels

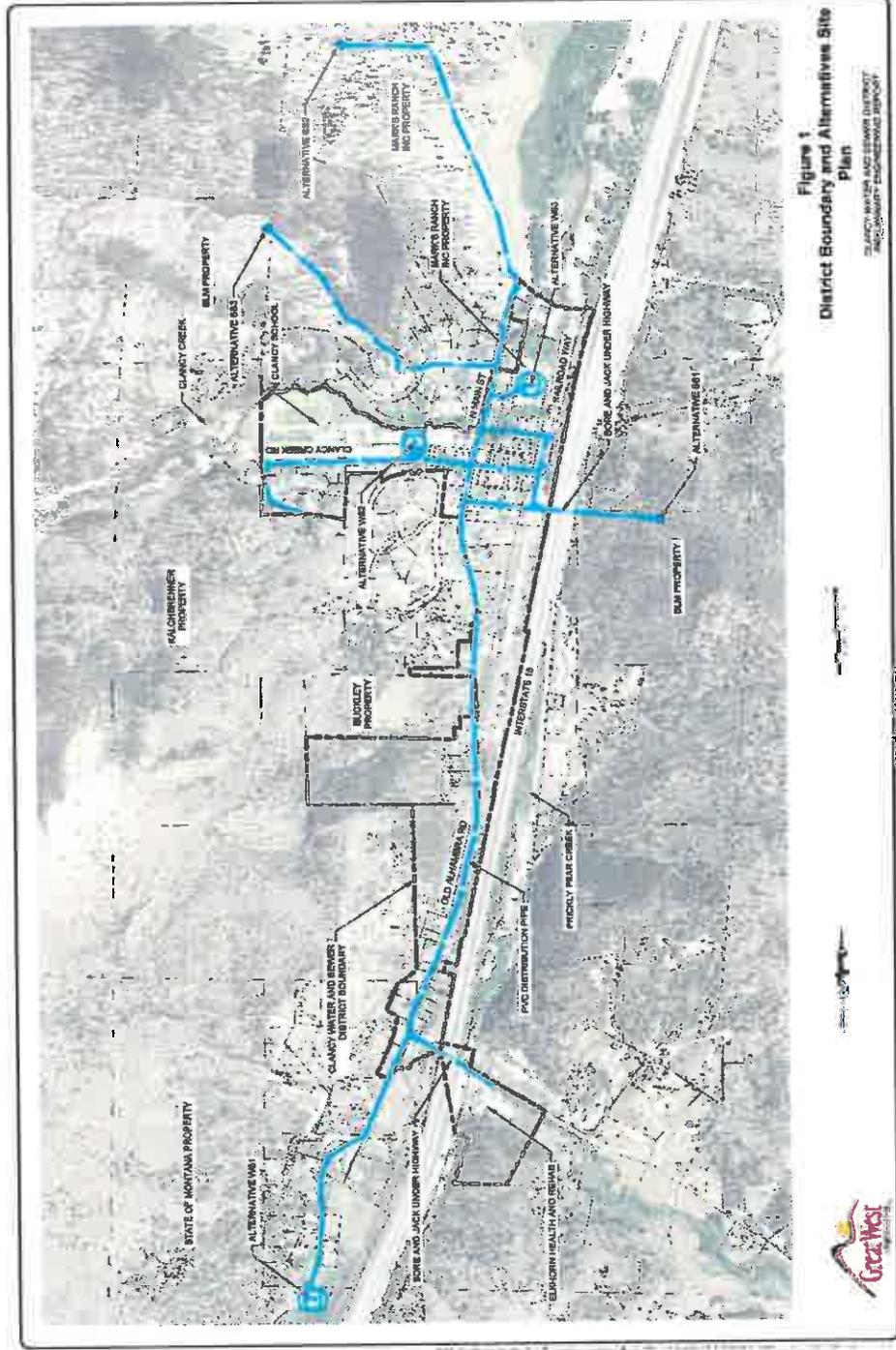
## ➤ **Water System Preliminary Engineering Report (PER)**

## ➤ **PUBLIC COMMENT**

# PRELIMINARY ENGINEERING REPORT

- **What is a PER?**
  - Required by funding agencies to qualify for grant and loan funding
  - Analysis of existing system
  - Problem definition
  - Evaluates alternatives and identifies the preferred alternative
  - Establishes costs and develops funding scenarios
  - Implementation schedule
  - PUBLIC COMMENT

# PLANNING AREA



# PLANNING AREA

## ➤ **Current Population**

- Clancy CDP: 1,563
- Clancy W&S District: 287

## ➤ **Design Population**

- A 0.55% annual growth rate over the next 20 years within the District is assumed
- 2038 Projected Population: 321

# WATER USAGE

- **National average: 160 gpcd**
  - Design Population: 321
  - Design Average Day Demand: 51,360 gpd
  - Peaking Factor: 4
  - Design Maximum Day Demand: 205,440 gpd
    - 143 gpm
- **DEQ requires source capacity to meet or exceed design max day demand with largest well out of service**
  - If only two wells are utilized, each must be capable of producing a minimum of 143 gpm
- **DEQ requires a minimum of two sources be provided**

# ALTERNATIVES ANALYSIS

- ✧ **Non-Viable Alternatives:**
  - Point of Use/Point of Entry Devices
  - Multi-Use Wells
  - Connection to Red Cliff Estates
  - Bottled Water
- ✧ **Not eligible for funding**
- ✧ **Not long term, sustainable options**
- ✧ **Contaminated wells remain connected to service lines to homes and businesses**

# ALTERNATIVES ANALYSIS

## ▶ **Public Water System Alternatives**

### ■ **Water Supply Locations**

- State of Montana Land
- Clancy School
- Mark's Ranch Inc.

### ■ **Storage Tank Locations**

- BLM South Site
- BLM North Site
- Mark's Ranch Inc.



# ALTERNATIVES ANALYSIS

## ➤ Public Water System Alternatives

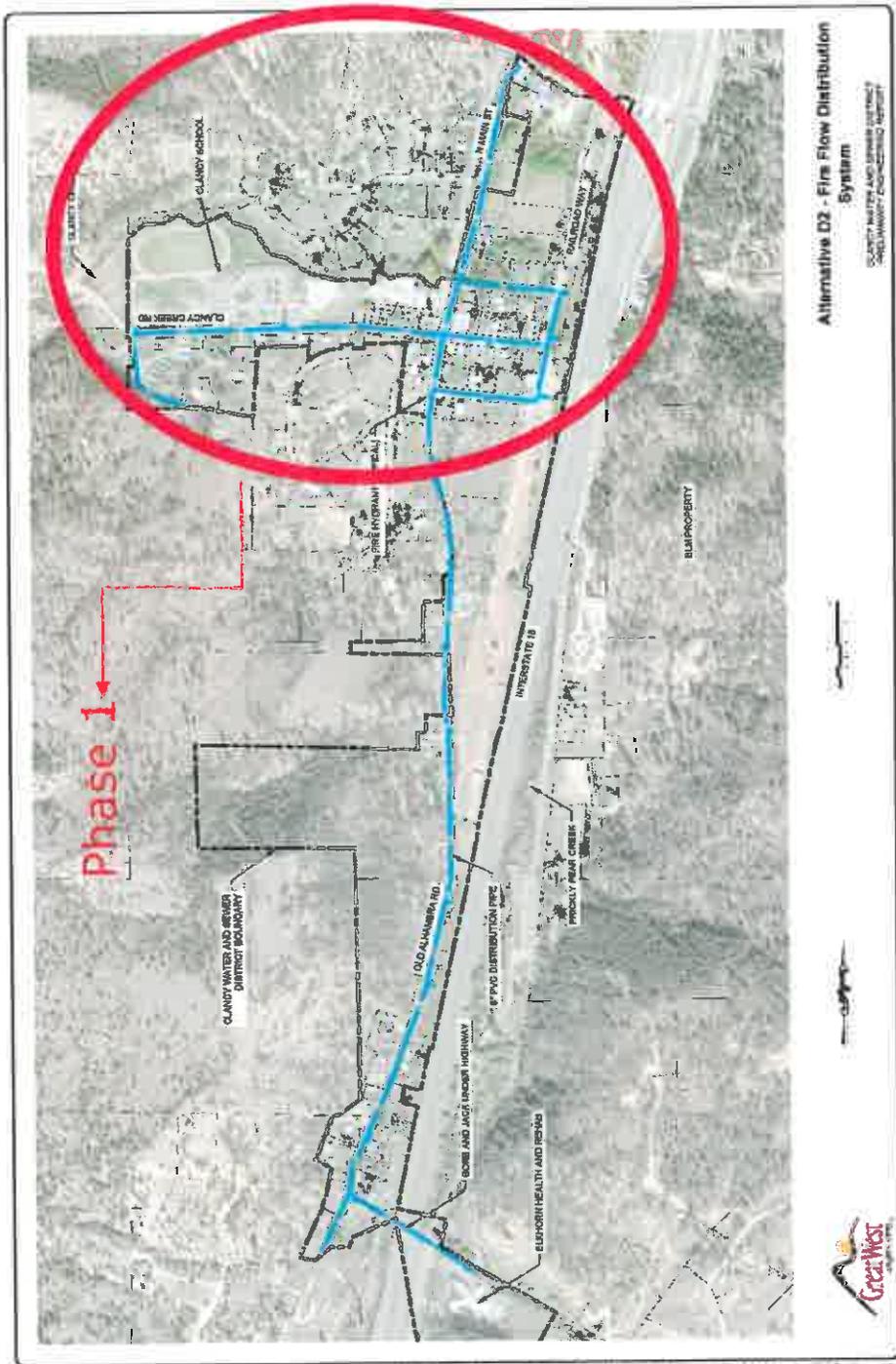
- Storage Tank Types
  - On-grade Glass Lined Bolted Steel
    - Low maintenance costs, expandable
  - On-grade Welded Steel
    - Higher maintenance costs (recoating required) than other options
  - Buried Prestressed Concrete
    - Low maintenance costs, longest life, high capital costs compared to bolted or welded steel
  - Buried Fiberglass
    - Low maintenance costs, shorter life, highest capital costs

# ALTERNATIVES ANALYSIS

## ▶ **Public Water System Alternatives**

- **Distribution System**
  - **Fire Flow System**
    - Includes additional storage capacity and hydrants
  - **Non Fire Flow System**
    - Smaller storage tank and no hydrants
  - **Phased Approach**

# ALTERNATIVES ANALYSIS



# SELECTION OF PREFERRED ALTERNATIVE

## Ranking Criteria

- Life cycle cost analysis
- Operation and maintenance considerations
- Permitting issues
- Social impacts
- Environmental impacts
- **Public health and safety**
- Land acquisition
- **Public Opinion**

# **DRAFT PREFERRED ALTERNATIVE**

- ▶ **Water Supply**
  - Clancy School Site
- ▶ **Storage**
  - Mark's Ranch Inc. Site
  - On-grade Glass Lined Bolted Steel Tank
- ▶ **Distribution**
  - Phase 1, No Fire Flow
- ▶ **Total Estimated Project Costs:**
  - Capital Cost: \$2,886,000
  - O&M Cost: \$44,700

# PROJECT FUNDING STRATEGY

- ▶ **Funding Sources**
  - TSEP – Treasure State Endowment Program
  - DNRC – Department of Natural Resources and Conservation
  - CDBG – Community Development Block Grant Program
    - **QUALIFYING INCOME SURVEY REQUIRED**
  - SRF – State Revolving Fund
  - RD – U.S. Department of Agriculture Rural Development
    - **QUALIFYING INCOME SURVEY REQUIRED FOR GRANT ELIGIBILITY**

# PROJECT FUNDING STRATEGY

## ▶ Target Rate Analysis for Grant Eligibility

Median Household Income (MHI) Based on 2015  
American Community Survey

= \$75,000

Department of Commerce Target Rate Threshold

= 27.1%

Low and Moderate Income Percent

= 1.4% of MHI

Water Systems

Clancy Water Only Target Rate

= (\$75,000) \* (1.4%)

= \$1,050/year

= \$87.50/month

# PROJECT FUNDING STRATEGY

## ▶ TSEP

- 100% of Target Rate: \$500,000
- 125% of Target Rate: \$625,000
- 150% of Target Rate: \$750,000
- Dollar for dollar match
- Bi-annual funding cycle
- Focus on benefit to public health and safety

## ▶ DNRC

- \$125,000 – target rate doesn't apply
- No match
- Bi-annual funding cycle
- Focus on benefit to renewable resources

# PROJECT FUNDING STRATEGY

## CDBG

- 51% Low and moderate income (LMI)
- 25% Match
- Annual program
- Target rate and LMI determined eligibility
- **Clancy W&S District needs qualifying income survey to be eligible**

## SRF

- Low interest loans (2.5% currently)
- Up to 30 year term
- 50% Loan forgiveness up to \$500,000
- Open cycle

# PROJECT FUNDING STRATEGY

## RD

- Grant/Loan Combination
- Open cycle
- 40 year term
- Interest rates based on MHI
  - Poverty Rate: MHI < \$38,205
    - Loan rate of 2.375%, up to 75% grant for a project with significant public health and safety and regulatory issues
    - **Clancy W&S District would need qualifying income survey**
  - Intermediate Rate: MHI above \$38,205, below \$47,757
    - Loan rate of 3.125%, up to 45% grant for a project with significant public health and safety and regulatory issues
    - **Clancy W&S District would need qualifying income survey**
  - Market Rate: MHI over \$47,757
    - Loan rate of 3.875%, no grant

# FUNDING SCENARIOS

## ➤ With CDBG & RD qualifying income survey:

- TSEP
- DNRC
- CDBG
- RD

## ➤ Estimated User Rate:

- \$83 to \$93/month

# FUNDING SCENARIOS

## ➤ Without a qualifying income survey:

- TSEP
- DNRC
- SRF Loan Forgiveness (\$500,000)
- SRF Loan (2.5%/30 yrs)

## ➤ Estimated User Rate:

- \$132/month

# **WHERE WE GO FROM HERE**

- ▶ **Public Comment**
- ▶ **Finalize Income Survey**
- ▶ **DNRC Grant Application – May 15, 2018**
- ▶ **TSEP & Environmental Public Meeting – May 2018**
- ▶ **TSEP Grant Application – June 15, 2018**
- ▶ **RD Application – June 2018**
- ▶ **Grant Awards – May 2019**
- ▶ **Design – July 2019**
- ▶ **Advertise and Bid Project – January 2020**
- ▶ **Construction – May 2020**

# WATER SYSTEM IMPROVEMENTS

CLANCY WATER AND SEWER DISTRICT  
PUBLIC MEETING

April 12, 2018

[www.clancyinfrastructure.com](http://www.clancyinfrastructure.com)



## LEGAL NOTICE - PUBLIC HEARING

The Clancy Water and Sewer District will hold a public hearing on April 12, 2018 at 6:30 p.m., at **INSERT LOCATION AND ADDRESS**. The District Board has scheduled the hearing to obtain public comments regarding a preliminary engineering report (PER) and recommended improvements for a community drinking water system.

At the public hearing, a representative of Great West Engineering will describe how the PER was prepared and explain the proposed project, including the purpose, project activities, budget, possible sources of funding, and the potential impact of the project on user rates. All interested persons will be given the opportunity to ask questions and to express their opinions regarding the PER and the proposed project.

Comments may be given orally at the hearing or submitted in writing by the end of the public hearing. Visit [www.clancyinfrastructure.com](http://www.clancyinfrastructure.com) for more project information.

The District will make reasonable accommodation for any known disability that may interfere with a person's ability to participate in this public hearing. Persons needing an accommodation must notify Board Secretary Lori Gilliland at (406) 465-4772 no later than April 11, 2018 to allow adequate time to make needed arrangements. You may also write to the District via email at [LGilliland@mt.gov](mailto:LGilliland@mt.gov) to make your request known or to comment on the proposed project.

Clancy Water and Sewer District  
Clancy, Montana

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Dave Leitheiser, President

Publish: The Boulder Monitor

April 4, 2018  
April 11, 2018



**CLANCY WATER & SEWER DISTRICT**  
Water System Improvement Project  
Public Meeting  
April 12, 2018  
Sign-In Sheet

Name	Company	email	Telephone
Bob Marka		bobmarka@brownmtn.net	933 5589
Bob Muelken			
Cory Kirsch			
Megan Bullock	Jefferson County	mbullock@jeffersoncounty-nt.gov	225-4126
Sue Johnson			
Bob Johnson		bob.johnson@astgrave.com	
Hoti Gilliland	CNSD Board		
Bill Hammer	prop. owner	bhammer@hdtmail.com	406-933-5742

**Clancy Water-Sewer District Board**  
(Regular Meeting Minutes: March 27, 2018)  
(6:30p.m. Clancy Library)

*Board Members:*

*Present: Secretary Lori Gilliland, Bob Johnson and Bill Hammer*

*Absent: President David Leitheiser, Vice President vacant, 5<sup>th</sup> board member vacant*

*Quorum present? Yes*

*An attendee list was collected and is available, there were 6 attendees*

*Meeting called to order at 6:31 p.m. by Secretary Lori Gilliland*

*Meeting Minutes: Lori Gilliland read the minutes from February, then she made the motion to approve, Bob Johnson 2<sup>nd</sup> the motion and all agreed.*

*Announcements - Correspondence:*

*The drawing for the donated flat screen tv was held. County Commissioner Cory Kirsch drew a name and addressed slip of paper from the completed survey list. The Lauden's name was pulled from the lot. Lori Gilliland will call to let them know they won, and that they can pick it up at the PER public hearing on April 12<sup>th</sup>.*

*Matt Strozewski graduate dissertation for the Clancy Water Testing project will be at Montana Tech April 19<sup>th</sup>.*

*Reports:*

*Great West Engineering Water PER – Collette Anderson is now the project manager for the Clancy Water PER. She assisted with the previous PER. They are very close to finishing the Water PER, three optional sites have been selected and the property owners will be contacted. The cost estimates are complete. The final portion to be completed will be the list of funding sources and scenarios depending on the income survey. The next step will be applying for grants, first would be for the DNRC- RRGL (renewable resource) for \$125,000.*

*Old Business:*

*The income survey has been hand delivered to the residents of the district on March 1<sup>st</sup>. Then the board went out a 2<sup>nd</sup> time to remind the residents to survey was due March 16<sup>th</sup> to possibly win a flat screen tv at the next meeting March 27<sup>th</sup>. There are three grants that will require a salary survey.*

*Two Clancy Board Vacancies, nominations and voting tabled until a later date*

*Regular Business:*

*Community Event- Public Hearing is set for April 13<sup>th</sup>, Megan and Collette will plan and prepare the event, a public notice will be posted at least ten days in advance. Collette also informed the district that there is a link for the Clancy Water Project at [www.clancyinfrastructure.com](http://www.clancyinfrastructure.com).*

*New Business:*

*There is another Clancy school board meeting the same evening as the PER public hearing, Megan will attend the school board meeting and then attend the districts event. The school property is a possible option for a district water source.*

*Public Comment:*

*Bob Marks asked what the status was for the survey collection, there need to be another seven. 45 of 78 are completed. Megan has mailed 21 surveys after the due date to try and improve the response rate.*

*Bob was asking about the option of using bottled water and what the cost would be? He also was wondering about the next phases, who will pay for what and how are the rates determined. He was informed most of those questions will be answered at the PER public hearing and in the final report.*

*Next Agenda: topics could be Great West PER, income survey and community event*

*Meeting adjourned at 7:32 p.m.*

*The next meeting will be April 24, 2018*

**Clancy Water-Sewer District Board**  
(Regular Meeting Minutes: February 27, 2018)  
(6:30p.m. Clancy Library)

*Board Members:*

*Present: President David Leitheiser, Vice President Dominic Bair, Secretary Lori Gilliland and Bob Johnson*

*Absent: 5<sup>th</sup> board member (vacant)*

*Quorum present? Yes*

*An attendee list was collected and is available, there were 6 attendees*

*Meeting called to order at 6:43 p.m. by President David Leitheiser.*

*Meeting Minutes: Lori Gilliland read the minutes from January, then she made the motion to approve, Bob Johnson 2<sup>nd</sup> the motion and all agreed.*

*Correspondence:*

*The Jefferson County Commissioners approved a contract for \$800 for the Midwest Assistance Program to collect and compile the District's income survey.*

**Reports:**

*Great West Engineering Water PER - Todd Kuxhaus continues to work on the project, currently looking at property values for possible well sites and storage sites. He is also looking into researching other water sources such as the Clancy School and Red Cliff Estates. The completed plan will require further funding to proceed and the survey results to determine qualification for grants.*

*Old Business:*

*The income survey has been approved by the Montana Department of Commerce. Megan Bullock has printed out the surveys for hand delivery to all the district's residents. The board members will meet on March 1st at the Clancy Library at 6:30 to deliver the surveys door to door. The plan is to follow up with the residents the following week. Completed surveys will be due March 16th for the residents to qualify for the donated flat screen TV. The drawing will be held at the Board meeting March 27<sup>th</sup>.*

*Regular Business:*

*New Business:*

*Megan will attend the next School Board Meeting in March 10<sup>th</sup> to determine if there would be any interest in looking into working with the District.*

*A Community Event/Public Hearing on the PER is planned for April 12<sup>th</sup> at 6:30 pm. Megan will plan the event.*

*Public Comment:*

*Owner of the Alhambra RV park attended the meeting and was informed the park was not currently within the Water and Sewer District.*

*Erinn Zindt submitted an e-mail as public comment.*

*"I spoke with County Commissioner Kirsch, the County Attorney and Megan Bullock to bring up the project funding application fees and the need for an inter-local agreement between the County and the District if there are any stipulations to the funds that have been/may be provided.*

*While it is unknown at this time what funding agencies the District would want to consider submitting applications to until the income survey is complete, it is worth noting the costs and time frames associated. Per Todd with Great West, funding application preparation costs are as follows:*

*TSEP = \$7,000*

*RRGL= \$3,000*

*CDBG = 10,000*

*SRF = 1,000*

*RD = 5,0000*

*Your engineer will provide guidance, but please know that RRGL is due May 15, 2018 and TSEP is assumed to be early to mid June and are accepted in even years only. CDBG deadline has not been announced but in the past has been in June or July annually. This is a tight time frame for an application to be put together, but the District and County need to start the discussion to plan out paying for the application submittals and if they want to try to push for applications this year. Special meeting dates may be needed to make all of this happen, so please stay be flexible and stay in communication with each other."*

*Cory Kirsch commented, that the last PER cost for the Waste Water System was paid for through an MOU with the county and is considered a loan to the District.*

*The board will require a vote on a Resolution for Great West Engineering to apply for grants.*

*Erinn would like to set up board training sometime in April or May.*

*Next Agenda: topics could be Great West PER status, income survey and community event*

*Meeting adjourned at 7:50 p.m.*

*The next meeting will be March 27, 2018*

**Clancy Water-Sewer District Board**  
(Regular Meeting Minutes: January 23, 2018)  
(6:30p.m. Clancy Library)

*Board Members:*

*Present: President David Leitheiser, Vice President Dominic Bair, Secretary Lori Gilliland and Bob Johnson*

*Absent: 5<sup>th</sup> board member (vacant)*

*Quorum present? Yes*

*An attendee list was collected and is available, there were 6 attendees*

*Meeting called to order at 6:43 p.m. by President David Leitheiser.*

*Meeting Minutes: Lori Gilliland read the minutes from the December, then she made the motion to approve, Nic Bair 2<sup>nd</sup> the motion and all agreed.*

*Correspondence:*

*Letter from the IRS to President David Leitheiser asking for clarification on Form 990 and pending nonprofit exclusion for the District.*

*Reports:*

*The final report for the Clancy Drinking Water Project has been completed. A copy will be available at the Clancy Library and the conclusions and recommendations in the next district newsletter. Once the final Graduate Thesis is complete, the district will receive a copy. The thesis will include Radon testing results.*

*Old Business:*

*The DNRC Grant agreement has been signed and delivered by President David Leitheiser.*

*Regular Business:*

*Great West PER preparation is almost complete. Todd Kuxhaus brought in large maps showing alternative water systems and possible phases for installation, with locations for well sites and storage placement. There was some discussion about adding a fire fighting system into the PER as another option, which would increase the overall cost. Clancy has a fire rating of 7 out of 10.*

*New Business:*

*Lori Gilliland nominated Bill Hammer to the Clancy Water and Sewer District board effective immediately, David Leitheiser 2<sup>nd</sup> the motion and all approved. Nic Bair's last day will be February 27<sup>th</sup>, and Bob Johnson will inherit the meeting sign and put it out before every meeting.*

*The board will be preparing to push out an income survey of district residents needed for future grant applications, the survey will need to be approved by the state before they are handed out. The district will also begin planning for a community event/public hearing to discuss the Water PER and after the event, the district will draw a winner for a flat screen tv donated by Great West for those who completed a survey.*

*Public Comment:*

*Next Agenda: topics could be Great West PER status, income survey and community event*

*Meeting adjourned at 8:11 p.m.*

*The next meeting will be February 27, 2018*

**Clancy Water-Sewer District Board**  
(Regular Meeting Minutes: December 19, 2017)  
(6:30p.m. Clancy Library)

*Board Members:*

*Present: Vice President Dominic Bair, Secretary Lori Gilliland and Bob Johnson*

*Absent: President Dave Leitheiser and 5<sup>th</sup> board member (vacant)*

*Quorum present? Yes*

*An attendee list was collected and is available, there were 3 attendees*

*Meeting called to order at 7:26 p.m. by Vice President Dominic Bair. The meeting was a week early due to the upcoming holidays. It started late due to poor road conditions and waiting for a quorum.*

*Meeting Minutes: Lori Gilliland read the minutes from the November meeting, then she made the motion to approve, Bob Johnson 2<sup>nd</sup> the motion and all agreed.*

*Correspondence: The district received an award letter from the Montana Department of Commerce Treasure State Endowment Program (TSEP) dated December 1, 2017. Both Erin Zindt and Todd Kuxhaus have left messages with the department with a question about the requirement for insurance coverage and proof of Worker's Compensation.*

*Dominic Bair handed a letter of resignation to Lori Gilliland, his last meeting will be February 28<sup>th</sup>.*

*Reports:*

*The final report for the Clancy Drinking Water Project has not yet been completed. Megan will follow up on it. Lori will put the conclusions and recommendations in the next district newsletter.*

*Old Business:*

*Board member Bob Johnson will need to fill in a declaration of candidacy for the next election and return to the Jefferson County Clerk and Recorder's office by February 12, 2018.*

*New Business:*

*The board discussed and decided on Resolution 2017-2 accepting the DNRC grant for \$15,000. Dominic Bair moved to approve and Bob Johnson 2<sup>nd</sup> the motion, all agreed. Lori Gilliland will have David Leitheiser sign it and send it to the Department.*

*The board discussed and decided to authorize selecting professional services from the Jefferson County engineering firm Great West for a Public Water System PER for Clancy pending approval from the Jefferson county attorney. The cost will be \$35,000.00. Lori Gilliland moved to authorize, Dominic Bair 2<sup>nd</sup> the motion and all agreed. Lori Gilliland will send a copy to the county for review, then have David Leitheiser sign it after it has been deemed acceptable by the attorney.*

*Todd Kuxhaus has stated that Great West Engineering is willing to donate a flat screen tv for those in the district that fill in an income survey. The income survey will need to be completed by a third party by the end of March. He*

*also stated the best-case scenario for breaking ground would be 2020. The first phase would be finding water rights.*

*The county paid for the survey copies and postage in the past, and the district mailing list will need to be updated. But Todd thinks the survey's will need to be hand delivered to insure we get the number of response required by the state.*

*Erin Zindt called in and would like the board to come up with a date in the future for training. She recommended the board to consider bringing in Dan Clark in March or April, since he has done this for other districts.*

*Public Comment:*

*Bill Hammer said he will fill out the declaration for to the county for the next general election, and is willing to join the board before then. Lori will place his nomination on the next agenda. He also stated that the board doesn't need to have the next Vice President nomination on the agenda.*

*Next Agenda: topics could be Montana Tech project final report, DNRC grant, TSEP grant, Great West PER contract, and a Board nomination*

*Meeting adjourned at 8:13 p.m.*

*The next meeting will be January 23, 2018*

**Clancy Water-Sewer District Board**  
(Regular Meeting Minutes: November 28, 2017)  
(6:30p.m. Clancy Library)

*Board Members:*

*Present: President Dave Leitheiser, Vice President Dominic Bair, Secretary Lori Gilliland and Bob Johnson*

*Absent: 5<sup>th</sup> board member (vacant)*

*Quorum present? Yes*

*An attendee list was collected and is available, there were 7 attendees*

*Meeting called to order at 6:31 p.m. by President Dave Leitheiser*

*Meeting Minutes: Lori Gilliland read the minutes from the October meeting, then she made the motion to approve, Dave Leitheiser 2<sup>nd</sup> the motion and all agreed.*

*Correspondence: The district is expecting a letter from the Montana Department of Commerce Treasure State Endowment Program (TSEP).*

*Dave Leitheiser received a letter from the Secretary of State requiring clarification that the Clancy Water and Sewer District Board is a local governmental group and not a for profit organization. Dave will respond.*

*Reports:*

*Matt Strozewski from Montana Tech delivered copies of a draft final report for the Clancy Drinking Water Project. Megan found a few errors in the report and a final report will be ready by the next meeting. Matt read aloud the conclusions and recommendations from the draft. It was concluded the source of elevated nitrate levels in the Clancy drinking water wells is septic effluent. It is recommended a centralized drinking water system be installed.*

*Old Business:*

*The two nominated board members Dominic Bair and Bob Johnson are up for re-election. Bonnie Ramey will send out the notices.*

*Lori will put together a newsletter once the MT Tech final report is obtained. She will also include information about the DNRC and TCEP awards along with the upcoming PER.*

*Lori Gilliland moved that the district allow the Department of Commerce to submit the district map to the census PSAP Program. Nic 2<sup>nd</sup> the motion, all approved.*

*New Business:*

*It was decided to move the December meeting up to the 19<sup>th</sup> due to the upcoming holidays. DNRC grant agreements for \$15,000 will need to be signed at the next meeting. The board will need to select a service provider and then vote on a resolution authorizing the selected service provider to proceed after the county attorney reviews the scope and contract for developing a Preliminary Engineering Report for a centralized water system for the district. The board may need to set up a special meeting to move on the TCEP grant before the next meeting in January.*

*Public Comment:*

*Bob Marks wants the Montana Tech report sent to all those in the district with an email address. And he was interested if the county contacted those owners and residents about the negative well testing results and if there were any instructions on what they may do about it since it will be quite a while before a system will be in place. Megan said the county did send out letters and will follow up on them to see if they have done anything such as buying bottled water or install a water purifying system.*

*Next Agenda: topics could be Montana Tech project final report, DNRC grant, service provider selection and PER, Board election.*

*Meeting adjourned at 7:36 p.m.*

*The next meeting will be December 19, 2017*

**Clancy Water-Sewer District Board**  
(Regular Meeting Minutes: October 24, 2017)  
(6:30p.m. Clancy Library)

*Board Members:*

*Present: President Dave Leitheiser, Secretary Lori Gilliland and Bob Johnson*

*Absent: Vice President Dominic Bair and 5<sup>th</sup> board member (vacant)*

*Quorum present? Yes*

*An attendee list was collected and is available, there were 6 attendees*

*Meeting called to order at 6:31 p.m. by President Dave Leitheiser*

*Meeting Minutes: Lori Gilliland read the minutes from the July meeting, then she made the motion to approve, Bob Johnson 2<sup>nd</sup> the motion and all agreed.*

*Correspondence: Letter from the Montana Department of Natural Resources and Conservation awarding the Clancy Water and Sewer District \$15,000 in grant funding for a planning project.*

**Reports:**

*Matt Strozewski from Montana Tech discussed the latest results from the Clancy Drinking Water Project. The results for the four Isotope samples sent to Canada for processing have been completed and will be included in the final report which should be ready in November.*

*Old Business:*

*The Clancy WSD community event was a success. There were 15 attendees with another 9 or more resource partners. The Boulder Monitor published an article about the poor water quality in Clancy soon after the event.*

*New Business:*

*Lori Gilliland attended a conference recently and met with staff from the Department of Commerce who was promoting and educating the public about the upcoming U.S. Census in 2020. They had various handouts and one of the topics covered was the Participant Statistical Areas Program. The program may allow the county to legally define the Clancy and Water district as a separate geographic area for census purposes. It would be a statistical boundary for future data collection. This might be helpful if another salary survey fails in the future. Lori will send a copy of the district map to the Economic and Information Center at Commerce and to ask them what the county need to do to initiate the process if they choose to do so.*

*Public Comment:*

*Erin Zindt suggested the board or Megan give the Clancy Library the various handouts pertaining to wells and water quality. Megan delivered them.*

*An attendee asked if the Clancy School water was safe for her children? She read the Boulder article and came to meeting. Megan assured her the water for the school is tested monthly since it is considered a public water system and it is safe. Megan also said anyone can to the DEQ website and look at any public systems testing results.*

*Next Agenda: topics could be Montana Tech project, Great West Engineering PER, Board Vacancy, PSAP 2020*

*Meeting adjourned at 7:06 p.m.*

*The next meeting will be November 28, 2017*

*Minutes submitted by Secretary, Lori Gilliland*

**Clancy Water-Sewer District Board**  
(Regular Meeting Minutes: July 25, 2017)  
(6:30p.m. Clancy Library)

*Board Members:*

*Present: Vice President Dominic Bair, Secretary Lori Gilliland and Bob Johnson*

*Absent: President Dave Leitheiser & 5<sup>th</sup> board member (vacant)*

*Quorum present? Yes*

*An attendee list was collected and is available, there were 4 attendees*

*Meeting called to order at 6:35 p.m. by Vice President Dominic Bair*

*Meeting Minutes: Lori Gilliland read the minutes from the June meeting, then Nic made the motion to approve. Bob 2<sup>nd</sup> the motion and all agreed.*

*Correspondence: None*

**Reports:**

*Raja Nagisetty from Montana Tech discussed the latest results from the Clancy Drinking Water Project. So far, they have sampled five times from 21 wells and from both Clancy Creek and Prickly Pear. The last round of sampling included testing for Uranium. Nitrate analysis show that five wells measured nitrate concentrations above EPA Maximum Contaminant Level of 10mg/L. He also brought various maps for the board to review. The maps were put together using the average of the last four samples. The team used Survey grade GPS and a Solinst Water Level Meter to determine the groundwater elevations and gradients. Static well levels are from a low of 2.6 to 67.8 feet with an average of 21.2 feet. In general, the groundwater flow is towards north-east.*

*Chloride, which can be used to determine septic effluent contamination is connected with salt levels from human consumption. Ammonia determines fresh sewage, and there were no issues found in the district. Ph levels of 6.5 to 8.5 is normal. High pH and Ammonia levels is bad for fish in the surface waters. Fecal Coliforms come from human digestive systems. In the June sampling 6 wells tested positive for total coliforms and no wells that were analyzed were positive for E coli (Fecal Coliform). Specific Conductivity, a measure of electrical conductivity, is routinely used to measure the ionic content of a solution. Specific conductivity is directly linked to total dissolved solids.*

*The groundwater wells ORP (Oxidation Reduction Potential) is in the range of 160-300 (min-max considering all the wells and 4 sampling events). This ORP range suggest that the conditions are favorable for ammonia to nitrate conversion. In addition, the conditions are not favorable for denitrification.*

*Uranium tests show that 37% were above EPA Maximum Contaminant Level (MCL) of 30 micrograms per liter. Long term exposure to uranium could affect the kidneys.*

*Four Isotope samples have been sent to Canada for processing which will take up to two months.*

*Old Business:*

*The Clancy WSD community event is scheduled for September 26<sup>th</sup> at the Bill Gruber Fire Station.*

*Public Comment:*

*Bill Hammer noticed the changes in the district water levels since May. He learned about the “cone of depression” when water usage changes, such as watering the lawn or garden pulls water from further out.*

*Mark Gornick, a homeowner in the Clancy area, stated he has an RO system for his recycles the waste water back into the system.*

*Next Agenda: topics could be Montana Tech project, Great West Engineering PER, Board Vacancy, Special Community event, and a possible visit by Scott Peterson from DEQ to discuss Nitrates and Drinking water.*

*Meeting adjourned at 7:35 p.m.*

*The next meeting will be August 22, 2017*

*Minutes submitted by Secretary, Lori Gilliland*

**Clancy Water-Sewer District Board**  
(Regular Meeting Minutes: June 27, 2017)  
(6:30p.m. Clancy Library)

*Board Members:*

*Present: President Dave Leitheiser, Vice President Dominic Bair, Secretary Lori Gilliland and Bob Johnson*

*Absent: 5<sup>th</sup> board member vacant*

*Quorum present? Yes*

*An attendee list was collected and is available, there were 8 attendees*

*Meeting called to order at 6:30 p.m. by President Dave Leitheiser*

*Meeting Minutes: Lori Gilliland read the minutes from the May meeting, then she made the motion to approve. Bob 2<sup>nd</sup> the motion and all agreed.*

*Guest Speaker:*

*Brian Gartland from the Montana Department of Natural Resources spoke about water rights in general. He said the DNRC is concerned with water quantity not quality, for permitting. He answered question from the board and attendees. He said a 10 to 20 house public water system would require a permit. He said planning for a public water system would require water rights mitigation including retiring existing rights. All this will take a long time in such a closed system. Steps required in the pre-application process includes; determining water availability, a mitigation plan and time frame (9 to 12 months), public notice to grant a permit, and hiring a consultant. It will also cost about \$1,500 to \$2,000 for filing and engineering costs.*

*There was some discussion about older exempt wells and agricultural water rights that might make it difficult to find the required 10-acre foot water source for a public system. There are many pre-1973 wells and water rights in the area. It may require a combined appropriation to find a good location for a public well.*

*Correspondence:*

*Erinn Zindt sent an email with a sample letter concerning vacating the 5<sup>th</sup> board member position Lori Gilliland filled in the template for the June 27<sup>th</sup> meeting.*

*Reports:*

*Megan Bullock brought in the latest test results from May and June which included uranium testing. Two wells tested positive for chloroform, two wells exceeded the EPA level for Nitrates, and seven wells exceeded EPA levels for Uranium. She said Montana Tech will continue with testing in July and August, which will include testing for isotopes to determine speciation for the nitrate source.*

*Old Business:*

*The Clancy WSD community event is scheduled for September 26<sup>th</sup> at the Bill Gruber Fire Station.*

*Clancy's Day booth was a success, Megan, Dave and Lori said there was much more interest from the public.*

*Megan brought the Montana Tech results on a display and was a popular focal point for the event. Bruce Binkowski stopped by and dropped off save the date cards for the September event. Also available at the booth was a new manual for private well owners and free water sample kits. A few district residents stopped by and Megan was able to get permission to add a few more wells for the Montana Tech testing pool.*

*Public Comment:*

*Bob Marks feels the mapping results should be made public for those in the district to better understand the gravity of the situation. The county is still considering the land owner's privacy versus the public's right to know. He also wanted the board to know that the maintenance of a public water system is very expensive. There are new rules about water testing which is three times more than the operating costs itself. He also thinks the county should be providing water to the residents since this could be considered a public health crisis. Bob also commented that he thinks the board should open the PER to other engineering firms despite the new law that doesn't require a RFP for projects under \$50,000. He does not think the PER for the Clancy WSD waste water system was sufficient.*

*Items for Review:*

*Todd Kuxhaus from Great West brought in documents for signature to complete grant applications for the district. He sent a template to Lori Gilliland to fill in for the TSEP Grant. It was for a resolution authorizing submission. Todd said it was important to complete tonight, since the funding granted on a first come first serve basis. Nic Bair moved that the board approve Resolution 2017-1 to apply for a TSEP grant through the Montana Department of Commerce. Lori Gilliland 2<sup>nd</sup> the motion, all approved. Dave Leitheiser signed the resolution. Dave also signed forms provided by Todd for DNRC planning grants. The project approved would start May 2018.*

*New Business:*

*Lori Gilliland brought up the topic concerning the board member Mr. Brian Erlandson and his prolonged absence. Mr. Erlandson has not attended a meeting since January 2016. Both Nic and Lori have made several attempts to contact Brian by phone and email with no response. Lori then sent a letter by mail with a resignation letter for him to sign with a pre-stamped envelope in May, again no response. Dave moved that the board vacate Brian Erlandson's position on the board, Nic 2<sup>nd</sup> the motion and all approved.*

*Next Agenda: topics could be Montana Tech project, Great West Engineering PER, Board Vacancy, Special Community event.*

*Meeting adjourned at 8:35 p.m.*

*The next meeting will be July 25, 2017*

*Minutes submitted by Secretary, Lori Gilliland*

**Clancy Water-Sewer District Board**  
(Regular Meeting Minutes: May 23, 2017)  
(6:30p.m. Clancy Library)

*Board Members:*

*Present: President Dave Leitheiser, Vice President Dominic Bair, Secretary Lori Gilliland and Bob Johnson*

*Absent: Brian Erlandson*

*Quorum present? Yes*

*An attendee list was collected and is available, there were 7 attendees*

*Meeting called to order at 6:34 p.m. by President Dave Leitheiser*

*Meeting Minutes: Lori Gilliland read the minutes from the April meeting and after making a few minor changes she made the motion to approve. Nic 2<sup>nd</sup> the motion and all agreed.*

*Correspondence:*

*The district received an email from Erinn Zindt to Bryan Gartland inviting him to attend a board meeting soon to answer any questions from the district concerning water rights. Lori contacted Bryan and he said he would attend the June meeting on the 27<sup>th</sup>.*

*The most recent Clancy WSD Newsletter was mailed out May 23<sup>rd</sup>. Lori placed copies at the post office and library, and hand delivered some to residents of the trailer court.*

**Reports:**

*Megan Bullock said that the next round of testing will be on June 20<sup>th</sup>. She also sent letter to those living in the district about the ongoing testing with an option to decline participation.*

*She also said that Montana Tech will include Uranium testing at no cost. She pointed out that elevated levels of uranium in drinking water may affect the kidneys at levels above 30 ug/L (parts per billion). R/O systems are effective.*

*Montana Tech will also be performing an isotope analysis to possibly determine the source of nitrates either geographical or biological.*

*Old Business:*

*Megan said Jefferson County Commissioners has approved payment for the Montana Tech project and the next PER for a water system.*

*The Clancy WSD community event is scheduled for September 26<sup>th</sup> at the Bill Gruber Fire Station.*

*Clancy's Day booth will have free water sample kits and handouts for well and septic maintenance. Megan will bring the preliminary reports from Montana Tech. Bruce Binkowski will produce save the date cards for the September event.*

*Public Comment:*

*Bill Hammer asked about the Red Cliff subdivision and their home owners association ownership of the shared well, and could it be expanded for use in town. Todd Kuxhaus said it was a good chance it would not work.*

*Items for Review:*

*Todd Kuxhaus from Great West said the applications for grants are not available until June and will also need the test results from Montana Tech for the application. He also said the Senate Bill 278 if passed will increase the minimum requirement for an RFP from \$20,000 to \$50,000. He will send a copy.*

*There were questions about the fire station and search and rescue wells and could they be tested in June?*

*New Business:*

*Next Agenda: topics could be DNRC & water rights, Clancy's Day, Montana Tech project, Great West Engineering PER*

*Meeting adjourned at 7:45 p.m.*

*The next meeting will be June 27, 2017*

*Minutes submitted by Secretary, Lori Gilliland*

**Clancy Water-Sewer District Board**  
(Regular Meeting Minutes: April 25, 2017)  
(6:30p.m. Clancy Library)

*Board Members:*

*Present: President Dave Leitheiser, Vice President Dominic Bair, Secretary Lori Gilliland and Bob Johnson*

*Absent: Brian Erlandson*

*Quorum present? Yes*

*An attendee list was collected and is available, there were 10 attendees*

*Meeting called to order at 6:31 p.m. by President Dave Leitheiser*

*Meeting Minutes: Lori Gilliland read the minutes from the March meeting and made the motion to approve. Dave 2<sup>nd</sup> the motion and all agreed.*

*Correspondence:*

*Erinn called then emailed Bryan Gartland at the DNRC, inviting him to attend a district board meeting soon to answer any questions related to water rights. Bryan called Lori and said he will be available for the June meeting.*

*Old Business:*

*Megan brought the latest results from the Montana Tech well testing project. The first round of testing was in February and the second round of testing was in April. On the list of 24 wells 10 have tested at 2.5 mg/l or higher for nitrates. One private well was over 10 mg/l. Most of these wells above 8 mg/l are along Clancy Creek Road in town.*

*Public Comment: Steve Marks wanted the board to consider the Red Cliff well as a possible source for a Clancy community water system. He also brought up the County Ag shop herbicide spill in the 80's and was wondering if that could be still an issue along Clancy Creek Road. Megan said the monitor test wells were pulled after the tests were clear years ago.*

*Bob Marks suggested the board needs to make the minutes and newsletters more readily available. Lori said she will contact the county about a webpage or adding a link to the districts Facebook page. She will also put together an email list for the newsletters.*

*There were questions about the businesses and the school property. Megan said these public wells are self-tested and report every month to the county and the results are available online at the Drinking Water Watch website.*

*There was discussion about the Clancy Volunteer Fire station and the well nearby that supports 4 or 5 homes. It was suggested that this should be added to the Montana Tech project for testing.*

*Items for Review:*

*The Board members voted to approve funding for the Montana Tech project for \$8,882.00 after Raja Nagisetty amended the proposal with a more in depth break down of the tasks and the hours it would take to complete them. Nic Bair moved that the board approve the funding, Bob 2<sup>nd</sup> the motion and all agreed.*

*The board still plans to have a booth at the upcoming Clancy Days event on June 10<sup>th</sup> next to the Gilliland's garage on Main street, and maybe have board members attend or have a booth at the Lake Helena Watershed event in August.*

*Bruce Binkowski confirmed he will assist the district with planning for a special community event. It was decided to hold it on September 26<sup>th</sup>, and possibly at the Clancy Fire Station. Nic will contact the Fire Chief.*

*New Business:*

*Todd Kuxhaus from Great West Engineering spoke about options to proceed with a new community water system Request for Proposal, starting with applying for a TCEP planning grant. Grants could cover up to \$15,000 for TCEP and \$15,000 for DNRC. Great Western offered to apply for the grants at no cost.*

*Todd said the district should leverage the grant cycles and phase in the water system in sections. A new PER from Great Western could be at a lower cost since they already have information from the Clancy Waste Water PER they put together a few years ago. He said this needs to be done soon, since the grant cycle is every two years.*

*Nic moves that the district has the county's engineering firm Great West apply for planning grants free of charge, when the grant applications are available. Dave 2<sup>nd</sup> the motion, all approved.*

*Next Agenda: topics could be Clancy's Day, Montana Tech project, Great West Engineering PER*

*Meeting adjourned at 8:15 p.m.*

*The next meeting will be May 23, 2017*

*Minutes submitted by Secretary, Lori Gilliland*

**Clancy Water-Sewer District Board**  
(Regular Meeting Minutes: March 28, 2017)  
(6:30p.m. Clancy Library)

*Board Members:*

*Present: President Dave Leitheiser, Vice President Dominic Bair, Secretary Lori Gilliland and Bob Johnson*

*Absent: Brian Erlandson*

*Quorum present? Yes*

*An attendee list was collected and is available, there were 6 attendees*

*Meeting called to order at 6:36 p.m. by President Dave Leitheiser*

*Meeting Minutes: Lori Gilliland read the minutes from the February meeting and made the motion to approve. Bob 2<sup>nd</sup> the motion and all agreed.*

*Correspondence: Megan emailed and brought an updated list of wells tested and the results, six wells have tested at elevated levels of Nitrates all up and down Clancy Creek Road. One well is the over the recommended level of 10 mg/l at 10.5 mg/l. That well also tested very high for Chloride at 209 mg/l, most all of rest averaged in the twenties. More testing will continue next week. The county has contacted the residents of that home. Clancy Creek, Lower and Upper Prickly Pear tested below .5 mg/l of nitrates.*

*Erinn says individual wells are not regulated. She was asked about testing for animal waste such as horses, but the Montana Tech testing could not speciate the results and it is very difficult to find the smoking gun or source of nitrates. It could be natural due to the soil and rock in the area, but likely from several sources.*

*Public Comment: County Commissioner Leonard Wortman brought a guest. Bruce Binkowski an Events Coordinator from the Jefferson County Planning Department. Bruce has offered his services to the district.*

*New Business:*

*Megan Bullock also brought a guest, Tony Prothero from Shedhorn Engineering to discuss what it would take to install a public water system and concerns over water rights. He said a system with a well producing under 10 acre feet a year doesn't need water rights, and some wells still could be kept online for irrigation. Wells producing 25 feet a year directly influenced by surface water require chlorination and dialing testing by a certified water operator.*

*The first step would be obtaining a Preliminary Engineering Report (PER). Possible types of systems could include a multiple user system or a public system. A public system would require water rights and might entail mitigation measures to obtain water rights for the system. A multiple user might be appropriate as most wells within the Clancy Water and Sewer District are exempt wells. State law provides an exemption when a groundwater appropriation does not exceed 35 gallons per minute and 10 acre-feet per year. For a public system, some wells may be required to be abandoned or be purchased by the district. The Department of Natural Resources and Conservation (DNRC) would be the state agency involved with the permitting process. Clancy is within a 'closed system' where any new water right volume use needs to be replaced with abandonment of an existing water right volume, but that will need to be clarified by DNRC.*

*Erinn suggested the district invite Bryan Garltand from the DNRC office in Helena to a meeting to answer any questions pertaining to water rights solutions. She also suggests that the district will need to consider looking for funding options to proceed with a Request for Proposal, and include Grant writing. A PER can cost between \$50,000 to \$75,000. They will also need a selection committee. The county paid for the Waste Water PER years ago and they have an engineering firm Great Western. There is a possibility to raise a mil from district and to raise tax dollars to support the districts efforts and to pay the county back for the first PER.*

*Bruce would like to assist the district with planning for a special community event, once the district has more information from Montana Tech project, possibly later in the summer. It was also suggested there be an article in the Boulder Monitor about the Montana Tech testing and the results once the report is complete to pique the interest of the district residents.*

*The board plans to have a booth again at the upcoming Clancy Days event on June 10<sup>th</sup>.*

*The Board members then discussed voting to approve funding for the Montana Tech project for \$8,882.00. Bob Johnson felt the board needed more information and moved that the discussion be tabled until the next meeting, Dave 2<sup>nd</sup> the motion and all approved. Erinn Zindt will contact Raja Nagisetty to ask for more details concerning the project, especially the section concerning reporting the results. What would that look like. The board asks that the information is send to the board before the next meeting so they may look at it before discussing it.*

*Items for Review:*

*The Clancy WSD Newsletter for the Spring of 2017 was completed by Lori Gilliland and the county mailed them out.*

*Lake Helena Watershed Group-Nic still plans to contact them about their next meeting and possible collaboration for the next Clancy Days event in June.*

*Next agenda topics could be Clancy Days, a Special Community Event after Labor Day, and continued reports on the Montana Tech project. The next Newsletter could go into more detail about the results and the negative health effects.*

*Meeting adjourned at 7:47 p.m.*

*The next meeting will be April 25, 2017*

*Minutes submitted by Secretary, Lori Gilliland*

**Clancy Water-Sewer District Board**  
(Regular Meeting Minutes: February 28, 2017)  
(6:30p.m. Clancy Library)

*Board Members:*

*Present: President Dave Leitheiser, Vice President Dominic Bair, Secretary Lori Gilliland and Bob Johnson*

*Absent: Brian Erlandson*

*Quorum present? Yes*

*An attendee list was collected and is available, there were 4 attendees, one of those called in*

*Meeting called to order at 6:34 p.m. by President Dave Leitheiser*

*Meeting Minutes: Lori Gilliland read the minutes from the January meeting and made the motion to approve. Dave 2<sup>nd</sup> the motion and all agreed.*

*Correspondence: None*

*Public Comment: None*

*New Business:*

*Megan Bullock brought the Montana Tech proposal submitted for the Clancy project. The five-page proposal includes the goals and objectives, implementation and budget. Megan and the County Commission requests the board secretary add this new business to the next board agenda so the district may discuss and vote on it.*

*Megan also brought copies of the preliminary results for the Montana Tech-Clancy project. There were five wells with elevated levels of Nitrates. Testing for Chloride may locate a possible plume or source of nitrates within the district. The rest of the preliminary results will be completed in March. All results are to be kept confidential.*

*Megan is now wondering if a public water system would be a better solution over a sewer system. It was not considered an option earlier, most within the district wanted to keep their wells. While any public system details are completely unknown at this time, a public water system in a closed basin with limited/if any new water rights available could require well owners give up their water rights to be able to use a public water supply. There would need to be another preliminary engineering report*

*Erinn made a comment that with the elevated nitrates found in privately owned, non-regulated wells,, the County Board of Health and Commission may have a responsibility to inform residents of the health concern and/or deal with the degradation of water quality from potential nitrate contributors such as area septic systems. She suggested the District work together with the County Commission and Board of Health to educate residents on the water quality concerns and potential resolutions. If the District sends out a letter/newsletter, it may be worthwhile to work with all entities and have everyone sign it to show the coordinated effort. It may be worthwhile for all stakeholders (District, Board of Health, Commissioners) to meet to discuss the ground water quality concerns and potential resolutions.*

*There was some talk of a state of emergency by the county commissioners, and having the national guard delivering water if needed. They were wondering what it would take to initiate such an action. But they will wait until after the water testing project is complete.*

*Items for Review:*

*Lake Helena Watershed Group-still need to contact them about their next meeting and possible collaboration for the next Clancy Days event in June.*

*Next Newsletter-Montana Tech Graduate Project*

*Meeting adjourned at 7:47 p.m.*

*The next meeting will be March 28, 2017*

*Minutes submitted by Secretary, Lori Gilliland*

**Clancy Water-Sewer District Board**  
(Regular Meeting Minutes: January 24, 2017)  
(6:30p.m. Clancy Library)

*Board Members:*

*Present: President Dave Leitheiser, Secretary Lori Gilliland and Bob Johnson*

*Absent: Vice President Dominic Bair and Brian Erlandson*

*Quorum present? Yes*

*An attendee list was collected and is available, there were 9 attendees*

*Meeting called to order at 6:32 p.m. by President Dave Leitheiser*

*Meeting Minutes: December meeting minutes in Dropbox where approved with the request to change the incorrect last name of the county employee Melissa Morris to Melissa Harris.*

*Correspondence: County Courier invoice, Cory Kirsch and the county commissioners are aware of the new \$5.00 charge to post the monthly Clancy WSD Board meeting agenda with the Jefferson Courier. The county will pay the invoices for the district.*

*Public Comment: County Commissioner Bob Mullen, was wondering if it would be necessary to proclaim a state of emergency to have the means to apply for any new infrastructure funds available in the upcoming state biennium 2018-2019. He also suggested the board contact Bruce Binkowski an events coordinator to assist with the district community outreach.*

*New Business:*

*Megan Bullock brought to the meeting Dr. Raja Nagisetty and Matt Strozewski from the Environmental Engineering Department at Montana Tech. The Department have already begun preliminary water testing within the district and brought the results to the meeting. They are using GIS mapping for the wells tested and will identify gradients between them.*

*Montana Tech will move forward with the water testing in March. They also plan to test the flows of nutrients into the Prickly Pear Creek. This graduate project will take about 6 months to complete with samples taken in the Spring, Summer and Fall. Megan and the Montana Tech graduates will come up with a list of wells to be tested next.*

*They also still plan to educate the students at the Clancy School about water quality. They will be able to bring a lab to the school and do onsite testing.*

*For the new attendees, Megan listed the reasons the county want assistance from Montana Tech, and that is to further educate those within the district the need for a waste water system. She pointed out that it took three attempts to form the district and the inability to complete an income survey will require more data, information and outreach to get the message across to those living in Clancy. She said 90% of the wells in the district do not meet setback standards. She told them that with the Great West Preliminary report, that with all the grants*

*available it would cost each residence about \$100 a month, without grant funding it would not be feasible, therefore it is important that we complete a salary survey to qualify for such grants.*

*Items for Review:*

*Lake Helena Watershed Group*

*Next Newsletter-Montana Tech Graduate Project*

*Meeting adjourned at 7:36 p.m.*

*The next meeting will be February 28, 2017.*

*Minutes submitted by Secretary, Lori Gilliland*

May 15, 2018

Clancy Water and Sewer District  
Box 16 North Main St  
Clancy, MT

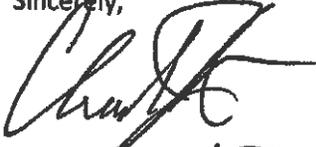
To Mr. Leitheiser and the District Board,

I am writing to express my support for the Districts' water system project. The proposed project is necessary to protect public health and safety of our residents.

For the Clancy Business community, I am concerned with the current state of the Clancy drinking water. Residents and Businesses in Clancy have been dealing with nitrates and other contaminants in our drinking water for a long time. Not having a centralized system threatens our health, our customers health as well as reduces property values and makes it nearly impossible for many to sell their property. We should not have to rely on bottled water for safe drinking water.

I fully support the construction of centralized water system for the District. The award of grant funding to the proposed project would allow the District to supply, safe, clean water, while reducing the economic impact of the project on the community.

Sincerely,

  
Chad  
Gen Legal Tender Pub & Bistro

May 15, 2018

Clancy Water and Sewer District  
Box 16 North Main St  
Clancy, MT

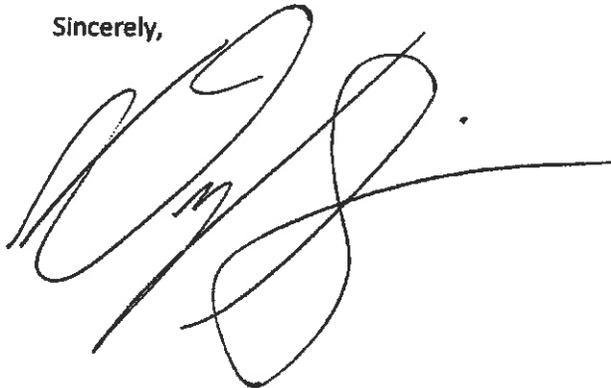
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I fully support the construction of centralized water system for the District. The award of grant funding to the proposed project would allow the District to supply, safe, clean water, while reducing the economic impact of the project on the community.

Sincerely,

A handwritten signature in black ink, appearing to be 'Chobby's Bar & Grill', written in a cursive, stylized font. The signature is positioned above the printed name.

CHOBBY'S BAR & GRILL

# **Appendix E**

## Planning Documents

**JEFFERSON COUNTY**  
*GROWTH POLICY*



**JEFFERSON COUNTY, MONTANA**

*ADOPTED JUNE 18, 2003*  
*AMENDED NOVEMBER 3, 2009*

# **Jefferson County**

**2003**

## **Growth Policy**

### **Contributors**

**Citizens of Jefferson County**

**Jefferson County Commissioners**

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Tom Lythgoe  
Chuck Notbohm**

**Developed by the**

**Jefferson County Planning Board**

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Joanne Samson  
Karen Davidson  
Donna Minard  
Linda Roginske  
Terry Lindsay  
Terrie Solugub  
David Leitheiser**

*Jefferson County Growth Policy*

*Prepared by J. Bryher Herak*

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## **CHAPTER ONE: INTRODUCTION**

Jefferson County covers 1,657 square miles in the heart of western Montana. Jefferson County's slogan, the "Undiscovered In Between" is an accurate description. It lies between three major metropolitan areas in Montana: Butte, Helena and Bozeman and between two national parks, Yellowstone National Park and Glacier National Park.

Major waterways include the Jefferson River and the Boulder River and their tributaries. These waterways travel through Jefferson County on their way to the Missouri and provide recreational opportunities for residents and visitors.

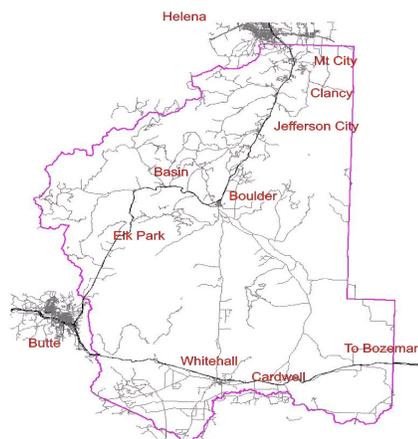
Major mountain areas include the Elkhorn Mountains, Bull Mountain and the Continental Divide, which serves as the western boundary of the county.

Tourist attractions include the Lewis and Clark Caverns, health mine enterprises, hot springs, National Rodeo Association rodeo, the annual "Rockin the River" concert and numerous campgrounds, hiking trails, hunting and fishing areas and several ghost towns.

The major industries in Jefferson County include agriculture, mining, timber, tourism, retail and home businesses, and county and state government.

Jefferson County is made up of a number of distinct "communities" or "vicinities". Some, for example Basin and Clancy, are small towns. Others, like Montana City and Toll Mountain are generally defined settlement areas associated with former towns or physical features. While others, such as Elk Park and Boulder Valley are ranching and farming areas covering thousands of acres. Two of the county's communities, Whitehall and Boulder, are incorporated municipalities with their own governing structures.

Jefferson County is one of the fastest growing counties in Montana. The Planning Board of Jefferson County is committed to developing programs and strategies that will provide for and facilitate this growth and retain the rural character and sense of community of small towns. To this end, the aim of this policy is to help guide and manage community change to best serve our citizen's overall long-term interests.



## **CHAPTER TWO: STATEMENT OF PURPOSE/COMMUNITY GOALS**

The past decade has been marked by continued growth and change. Jefferson County's landscape and rural character has attracted more residents and visitors. The interests and values of the county residents have grown more diverse. Tourism and recreation, including hunting, fishing, skiing, and health mine visits, have joined the traditional industries of agriculture, forestry, and mining as important economic interests. Land is increasingly valued for its aesthetic and recreational assets leading to the conversion of more rangeland and farmland to residential subdivision and recreational development. This is most apparent in the northern section of the county where the communities of Clancy, Montana City, and Jefferson City have shown the most dramatic increase in population and subsequent residential subdivision.

In the lower valley floors of the county around Whitehall, land continues to be used primarily for agriculture and mining. Population growth in this area has increased the need for housing and public services.

In the western section of the county in the communities of Basin and Bernice, mining, agriculture, and reclamation interests continue to be primary.

Boulder, the county seat, has grown in population as well. Employment in this area includes a large number of government workers employed by Jefferson County, by the Montana Development Center, Riverside, Alternative Youth Adventures, and small retail businesses.

The Jefferson County Commissioners, in turn, face increasingly difficult decisions regarding land use and development, conservation, and public services. The purpose of this plan is to guide policy making by providing a framework for residents and local decision makers as they struggle with this growth and change and the issues that have evolved from this growth.

### **GROWTH POLICY UPDATE PROCESS**

The Jefferson County Planning Board initiated preparation of this planning document pursuant to Montana statute. The legally mandated role of the Planning Board is to "(1) assure the promotion of public health, safety, morals, convenience, order, or the general welfare and for the sake of efficiency and economy in the process of community development, the Planning Board shall prepare a Growth Policy and shall serve in an advisory capacity to the local governing bodies establishing the Planning Board."

Jefferson County has had a Planning Board for almost 30 years. The most recent county plan was the 1993 Jefferson County Comprehensive Plan. The County Commissioners charged the Planning Board with the responsibility of preparing a Growth Policy. This document, prepared by the Board, is in response to that charge.

The Planning Board and the County Commissioners determined at the outset of the planning process that the county's Growth Policy would, to the maximum extent possible, reflect the values and aspirations of the county's citizens. To this end, in 2000 a process called "Visioning

Jefferson County” was initiated. This process was designed to provide county citizens and community leaders an opportunity to participate in the development of this Growth Policy by identifying and prioritizing countywide issues. A letter to all parties listed on the Jefferson County tax rolls was mailed. Following this, advertised listening posts and community meetings were held in seven different locations of the county to provide a convenient opportunity for citizens to state their concerns and recommendations for the future of their community.

Planning is the act of determining needs and setting a course to meet those needs. This policy is the summation of creative work by Jefferson County to define the needs of its citizens and recommend a course of action for the future. Preparing this comprehensive Growth Policy involves assessing a community’s economic, physical and social/cultural makeup and determining trends and circumstances that are likely to shape the community’s future. This information, together with citizen input regarding their community, has been used to prepare this policy. **The fundamental aim of the policy is to help guide and manage community change to best serve Jefferson County citizens’ overall long-term interests.**

This Growth Policy is, by necessity, very general and will serve primarily as a guide for making future decisions. Many of the recommendations in this policy are in the form of general goals and objectives. Many of the goals, objectives, and recommendations in this policy can only be implemented by county decision makers.

## **ORGANIZATION OF THE POLICY**

This Growth Policy is organized into seven chapters. **Chapter One:** Introduction is designed to serve as an overview of Jefferson County and provide a description of how the policy is organized.

**Chapter Two:** Statement of Purpose/Community Goals is a statement of the purpose of the policy and a description of the primary goals and objectives to be achieved in Jefferson County’s overall planning efforts. These goals and objectives are applicable throughout all planning efforts by the county and are designed to be the basis of local decision-making. Specific Goals and Objectives are also contained in this chapter. This is a summary of the specific issues before the Planning Board in the past two years and goals and objectives established by the Board as a guide to public policy decision-making. These goals and objectives are not exclusive. The Planning Board will continue to meet and do on-going work as issues develop.

**Chapter Three:** A Profile of Jefferson County includes current information and statistics of the county. It includes a description of the population and economy as well as the environment and current land use. It describes current public services available to county residents including transportation, recreation and other public services.

**Chapter Four:** The Future of Jefferson County includes projected trends in population, economy, land use and public services.

Implementation of the Growth Policy in **Chapter Five** describes the process by which this plan will be implemented and includes recommended voluntary actions. It includes information on cooperation between jurisdictions both within and outside Jefferson County.

**Chapter Six** contains a conclusion to this report and a letter from the Planning Board to the residents of Jefferson County.

**Definitions:**

Goals and objectives are the principle elements in guiding the Planning Board. In this context, a **goal** is a broad, generalized expression of a commonly held community value regarding growth, development patterns and quality of life. Goals, as used in this policy, express the primary theme or general intent and direction of the policy.

An **objective** is a more narrowly defined and concrete expression of community intent. A goal may contain one or more objectives with each objective responsive to a particular aspect of a broadly stated goal. For example, a goal might be “mitigate development’s impact to wildlife and fisheries.” A related objective could be “encourage subdivision designs that do not restrict wildlife movement.”

A **policy** is a fairly precise statement of how county government will exercise its authority, responsibility and fiscal resources to achieve a specific goal. Policies are tangible and can be quantitatively measured. Examples of policies related to the goal of “mitigate development’s impact to wildlife and fisheries” could include such statements such as “Subdivisions may be designed to mitigate impact on wildlife movement.” in county subdivision regulations.

The following goals summarize the citizen’s aspiration for their community and have guided the Jefferson County Planning Board’s development of this policy: <sup>1</sup>

- I. Sustain and strengthen the economic well-being of Jefferson County’s citizens**
- II. Protect and maintain Jefferson County’s rural character and the community’s historic relationship with natural resource development**
- III. Preserve and enhance the rural, friendly and independent lifestyle currently enjoyed by Jefferson County’s citizens**

This Growth Policy is designed to help guide community decision-making in its effort to achieve these goals. Under each goal, the Planning Board has defined a number of objectives to guide the county in its efforts to reach these goals. These objectives are listed below:

**I. Goal: Sustain and strengthen the economic well being of Jefferson County’s citizens.**

**Objectives:**

---

<sup>1</sup> These primary goals are the same goals listed in the 1993 Jefferson County Comprehensive Plan. The Planning Board believes that these goals continue to provide the best overall direction for county planning.

- A. Stimulate the retention of existing businesses and aid in the development of new businesses and industries, especially agriculture, mining, timber harvest, manufacturing/processing, and wholesale and retail businesses.
- B. Stabilize Jefferson County's tax base by encouraging the sustainable use of its natural resources and by working toward greater economic diversity.
- C. Promote the development of cultural resources and tourism to broaden Jefferson County's economic base.
- D. Support economic development activities throughout southwest Montana in recognition of Jefferson County's interdependency with surrounding employment centers and the needs of citizens for goods, services and other urban amenities available in surrounding communities.
- E. Promote the economic self-sufficiency of Jefferson County's citizens by furthering the development of locally owned and operated business enterprises.
- F. Promote secondary, value adding industry in Jefferson County through appropriate land use designations and development incentives.

**II. Goal: Protect and maintain Jefferson County's rural character and the community's historic relationship with natural resource development.**

**Objectives:**

- A. Foster the continuance of agriculture and forestry in recognition of their economic contribution and the intrinsic natural beauty of grazing areas, and forests.  
farmlands
- B. Preserve Jefferson County's scenic beauty and conserve its forests, rangelands and streams, with their abundant wildlife and good fisheries.
- C. Preserve Jefferson County's open space setting by encouraging new development to locate near existing towns and rural settlements and by discouraging poorly designed, land subdivisions and commercial development.
- D. Assure clean air, clean water, a healthful environment and good community appearance.

**III. Goal: Preserve and enhance the rural, friendly and independent lifestyle currently enjoyed by Jefferson County's citizens.**

**Objectives:**

- E. Encourage fire resistant construction.
- F. Promote cooperation with local fire districts and state and federal agencies to develop and provide a wildfire educational program.
- G. Promote fire services for all subdivisions.
- H. Promote adequate water supply systems.
- I. Support adequate ingresses and egresses in all subdivision planning.
- J. Promote vegetation policies that reduce fire hazards.

## **WATER QUALITY**

### **1. Goal: Protect surface and groundwater quality from pollution.**

#### **Objectives**

- A. Discourage development with on-site wastewater treatment systems in areas having inappropriate soils or high groundwater, as indicated on the revised Jefferson County soil maps, to help prevent the contamination of groundwater supplies.
- B. Promote education efforts designed to further awareness of waste water system functioning.
- C. Require local review of subdivisions to meet Montana Department of Environmental Quality (DEQ) regulations.
- D. Encourage the formation of rural water districts in developing areas through the following incentives:
  - 1. Help developers secure grants to pay for preliminary engineering work for a community water system;
  - 2. Help developers secure funding from the state's Treasure State Endowment Fund Program and/or federal Community Grants for community water systems;
  - 3. Educate interested developers about the possibility of the county sponsoring and/or administering grants at minimal cost to the developer.

- E.** Promote investigation on stream setbacks and ensure that this issue be rewritten with reference to floodplain regulations. Recommend floodplain regulations be amended to coincide with state floodplain regulations.
- F.** Promote grants available to local organizations under section 319 of the Clean Water Act for the reduction of non-point source water pollution.
- G.** Educate land users on the necessity of obtaining appropriate permits before doing any work to alter streams.
- H.** Require all construction to be setback from streams, in order to prevent water quality degradation and stream bank erosion.
- I.** Promote policies that ensure greater setbacks be required for commercial, industrial, and multi-family development because of greater potential for negative impacts.
- J.** Recommend wetland protection standards be included in subdivision regulations for preserving waterfowl and other wildlife habitat.

### **WORKING LANDSCAPES**

**1. Goal:** Foster the continuance of agriculture and forestry in recognition of their economic contribution and the intrinsic natural beauty of grazing areas, farmlands, and forests.

**Objectives:**

- A.** Encourage cooperation between new development and agricultural/forestry operations.
- B.** Educate prospective rural residents of potential conflicts with neighboring farm, ranch, and forestry operations before they build.
- C.** Require that rural residential developments be properly fenced to keep livestock out and allow free movement along traditional stock driveways.
- D.** Protect irrigation systems from the adverse impacts of rural residential development.
- E.** Require rural residential development to comply with the weed district's weed management plans.
- F.** Encourage open buffers between rural residences and adjoining agricultural lands.

- street,
- c. The proposed park space shall be safely accessible by pedestrians coming from lots to be served, but have direct access to a collector or otherwise be located where it will not channel traffic into local residential streets; and
  - d. Where possible, the proposed park should be connected to existing or proposed pedestrian/bicycle trails.
- E. Complete an inventory of all subdivision lands accepted as parklands in the county.
- F. Encourage use of completed inventory when staff makes recommendations to developers as to whether more parklands are needed in developed areas or whether cash should be accepted in lieu of land.
- G. Encourage homeowners' associations to be responsible for improvements and maintenance of dedicated parkland within its subdivision.
- H. Encourage homeowners' associations to keep parks and existing equipment well maintained.

## **ECONOMIC DEVELOPMENT**

1. **Goal:** Sustain and strengthen the economic well-being of Jefferson County's citizens.

### **Objectives:**

- A. Stimulate the retention and expansion of existing businesses, new businesses, value-added businesses, wholesale and retail businesses, and industries including agriculture, mining, manufacturing/processing and forest products.
- B. Stabilize and diversify the county's tax base by encouraging the sustainable use of its natural resources.
- C. Identify and pursue primary business development that complements existing business, that are compatible with communities, and utilizes available assets. Identify and pursue targeted business development opportunities to include, but not limited to, manufacturing/heavy industry, telecommunications, and youth/social services.
- D. Promote the development of cultural resources and tourism, especially Lewis and Clark Bicentennial related development, in order to broaden Jefferson County's economic base.

- E.** Foster and stimulate well-planned entrepreneurship among the county's citizenry.
- F.** Promote a strong local business environment. Support and strengthen business support mechanisms such as chambers of commerce, development organizations and business roundtable organizations.
- G.** Improve local trade capture for Jefferson County businesses. Promote local shopping as well as well-planned businesses and new businesses.
- H.** Network with and support other economic development efforts in the region and statewide, in recognition of Jefferson County's interdependence with other communities and to leverage available local resources.
- I.** Assist in the development of necessary public infrastructure in support of economic development.
- J.** Identify lands in Jefferson County where industrial development is appropriate including those areas adjacent to existing industrial sites including mining, manufacturing and processing facilities.
- K.** Implement land use regulations such as zoning districts that support industrial development in appropriate areas.

## **HOUSING ISSUES**

Across Montana, a major concern for many residents is the lack of affordable housing. It is becoming increasingly difficult for the average citizen to purchase a new home. Housing is typically deemed affordable if either the monthly rent or mortgage, principle and interest, is no more than 30 percent of a household's monthly income.

The private housing market in portions of Jefferson County does not provide adequate affordable housing for low to moderate income. Housing costs have risen faster than incomes during the last decade, contributing to the on-going challenge of securing adequate housing for low to moderate income groups.

The senior citizen population is significant and growing in Jefferson County, resulting in an important housing issue. This group has needs that are different from the rest of the population.

Resources to meet the housing needs are fairly limited in Jefferson County. To some degree, this is a reflection of national trends, as federal funding for housing was substantially reduced during the 1980s.

**1. Goal:** Work towards ensuring all residents of Jefferson County have an opportunity to obtain safe, sanitary, and affordable housing.

**Objectives:**

- A. Work to maintain an adequate land supply for diversity of all housing opportunities.
- B. Consider the locational needs of various types of housing with regard to proximity of employment, and access to transportation and services.
- C. Promote dispersal of affordable housing throughout the county.
- D. Participate in periodic analyses to determine immediate and long range affordable housing needs.
- E. Study and consider innovative housing programs to reduce dependency on subsidized housing.
- F. Group homes, foster care facilities, and facilities for other special populations should be equitably distributed throughout the county, yet near daily services.
- G. Encourage preservation, rehabilitation, and redevelopment of existing housing, with special attention to historic structures and historic areas.
- H. Encourage compatible mixed-use development.
- I. Encourage preservation, rehabilitation, and development of existing housing, with special attention to historic structures and historic houses.
- J. Develop programs, as funding allows, to access available public and/or private funding for affordable housing and related infrastructure.

**EVALUATION CRITERIA & PROCESS FOR REVIEW OF PROPOSED SUBDIVISIONS**

Potential developers will be given a subdivision application which is required to be completed. This application will be compared to the subdivision regulations to ensure that the Montana Subdivision and Platting Act and the county's objectives have been met. The application will be forwarded to the Planning Board for a recommendation to the County Commission. The County Commission will review the recommendation and may add conditions of approval to the Preliminary Plat approval. Once the Preliminary Plat approval has been given by the County Commission, conditions of approval will have to be met in order for the County Commission approve the Final Plat. Final Plats can then be filed with the Clerk and Recorder.

**CHAPTER 3: A PROFILE OF JEFFERSON COUNTY**

A summary profile of Jefferson County is presented below. This profile includes the history, social and economic conditions, and environmental features of Jefferson County.

## **HISTORY**

Historians agree that the land now designated as Jefferson County was once occupied and visited by Indians from various tribes including the Snake, Nez Perce, Bannok, Blackfeet and Shoshoni tribe. It appears various tribes passed through the area for hunting, to visit the hot springs areas, and to collect stones for weapons and tools. It does not seem that any tribe made their permanent long-term home in this area. Jefferson County has two documented buffalo jumps, numerous teepee rings and many pictographs that provide documentation of tribal presence in the area.

The land in Jefferson County came under French and Spanish rule before the United States acquired it through the Louisiana Purchase.

According to G.O. Vineyard, one of the first commissioners of Jefferson County, “Jefferson County was not on the maps until the winter of 1864 and 1865 when the first Legislature met at Bannack City . . . That legislature created the counties of Beaverhead, Madison, Gallatin, Jefferson and Choteau. Afterwards the county seat of Jefferson was located in Montana City . . .”<sup>2</sup> Although the county boundaries have changed significantly since then, the towns that make up the fabric of the county changed significantly over time. Early settlers flocked to Jefferson County during the height of the gold rush that affected the entire country. Large mining camps, which were established then, continued to grow into towns that exist today. The county seat of Boulder, the towns of Basin, Clancy and Montana City all grew as a result of the stagecoach line between Butte and Helena, the rich mineral deposits, and the railroad.

Whitehall, in the southern portion of the county, thrived as a railroad town that transported mined products across the United States. The Mayflower ore discovered southeast of Whitehall in 1895 ensured that Whitehall would remain a thriving town in Jefferson County. A smelter was built on the banks of the Jefferson River by W.A. Clark to handle gold from the Mayflower ore. The rich deposits supported the community of Whitehall for many years. Today, the town of Whitehall supports retired miners, farmers, and new families who mostly work in Butte, but enjoy small town living.

The town of Boulder differed from the other towns in Jefferson County in that it did not depend on mining for its existence. A main stop on the Virginia City – Fort Benton stagecoach line, Boulder developed into an agricultural area. Miners that initially moved into the area to try their hand at placer mining along the Boulder River gradually began using their land for cattle and sheep. Before long, ranches sprang up along the Boulder River Valley, many of which remain today. In 1883 Boulder became the county seat, with a stately courthouse built in 1888. Today, Boulder continues to be the hub for county government.

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<sup>2</sup> Muriel Sibell Wolle, *Montana Pay Dirt: A Guide to the Mining Camps of the Treasure State* (Athens: Swallow Press/Ohio University Press, 1983).

Basin had its beginnings from the Virginia City – Fort Benton stagecoach line as well. Miners disembarking from the stage at Basin Creek built little cabins while searching the surrounding mountains for traces of gold. Basin proved to be rich in placer mines and during the years of 1870 – 1890 enjoyed a boom.<sup>3</sup> By 1905 the town contained a butcher shop, millinery shop, bowling alley, three hotels, three grocery stores and one bathhouse.<sup>4</sup> Other smaller buildings and cabins rounded out the town. Two mines, the Katy and the Hope contributed to the growth of Basin. By the mid 1920's gold ore taken from the Hope, Katy and White Elephant mines produced \$1,700,000 in revenues.<sup>5</sup> However, as smelter costs escalated and stock market manipulations took their toll, the boom time for Basin was over. Over the years, Basin's population has dwindled. Today the quiet little town relies on radon health mines, artists and visitors for economic support.

Of all the towns in Jefferson County, the small bedroom community of Clancy has evolved the most over the years. Clancy began as a mining camp around 1865 when silver ores were discovered. The Legal Tender mine was the most prolific of the silver mines in Clancy, producing around \$1,000,000 in revenue<sup>6</sup>. However, the mining ventures were short lived. The Montana Central railroad built a roundhouse in Clancy and railroad workers were housed in brick homes built especially for them. Although the roundhouse burned to the ground, the two competing railroad companies continued to stop in Clancy. The railroads played an important role in the growth of Clancy. The "iron horse" brought tourists to the hot springs located just a few miles from Clancy at Alhambra. A lavish resort was built to promote the hot springs as a medicinal cure. Although the last railroad tracks were washed away by the 1981 flood and the beautiful Alhambra Hot Springs Resort burned down, the town of Clancy continued. Today, the mountain views and small town benefits lure families to live in Clancy while making a living in Helena.

Montana City just 5 miles from Clancy attracts affluent families to live in the mountains and work in Helena. While Montana City was initially a small mining camp and the first county seat, it was short lived as a placer camp and the government center. After only one year the county seat was moved to Radersburg. Montana City was relatively quiet until the building craze of the 1990's. Today, Montana City enjoys a wealth of services and beautiful homes.

Jefferson County's history is rich with tales from the days of the "iron horse", mining camps and early ranches. Some towns that thrived during the 19<sup>th</sup> Century, like Elkhorn, resemble little of their former grandeur. Today, many new families choose to settle in Jefferson County, not to work, but to enjoy small town living close to the urban areas of Helena, Butte and Bozeman. However, farmers and ranchers remain active in Jefferson County and many residents continue to live and enjoy a rural lifestyle.

## **POPULATION**

- The current population of Jefferson County is 10,084.

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<sup>3</sup> Id.

<sup>4</sup> Id.

<sup>5</sup> Id.

<sup>6</sup> Id.



# Southwestern Montana Comprehensive Economic Development Strategy 2012-2017

Beaverhead County, Madison County, Granite County, Jefferson County, Powell County, Butte-Silver Bow City-County, Anaconda-Deer Lodge City-County

Headwaters Resource Conservation & Development Area, Inc.

Primary author and researcher: Katie Weaver, Economic Development Planner

Headwaters RC&D  
65 East Broadway  
Butte, MT 59701  
(406) 782-7333  
[www.headwatersrcd.org](http://www.headwatersrcd.org)

Data included in this report has been compiled from general sources and is to be used only as a guide. Headwaters RC&D assumes no liability for accuracy or decisions made based on this document.



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## Executive Summary

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Improving the economic and social well-being of the residents of southwestern Montana is the fundamental purpose of the goals and objectives outlined in the 2012 Comprehensive Economic Development Strategy (CEDS). As an Economic Development District, Headwaters RC&D is tasked with bringing together the public and private sectors to update this strategy every five years and provide an economic roadmap that will diversify and strengthen the regional economy.

Perhaps the most important goal identified in this strategy is increased collaboration. Working across social and political boundaries can provide communities, counties, businesses, community groups and residents the opportunity to pool financial, political and social capacity, thereby increasing both the region's competitiveness and its resiliency.

Southwestern Montana is rich in both its people and its natural resources. Small businesses, entrepreneurs and natural resource industries are the foundation of the region's economy. Many of the communities in this region of 82,013 people are very small; therefore small businesses and entrepreneurs are often the drivers of local economies. These residents' hard work, innovation and willingness to take risks are what keep rural communities intact and healthy. It is imperative that there is adequate access to capital for these businesses to ensure the region's downtowns and main streets remain the economic and social hubs of the community.

The abundance and health of the region's water, land, forests, minerals and wildlife are perhaps its greatest assets. In recent times, the economic importance and strength of some natural resources sectors has diminished, but with innovative, thoughtful, collaborative

approaches they can once again be the foundation of vibrant rural economies. Agriculture remains a strong sector, and with national trends in food, it will likely become more so over time. Tourism and recreation also continue to grow in importance.

While natural resource-based industries present many opportunities for the region, this reliance, and the resulting uncertainty caused by forces beyond local control, make the regional economy vulnerable. Diversification is critical.

Over the last decade, several new economic sectors have emerged to be significant economic drivers. These include advanced manufacturing, aerospace technology, environmental remediation and transportation, distribution and warehousing. While some of the companies in these sectors are nascent, there are several large employers that are committed to the region and are helping to build a more diversified, resilient economy.

These industries often provide higher wage salaries; therefore improving the social well-being of the region's residents. Many people choose to live in southwestern Montana because of the land, its people and the way of life. Recognizing the advantages of living in a small town, people live here, among other reasons, because of the scenic beauty, recreational opportunities and their connection to family and friends. Therefore, promoting the amenities of region, in addition to creating good-paying, stable jobs, is a critical element in this strategy.

The 2012 CEDS was designed to ensure an integrated, innovative approach to regional economic development that strengthens and builds resiliency in the communities and economy of southwestern Montana.

**GOAL TWO: ENSURE COMMUNITIES ARE APPEALING AND HEALTHY PLACES TO LIVE AND WORK.**

Many people choose to live in southwestern Montana because of the land, its people and the way of life. Recognizing the advantages of living in a small town, people live here, among other reasons, because of the scenic beauty, recreational opportunities and their connection to family and friends. Therefore, promoting the amenities of region, in addition to good-paying, stable jobs, is a critical element in this strategy.

**2.1 Objective: Assist communities to ensure they have proper infrastructure in place to meet the needs of residents and the business community.**

- *Utilize existing funding opportunities to leverage local dollars for completion of critical infrastructure projects.*
- *Assist with emergency service improvements including communications, equipment and facility development.*
- *Assist with rural health care needs.*
- *Utilize the economic development community and government agencies to support infrastructure development for the business community.*
- *Work with communities and businesses to implement energy efficiency measures and alternative energy projects.*

**2.2 Objective: Promote high-quality education and childcare.**

- *Increase the quality and number of childcare businesses.*
- *Explore strategies to keep rural schools open.*

**2.3 Objective: Emphasize the need for safe, decent and affordable housing.**

- *Promote affordable housing programs, such as First Time Homebuyer's Mutual Self-Help, Habitat for Humanity, etc.*
- *Increase access to programs that increase the safety and quality of existing housing.*

**2.4 Objective: Support the development and expansion of parks, trails and open space.**

- *Develop and disseminate an inventory of funding opportunities.*
- *Explore the development of parks districts.*
- *Work with public land agencies to link communities to public land.*

- Economic and Business Development Organizations: these organizations are integral to the efforts to diversify the area's economy
- Employment and Training Sector: linkage between economic development and workforce development, community colleges, vocational-technical schools and school-to-work programs are crucial
- Community-based Organizations: the needs and concerns of housing and neighborhood associations, special interest groups, historic preservation groups, agricultural or farming associations and citizen committees affect economic development
- Women, Minorities, Aged and Disabled: Headwaters RC&D's mission can only be realized if the needs of all residents are appropriately considered
- Other: health, education, social services and other professions or special interests must be included in any economic development plan

### Staff Support

Headwaters' Board of Directors and Committees are comprised of individuals with other responsibilities and scheduling constraints, therefore staff members are assigned the task of conducting the day-to-day functions required to ensure the completion and implementation of the CEDS. These daily operations include collecting and analyzing information on the area's economy, identifying strategy options and preparing a detailed implementation plan. The Board of Directors has the responsibility to ensure that adequate staff resources are available to perform these functions.

The Economic Development Planner is the program manager of the CEDS process. Additional support is provided by the Executive Director, programs managers and administrative staff within the organization

## Support for the State of Montana Economic Development Goals

The State of Montana, in conjunction with the Governor's Office of Economic Development, has defined a broad vision of economic development for Montana that includes:

- Strengthening and diversifying the state's economy
- Increasing the number and quality of available jobs
- Geographically dispersing jobs

This vision will be supported by:

- **Infrastructure Improvement**
- Marketing and Recruitment
- Permitting and Regulatory Processes
- Technology Development
- Workforce Development

Headwaters RC&D has a strong working relationship with the State of Montana, with each sharing information and resources in the interest of common goals. In 2006, Headwaters RC&D became a Certified Regional Development Corporation (CRDC). The intent of the CRDC program is to encourage a regional approach to economic development that facilitates the efficient delivery of economic development programs by supporting regional capacity.

As a CRDC, Headwaters RC&D facilitates the identification of priority needs of local communities and works to foster collaboration and bring elected officials, business leaders and stakeholders together to prepare and implement regional development strategies. Headwaters RC&D is required to have broad-based support from each county and community including local development organizations within the

## Section Four: Action Plan

Headwaters RC&D and its member communities and organizations, as well as the public, have identified strategic projects, program and activities to support the achievement of the regional economic development strategy. A proposed implementation schedule is detailed in the table in this section. Included is the established objective, the projected timeframe, number of potential jobs, anticipated funding sources and the entities responsible for the execution of each project, program or activity. Each year, this section will be evaluated for assess progress and any change in priority.

PROJECT, PROGRAM, ACTIVITY	OBJ.	TIME FRAME	# OF JOBS p=permanent t=temporary	LEAD ENTITY	EDD/EDA ASSISTANCE TA=technical assistance
<b>ANACONDA-DEER LODGE</b>					
Airport upgrades	2.1	2013-2017	1-3 t	ADLC	Funding
Anaconda sewer upgrades	2.1	2015-2017		ADLC	Funding
Bridge replacements	2.1	2013		ADLC	Funding
Courthouse upgrades	2.1	2013-2017		ADLC	Funding
East Yards infrastructure development	2.1	2013-2017	80 p	ADLC	Funding, planning
Groundwater discharge permit & wastewater treatment upgrades & expansion	2.1	2013-2017		ADLC	Funding
Hospital expansion	2.1	2013-2017		Private	Funding
Sewer hook up to Arbiter Complex	2.1	2013-2017		ADLC	Funding
Water main replacement	2.1	2013-2017		ADLC	Funding
West Valley sewer line extension	2.1	2013-2017		ADLC	Funding
Boys & Girls Club facility planning	2.2	2013-2014		Private	TA
School system upgrades	2.2	2013-2015		School District	TA
Park and open space upgrades	2.4	2013-2017		ADLC, private	TA
Trail system development	2.4	2013-2017		ADLC, private	Planning, TA
FEMA emergency service plan	2.7	2013-2015		ADLC	Planning
Washoe Park Master Plan	2.7	2013-2015		ADLC	Funding, TA
Montana Hotel restoration	3.1	2013-2017		Private	Funding, TA
CCCS complex upgrades	4.2	2013-2017		Private	Funding

<b>PROJECT, PROGRAM, ACTIVITY</b>	<b>OBJ.</b>	<b>TIME FRAME</b>	<b># OF JOBS</b> p=permanent t=temporary	<b>LEAD ENTITY</b>	<b>EDD/EDA ASSISTANCE</b> TA=technical assistance
Galen Campus upgrades	4.2	2013-2015	85 p	ADLC, private	Funding
Mill Creek industrial area development	4.2	2013-2017	15 p	ADLC	Funding, planning
Opportunity Triangle industrial area	4.2	2013-2017	5 p	ADLC	Funding, planning
Copper Village Arts Center	5.2	2013-2016		Private	Funding, TA
Develop visitor infrastructure	6.4	2013-2017		ADLC, private	Funding, planning
<b>BEAVERHEAD COUNTY</b>					
Airport improvements	2.1	2014-2016		County	Funding
Beaverhead County Fairground improvements	2.1	2014-2015		County	TA
Development of medical services associated with Barrett Hospital	2.1	2013-2017	10-50 p	Private	Funding
Jackson sewer system upgrade	2.1	2014-2016		County	Funding
Development of pedestrian & biking trails	2.4	2013-2017		County, private	TA
Soccer/rugby park improvements & upgrades	2.4	2013-2017		County	TA
Industrial park development	4.2	2014-2017		County	Funding, planning
Natural resources business development	6	2013-2017		Private	Funding, planning, TA
Value-added agriculture business development	6.1	2013-2017	10-50 p	Private	Funding, planning, TA
Beaverhead & Big Hole Watershed restoration projects	6.6	2013-2017	5-10 t	BHWC	TA
<b>CITY OF DILLON</b>					
Acquire traffic right-of-ways	2.1	2013-2017		City	TA
Annex property connected to City sewer & water	2.1	2013-2017		City	TA
Change the use of the library elevator	2.1	2013-2017		City	TA
Chip seal & pave streets	2.1	2013-2017		City	TA
Conduct a water rate study	2.1	2013-2017		City	TA
Coordinate with MDT on pedestrian safety	2.1	2013-2017		City, MDT	Planning
Develop storm water management statute	2.1	2013-2017		City	TA
Develop water wells in Dan Ibey Park & cemetery	2.1	2013-2017		City	TA
Establish a wastewater maintenance fund	2.1	2013-2017		City	TA
Establish a water valve maintenance fund	2.1	2013-2017		City	TA

<b>PROJECT, PROGRAM, ACTIVITY</b>	<b>OBJ.</b>	<b>TIME FRAME</b>	<b># OF JOBS</b> p=permanent t=temporary	<b>LEAD ENTITY</b>	<b>EDD/EDA ASSISTANCE</b> TA=technical assistance
Establish ADA fund and improve access in City Hall and the Volunteer Fire Hall	2.1	2013-2017		City	Funding
Evaluate roof & street storm water drains	2.1	2013-2017		City	TA
Implement Park Maintenance Fund	2.1	2013-2017		City	TA
Install storm drains	2.1	2013-2017		City	Funding, TA
New maintenance building	2.1	2013-2017		City	Funding, TA
Plan for City Hall expansion	2.1	2013-2017		City	TA
Replace undersized storm water drain pipes	2.1	2013-2017		City	Funding, TA
Replace wastewater collection pipes & manholes	2.1	2013-2017		City	Funding, TA
Replace water distribution pipes	2.1	2013-2017		City	Funding, TA
Study alternative fairground access routes	2.1	2013-2017		City	Planning, TA
Study storm water management	2.1	2013-2017		City	Planning, TA
Traffic study	2.1	2013-2017		City	Planning, TA
Upgrade City statutes & regulations to define park requirements	2.4	2013-2017		City	TA
Upgrades and repairs to Children's, Dan Ibey, Depot, Ray Lynch, Vigilante & Westside Parks	2.4	2013-2017		City	Funding, TA
Develop a Parks Master Plan	2.7	2013-2017		City	Planning, TA
Industrial park strategy	4.2	2013-2017		City	Funding, planning, TA
Northeast Reservoir	6.6	2013-2017		City	TA
Obtain land for water storage & well site	6.6	2013-2017		City	
<b>TOWN OF LIMA</b>					
Community museum	2.1	2013-2014		Town	TA
Tourist guide & map of town	6.4	2013		Town, HWRCDC	Planning, TA
Water bottling plant	6.6	2013-2017		Town, private	Funding
<b>BUTTE-SILVER BOW</b>					
German Gulch realignment & bridge replacement	2.1	2014		BSB	Funding
Infrastructure improvements in central Butte	2.1	2013-2015		BSB	Funding
Potable water service to the TIFID	2.1	2015	3 t	TIFID	Funding

<b>PROJECT, PROGRAM, ACTIVITY</b>	<b>OBJ.</b>	<b>TIME FRAME</b>	<b># OF JOBS</b> p=permanent t=temporary	<b>LEAD ENTITY</b>	<b>EDD/EDA ASSISTANCE</b> TA=technical assistance
Vaulted sidewalk reconstruction	2.1	2014		URA	TA
Water Treatment Plant	2.1	2014	10 t	BSB	Funding
Residential development	2.3	2013-2017		Private	TA
Veterans' Home construction	2.3	2013-2015	10 t	BSB	Funding
Greenway Trail completion & TIFID connection	2.4	2015		BSB	TA
South Butte Industrial Park development	4.2	2013-2017		BSB	Funding, planning
Industrial Silver Mine development	6.3	2015-2016	200 p	Private	Funding
Continental Divide Tram & Trails	6.4	2013-2015	3.5 p	OLR, HWRCDC	Funding, TA
<b>GRANITE COUNTY</b>					
Philipsburg sewer & water infrastructure	2.1	2013-2017		Town	Funding
Build an assisted living facility	2.3	2013-2017	8 p	Private	Funding, TA
Expand small business support	5.1	2013-2017		Private, HWRCDC	TA
Support local ranching	6.1	2013-2017		Private, HWRCDC, NRCS, MDOA	Funding, planning, TA
Assist Eagle Stud in modernizing & expanding	6.2	2013-2017	2 p	Private	TA
Assist metals mining exploration & milling	6.2	2013-2017	40 p	Private	TA
Expand local post & pole operations	6.2	2013-2017	4 p	Private	TA
Assist in the development of a shavings mill	6.2	2013-2017		Private	TA
Assist tourism development & expansion	6.4	2013-2017	10 p	Private, Montana Office of Tourism	Planning, TA
Expand winter recreation	6.5	2013-2017		Private, Montana Office of Tourism	Planning, TA
<b>TOWN OF DUMMOND</b>					
Upgrade sewer lagoons	2.1	2013-2017		Town	Funding
Purchase & develop riverside park & trails	2.4	2013-2017	2 t	Town	TA
Historical preservation	3.1	2013-2017		Town	TA
Main Street beautification	3.1	2013-2017		Town, Chamber of Commerce	Planning, TA
<b>JEFFERSON COUNTY</b>					
Local service center for human service programs	2	2013-2017		County	Funding
Animal shelter	2.1	2013-2017		County	TA
Basin highway improvements	2.1	2013-2017		MDT	TA

<b>PROJECT, PROGRAM, ACTIVITY</b>	<b>OBJ.</b>	<b>TIME FRAME</b>	<b># OF JOBS</b> p=permanent t=temporary	<b>LEAD ENTITY</b>	<b>EDD/EDA ASSISTANCE</b> TA=technical assistance
Development of Whitehall Urban Renewal District	2.1	2013-2017		JLDC	Funding, planning, TA
Fairgrounds improvements	2.1	2013-2017		County	TA
Health services & pharmacies	2.1	2013-2017		Private	TA
I-15 interchange improvements	2.1	2013-2017		MDT	TA
Improve county libraries	2.1	2013-2017		County	TA
<b>Improve water &amp; sewer infrastructure</b>	2.1	2013-2017		County	Funding
Telecommunication & information infrastructure improvements	2.1	2013-2017		Private	Funding
TIF districts development	2.1	2013-2017		JLDC	Planning, TA
Affordable housing development	2.3	2013-2017		Private	TA
Senior housing development	2.3	2013-2017		Private	TA
Development of Piedmont Wetlands project	2.4	2013-2017		Private	TA
Recreational complex development	2.4	2013-2017		County	TA
Walking & biking trails	2.4	2013-2017		County, private	TA
Public transportation development	2.5	2013-2017		County	TA
Brownfield redevelopment	2.6	2013-2017		County, JLDC	Funding, TA
Environmental assessments	2.6	2013-2017		County	Planning
Support comprehensive community planning	2.7	2013-2017		County, JLDC	Planning
Beautification efforts	3.1	2013-2017		County, communities	Planning, TA
Redevelopment of Borden's Building	3.1	2013-2017		JLDC	Funding, TA
Streetscape improvements	3.1	2013-2017		Communities	Planning, TA
Continued development of Boulder South Campus	4.2	2013-2017		JLDC	Planning, TA
Convenience store in Clancy	4.2	2013-2017		Private	TA
Expand Liberty Place facility	4.2	2013-2017		Private	TA
Factory outlet store development	4.2	2013-2017		Private	TA
Spring Creek property development	4.2	2013-2017		Private	TA
Sunlight Business Park development	4.2	2013-2017		JLDC	Planning, TA

<b>PROJECT, PROGRAM, ACTIVITY</b>	<b>OBJ.</b>	<b>TIME FRAME</b>	<b># OF JOBS</b> p=permanent t=temporary	<b>LEAD ENTITY</b>	<b>EDD/EDA ASSISTANCE</b> TA=technical assistance
Natural resource extractive industries	6	2013-2017		Private	Planning, TA
Develop value-added agriculture	6.1	2013-2017		Private, HWRCDCD	Funding, planning, TA
Increase direct-market sales for regionally grown food and food processing	6.1	2013-2017		Private, HWRCDCD	TA
Expand wood products opportunities	6.2	2013-2017		Private	Funding, planning, TA
Construct Golden Sunlight Mine concentrator	6.3	2013-2017		Private	TA
Expand cement operations	6.3	2013-2017		Private	TA
Expansion of Golden Dream Mine	6.3	2013-2017		Private	TA
Expansion of Golden Sunlight Mine	6.3	2013-2017		Private	TA
Expansion of Montana Tunnels Mine	6.3	2013-2017		Private	TA
Utilize gravel deposits	6.3	2013-2017		County, Private	TA
Golf course development	6.4	2013-2017		Private	TA
Overnight lodging facilities	6.4	2013-2017		Private	TA
Sunlight Business Park interpretive center development	6.4	2013-2017		JLDC	Planning, TA
Tourism development	6.4	2013-2017		Private	Planning, TA
Backcountry trails development	6.5	2013-2017		Private	Planning, TA
Jefferson River water study	6.6	2013-2017		County	Planning, TA
Renewable energy development	6.7	2013-2017		County, JLDC, private	Funding, planning, TA
Wind project at Sunlight Business Park	6.7	2013-2017		JLDC	Funding, planning, TA
Youth & adult vocational & educational training	7.1	2013-2017		Job Service	TA
<b>TOWN OF WHITEHALL</b>					
Pool enhancements	2.1	2013-2017		Town	TA
Sidewalk enhancements	2.1	2013-2017		Town	TA
Wastewater facility	2.1	2013		Town	Funding, TA
<b>MADISON COUNTY</b>					
County-wide marketing program	1.1	2013-2016	1	County, HWRCDCD	Funding, planning, TA
Big Sky land use permit development	2.1	2013-2016	1	County	TA
County Administration Building	2.1	2013-2016	5-10 t	County	Funding

<b>PROJECT, PROGRAM, ACTIVITY</b>	<b>OBJ.</b>	<b>TIME FRAME</b>	<b># OF JOBS</b> p=permanent t=temporary	<b>LEAD ENTITY</b>	<b>EDD/EDA ASSISTANCE</b> TA=technical assistance
Ennis Senior Center	2.1	2013-2016	1-2 p, 3-6 t	Private	TA
Ennis/Big Sky Airport	2.1	2013-2016	5-10 t	County	Funding
Fiber optics to residences	2.1	2013-2016	5-10 t	Private	Funding, planning
Giem Bridge replacement	2.1	2013-2016	15-20 t	County	Funding
Madison County Courthouse ADA access	2.1	2013-2016	4-5 t	County	Funding
Madison County Fairgrounds maintenance & renovations	2.1	2013-2016		County	TA
Moore's Creek culverts replacement	2.1	2013-2016	6-10 t	County	Funding
New District II road shop	2.1	2013-2016	4-5 t	County	TA
New fire stations—Sheridan, South Boulder, Twin Bridges, Varney, Virginia City (expansion)	2.1	2013-2016	5-10 t	County	Funding, TA
Replace Blain Springs and Varney Bridges	2.1	2013-2016	15-20 t	County	Funding
Ruby Valley Hospital expansion	2.1	2013-2016	2 p, 15-20 t	Private	Funding
Twin Bridges Airport	2.1	2013-2016	5-10 t	County	Funding
Twin Bridges Senior Center	2.1	2013-2016	1-2 p, 3-6 t	Private	TA
Virginia City street lights	2.1	2013-2016	5-10 t	City	TA
LMI senior & family rental housing	2.3	2013-2016	10-15 t	Private	Funding, TA
Single family workforce housing	2.3	2013-2016	10-15 t	Private	Funding, TA
Madison Valley Parks District	2.4	2013-2014		County	TA
Walking & biking trails	2.4	2013-2016		County, private	TA
Transit Bus expansion	2.5	2013-2016	2:00 PM	County	TA
Update CIPs	2.7	2013-2016	2 t	Communities	Planning
Sheridan Main Street improvements	3.1	2013-2016		Town	Planning, TA
Law & Justice Center	4.2	2013-2016	5-10 t	Private	TA
Nevada City/Virginia City business development	4.2	2013-2016		Private, HWRCDCD	Planning, TA
Renovation of the Conister Barn	4.2	2013-2016	6-10 t	MCEDC, HWRCDCD	TA
Natural Resource business development	6	2013-2016		Private, HWRCDCD	Funding, planning, TA
Value-added Agriculture business development	6.1	2013-2016		Private, HWRCDCD	Funding, planning, TA
Channel migration mapping project	6.6	2013-2016	3-5 t	County	TA

<b>PROJECT, PROGRAM, ACTIVITY</b>	<b>OBJ.</b>	<b>TIME FRAME</b>	<b># OF JOBS</b> p=permanent t=temporary	<b>LEAD ENTITY</b>	<b>EDD/EDA ASSISTANCE</b> TA=technical assistance
Develop streamside setback/land use position	6.6	2013-2016	1 t	County	TA
Groundwater assessments	6.6	2013-2016	3-5 t	County	TA
South Meadow Creek water efficiency project	6.6	2013-2014		Madison Conservation District	TA
<b>POWELL COUNTY</b>					
Blue Ribbon Pavilion improvements	2.1	2013-2016	.5 p	County	TA
County bridge replacements	2.1	2013-2016		County	Funding
Reuse of the old hospital	4.2	2013-2016		County, private	Planning, TA
Roundhouse development	4.2	2013-2016	.5 p	County	Funding, planning, TA
Biomass projects	6.2	2013-2016		Private, HWRCDC	Funding, planning, TA
<b>CITY OF DEER LODGE</b>					
Westside Park project	2.4	2015		City	TA
Deer Lodge Hotel	3.1	2013-2017		Private	TA
Establish Main Street restaurant	3.2	2014		Private	TA
Industrial park plan	4.2	2016		City	Planning, TA

Abbreviations:

ADLC—Anaconda-Deer Lodge

BHWC—Big Hole Watershed Council

BSB—Butte-Silver Bow

HWRCDC—Headwaters RC&D

JLDC—Jefferson Local Development Corporation

MDOA—Montana Department of Agriculture

MDOT—Montana Department of Transportation

NRCS—Natural Resource Conservation Service

OLR—Our Lady of the Rockies

TIFID—Tax Increment Financing Industrial District

URA—Urban Revitalization Agency

## **Types of Infrastructure and Public Facilities to Address in Post-disaster Redevelopment Planning**

A community's infrastructure is made up of a number of different systems and structures, each of which should be considered carefully:

Transportation systems – The repair of roads, bridges, railroads, airports and public transit is essential to establishing normal operations within a community. The repair of these and other types of infrastructure is often necessary for other redevelopment efforts to take place. Post-disaster redevelopment can be used as an opportunity to modify, improve and add to existing transportation networks. Incorporating hazard mitigation into the repair and reconstruction of transportation facilities can ensure that when disaster strikes again, the infrastructure is better able to handle the impacts.

Potable water, sewer and storm water systems – Damage to potable water, sewer and storm water infrastructure can weaken a community's ability to recover. Like with other infrastructure, the community can take the opportunity to include hazard mitigation or other improvements during repairs. In cases of severe damage to infrastructure in highly hazardous locations, relocation could be considered. These opportunities may be missed if pre-planning is not conducted.

Power, natural gas and telecommunications – Recovery from a disaster cannot begin until major utilities, especially electricity, are restored.

Public facilities – Rebuilding after a disaster provides an opportunity to mitigate future hazard impacts and build back a more resilient community. Public facilities, such as schools, libraries and government offices must be rebuilt to current building codes. However, above-code hazard mitigation may also be a good investment, and post-disaster funding sources may allow these expenditures. Some public facilities in

highly hazardous areas could potentially be targeted for relocation during pre-disaster planning.

Parks and recreation facilities – While parks and recreation facilities are typically not a priority for recovery, they are important for regaining quality of life as part of long-term redevelopment. Park properties also are often used in staging recovery efforts, such as temporary vegetative debris storage.

## **Financing Infrastructure and Public Facilities Repair**

When a community starts to make decisions about which structures to relocate after a disaster or which mitigation projects it should invest in pre-disaster, they should consider funding availability. Knowing where to prioritize spending requires some basic knowledge of what is covered under insurance policies, which projects will be eligible for federal reimbursement through the Public Assistance Program, which projects can be funded through grant programs and what financial reserves can be targeted for grant matching funds or local investment. When a community begins to address its infrastructure issues as part of the initial planning process or as a pre-disaster implementation action, it can launch an assessment of county or municipal insurance policies to determine which facilities are covered and for what extent of damage. They can then use this assessment to make decisions about increasing coverage or financing repairs to uninsured structures. They can also determine whether mitigation enhancements would be covered under current policies and Public Assistance or whether additional funding would be needed.

## **Public Assistance: Improved and Alternate Projects**

Occasionally an Applicant may determine that improvements should be made while restoring a damaged facility, or that the public would not be best served by restoring a damaged facility or its function at all. FEMA

**4.2 WILDFIRE****CPRI SCORE = 3.40***Description and History*

A wildfire is an unplanned fire, a term which includes grass fires, forest fires and scrub fires, both man-caused and natural in origin. Severe wildfire conditions have historically represented a threat of potential destruction within the region. Negative impacts of wildfire include loss of life, property and resource damage or destruction, severe emotional crisis, widespread economic impact, disrupted and fiscally impacted government services, and environmental degradation.

Wildfire risk is the potential for a wildfire to adversely affect things that residents value- lives, homes, or ecological functions and attributes. Wildfire risk in a particular area is a combination of the chance that a wildfire will start in or reach that area and the potential loss of human values if it does. Human activities, weather patterns, wildfire fuels, values potentially threatened by fire, and the availability (or lack) of resources to suppress a fire all contribute to wildfire risk. Summer in Jefferson County typically brings the fire season, the result of low rainfall, high temperatures, low humidity, and thunderstorms. However, major wildfires can occur at any time of the year. Varied topography, semi-arid climate, and numerous human-related sources of ignition make this possible.

Montana and other western states are experiencing forest health challenges primarily due to drought, insects, unusually warm temperatures, and past fire suppression activities. Various bark beetles including the mountain pine beetle and spruce bud worm are attacking large stands of trees. Because winter is no longer cold enough and long enough to keep these beetles in check, they survive to deplete the tree of nourishment and moisture throughout the year. Affected trees usually die within 2 to 3 years. Historically, the pine forests were open growth stands and resembled park like forests that could resist small ground fires that cleaned the forested areas of young trees and underbrush. Today, many of these older trees are no longer on the landscape. In the absence of fire, young trees crowd the understory, often out-competing the larger trees for available water. The result is a forest that is highly vulnerable to drought stress, insect and disease infestation and large stand-replacing fires. In Jefferson County, bark beetle damage has become much more noticeable since the 2005 PDM Plan was completed. The number of stands infested by mountain pine beetle has increased each year as beetles have moved up the drainages.

In the past 25 years, Jefferson County has witnessed a number of wildfires that have destroyed property and affected wildlife habitat, scenic resources, and air quality. During this period there have been 208 wildfires. **Table 4.2-1** presents the fires over 100 acres in the county since 1980, their size and source of ignition.

TABLE 4.2-1 WILDFIRES OVER 100 ACRES IN JEFFERSON COUNTY, 1981-2010							
Date	Name	Size in Acres	Cause	Date	Name	Size in Acres	Cause
1981	Johnny Gulch	1,300	Not	1998	Greer Gulch	120	Not reported
1985	Woodward Ranch	1,120	Not	2000	High Ore Road	9,978	Human
1988	Sheep Creek	125	Not	2000	Boulder Hill	2,482	Human
1988	Whitehall	1,630	Not	2001	Wheat	150	Not reported
1988	Warm Springs	46,900	Human	2005	158	169	Not reported
1992	Black Butte	1,466	Not	2008	Cactus	518	Not reported
1996	Cavern Fire	135	Human				

Source: CWPP, 2005; DNRC, 2011

Jefferson County received both a Presidential and State disaster declaration for the Boulder Complex Fires in 2000. State-wide wildfire disasters were declared in 1979, 1988, 1991, 1992, 1996, 1998, 1999 and 2003 (DMA, 2011). A description of one significant wildfire that has occurred in Jefferson County is presented below.

*Boulder Complex Fire*: Two fires, both man-caused, started the afternoon of August 2, 2000 near Boulder. The much more active and dangerous "High Ore Road Fire" started on a patented mining claim north of Basin. The Boulder Hill fire ignited the same afternoon above Interstate-15. The Boulder Hill fire moved east away from the Interstate into the Elkhorn Mountains, including both roaded and backcountry areas. The High Ore Road fire rampaged north across developed rural areas in lower elevation foothills east of the Continental Divide. <http://www.wildrockiesalliance.org/issues/wildfire/mwa12biggest.html>. The Jefferson County DES Coordinator reported that evacuations were west of Boulder above the Free Enterprise Mine then on a line north to the Amazon District and then east across the Boulder Hill and the Aspen Valley subdivision. Several outbuildings were burned.

Fighting wildland fires in Jefferson County is primarily the responsibility of the U.S. Forest Service (USFS) and the Montana Department of Natural Resources and Conservation (DNRC). Additionally, local volunteer fire districts provide important initial attack. The Tri-County FireSafe Working Group, USFS, and DNRC have been instrumental in maximizing the efficiency of local fire districts in response to wildfires.

#### *Vulnerability and Area of Impact*

Land management issues with wildfire occur when combined with the human environment. People and structures near wildfires are threatened unless adequately protected through evacuation or mitigation. Most structures are flammable, and therefore, are threatened when wildfire approaches. In addition, a significant loss of life could occur to residents, firefighters, and others who are in the wildfire area and do not evacuate. Infrastructure such as electric transmission lines, fuel tanks, and radio transmission

towers are not often equipped to withstand the heat from a wildfire. Timber resources, animal habitats, and waterways can all be damaged leading to negative economic and environmental impacts.

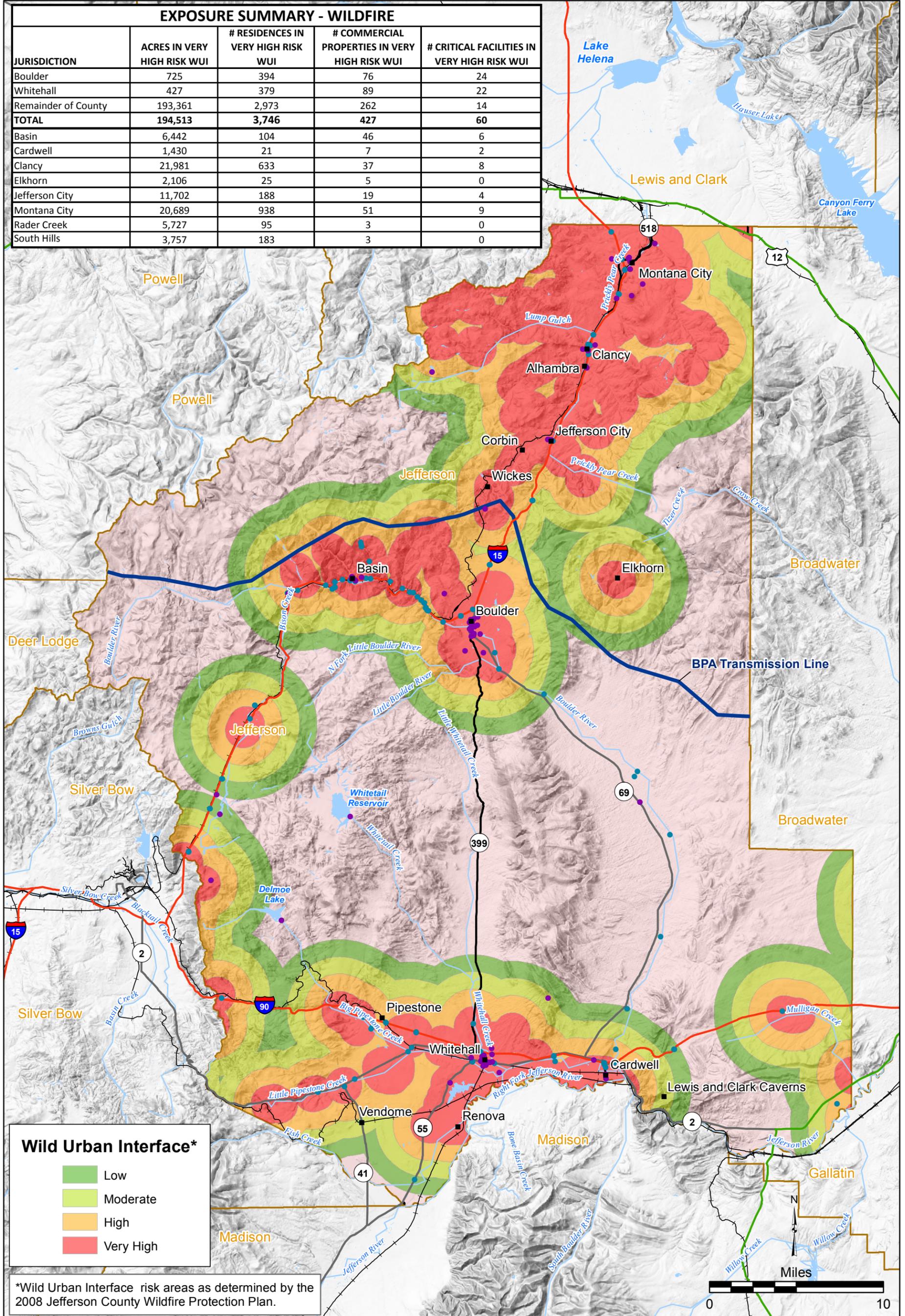
Since the mid-1960s, and particularly in the last 20 years, people have subdivided and developed wildlands throughout the county for residential, recreational, and commercial uses. Development has created many communities mixed with wildland vegetation, otherwise known as a Wildland Urban Interface (WUI). The WUI is defined as the line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels. A WUI exists anywhere that structures are located close to natural vegetation and where a fire can spread from vegetation to structures, or vice versa. A WUI can vary from a large housing development adjacent to natural vegetation to a structure or structures surrounded by vegetation. Throughout the country in the 1990s, the number of structures destroyed by wildfire increased six times over the previous decade's total, as increasing numbers of people moved to fire-prone areas.

According to the county growth policy, most of the recent residential construction in Jefferson County has been in areas near Boulder, Whitehall, and from Jefferson City to Helena, with much of it at the WUI. While homes near the wilderness enjoy closeness with nature, clean air and many other benefits, adequate fire prevention measures have often not been undertaken in either the subdivision of land or the construction of many structures near wildlands. Some subdivisions have been built without adequate means of alternative ingress/egress or, in some cases, with roads that are not accessible to emergency vehicles. Many of the earlier subdivisions do not have water supply systems capable of suppressing a major fire.

Homes are often located at the forest edge or in the forest itself; built out of flammable materials (wood siding and other flammable materials); constructed near the end of gulches with only one escape route or on steep hillsides with narrow, winding roads; and built on lands without adequate water. While the site or building material may be chosen for its aesthetic merit, it often has few or none of the qualities essential for the safety of both the home and its occupants in the event of a fire (Jefferson County Growth Policy).

The Tri-County FireSafe Working Group has been important in establishing areas within Jefferson County subject to wildfire risk. A recent mapping effort was completed to assess the wildland fuel hazard risk within the county. **Figure 5** presents a wildfire risk map showing the WUI and critical facilities in Jefferson County.

Jefferson County, as part of a collaborative effort along with Lewis and Clark and Broadwater Counties, completed a *Regional Community Wildfire Protection Plan*. This document is presented in **Appendix E**. Mitigation projects identified in this plan are incorporated herein by reference.



- Critical Facilities
- BPA Transmission Line
- Interstate
- Bridges
- River/Stream
- U.S. Highway
- Place Names
- Lake/Reservoir
- Montana Highway
- County Boundary
- +— Rail

Probability and Magnitude

Property damage is difficult to obtain for wildfires since it is typically the forest resource that sustains most of the damage/destruction. DNRC has collected data on structure loss from wildfires since 2003. In addition, Jefferson County DES has records of structure loss from the wildfires of 1988 and 2000. These sources indicate that in the past 10 years, wildfire has claimed 10 residential structures in Jefferson County. **Table 4.2-2** presents details on these structure losses including the approximate dollar loss adjusted to current dollars.

Date	Name of Fire	# Commercial Structures	Adjusted Value to 2011 Dollars	# Residential Structures	Adjusted Value to 2011 Dollars	# Outbuildings	Adjusted Value to 2011 Dollars
1988	Warm Springs	0	0	1	\$129,123	0	0
2000	Boulder Complex	0	0	9	\$1,162,107	0	0
2004	Wood Hauler	0	0	0	0	1	\$1,000
<b>TOTAL</b>		<b>0</b>	<b>0</b>	<b>10</b>	<b>\$1,291,230</b>	<b>1</b>	<b>\$1,000</b>

Sources: Fire Data (DNRC, 2011); Median Value of Residential Property (US Census, 2000); Assumed \$1,000 value for average outbuilding; Inflation Calculator ([http://www.bls.gov/data/inflation\\_calculator.htm](http://www.bls.gov/data/inflation_calculator.htm))

**Table 4.2-3** presents the wildfire events in Jefferson County with reported property damages from the SHELDUS database and Presidential disaster declarations.

Date	Injuries	Fatalities	Property Damage	Crop Damage	Remarks
8/1/1994	0	0	\$5,000,000	\$0	Wildfire
9/1/1994	0	0	\$5,000,000	\$50,000	Forest Fires
8/2/2000	2	0	\$1,000,000	\$0	Presidential Disaster Declaration
<b>TOTAL</b>	<b>2</b>	<b>0</b>	<b>\$11,000,000</b>	<b>\$50,000</b>	

Source: SHELDUS, 2010 (adjusted to 2010 dollars); DES, 2001

Wildfire does not present a uniform risk across Jefferson County. **Figure 5** presents a wildfire risk map showing the WUI and the Jefferson County critical facilities. The WUI layer used for this analysis consists of two input layers: WUI zones computed using GIS and USFS Region One Healthy Forest Restoration Act WUI. Wildland interface zones up to four miles from interface communities (areas where population density  $\geq$  250 people per square mile), were identified as important areas for reducing fuel hazards. A wildland urban interface zone mapping procedure was created based on buffering interface communities by four miles. Each one mile buffer zone in the four mile area was assigned a WUI risk class of: 4 (very high) for the nearest, 3 (high) for the next, 2 (moderate) for the next, and 1 (low) for the farthest. Additional WUI areas were added from the USFS Healthy Forest Restoration Act WUI layer which was created using communities at risk, population density, and topography modeling.

To complete the vulnerability analysis for this project, GIS was used to intersect the resulting WUI layer with both the critical facility and MDOR cadastral parcel datasets. Estimates of vulnerable population were calculated by determining the percent exposure in each census block for the hazard area.

Exposure values are presented in **Table 4.2-4**. Annualized loss estimates were calculated by applying frequency and magnitude to building stock exposure, and are presented on the Risk Assessment Summary tables in *Section 4.11 (Tables 4.11-1 through 4.11-3)*. Building exposure reflects only the monetary structure value and does not account for improvements or personal effects that may be lost to wildfire. The *Wildfire Section* in **Appendix C** presents supporting documentation from the risk assessment including a list of critical facilities in the very high, high, moderate, and low WUI risk zones.

GIS analysis of the wildfire risk to Jefferson County indicates that over 194,513 acres are within the very high-risk WUI. According to the vulnerability analysis, 3,746 residences, 427 commercial, industrial and agricultural buildings, and 60 critical facilities are located in very high-risk WUI. Digital data on construction type for the facilities is not available but will be considered in future PDM updates.

The history of wildfires, the terrain, and recent insect infestations has prompted Jefferson County to identify wildfire as a significant hazard. Smoke from fires both within and outside of the county can create poor air quality. Sensitive groups, such as the elderly and asthmatics, can be affected. Wildfires can also have a significant impact on the regional economy with the loss of timber, natural resources, recreational opportunities, or tourism. Although the primary concern is to structures and the interface residents, most of the costs associated with fires, come from firefighting efforts. As past events have also shown, infrastructure such as power transmission lines can also be threatened.

Wildfires generally occur more than once per year in Jefferson County and therefore, the probability of future events is rated as “highly likely”.

### **Future Development**

Land use regulations and subdivision ordinances can reduce the incidence of wildland fire by addressing survivable space and access for emergency vehicles. The Jefferson County Growth Policy acknowledges wildfire risk with the following goal: *Minimize risk of fire by management and planning, and to permit the effective and efficient suppression of fires in order to protect persons, property and forested areas.*

The following objectives have been outlined to mitigate the risk of wildfire in future development:

- Encourage fire protection measures throughout the county, giving special emphasis to the extreme fire hazards at the wildland urban interface.
- Complete fire hazard mapping for Jefferson County.
- Encourage that all developments be within a fire protection district, or have a contract for service with a fire protection district.

TABLE 4.2-4 JEFFERSON COUNTY VULNERABILITY ANALYSIS – WILDFIRE (VERY-HIGH RISK)										
JURISDICTION	RESIDENTIAL PROPERTY EXPOSURE \$	# RESIDENCES AT RISK	COMMERCIAL , INDUSTRIAL & AGRICULTURAL PROPERTY EXPOSURE \$	# COMMERCIAL , INDUSTRIAL & AGRICULTURAL PROPERTIES AT RISK	CRITICAL FACILITIES EXPOSURE RISK \$	# CRITICAL FACILITIES AT RISK	BRIDGE EXPOSURE \$	# BRIDGES AT RISK	PERSONS AT RISK	PERSONS UNDER 18 AT RISK
<b>Incorporated Communities &amp; County</b>										
Boulder	\$24,902,761	394	\$7,775,364	76	\$176,184,108	24	\$151,180	1	1,183	223
Whitehall	\$31,207,320	379	\$8,389,386	89	\$6,592,714	22	\$0	0	1,038	239
Remainder of County	\$456,191,186	2,973	\$32,280,874	262	\$31,957,128	49	\$9,953,800	73	8,539	2,034
<b>CENSUS Designated Places</b>										
Basin	\$5,563,391	104	\$1,277,430	46	\$319,666	6	\$1,651,992	15	212	46
Cardwell	\$2,171,372	21	\$531,359	7	\$878,210	2	\$517,768	5	50	16
Clancy	\$99,059,802	633	\$4,209,681	37	\$7,954,126	8	\$891,224	9	1,661	360
Elkhorn	\$808,614	25	\$52,294	5	\$0	0	\$0	0	10	0
Jefferson City	\$24,580,255	188	\$419,333	19	\$273,317	4	\$519,376	3	472	107
Montana City	\$173,250,944	938	\$19,252,068	51	\$8,050,033	9	\$1,292,344	4	2,715	706
Rader Creek	\$10,809,350	95	\$62,282	3	\$0	0	\$115,824	1	291	53
South Hills	\$46,902,951	183	\$873,509	3	\$0	0	\$0	0	517	183
<b>CENSUS County Divisions</b>										
Boulder	\$403,734,274	2,713	\$35,369,389	261	\$199,320,499	60	\$6,267,924	45	7,683	1,856
Whitehall	\$108,566,993	1,033	\$13,076,235	166	\$15,413,452	35	\$3,837,056	29	3,077	640

- Subdivisions should be planned, designed, constructed and maintained so as to minimize the risk of fire. Developers should submit a defensible space plan for each subdivision to the appropriate fire district for its review.
- Encourage fire resistant construction.
- Promote cooperation with local fire districts and state and federal agencies to develop and provide a wildfire educational program.
- Promote fire services for all subdivisions.
- Promote adequate water supply systems.
- Support adequate ingresses and egresses in all subdivision planning.
- Promote vegetation policies that reduce fire hazards.

The Jefferson County subdivision regulations state that all subdivisions will be planned, designed, constructed and maintained so as to minimize the risk of fire and permit the effective and efficient suppression of fires in order to protect persons, property, and forested areas. Required conditions include:

- Placement of structures in such a manner so as to minimize the potential for flame spread and to permit efficient access for fire fighting equipment.
- An adequate water supply and water distribution system to fight fires.
- Special standards for subdivisions proposed in areas of high fire hazard including:
  - At least two entrance-exit roads.
  - Road right-of-way cleared of slash.
  - Building sites prohibited on slopes greater than 30 percent and at the apex of fire chimneys.
  - Minimum lot standards for densities in areas of steep slopes of dense forest growth.
  - Open space located to separate residences from densely forested areas.
  - A water supply of sufficient volume for effective fire control.

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## **1.0 EXECUTIVE SUMMARY**

### **1.1 Introduction and Background**

The community of Clancy has reached a point where the water quality is a serious concern and the community is unable to grow in a reasonable and prudent manner due to inadequate wastewater treatment and disposal. Over the last several years the County Health Department has been dealing with an increasing number of septic systems that are out of compliance with current health regulations. Many of these existing systems are out-dated and failing at an increasing rate.

During early 2012, groundwater samples were collected from several wells in the Clancy area. These wells were analyzed for total coliform, e-coli, and nitrate plus nitrite, which are indicators of impacts from either animal or human waste. Several of the water sample results showed impacts from what is assumed to be onsite wastewater treatment systems. The water sample analyses showed exceedences of the EPA Maximum Contaminant Limits (MCL) for Nitrate and the presence of total coliform. This is a very serious threat to health and human safety.

This situation has brought the need for a centralized wastewater system to the forefront. The local citizens are becoming more aware of their water quality problems and the potential health hazards they face with older congested onsite septic systems. Jefferson County has taken an active role to find solutions for this problem and has sought the assistance of Great West Engineering, Inc. to help move forward toward building a community wastewater treatment system.

If a community wastewater collection and treatment system moves forward it would require the financial assistance of grants and a legal Water and Sewer District will need to be formed. The formation of a Water and Sewer District must be approved by the voters in accordance with Montana State law.

### **1.2 Problem Definition**

Clancy is an unincorporated community that, for the most part, was built prior to the establishment of County or State health or environmental regulations, thus many individual septic disposal systems do not comply with current regulations. One of the most prominent non-compliance issues is the close proximity of drinking water wells to septic systems (less than 100-foot separation). The small lots sizes within the proposed District does not allow for adequate separation between wells and drainfields. The majority of these systems are cesspools, seepage pits, or metal septic tanks with drainfields that have either failed, or have a high potential of failing in the near future. Additionally, the small lot size does not allow for a replacement drainfield to be installed in the event the primary drainfield fails. The soils in this particular area consist of coarse grained decomposed granite or alluvium that lacks the organic material necessary to reduce the levels of nitrate and phosphorous. Coupled with poor treatment characteristics of the soils are shallow groundwater and close proximity of Prickly Pear Creek, further increasing the high probability of contaminating the groundwater, water supply wells, and

potentially Prickly Pear Creek. The existing conditions are a public health hazard for the community and warrants the need for a centralized wastewater collection and treatment system. Without this type of system in place, the local residents face a serious health risk. Additionally, the Jefferson County Environmental Health Department will continue to have an increasingly difficult time allowing the construction of new homes or businesses in the area unless the proposed septic systems can meet all the required regulations. The end result could be a moratorium on new construction and an inability to permit replacement septic system drainfields as they fail.

### **1.3 Alternatives Considered**

The alternative screening process considered numerous alternatives aimed at resolving the problems faced by the community of Clancy to ensure that the best possible solution was not overlooked. After an initial evaluation, it was determined that several of the potential alternatives were not viable options for Clancy and were eliminated from further review. The lack of suitable wastewater treatment sites within a reasonable distance of the proposed District and project feasibility were the primary reasons for the initial eliminations. Alternatives that were considered for a more detailed review include:

#### Collection System

- Alternative CS-1: Gravity Collection – Street Layout
- Alternative CS-2: Gravity Collection – Alley Layout

#### Lift Station

- Alternative L-1: Single Centralized Lift Station

#### Treatment System

- Alternative T-1: No Action Alternative
- Alternative T-2: Storage and Irrigation (Low Rate Land Application)
- Alternative T-3: Septic Tank / Level 2 Treatment / Pressure Dosed Drainfield
- Alternative T-4: Biological Nutrient Removal (BNR) Mechanical Treatment Plant

#### Site Selection

- Alternative S-1: Chokecherry Lane
- Alternative S-2: Lump Gulch
- Alternative S-3: Marks Bench
- Alternative S-4: Sunnyside Lane
- Alternative S-5: Across I-15
- Alternative S-6: State Land

## 1.4 Preferred Alternative

Each of the alternatives presented in Section 1.3 were analyzed in detail. A decision matrix was developed to compare alternatives and help select a preferred alternative. The decision matrix included environmental impacts, technical feasibility, 20-year life cycle costs, public health and safety, operation and maintenance, and public opinion. A public meeting was held by the County, at which Great West Engineering presented the preliminary engineering report to the public in order to get their opinion and support of the project.

Based upon the results of the decision matrix, the preferred alternative was determined to include:

- Alternative CS-2: Gravity Collection System – Alley layout
- Alternative L-1: Single Centralized Lift Station – Packaged Submersible
- Alternative T-3: Septic Tank / Level 2 Treatment / Pressure Dosed Drainfield
- Alternative S-5: Across I-15

Alternative CS-2 includes the installation of collection system infrastructure primarily in the alley ways of the community grid. The majority of the existing septic systems are located in the back of the lots so the new service line construction will have less impact and be more feasible to connect to the central system.

Alternative L-1 includes installation of a new centralized raw sewage lift station located in the far northeast corner of the proposed District, which is the low point of the system. The entire service area consistently slopes to the northeast, allowing for a single lift station design. After evaluating different types of lift stations, a packaged submersible type was selected.

Alternative T-3 consists of a centralized septic tank, level 2 treatment system, and discharge to groundwater via a pressure dosed drainfield (subsurface infiltration galleries). Although this treatment technology has been used for decades, in recent years manufacturers such as Advantex have begun building modular type systems complying with level 2 treatment criteria for the State of Montana. These manufacturers have compiled an extensive amount of data available to support the effectiveness of their respective treatment systems. Disposal to groundwater works well given the soils found in this region, and the ability to incrementally expand this system as needed in the future gives support in making this a good alternative for Clancy. This treatment method will require the proposed District to obtain a groundwater discharge permit from MDEQ. Although the permit process can be rigorous, discharge permits are normally obtainable.

Alternative S-5 consists of the suitable land located on an open bench northeast of the proposed District and east of Interstate 15 and was selected primarily because the land is assumed to be suitable for groundwater infiltration and because of its separation distance from surface water and existing well heads. Based on the available soils information, this site will provide adequate treatment to be in compliance with Montana's non-degradation limitations. It should be noted that although site S-5 was selected, site S-3 located across Interstate 15 at the north end of the District boundary would be a suitable alternative, as would site S-6, located to the south. Final

site selection will depend largely on site specific testing and investigations, and if land acquisition negotiations are successful. The site specific testing and investigation would occur during the design phase of the proposed project.

## **1.5 Project Costs and Budget**

The total estimated capital cost for the preferred alternative is \$5,974,000 with an annual operations and maintenance cost of \$34,500. This includes construction of the collection system, lift station, treatment and disposal system, land acquisition, financing, engineering, and administration costs. A detailed line-item breakdown of these costs can be found in Tables 9.6.1A, 9.6.1B and 9.6.2.

Various funding scenarios were considered with a variety of grant and low interest loan sources available to the proposed District. The recommended funding strategy includes grant funds from the Treasure State Endowment Program (TSEP), the Department of Natural Resources and Conservation (DNRC), the Community Development Block Grant (CDBG) program, as well as STAG/WRDA grants. Additional project funding would be through the Rural Development (RD) grant and loan program. Table 10.1.2A in Section 10 presents the proposed funding strategy and Table 10.1.2B presents a detailed breakdown of the proposed funding strategy with user rates. Funding source eligibility would be determined by an income survey which will need to be performed prior to applying for any grants.

User rates were calculated using the proposed funding scenario and the equivalent dwelling unit (EDU) methodology. This methodology breaks-down the debt service and O&M costs to individual residential users on the system. The monthly rate per EDU is estimated to be \$94.92, whereby \$18.79 is attributable to O&M. Larger users (commercial properties, school, etc.) would pay more based on their usage. These users would be assigned an EDU multiplier based on standard practice of the industry using building size and use as criteria for assigning a multiplier.

## Jefferson County Bridge Projects - Last 17 Years

- 1998 Prickly Pear Bridge crossing the Prickly Pear Creek on McClellan Creek Road. Replaced with a concrete bridge structure. Cost unknown (Outside funding unknown-50%/Local Bridge Fund-50%).
- 2000 Red Bridge on Hubbard Lane. Cost unknown (MDT Offsystem)
- 2001 Mayflower Bridge on Tebay Lane. Cost unknown (MDT Offsystem).
- 2001 Jefferson River Bridge on Tebay Lane. Cost unknown (MDT Offsystem).
- 2002 Tizer Lake Road Bridge on Tizer Lake Road. Cost \$44,000 (Local Bridge Fund).
- 2003 Uncle Sam Bridge crossing Cataract Creek on Cataract Creek Road. Replaced with steel modular bridge. Cost \$63,000 (Forest Service-50%/Local Bridge Fund-50%).
- 2003 Eva Mae Bridge crossing Cataract Creek on Cataract Creek Road. Replaced with steel modular bridge. Cost \$82,000 (Forest Service-50%/Local Bridge Fund-50%).
- 2004 Jefferson Slough Bridge (L22522001+000001). Cost unknown (MDT Offsystem).
- 2005 Boulder River Bridge (L22099004+03001). Cost unknown (MDT Offsystem).
- 2005 Redecked Boulder cut off Road Bridge. Cost unknown (Local Bridge Fund).
- 2008 Lump Gulch Road Bridge crossing Prickly Pear Creek on Lump Gulch Road. Replaced with a concrete trideck bridge. Cost \$150,000 (TSEP-50%/Local Bridge Fund-50%).
- 2008 Forcella Road Bridge crossing the Jefferson Irrigation Canal on Forcella Road. County crews replaced bridge with a structural plate steel arch culvert. Cost \$30,000 (TSEP-50%/Local Bridge Fund-50%).
- 2008 Parrot Castle Road Bridge crossing the Jefferson Irrigation Canal on Parrot Castle Road. County crews replaced bridge with a structural plate steel arch culvert. Cost \$35,000 (TSEP-50%/Local Bridge Fund-50%).
- 2008 KG Ranch Road Bridge crossing an Irrigation Canal on KG Ranch Road. County crews replaced bridge with a structural plate steel arch culvert. Cost \$35,000 (TSEP-50%/Local Bridge Fund-50%).
- 2008 Sloans Lane Bridge crossing Muskrat Creek on Sloans Lane. County crews replaced bridge with an open bottom aluminum box culvert. Cost \$50,000 (TSEP-50%/Local Bridge Fund-50%).
- 2008 High Valley Road Bridge crossing Bison Creek on High Valley Road. County crews replaced bridge with an open bottom aluminum box culvert. Cost \$50,000 (TSEP-50%/Local Bridge Fund-50%).

- 2010 Quintance Lane Bridge crossing the Boulder River Overflow on Quintance lane. Replaced with a 3-sided concrete box culvert. Cost \$125,000 (TSEP-50%/Local Bridge Fund-50%).
- 2010 Hanson Lane (HL1) Bridge crossing the Jefferson Irrigation Canal on Hanson Lane. County crews replaced bridge with a structural plate steel arch culvert. Cost \$25,000 (TSEP-50%/Local Bridge Fund-50%).
- 2010 Hanson Lane (HL3) Bridge crossing the Jefferson Irrigation Canal on Hanson Lane. County crews replaced bridge with a structural plate steel arch culvert. Cost \$25,000 (TSEP-50%/Local Bridge Fund-50%).
- 2012 Basin Creek Road Bridge (BC1) crossing Basin Creek. The bridge deck and rails were rehabilitated. Cost \$40,000 (100% funded by the Resource Advisory Committee [RAC]).
- 2012 Cottonwood Canyon Road Bridge (CC3) crossing Cottonwood Canyon. County crews are scheduled to replace the bridge with a reinforced concrete box culvert. Cost \$74,000 (TSEP-50%/Local Bridge Fund-50%).
- 2014 Cataract Creek Road Bridge Replacement (CT4) crossing Cataract Creek. Replaced with a new steel modular bridge. Cost \$275,000 (TSEP-50%/Local Bridge Fund-50%).
- 2015 Dunn Lane Bridge crossing the Boulder River. Replaced with a concrete trideck bridge. Cost \$400,000 (TSEP-50%/Local Bridge Fund-50%).

# Excerpts



## Montana State Water Plan

A Watershed Approach to the  
**2015 Montana State Water Plan**



## MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

December 5, 2014

### ***My Fellow Montanans,***

Montana's economy and quality of life rely on water for everything from agriculture, livestock, fisheries, recreation, hydropower, industry and municipal uses. Montana enjoys the benefits of being a headwaters state where mountain snowpack delivers high quality water supplies into our valleys and plains. Balancing competing water demands with uncertain future water supplies is required. The State, working with citizens across Montana, must proactively plan and implement efforts to achieve a balance that ensures a strong economy and protects the magnificent environment we all enjoy and rely upon. It is with this recognition of the importance of water to the people of Montana that the Department of Natural Resources and Conservation (DNRC) is proud to adopt the 2015 State Water Plan.

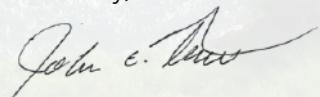
The 2015 Montana State Water Plan contains sixty-eight recommendations intended to guide state water policy and management over the near, intermediate and long-term bases. All recommendations contained in the State Water Plan are guided by the legal principles in the Montana Constitution, the prior appropriation doctrine and the Montana Water Use Act.

During the 18-month long planning process, DNRC worked with four regional Basin Advisory Councils (BACs) representing water users in the Clark Fork/Kootenai, Upper Missouri, Lower Missouri and the Yellowstone river basins. The 80 members of the four BACS represent the most diverse group of water users and interests ever brought together by the State of Montana. I want to thank all the members of the BACs for their hours of service in developing the basin plans that are the bases for the State Water Plan.

The planning process also benefited from the hundreds of Montanans who took the time to provide the BACs and the DNRC with comments on what they feel are the key water related issues facing Montana and how we, as a state, can address them together. As a result, the recommendations offered in the State Water Plan reflect the collective work and ideas of a broad range of water users from across the state.

I believe that implementation of the recommendations offered in the State Water Plan will provide the state and people of Montana with the information and tools necessary to meet the complex challenges of managing this vital resource to meet current uses and needs of future generations who will call Montana home.

Sincerely,

  
John E. Tubbs, Director



## ACKNOWLEDGEMENTS

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The hundreds of individual Montanans that took the time to attend meetings, provide input, and comment on the Montana State Water Plan

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## Montana Department of Natural Resources and Conservation

Persons with disabilities who need an alternative, accessible format of this report should contact Montana DNRC at 1424 Ninth Ave, Helena, MT 59620, or by phone at (406) 444-0465.

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# THE MONTANA STATE WATER PLAN 2015 A WATERSHED APPROACH

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# EXECUTIVE SUMMARY

**“...all waters within Montana are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided by law.”**

—Montana Constitution

Montana’s economy and quality of life rely on water for everything from agriculture, livestock, industry, fisheries, and recreation, to municipal and domestic uses. It is with this recognition of our dependence on water that the Department of Natural Resources and Conservation (DNRC) is proud to present the 2015 State Water Plan to the Montana Legislature and the citizens of Montana.

The 2015 State Water Plan is a synthesis of the vision and efforts of regional Basin Advisory Councils (BACs) established in Montana’s four main river basins: the Clark Fork/Kootenai, Upper Missouri, Lower Missouri, and the Yellowstone. The 80 members of the four BACs represent one of the most diverse groups of water users and interests ever brought together by the state of Montana. As part of the planning process, the BACs and DNRC were assisted by the hundreds of Montanans who took the time to provide the BACs and the DNRC with comments on what they feel are the key water related issues facing Montana and how we, as a state, can address them together.

As a result, the recommendations in the State Water Plan reflect the collective work and ideas of a broad range of water users from across the state. We believe that if the state and people of Montana carry out the recommendations offered in the State Water Plan, then Montana in the next 20 years will:

- Have finalized the adjudication of all water rights in the state of Montana – an effort that began in 1973;
- Be better prepared to manage water in real-time to adjust to seasonal changes in supply and demand as well as prepare for longer term climatic changes;
- Be better able to protect existing

and senior water right holders while continuing to improve the state's ability to allocate water to meet new demands;

- Be better prepared to endure droughts in watersheds across the state;
- Be better able to supply water to serve the needs of a growing population and thriving economy as well as the natural systems, habitats, and species that our state is renowned for; and
- Have a public that better understands the dynamics of our water supply and the water rights system they rely upon every day.

The Montana Legislature directed DNRC to update the State Water Plan and submit the results to the 2015 Legislative Session. The State Water Plan is to include:

- An inventory of consumptive and nonconsumptive uses associated with existing water rights;
- An estimate of the amount of surface and groundwater needed to satisfy new future demands;
- Analysis of the effects of frequent drought and new or increased depletions on the availability of future water supplies;
- Proposals for the best means, such as an evaluation of opportunities for storage of water by both private and public entities, to satisfy existing water rights and new water demands;
- Possible sources of water to meet the needs of the state; and
- Any legislation necessary to address water resource concerns.

The guiding legal principles for the State Water Plan include: the Montana Constitution with its recognition of pre-1973 water rights and the fundamental principles of the prior appropriation doctrine ("first in time is first in right"); and, the Montana Water Use Act that, amongst other things, governs the adjudication of existing pre-1973 water rights, new appropriations of water, changes to existing water rights, water rights compacts, water reservations, and water planning.

During the 18-month long planning process, DNRC worked with the BACs on developing basin specific responses to each of the subject areas listed above. Results of this effort in each planning basin, along with supporting data, are contained in four individual basin planning reports. Each of the four basin plans serves as a standalone document for guiding the development and management of the basin's water resources.

These basin plans will continue to evolve to meet the planning needs of their respective basins.

In contrast to the detail rich basin plans, the State Water Plan provides a high-level overview of the state's water resources and lays out a path for managing those resources over the next twenty years. Although the State Water Plan represents the outgrowth of these regional plans, only the State Water Plan has been formally adopted by DNRC. In the event that guidance in one of the basin plans is at odds with the State Water Plan, the direction offered in the State Water Plan takes precedence. Similarly, the policy recommendations offered in the basin plans represent the collective work of the individual BACs and should not be interpreted as carrying the authority of official state policy. The basin plans are all available for review at [www.dnrc.mt.gov/mwsi](http://www.dnrc.mt.gov/mwsi).



Water use in Montana totals approximately 84 million acre-feet annually. Hydroelectric power generation accounts for 72 million acre-feet or 86% of the water used on a state-wide basis.

Approximately 3.6 million acre-feet are consumed state-wide. Agriculture diverts approximately 10.4 million acre feet and consumes approximately 2.4 million acre-feet, reservoir evaporation consumes 1 million acre-feet, and municipal, industrial, domestic, and livestock watering consume approximately 200,000 acre-feet combined.

Demand for water is a function of many factors that are inherently uncertain. Population may grow or decline and agriculture and industry may demand more water or make do with less through greater efficiency. Changing and variable climatic conditions compound this uncertainty.

To forecast the potential effects of climate trends on future water supplies in Montana, DNRC modeled a range of climate scenarios following general procedures similar to those described in the U.S. Bureau of Reclamation (2011) West-Wide Climate Risk Assessments. Virtually all model simulations project warmer temperatures and most project modest precipitation increases. Although annual stream flow volumes are expected to stay the same or increase, Montanans are likely to see a shift in the timing of runoff due to earlier snowmelt and an increase in rain as a percentage of precipitation during late winter and early spring.

The availability of water for new appropriations varies across the state and is subject to both physical water availability and existing legal demands. Many of the basins located in the western third of the

state are generally closed to new surface water appropriations. Opportunities for new appropriations for surface water or hydraulically connected groundwater also may be limited outside of closed basins because of existing legal demands including irrigation claims, hydroelectric rights, or instream water rights for fisheries, wildlife, and recreational use.

Given the scarcity of legally available surface water, the reallocation of existing water rights to new uses will play a key role in meeting future demands. As part of that reallocation, water users must receive an authorization from DNRC before they change or lease their water right in order to ensure that they will not adversely affect other water rights.

In areas of Montana, the ability to put water to a beneficial use is limited as much by water quality as physical availability. Water quantity and water quality are closely intertwined and the Montana Water Use Act recognizes this relationship (§85-2-311 MCA). However, this document offers limited guidance regarding water quality issues because DNRC has no authority to regulate water quality and the state water planning statute does not explicitly address water quality. The Department of Environmental Quality has primary authority over the regulation of water quality in Montana. For more information on water quality regulation in Montana, please reference DEQ's Montana Nonpoint Source Management Plan at <http://deq.mt.gov/wqinfo/nonpoint/NonpointSourceProgram.mcp>. Another good source of information is the Clean Water Act Information Center <http://deq.mt.gov/wqinfo/CWAIC/default.mcp>. These sites provide information, strategies and goals and reports that address water



quality issues generally as well as water quality as it is affected by water quantity.

Water storage is an important tool for meeting future demands and responding to a changing climate. The prospect of constructing storage projects in Montana is limited by the availability of suitable locations, cost, public support, the need to mitigate environmental impacts, and limited legal and physical availability of water to store. The development of new storage projects is limited to basins where the volume of annual runoff exceeds downstream legal demands.

There are also opportunities to retain high spring flows through the use of natural systems such as riparian areas, floodplains and wetlands which act to slow runoff and promote groundwater recharge effectively storing water and releasing it slowly back to the surface water system. In this way, these natural systems fill a role similar to traditional reservoirs. Artificial recharge of alluvial aquifers may also provide additional opportunities to store water when the physical supply exceeds downstream legal demands.

The major findings and recommendations of the State Water Plan are found in the final section of this report and summarized below. All recommendations contained in the State Water Plan are subject to the existing institutional and legal framework for water use in Montana as provided by the Montana Constitution, prior appropriation doctrine, and Montana Water Use Act. Full implementation of some recommendations may require the Legislature to amend the Water Use Act.

## WATER SUPPLY AND DEMAND

Water supply across Montana is controlled by the variability in seasonal temperature and precipitation. While the demand for water continues to grow, water availability varies from year-to-year and often changes dramatically within a given year. As a result, coping with supply and demand imbalances is a constant feature of water management in Montana. The importance of ensuring an adequate supply of water to meet current beneficial uses and future demands is a theme echoed by the four Basin Advisory Councils throughout the planning process.

- **Increase water use efficiency and water conservation** – As the demand for water increases, water conservation and water use efficiency to reduce the consumption of water will play a larger role in meeting the state's future needs. Looking ahead, we must focus on innovative strategies to stretch supplies and promote water conservation while protecting against the adverse effects of increased consumption.
- **Expand efforts to quantify surface water supplies and availability** – While we cannot eliminate all supply and demand imbalances, Montana can improve and expand efforts to gather the best scientific information available to quantify and forecast water supplies and availability.
- **Increase flexibility to manage available water supplies through storage and rehabilitation of existing infrastructure** – Water storage is an important part of integrated water management. Water storage creates greater flexibility in managing available supplies to meet the multiple



demands of agriculture, municipalities, industry, hydropower, fisheries, recreation and water quality. While new storage projects may be difficult to site, authorize, and finance, there may be opportunities to modify the operations of existing facilities or construct smaller off-stream storage projects.

- **Explore the use of natural storage and retention to benefit water supplies and ecosystems** – Existing natural systems, such as riparian areas, floodplains and wetlands act to slow runoff and promote groundwater recharge; effectively storing water and releasing it slowly back to the surface water system. In this way, these natural systems fill a role similar

to traditional reservoirs. Artificial recharge of alluvial aquifers may also provide additional opportunities to store water when the physical supply exceeds downstream legal demands. Integrating existing natural systems into Montana's water management practices will support late season flows, mitigate the impact of drought cycles, and provide environmental benefits.

- **Support and expand Montana's existing drought preparedness and planning efforts** – Drought is part of Montana's natural hydrologic regime. Drought readiness requires proactive planning and a collaborative stakeholder approach within small- to medium-sized watersheds.

## WATER USE ADMINISTRATION

Historic beneficial use is the basis, measure and limit of a water right. An accurate understanding of water use is critical to Montana's ability to protect existing water rights while meeting new demands through the water right change process or new appropriations of water. Enforcement against water use without a water right or permit is also critical to the management of Montana's water resources.

- **Complete an accurate and enforceable water rights adjudication** – Adjudication of pre-1973 water rights is critical to Montana's ability to develop strategies for meeting future demands while protecting existing water rights. The water rights adjudication process must be completed as accurately as possible to establish the priority of pre-1973 water rights.

- **Enforce against illegal water use** – Montana Water users want a more efficient, less expensive, and less adversarial approach to water right enforcement. There is growing public sentiment in support of DNRC playing a more active enforcement role against illegal water use (i.e. using water without a right or permit).
- **Provide sufficient information, and legal and administrative capacity to minimize adverse impacts during times of water scarcity** – Drought planning efforts must include legal and administrative mechanisms that let water users reduce water diversions without putting their water rights at risk of abandonment and allow for the water savings to be protected.
- **Analyze additional opportunities and challenges for using water marketing, mitigation, and banking tools for meeting new demands** – Water marketing, mitigation, and water banking each offer distinct opportunities, and challenges. Understanding the potential positive and negative impacts of each is the first step toward taking advantage of these approaches.
- **Complete all outstanding tribal and federal reserved water rights compacts and work closely with federal partners to better manage federal water projects** – All four Basin Advisory Councils discussed the issue of outstanding reserved water right compacts and agreed that it is in the interest of the state, federal government, and the tribes to complete this important work. The State of Montana should work with the tribes, Montana's Congressional delegation and the federal government to complete the compacting process

through congressional and tribal ratification and decree by the Water Court.

## WATER INFORMATION

Water resource issues are multi-faceted and often highly localized. Understanding and resolving them requires ready access to up-to-date information. Multiple local, state and federal agencies generate and use water information in carrying out their responsibilities related to the protection or allocation of Montana's water resources. Better integration of this information will support planning, policy development and decision making at local, state and federal levels. Integration of information will also support planning and decision making by individual water users. Better access to hydrologic and climatic information at the appropriate geographic scale will result in more accurate assessments of water availability. Improved measurement and monitoring of water use will support the state's ability to determine when water is physically and legally available to meet new demands, while protecting existing water rights. Improved access to integrated water information will also support the work of water managers to distribute water by priority.

- **Support Improvements to the Montana Water Information System** – The Montana State Library's Water Information System (WIS) is the starting point for finding water resources information in Montana. The WIS makes high quality data on surface water, groundwater, water quality, riparian areas, water rights, climate data and more available to the public from one common starting place. The State Library continues to improve the WIS through the development of new data sets, interactive applications, and maps. Efforts to improve the WIS

should be encouraged and supported.

- **Inventory of consumptive and non-consumptive uses** – An accurate inventory of Montana’s water use, both consumptive and non-consumptive, is critical to the state’s ability to meet new demands while protecting existing water users from adverse effects. Accurate information on historic water use and associated water rights will support the state’s ability to determine the extent to which water is legally and physically available for new beneficial uses.
- **Monitor water supply and distribution** – Effective water management and distribution depend on accurate real-time measurements of streamflow, snowpack and soil moisture. Improving Montana’s water supply and distribution monitoring network will improve the ability of water managers to adjust to seasonal supply and demand imbalances as well as plan for longer term imbalances associated with climate variability.
- **Improve and expand efforts to characterize groundwater** – Montanans are increasingly looking to the state’s groundwater to meet future needs. Better groundwater information including aquifer characteristics and water monitoring data collected under the Montana Bureau of Mines and Geology Groundwater Water Assessment Program is needed statewide to identify sources of groundwater potentially available for development.
- **Improve management of surface water and groundwater as a conjunctive resource** – Montana recognizes the link between surface water and groundwater and manages them as a single resource. Additional information on interactions between

groundwater and surface water from site-specific investigations and long-term monitoring as well as strategies for mitigating impacts of groundwater use on surface water users is necessary to facilitate decisions on new permitting and water right change authorizations.

## ECOLOGICAL HEALTH AND THE ENVIRONMENT

Montana’s natural aquatic systems, lakes and rivers and associated biological resources, support our quality of life and Montana’s recreation and tourism economy. The availability of water in the appropriate quantity, quality, timing

and duration is necessary to ensure the health of our water-dependent ecosystems. We must pursue proactive policies and management practices to meet the needs of aquatic ecosystems within the prior appropriation system in order to sustain the health of these valuable natural systems.

- **Provide sufficient protection for instream flows within the prior appropriation framework to maintain aquatic and riparian systems** – Coordinated efforts are needed to develop and implement strategies and tools for providing minimum instream flow regimes within the prior appropriation framework.





- **Support proactive, coordinated efforts to reduce invasive species and protect endangered species in Montana** – Both aquatic and terrestrial invasive species can negatively impact water supplies and distribution. Coordinated efforts are needed to implement actions that protect Montana’s land and water resources. Experience has shown that a cooperative approach is the most effective way to address threatened and endangered species.

## **COLLABORATIVE WATER PLANNING AND COORDINATION**

Coordination increases communication, improves efficiencies, and leverages technical and financial resources. Effective collaboration helps to inform, engage, and connect stakeholders and supports efforts to improve water management across all watersheds. It is important to coordinate efforts and involve water managers, users, and stakeholders at the watershed, basin, and statewide scale to develop sustainable management solutions.

- **Expand support for basin and community-based watershed planning** – Community-based watershed groups, conservation districts, and other organizations provide the structure and a forum to bring together stakeholders, build partnerships, and work collaboratively to develop local water management plans. It will be increasingly important to provide such groups with planning support, technical assistance, and access to information to develop, implement, and monitor water use plans as demand for water grows and the administration of Montana’s water becomes more complex.
- **Encourage collaboration, coordination, and communication across local, state and federal agencies, and tribal governments** – Many local, state, federal, and tribal agencies share responsibilities for land and water management. The policies and actions of one often directly impact another. Close coordination between local, state, federal, and tribal water managers is critical for achieving outcomes that serve both economic and environmental interests.
- **Develop a plan to deliver water-related training, education, and outreach** – Water management is complicated, not only because of water’s finite and variable nature, but also because of the complicated nature of the water right laws and rules used to administer it. Water education and outreach activities are necessary to provide a foundation for informed management of Montana’s water resources now and in the future.

With the largest city in the state Billings, Yellowstone Basin has the highest municipal and industrial water use in the four MWSI planning basins (Figure 9d). Irrigation diverts approximately 2.5 million acre feet annually to serve over 600,000 acres. Hydroelectric power generation uses almost 2.7 million acre feet at Yellowtail Dam on the Bighorn River near the Wyoming border. Montana FWP manages an instream flow right of 5.5 million acre feet for the Yellowstone River at Sidney.

### INVENTORY OF CONSUMPTIVE WATER USE

Consumptive water use in Montana is influenced by a variety of factors including irrigated acreage, physically available water supplies, number of stock, and population. The water volume consumed by any use is less than the volume initially diverted, and the unused portion of water eventually returns to the system to be used by others. In Montana, basin-wide total consumption amounts to less than 30 percent of the diverted total, when considering all uses combined. Figures 10, 11a, 11b, 11c, and 11d show estimates of water consumed by type of use from information presented in individual planning basin documents. These estimates are of use for 2010 (2007 for irrigation) based on methodology described in individual basin plans.

### WATER CONSUMED IN MONTANA ANNUAL ACRE FEET

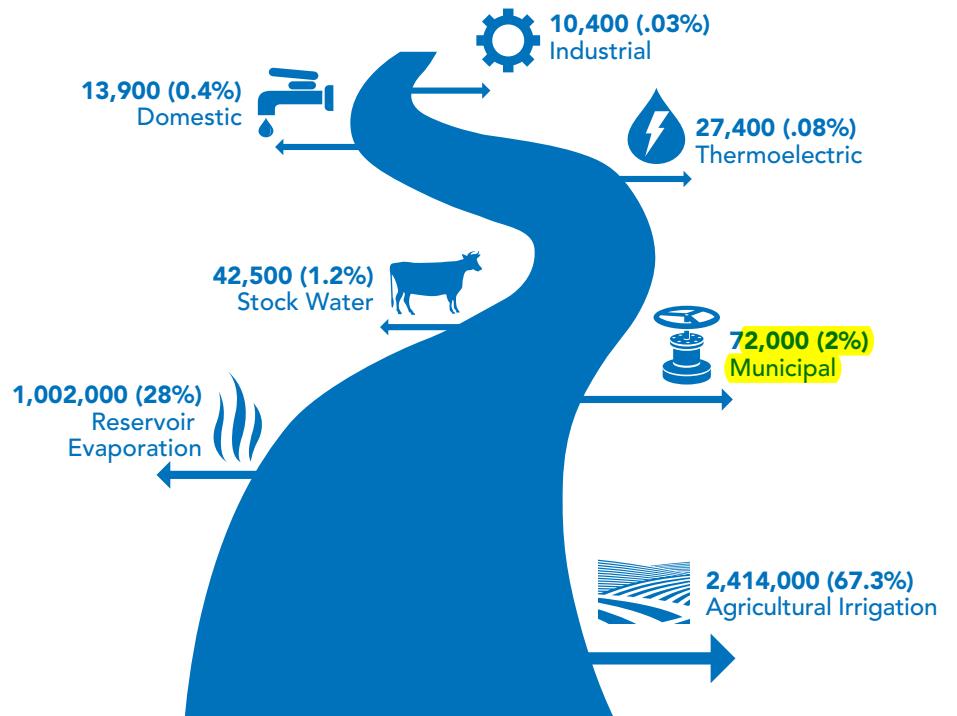


Figure 10: Water Consumption in Montana by Purpose

### CLARK FORK/KOOTENAI RIVER BASIN CONSUMPTIVE WATER USE ANNUAL ACRE FEET

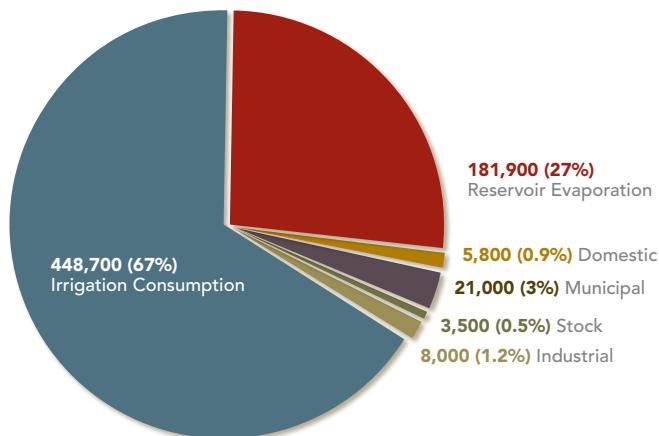


Figure 11a: Clark Fork/Kootenai River Basin Water Consumption

### UPPER MISSOURI RIVER BASIN CONSUMPTIVE WATER USE ANNUAL ACRE FEET

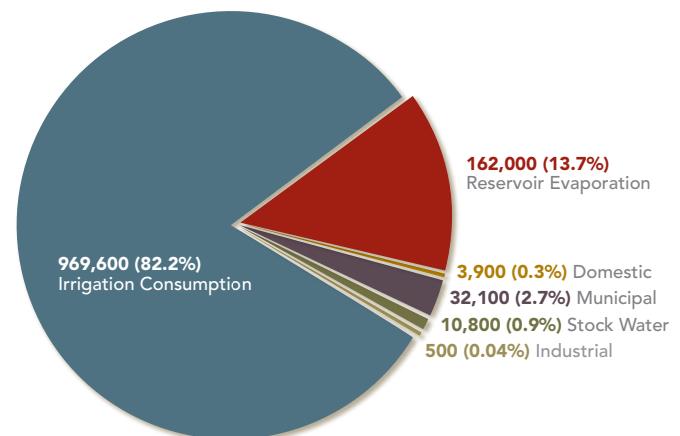


Figure 11b: Upper Missouri River Basin Water Consumption

## WATER SUPPLY AND DEMAND

Water supply across Montana is controlled by the variability in seasonal temperature and precipitation. While the demand for water continues to grow, water availability varies from year to year and often changes dramatically within a given year. As a result, coping with supply and demand imbalances is a constant feature of water management in Montana. Ensuring an adequate supply of water to meet current beneficial uses and future demands is a theme echoed by the four Basin Advisory Councils throughout the planning process.

*Steps to address these issues include:*

### Support Water Use Efficiency and Water Conservation

As the demand for water increases, water conservation and water use efficiency to reduce the consumption of water will play a larger role in meeting the state's future needs. Looking ahead, we must focus on innovative strategies to stretch supplies and promote water conservation while protecting against adverse effects to existing water users.

There is a general misunderstanding that when irrigators, municipalities, or other water users improve the efficiency of their water systems so that they divert or discharge less water that they are actually "saving" or reducing water consumption. In reality, irrigation upgrades, for example, may actually increase water consumption through higher crop yields and reduced return flows relied on by other water users. Additional adverse effects may include decreased recharge of shallow groundwater. The Montana Water Use Act prohibits changes in water use that result in adverse effects to other water

users on the source. Site-specific investigations, long-term monitoring and development of tools and strategies for mitigating the adverse effects from increasing efficiencies are needed to facilitate informed decisions on new permitting and water right change authorizations.

Free flowing wells are found throughout Montana and are a valuable asset, especially for stock water in remote areas, but left uncontrolled they can waste water and contribute to the decline of groundwater levels. Records from the Montana Groundwater Information Center (GWIC) indicate that there are more than 4,400 wells reported as "flowing" at the time of construction. With an average flow rate (of measured stock wells) of 20 gallons per minute, equipping a single well with a flow control valve can save approximately 32 acre feet per year. Monitoring by Montana Bureau of Mines and Geology indicate that water levels in the Lower Hell Creek – Fox Hills aquifer along the Yellowstone River corridor from Miles City to North Dakota have declined as much as 100 feet over the past 30 to 40 years partly due to uncontrolled flowing wells.

#### SHORT TERM RECOMMENDATIONS (0-2 YEARS)

- Support both site-specific investigations and long-term monitoring studies to quantify the effects associated with changes in irrigation methodologies and improvements to water distribution systems. These investigations will help to inform the development of water efficiency and conservation strategies that use water more effectively.
- Support state and federal programs that assist landowners with controlling discharge from uncontrolled flowing wells.

#### INTERMEDIATE TERM RECOMMENDATIONS (4-8 YEARS)

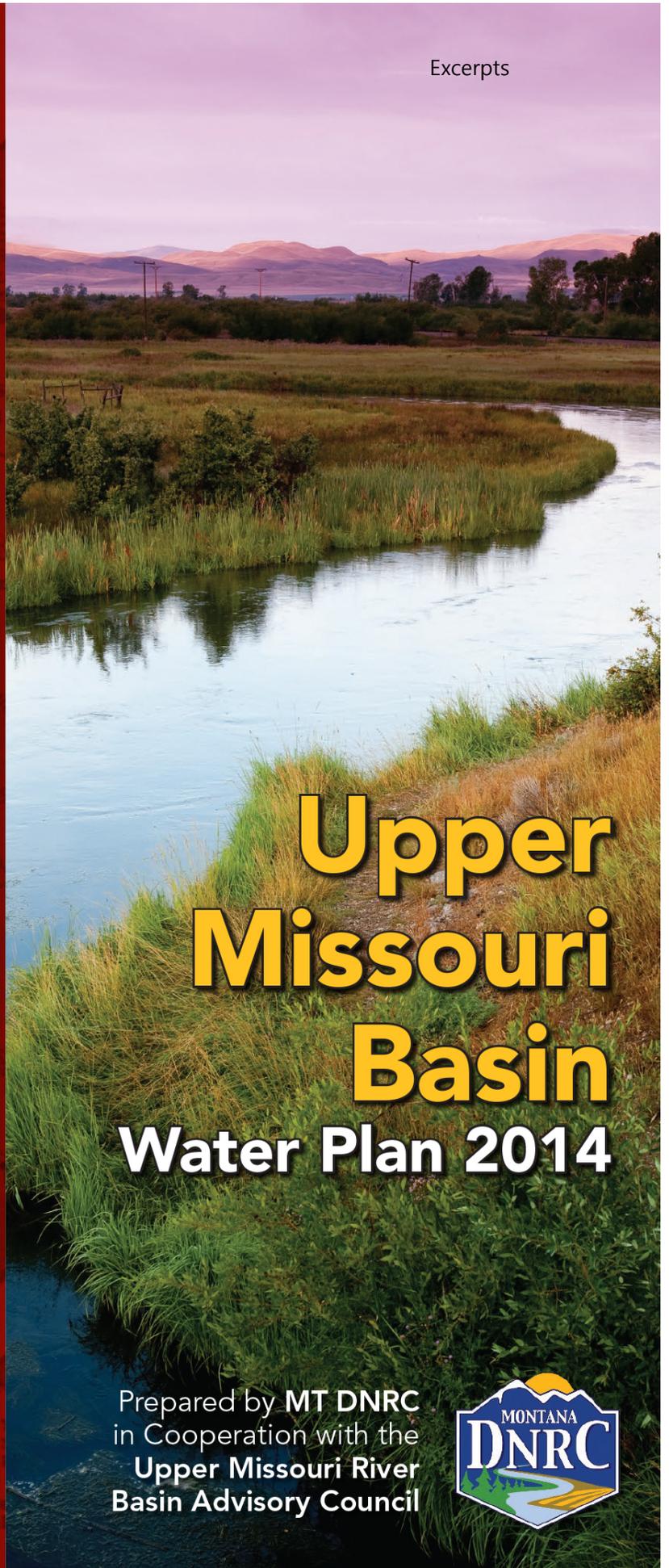
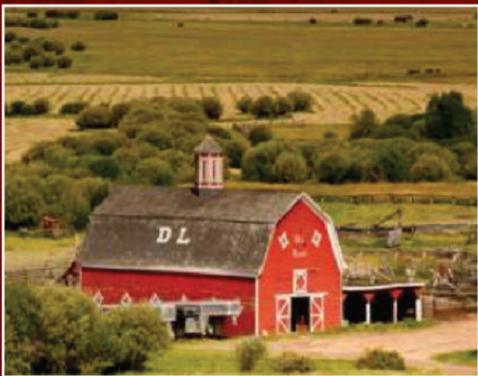
- Support the efforts of State agencies, universities and others to identify and pursue research on innovative water management and conservation strategies that are tailored to local needs and conditions.
- DNRC will analyze the water right implications and lessons learned from the land application of treated municipal wastewater.

#### LONG TERM RECOMMENDATIONS (6-10 YEARS)

- Support the implementation of water conservation incentives and measures that are adaptable to the needs of local conditions, individual watersheds and municipalities.
- The State of Montana should offer incentives that encourage the development of community wells as an alternative to individual wells for domestic water supplies.

### Improve and Expand Efforts to Quantify Surface Water Supplies and Availability

The importance of ensuring an adequate supply of water to meet current beneficial uses and future demands is a theme echoed by the four Basin Advisory Councils throughout the planning process. Water supply across Montana is controlled by variability in seasonal temperature and precipitation as well as long-term climatic trends. While the demand for water continues to grow, physical water availability varies from year-to-year and can often change dramatically between seasons in any given year. As a result, coping with supply and demand imbalances is a constant feature of water management in Montana. While we cannot eliminate all supply and demand imbalances, Montana can improve and expand



# Upper Missouri Basin Water Plan 2014

Prepared by MT DNRC  
in Cooperation with the  
Upper Missouri River  
Basin Advisory Council





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# MONTANA WATER SUPPLY INITIATIVE

## UPPER MISSOURI RIVER BASIN WATER PLAN

## II. Executive Summary

The Upper Missouri Basin is a treasure with its own distinguishing water story that makes it a unique place to live, work and visit. It is the headwaters to the continent, spanning the Rocky Mountain front and two major national parks. It is rich in agricultural tradition and beautiful productive irrigated valleys. Unsurpassed fishing and recreational opportunities attract locals as well as people from around the world. The basin is also a place of rapidly expanding urban and business development and economic growth. But the challenge that rises above all others is the fact that most of the Upper Missouri Basin is generally closed to new surface water appropriations, and options for putting water to beneficial use will probably require changing existing rights, mitigation or contracting water from Bureau of Reclamation facilities in the basin.

The Upper Missouri Basin Advisory Council took all of these factors to heart as it developed recommendations on future water management in the Upper Missouri Basin. The Council decided to present its water plan recommendations in the context of 12 issue areas: Conjunctive Surface water/Groundwater Management; Adjudication; Storage; Instream Flow; Local Cooperative Efforts; Water Use Efficiency and Conservation; Integrated Water Quality and Quantity; Water's Role in the Economy; Water Information Systems; Available Water Supply and Climate Change; Water Transfers and Marketing; and Large Scale Factors, but was quick to recognize that all 12 issues are highly interrelated. Each of the issue areas and objectives are summarized below and the detailed specific recommendations can be found in Section X of this report.

The Upper Missouri Basin Council thoughtfully stressed three core conditions essential to representing the people, livelihoods, and resources of the Upper Missouri River Basin. The first is that all 62 of the Council's recommendations recognize and support the Prior Appropriation Doctrine and its protection of multiple uses and existing water rights. None of these recommendations should infringe on the Prior Appropriation Doctrine and valid existing water rights. The second is that, like the issues themselves, all recommendations presented are highly interrelated and difficult to consider in isolation. For example, many recommendations deal with improving water-use and management efficiencies that, if carried out, could have both positive and negative impacts. In many cases, systems are already in place, but the recommendations call for additional tools to improve systems management. Finally, it is the ardent hope of the Council that this report does not reside on a shelf, but that it is revisited often as a living document to be updated regularly, especially in a way that keeps local efforts highly engaged. In this regard, the Council hopes to continue to participate and contribute on a regular basis.

### CONJUNCTIVE SURFACE WATER/GROUNDWATER MANAGEMENT

#### **Goal: Improve Management of Surface Water and Groundwater as a Conjunctive Resource**

Surface water and groundwater are invariably connected, and withdrawal from or reduced recharge to one can significantly affect availability of the other. Common examples in the Upper Missouri Basin include the degree to which well pumping reduces surface water flow, and where shifts from flood to sprinkler irrigation can, by changing the amount and timing of return flow, decrease aquifer recharge. Several state, federal and local agencies routinely collect data on groundwater quality and quantity. Although the agencies work together, at times they make management or permitting decisions internally without integration of all data, or without optimal data. Exempt wells are a topic of great importance in the Upper Missouri Basin. In particular there is broad agreement that exempt wells should not impact senior water rights, and the Council believes that resolution of the exempt well issue is imperative. The BAC supports



cooperative efforts to integrate, share, and analyze the data needed to conjunctively manage surface water and groundwater resources.

### **Objectives**

1. Groundwater and surface water resources are conjunctively managed by DNRC and the Montana Department of Environmental Quality (DEQ)
2. Exempt wells are allowed and managed within the original intent of the legislation.

## **ADJUDICATION**

### **Goal: Complete an Accurate and Enforceable Water Rights Adjudication**

The Statewide Adjudication Process is critical to all water users in the Upper Missouri River Basin, and the Council recognizes that it is already occurring at an accelerated pace. When completed, it will produce enforceable Final Decrees of all historic water rights. Water users in the basin are anxious to complete decrees and resolve issues of enforcement, which are important not only to water users and managers in the basin, but also for protecting Montana's interests against illegal uses of water and downstream claims.

### **Objectives**

1. Decrees are accurate and enforceable in the Upper Missouri Basin.
2. Management roles of the Water Court, District Court and DNRC are well defined.
3. The public recognizes the value and outcomes of the d process, and is engaged through informative public education.
4. The Confederated Salish and Kootenai Tribal water compact is successfully endorsed and passed during the 2015 Legislative session.

## **STORAGE**

### **Goal: Increase Water Availability through Storage and Retention**

With much of the Upper Missouri River Basin closed to new appropriations, many stakeholder groups hope to find options for additional water storage using a variety of methods. Stakeholders point to a desire to capture high flows earlier and retain them in the basin longer for additional flexibility in the late season and to accommodate expanded demand. An increase in natural storage capacity is desirable because of its cost effectiveness and ecosystem benefits.

### **Objectives**

1. There is public understanding of the costs and benefits of built and natural storage to increase the flow of water in the basin when it is most needed.
2. There is recognition of the public costs and benefits of both built and natural storage options in decision-making and state funding allocations.
3. Existing storage facilities (built) are retrofitted, where feasible, to increase storage capacity and uses.

## **INSTREAM FLOW**

### **Goal: Maintain and Enhance Instream Flow**

Instream flow pertains to streamflow in rivers and streams used non-consumptively for fish and wildlife, channel maintenance, habitat conservation, recreation, and hydropower. There is a broad recognition that streams and rivers in the Upper Missouri Basin are already heavily utilized for many purposes, yet future



# MONTANA WATER SUPPLY INITIATIVE

## UPPER MISSOURI RIVER BASIN WATER PLAN

water management should strive, when possible, for streamflow conditions that maintain or restore the desired ecological functions and processes, typically but not always, similar to those exhibited in their natural state.

### Objectives

1. More tools are available to protect or enhance instream flows within the prior appropriation framework.
2. Instream flows preserve ecological functions and natural processes.

### LOCAL COOPERATIVE EFFORTS

#### **Goal: Expand General Support for Conservation Districts, Local Watershed Groups and Water Quality Districts**

Community-based, local watershed groups, water quality and conservation districts, and other informal cooperative efforts are vital connections between water resource agencies and knowledgeable stakeholders. These groups bring diverse water users together to identify, design and implement water management solutions that address local and statewide goals.

#### **Objective**

1. There is recognition of on-the-ground water-issue expertise and awareness that local water and land management groups offer; agencies support and make use of this local expertise.

### WATER USE EFFICIENCY AND CONSERVATION

#### **Goal: Improve Water Use Efficiency and Conservation**

With limited supplies, water use efficiency is playing a bigger role in the Upper Missouri Basin, especially in ranching and municipal operations. Many irrigators are converting their fields from flood to sprinkler irrigation systems to decrease labor costs and to improve crop yields. People recognize that these changes in irrigation practices can affect the hydrologic regime and return flow rates.

#### **Objectives**

1. Water use efficiency improvements are in place. There is recognition that certain irrigation methods can have return flow benefits, and that irrigation methods have trade-offs among all water users.
2. Municipal water systems promote and employ water conservation measures wherever feasible.
3. There is public awareness of the effects of water use efficiencies and mitigation measures on local basin hydrology.

### INTEGRATED WATER QUALITY AND QUANTITY

#### **Goal: Advance Integrated Water Quantity and Quality Management**

The direct relationship between water quality and quantity in a basin with little unappropriated water underscores the importance of their integrated management. Low streamflows can be a major trigger of water quality concerns as problems intensify when pollutants like nutrients, metals, pathogens, and salinity concentrations are present at low flows. Warm water temperature is also a major water quality and fisheries concern associated with low flows.

#### **Objective**

1. Systems are in place to integrally manage water quality and water quantity.



# MONTANA WATER SUPPLY INITIATIVE UPPER MISSOURI RIVER BASIN WATER PLAN

## Opportunities for Research and Investment

Although estimates are available on per-animal consumption by livestock, these amounts do not include all water that is diverted from streams or pumped from aquifers for livestock use. On-the-ground surveys would be needed to determine these diverted amounts.

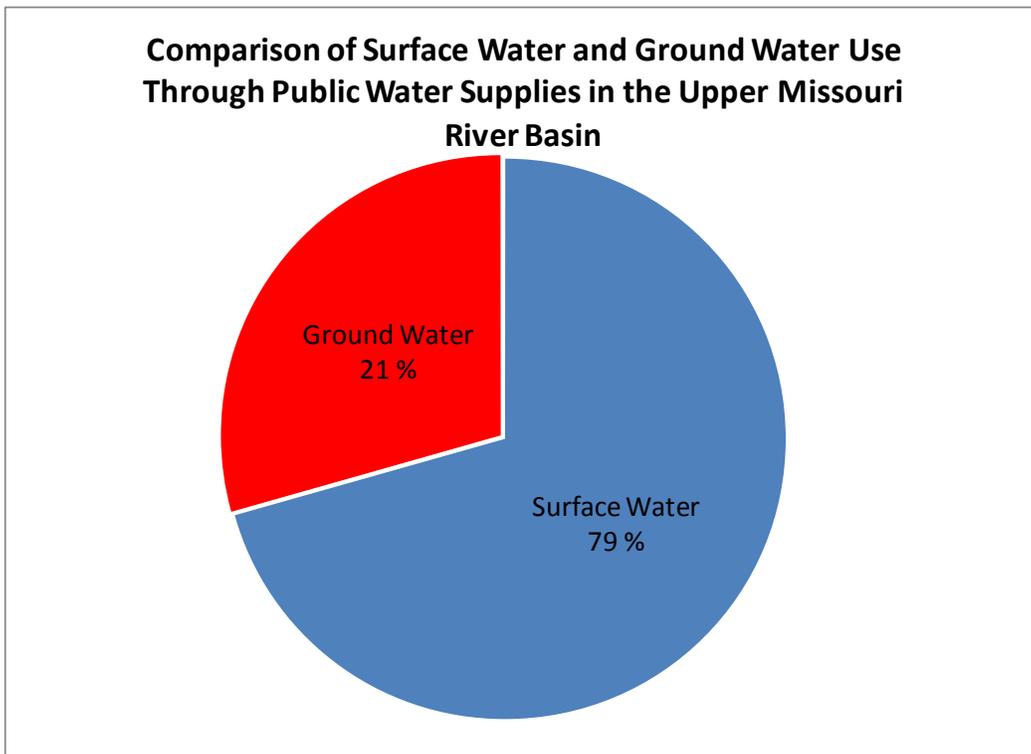
## PUBLIC AND SELF SUPPLIED WATER USE

### Public Water Supply

Public water systems (PWS) were identified by combining data from two sources: 1) the Montana Public Water System Sources database (MT DEQ, accessed through the Montana GIS portal; data published 9/19/2012); and 2) the EPA Safe Drinking Water Information System (SDWIS). The resulting dataset identifies the number of users, source, county, and HUC for each PWS. Water withdrawn by each PWS was estimated using values of per capita day use reported by county in the USGS (2004) document applied to the number of resident users. An additional 10 gallons per day was applied to cover non-resident users of the PWS. Consumptive use by PWS was assumed to be 37 percent of withdrawals (DNRC, 1975; USGS, 1986).

Upper Missouri Basin water is delivered to about 274,000 people through public water supplies. Most of the water supplied is surface water, although a large proportion is supplied by groundwater as well (Figure 6.17). Table 6.3 describes public water supply use by sub-basin.

**Figure 6.18** Relative contributions of surface water and ground water for public water supplies in the Upper Missouri River Basin



Data sources: Montana Public Water System Sources database, EPA Safe Drinking Water Information System (SDWIS), USGS (2004)



# MONTANA WATER SUPPLY INITIATIVE

## UPPER MISSOURI RIVER BASIN WATER PLAN

**Table 6.3** Upper Missouri River Basin water diverted and consumed through public water supplies by sub-basin

Sub-basin	Population Served	Volume Diverted (acre-feet)	Volume Consumed (acre-feet)
Gallatin River	71,202	11,876	4,394
Madison River	11,853	943	349
Ruby River	834	113	42
Beaverhead-Red Rock Rivers	5,560	2,025	749
Big Hole River	33,555*	14,471	14,464
Jefferson River	2,713	1,023	378
<b>Missouri River Headwater Total (to Canyon Ferry Dam)</b>	<b>125,717</b>	<b>30,451</b>	<b>20,376</b>
Smith River	1,774	397	147
Sun River	4,022	911	337
Missouri River main stem and smaller tributaries	113,661	24,554	9,085
Teton River	2,327	760	281
Marias River	26,894	5,239	1,938
<b>Missouri River to Marias River Total</b>	<b>274,395</b>	<b>62,312</b>	<b>32,164</b>

\*Big Hole River water is used by the City of Butte; waste-water returns are to the Clark Fork River basin.

Data sources: Montana Public Water System Sources database, EPA Safe Drinking Water Information System (SDWIS), USGS (2004)

### Self Supplied Domestic

The number of self-supplied domestic users was calculated by subtracting PWS resident users from 2010 population estimates (U.S. Census Bureau). The amount of water withdrawn by domestic users was assumed to be 78 gpd per person (DNRC, 1986; DNRC, 1975). Per the 1986 document, this estimate of water use was originally derived from statistics of municipal systems serving fewer than 55 users. All self supplied domestic water use was assumed to be from groundwater, and 50 percent of the water withdrawn is assumed to be consumed. Assignment of domestic users to HUCs was performed by assuming uniform distribution of residential users, consistent with the 2010 USGS documentation. Domestic systems serve the needs of about 90,000 households in the Upper Missouri River Basin, as summarized by sub-basin in Table 6.4.



**Table 6.4** Upper Missouri River Basin water diverted and consumed through domestic water systems by sub-basin

Sub-basin	Users Served	Volume Diverted (acre-feet)	Volume Consumed (acre-feet)
Gallatin River	27,037	2,369	1,184
Madison River	2,169	190	95
Ruby River	1,247	109	55
Beaverhead-Red Rock Rivers	3,729	327	163
Big Hole River	1,235	108	54
Jefferson River	5,455	478	239
<b>Missouri River Headwater Total (to Toston)</b>	<b>40,872</b>	<b>3,581</b>	<b>1,790</b>
Smith River	140	12	6
Sun River	5,621	492	246
Missouri River main stem and smaller tributaries	40,634	3,560	1,780
Teton River	1,701	149	75
Marias River	953	83	42
<b>Missouri River to Marias River Total</b>	<b>89,921</b>	<b>7,877</b>	<b>3,939</b>

Data sources: 2010 county population estimates (U.S. Census Bureau, DNRC, 1986; DNRC, 1975, USGS (2004)

#### Opportunities for Research and Investment

Larger municipalities generally record water diversions and returns of treated water to the source. For smaller municipalities and domestic users, water use estimates are based on what might be considered “typical” per capita water use, which may not accurately reflect the actual use at a particular location. More site-specific surveys would be needed to better characterize water use for smaller municipal system and for domestic users.

#### INDUSTRIAL WATER USE

Direct estimates of industrial use in 2010 were not possible. Instead, past USGS estimates (1985 through 2000, where both HUC and county estimates were provided, and 2005, which provided only usage by county) were analyzed to determine HUC assignment of those counties where the majority of industrial water use occurred. Then for those counties with the largest share (representing 90 percent of statewide industrial use), the 2005 USGS estimates were used as the best estimate for 2010 water use. All other industrial use estimates remain as reported in the 2000 water use document.

Industrial water use in the Upper Missouri Basin primarily is for mining, mineral processing, processing of agricultural products, and manufacturing. Figure 6.18 shows that surface water and groundwater are both important sources of water for industrial users. Table 6.5 summarizes industrial water use in the Upper Missouri River Basin by sub-basin.

# **Appendix F**

## District Documentation

**SECRETARY OF STATE**  
STATE OF MONTANA

LINDA McCULLOCH  
Secretary of State



Montana State Capitol  
PO Box 202801  
Helena, MT 59620-2801

April 22, 2015

BONNIE RAMEY  
PO BOX H  
BOULDER MT 59632, MONTANA 59632

Re: CLANCY WATER AND SEWER DISTRICT

Dear BONNIE RAMEY:

I have approved the filing of the Certificate of Incorporation of **CLANCY WATER AND SEWER DISTRICT**.

I am forwarding a Certificate of Incorporation to you in accordance with section 7-13-2214, Montana Code Annotated.

If I can be of further help to you, just let me know.

Sincerely,

A handwritten signature in cursive script that reads "Linda McCulloch".

# SECRETARY OF STATE STATE OF MONTANA

## CERTIFICATE OF INCORPORATION

I, **LINDA McCULLOCH**, Secretary of State of the State of Montana, do hereby certify that on **April 13, 2015**, the County Clerk and Recorder of **JEFFERSON**, pursuant to Section 7-13-2214, Montana Code Annotated, caused to be filed in this office a Creation of county Water and/or Sewer District containing the statements required by law for **CLANCY WATER AND SEWER DISTRICT**.

NOW, THEREFORE, I, **LINDA McCULLOCH**, as such Secretary of State, by virtue of the authority vested in me by law, do hereby certify that **CLANCY WATER AND SEWER DISTRICT** has been duly incorporated according to the laws of the State of Montana, and is a body politic and corporate, with right to perpetual succession.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Great Seal of the State of Montana, at Helena, the Capital, this **April 22, 2015**.



**LINDA McCULLOCH**  
Secretary of State

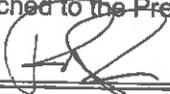
*Linda McCulloch*  
Certified File Number: **D260869**

# **Appendix G**

## Environmental Checklist

## UNIFORM ENVIRONMENTAL CHECKLIST

As the engineer that prepared the preliminary engineering report, I Brent Pilon, PE  
(print name of engineer)  
 have reviewed the information presented in this checklist and believe that it accurately identifies the environmental resources in the area and the potential impacts that the project could have on those resources. In addition, the required state and federal agencies were provided with the required information about the project and requested to provide comments on the proposed public facility project. Their comments have been incorporated into and attached to the Preliminary Engineering Report.

Engineer's Signature: 

Date: 4/25/18

**Key Letter:** N – No Impact    B – Potentially Beneficial    A – Potentially Adverse  
 P – Approval/Permits Required    M – Mitigation Required

### PHYSICAL ENVIRONMENT

<u>Key</u> N	<p><b>1. Soil Suitability, Topographic and/or Geologic Constraints (e.g., soil slump, steep slopes, subsidence, seismic activity)</b></p> <p><i>Comments and Source of Information:</i> Soils are generally stable and conducive to excavation and construction. Topography within the project area is suitable for pipe and structure construction. No soil slumps or subsidence have been identified in the project area. Soils data was obtained from the NRCS Jefferson County Soil Survey (Parts of the document are included in the PER). Topographic information was obtained from the USGS Quadrangle for the area and from site inspections completed by Great West Engineering.</p> <p>-Great West Engineering</p>
<u>Key</u> N	<p><b>2. Hazardous Facilities (e.g., power lines, EPA hazardous waste sites, acceptable distance from explosive and flammable hazards including chemical/petrochemical storage tanks, underground fuel storage tanks, and related facilities such as natural gas storage facilities &amp; propane storage tanks)</b></p> <p><i>Comments and Source of Information:</i> None of the proposed water system improvements are proximal to any National Priority Sites. The proposed water system improvements are not anticipated to have any adverse impacts on the proximal area. No underground storage tanks are located in the area and local officials do not recall any leaking underground tank over the history of the District area. There are power lines in the project area that the Contractor will be made aware of in the design plans.</p> <p>-Great West Engineering</p>
<u>Key</u> N	<p><b>3. Effects of Project on Surrounding Air Quality or Any Kind of Effects of Existing Air Quality on Project (e.g., dust, odors, emissions)</b></p> <p><i>Comments and Source of Information:</i> The project may produce temporary nuisance dust during construction. Dust suppression protocols will be in place during construction, but no long term adverse impacts will result from the water system improvements.</p> <p>-Great West Engineering</p>

Key Letter: N – No Impact B – Potentially Beneficial A – Potentially Adverse  
P – Approval/Permits Required M – Mitigation Required

<p style="text-align: center;"><u>Key</u> N</p>	<p><b>4. Groundwater Resources &amp; Aquifers (e.g., quantity, quality, distribution, depth to groundwater, sole source aquifers)</b></p> <p><i>Comments and Source of Information:</i> This project will have no adverse impacts on groundwater resources. The same amount of water will be required with the proposed water system improvements versus the existing system, the only difference being that it is a centralized system versus individual system.</p> <p>-Great West Engineering</p>
<p style="text-align: center;"><u>Key</u> B</p>	<p><b>5. Surface Water/Water Quality, Quantity &amp; Distribution (e.g., streams, lakes, storm runoff, irrigation systems, canals)</b></p> <p><i>Comments and Source of Information:</i> The construction of new water system improvements would possibly improve the surface water quality due to the elimination of individual wells because groundwater is connected to surface water in the area.</p> <p>The effects of storm runoff will need to be mitigated during the construction project. Best Management Practices should be implemented to keep sediment from entering water resources.</p> <p>-Great West Engineering</p>
<p style="text-align: center;"><u>Key</u> A</p>	<p><b>6. Floodplains &amp; Floodplain Management (Identify any floodplains within one mile of the boundary of the project.)</b></p> <p><i>Comments and Source of Information:</i> The project area is not mapped on the FIRM maps but could potentially be within the 100 year flood plain. The water system improvements could be within flood plain.</p> <p>-Great West Engineering -FEMA FIRM Map</p>
<p style="text-align: center;"><u>Key</u> A</p>	<p><b>7. Wetlands Protection (Identify any wetlands within one mile of the boundary of the project.)</b></p> <p><i>Comments and Source of Information:</i> Wetlands are located in the planning area. Most of the wetlands in the area are confined to stream and irrigation ditch corridors. Additional wetland delineation would need to be performed in the design phase of the project. Design of the water system would strive to avoid any delineated wetlands if found.</p> <p>-Great West Engineering -NRCS</p>

Key Letter: N – No Impact B – Potentially Beneficial A – Potentially Adverse  
P – Approval/Permits Required M – Mitigation Required

<p style="text-align: center;"><u>Key</u> N</p>	<p><b>8. Agricultural Lands, Production, &amp; Farmland Protection (e.g., grazing, forestry, cropland, prime or unique agricultural lands) (Identify any prime or important farm ground or forest lands within one mile of the boundary of the project.)</b></p> <p><i>Comments and Source of Information:</i> The NRCS soils survey for Jefferson County identifies both prime farmland and land of statewide importance in the planning area boundary. Within the limits of the proposed project, some agricultural lands will be impacted as part of the proposed water system improvements. All disturbed areas will be returned to existing conditions.</p> <p>-Great West Engineering -NRCS</p>
<p style="text-align: center;"><u>Key</u> N</p>	<p><b>9. Vegetation &amp; Wildlife Species &amp; Habitats, Including Fish (e.g., terrestrial, avian and aquatic life and habitats)</b></p> <p><i>Comments and Source of Information:</i> The area is considered to be primarily Rocky Mountain Montane Douglas-fir Forest and Woodland (Montana Natural Heritage Program; Montana Field Guides). This system is associated with a dry to submesic continental climate regime with annual precipitation ranging from 20 to 40 inches, with a maximum in water or late spring. Wildlife in the area generally consists of elk, deer, coyote, fox, mountain lion, bobcat, rabbit, porcupine, skunk, raccoon, mice, other small mammals, and a wide variety of birds.</p> <p>-Great West Engineering -Montana Department of Fish, Wildlife, and Parks -Montana Field Guides</p>
<p style="text-align: center;"><u>Key</u> N</p>	<p><b>10. Unique, Endangered, Fragile, or Limited Environmental Resources, Including Endangered Species (e.g., plants, fish, sage grouse, or other wildlife)</b></p> <p><i>Comments and Source of Information:</i> A Montana Natural Resources and Information System (NRIS) search was conducted and revealed species of concern in the planning area. The search revealed 22 animal species of concern, 4 plant species of concern, and 1 potential plant species of concern. The species of concern data can be found in associated Appendix. Most of these species do not frequent the habitat found in the Community of Clancy or the proposed water system improvements site. Because most of the proposed water system improvements project construction will take place within the existing community streets, alleys, and previously disturbed areas, minimal adverse impacts are anticipated for the listed species of concern. The Community of Clancy does not fall within the general habitat are for greater sage grouse, as defined by the Montana Sage Grouse Habitat map, which depicts the areas that fall under the Executive Order. Jefferson County does not host sage grouse habitat of any classification.</p> <p>-Great West Engineering -Montana Department of Fish, Wildlife, and Parks -Montana Field Guides</p>

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<p style="text-align: center;"><u>Key</u> N</p>	<p><b>11. Unique Natural Features (e.g., geologic features)</b></p> <p><i>Comments and Source of Information:</i> The District does not host any known unique natural features therefore natural features will not be impacted by the proposed project.  -Great West Engineering</p>
<p style="text-align: center;"><u>Key</u> N</p>	<p><b>12. Access to, and Quality of, Recreational &amp; Wilderness Activities, Public Lands and Waterways (including Federally Designated Wild &amp; Scenic Rivers), and Public Open Space</b></p> <p><i>Comments and Source of Information:</i> Access to and quality of recreational and wilderness activities, public lands and water ways, and public open spaces are not anticipated to be impacted by this project.  -Great West Engineering</p>
<b>HUMAN POPULATION</b>	
<p style="text-align: center;"><u>Key</u> N</p>	<p><b>1. Visual Quality – Coherence, Diversity, Compatibility of Use and Scale, Aesthetics</b></p> <p><i>Comments and Source of Information:</i> The only potential impact to visual quality presented by the proposed project is related to the new storage tank. Depending on final elevation of the top of the tank, which will be determined during design, the tank may be visible from surrounding areas.  -Great West Engineering</p>
<p style="text-align: center;"><u>Key</u> N</p>	<p><b>2. Nuisances (e.g., glare, fumes)</b></p> <p><i>Comments and Source of Information:</i> Nearby residences may be temporarily affected by noise from construction activity, however, no long term impacts are anticipated and efforts will be made to minimize nuisances if they occur.  -Great West Engineering</p>
<p style="text-align: center;"><u>Key</u> N</p>	<p><b>3. Noise -- suitable separation between noise sensitive activities (such as residential areas) and major noise sources (aircraft, highways &amp; railroads)</b></p> <p><i>Comments and Source of Information:</i> Some noise may be generated during construction, but that will be limited. The project will not create long term impacts.  -Great West Engineering</p>

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<p style="text-align: center;"><u>Key</u> <u>A/P/M</u></p>	<p><b>4. Historic Properties, Cultural, and Archaeological Resources</b></p> <p><i>Comments and Source of Information:</i> The Montana State Preservation Office (SHPO) has been contacted to determine whether there are significant historical and cultural resources within the project area. Response from SHPO dated February 21, 2018: "It is SHPO's position that any structure over fifty years of age is considered historic and is potentially eligible for listing on the National Register of Historic Places. For all water lines that are within existing roadways, we feel there is a low likelihood cultural properties will be impacted as these areas have been previously disturbed...it will be important for you to coordinate efforts in further consideration of impacts to cultural resources through the federal agency for consultation with our office."</p> <p>-Great West Engineering -SHPO</p>
<p style="text-align: center;"><u>Key</u> <u>B</u></p>	<p><b>5. Changes in Demographic (population) Characteristics (e.g., quantity, distribution, density)</b></p> <p><i>Comments and Source of Information:</i> The implementation of water system improvements will allow for infilling in the area and make the District a more desirable place to live. This will allow the District to grow. No negative impacts are anticipated relating to distribution and density.</p> <p>-Great West Engineering</p>
<p style="text-align: center;"><u>Key</u> <u>N</u></p>	<p><b>6. Environmental Justice – (Does the project avoid placing lower income households in areas where environmental degradation has occurred, such as adjacent to brownfield sites?)</b></p> <p><i>Comments and Source of Information:</i> This project is not located in an area known to have environmental degradation. Therefore, is not applicable to the project.</p> <p>-Great West Engineering</p>
<p style="text-align: center;"><u>Key</u> <u>B</u></p>	<p><b>7. General Housing Conditions - Quality, Quantity, Affordability</b></p> <p><i>Comments and Source of Information:</i> The water system improvements project will likely improve property and housing values.</p> <p>-Great West Engineering</p>
<p style="text-align: center;"><u>Key</u> <u>B</u></p>	<p><b>8. Displacement or Relocation of Businesses or Residents</b></p> <p><i>Comments and Source of Information:</i> The water system improvements project will likely make the District more attractive for existing businesses to remain and for new businesses to open.</p> <p>-Great West Engineering</p>
<p style="text-align: center;"><u>Key</u> <u>B</u></p>	<p><b>9. Public Health and Safety</b></p> <p><i>Comments and Source of Information:</i> The water system improvements will suppress potential fire and provide for treatment of the source water supply which will increase public health and safety.</p> <p>-Great West Engineering</p>

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**P – Approval/Permits Required M – Mitigation Required**

<u>Key</u> <b>N</b>	<p><b>10. Lead Based Paint and/or Asbestos</b></p> <p><i>Comments and Source of Information:</i> There are no known lead based paint or asbestos that will be encountered on this project.</p> <p>-Great West Engineering</p>
<u>Key</u> <b>B</b>	<p><b>11. Local Employment &amp; Income Patterns - Quantity and Distribution of Employment, Economic Impact</b></p> <p><i>Comments and Source of Information:</i> The District may experience short term benefits if contractors choose to hire local residents. Local businesses may benefit from the presence of construction crews, who would patronize local businesses. Longer term benefits may be experienced by the community as a result of the presence of a significantly improved infrastructure that may attract new businesses.</p> <p>-Great West Engineering</p>
<u>Key</u> <b>B</b>	<p><b>12. Local &amp; State Tax Base &amp; Revenues</b></p> <p><i>Comments and Source of Information:</i> The water system improvements project will enable commercial and industrial growth to occur therefore, expanding the Local and State tax base and revenues.</p> <p>-Great West Engineering</p>
<u>Key</u> <b>B</b>	<p><b>13. Educational Facilities - Schools, Colleges, Universities</b></p> <p><i>Comments and Source of Information:</i> The new water system improvements project will improve fire flows near the school, decreasing the likelihood of major damage to the school and preventing fatalities of its students and staff.</p> <p>-Great West Engineering</p>
<u>Key</u> <b>B</b>	<p><b>14. Commercial and Industrial Facilities - Production &amp; Activity, Growth or Decline</b></p> <p><i>Comments and Source of Information:</i> The new water system improvements project construction will expand growth of commercial and industrial facilities.</p> <p>-Great West Engineering</p>

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**P – Approval/Permits Required M – Mitigation Required**

<u>Key</u> <b>N</b>	<p><b>15. Health Care – Medical Services</b></p> <p><i>Comments and Source of Information:</i> No impacts are anticipated.</p> <p>-Great West Engineering</p>
<u>Key</u> <b>N</b>	<p><b>16. Social Services – Governmental Services (e.g., demand on)</b></p> <p><i>Comments and Source of Information:</i> No impacts are anticipated.</p> <p>-Great West Engineering</p>

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<u>Key</u> <b>N</b>	<p><b>17. Social Structures &amp; Mores (Standards of Social Conduct/Social Conventions)</b></p> <p><i>Comments and Source of Information:</i> No impacts are anticipated.          -Great West Engineering</p>
<u>Key</u> <b>N</b>	<p><b>18. Land Use Compatibility (e.g., growth, land use change, development activity, adjacent land uses and potential conflicts)</b></p> <p><i>Comments and Source of Information:</i> The land use at the proposed new tank site will change; however, no conflicts with the landowner are anticipated and no other adverse impacts are expected.          -Great West Engineering</p>
<u>Key</u> <b>N</b>	<p><b>19. Energy Resources - Consumption and Conservation</b></p> <p><i>Comments and Source of Information:</i> The water system improvements project will not incur any adverse impacts on energy resources.          -Great West Engineering</p>
<u>Key</u> <b>N</b>	<p><b>20. Solid Waste Management</b></p> <p><i>Comments and Source of Information:</i> No impacts are anticipated.          -Great West Engineering</p>
<u>Key</u> <b>N</b>	<p><b>21. Wastewater Treatment - Sewage System</b></p> <p><i>Comments and Source of Information:</i> No impacts are anticipated.          -Great West Engineering</p>
<u>Key</u> <b>N</b>	<p><b>22. Storm Water – Surface Drainage</b></p> <p><i>Comments and Source of Information:</i> The project will not incur any long term adverse impacts on storm water or drainage. Some temporary rerouting of storm water may be required during construction.          -Great West Engineering</p>
<u>Key</u> <b>B</b>	<p><b>23. Community Water Supply</b></p> <p><i>Comments and Source of Information:</i> The water system improvements project will implement a community water supply which is not currently in place. It will improve water supply overall quality, reliability, and fire protection offered by the existing water system.          -Great West Engineering</p>
<u>Key</u> <b>N</b>	<p><b>24. Public Safety – Police</b></p> <p><i>Comments and Source of Information:</i> No impacts are anticipated.          -Great West Engineering</p>

<p style="text-align: center;"><u>Key</u> <u>B</u></p>	<p><b>25. Fire Protection – Hazards</b></p> <p><i>Comments and Source of Information:</i> Fire flow, and therefore fire fighting capability of the District, throughout the planning area will be improved by the water system improvements project.</p> <p>-Great West Engineering</p>
<p style="text-align: center;"><u>Key</u> <u>N</u></p>	<p><b>26. Emergency Medical Services</b></p> <p><i>Comments and Source of Information:</i> No impacts are anticipated.</p> <p>-Great West Engineering</p>
<p style="text-align: center;"><u>Key</u> <u>N</u></p>	<p><b>27. Parks, Playgrounds, &amp; Open Space</b></p> <p><i>Comments and Source of Information:</i> No impacts are anticipated.</p> <p>-Great West Engineering</p>
<p style="text-align: center;"><u>Key</u> <u>N</u></p>	<p><b>28. Cultural Facilities, Cultural Uniqueness &amp; Diversity</b></p> <p><i>Comments and Source of Information:</i> No impacts are anticipated.</p> <p>-Great West Engineering</p>
<p style="text-align: center;"><u>Key</u> <u>P/M</u></p>	<p><b>29. Transportation Networks and Traffic Flow Conflicts (e.g., rail; auto including local traffic; airport runway clear zones - avoidance of incompatible land use in airport runway clear zones)</b></p> <p><i>Comments and Source of Information:</i> The water system improvements project may impact MDT facilities. The distribution system would need to cross the highway to provide service to facilities in the District. Necessary permits will be obtained during the design phase of the project. Correspondence from the Federal Highway Administration indicates that MDT will require a permit and review of impacted state roadways plans.</p> <p>-Great West Engineering -FHWA -MDT</p>
<p style="text-align: center;"><u>Key</u> <u>N</u></p>	<p><b>30. Consistency with Local Ordinances, Resolutions, or Plans (e.g., conformance with local comprehensive plans, zoning, or capital improvement plans)</b></p> <p><i>Comments and Source of Information:</i> All applicable local, state, and federal rules and regulations will be complied with during the project.</p> <p>-Great West Engineering</p>
<p style="text-align: center;"><u>Key</u> <u>N</u></p>	<p><b>31. Is There a Regulatory Action on Private Property Rights as a Result of this Project? (consider options that reduce, minimize, or eliminate the regulation of private property rights.)</b></p> <p><i>Comments and Source of Information:</i> To the extent possible new facilities will be placed on public easements and public land. Water services would be connected on private property. Temporary construction easements/agreements would be required to perform this work.</p> <p>-Great West Engineering</p>

**ENVIRONMENTAL REQUIREMENTS AFTER THE PER HAS BEEN COMPLETED**

**I. Environmental Report (ER) with Categorical Exclusion (CE)**

Depending on the sources of funding, once the Preliminary Engineering Report (PER) has been completed and the potential environmental impacts have been determined, projects may have no additional environmental requirements other than obtaining appropriate permits. However, if the project is being funded by the USDA Rural Development Community Facility Programs, an Environmental Report must be completed. Depending on the outcome of the Environmental Report, either a Categorical Exclusion (CE) will need to be completed or an Environmental Assessment (EA) or Environmental Impact Statement (EIS) will be required. Projects funded through the State Revolving Fund Loan Program, the Treasure State Endowment Program, or the Community Development Block Grant Program also require a Categorical Exclusion or an Environmental Assessment before construction can be authorized. Contact the funding agencies involved for details.

The USDA RD program has a guide available to assist you in preparing the Environmental Report. See Guide to Applicants for Preparing Environmental Reports for Categorical Exclusions under § 1970.54 RD Instruction 1970-B, Exhibit C, FINAL RULE 81 FR 11000 Published March 2, 2016 with an Effective Date April 1, 2016. The Guide can be obtained by contacting the RD program staff, or at the following Internet address:

<https://www.rd.usda.gov/files/1970b.pdf>

RD Instruction 1970-B, Exhibit C provides specific guidance for preparing the ER including the format and information required; the environmental issues that must be considered during the proposed project's planning and design activities; the sources for locating the required information; and the documentation required to determine that there are no extraordinary circumstances that require a higher level of review including an EA or an EIS.

**II. Environmental Assessment with FONSI**

Depending on the sources of funding, once the Preliminary Engineering Report (PER) has been completed and potential environmental impacts associated with the project have been identified, proposed projects may require an Environmental Assessment (EA). For projects that anticipate funding through the USDA Rural Development Community Facility Programs, the State Revolving Fund Loan Programs, the Treasure State Endowment Program, or the Community Development Block Grant Program, an EA must be completed if the environmental review identifies potential environmental impacts beyond those qualifying for a Categorical Exclusion. Depending on the findings of the EA, either a Finding of No Significant Impact (FONSI) must be published or an Environmental Impact Statement (EIS) prepared. Assuming the EA determines there are no significant environmental impacts, the funding agency will prepare the FONSI and direct the applicant to publish it. The following chart provides specific program requirements for publishing the FONSI.

	<b>CDBG</b>	<b>DNRC</b>	<b>RD</b>	<b>SRF</b>	<b>TSEP</b>
Notice of Availability of EA	Contact CDBG staff	Not Required	Publish once; 30-day comment period required*	Not Required	Contact TSEP Staff
Notice of FONSI	Contact CDBG staff	Provide copy of FONSI.	Publish once; no comment period required	Publish once; 30-day comment period required	Contact TSEP Staff

\*RD requires a Notice of Availability of the Environmental Assessment to be published once, which allows for a 30-day comment period prior to publishing the FONSI.

If two or more agencies provide funding for a project, a combined publication notice may possibly be used to satisfy the requirements of all agencies. Check with the applicable agencies to determine if a combined publication notice is possible.

## ENVIRONMENTAL REVIEW FORM

**On a separate piece of paper, please answer the following as they apply to your proposed project:**

1. **Alternatives:** Describe reasonable alternatives to the project.

The Clancy Water and Sewer District has explored alternatives to construct and install a central public water supply for the District. The District is currently served by on-site private wells that are supplying groundwater contaminated with nitrates and uranium. The District has proposed water supply, storage site, storage tank, and distribution alternatives to address the deficiencies.

The water supply site alternatives explored are State of Montana, Clancy School, and Mark's Ranch Inc. The sites include wells, pumps, treatment, pumphouse, and transmission main. The storage site alternatives include the BLM South, Marks Ranch Inc., and BLM North site. These sites are explored for storage tank siting. The storage tank alternatives explored include the Bolted Steel, Welded Steel, Concrete Buried Prestressed, and Fiberglass Buried storage tanks. These alternatives explored 85,000-gallon tanks and associated appurtenances. The distribution system alternatives explored include non-fire flow and fire flow distribution system.

2. **Mitigation:** Identify any enforceable measures necessary to reduce any impacts to an insignificant level.

A number of agencies were invited to comment on the proposed improvements. After considering responses from the agencies and evaluating the environmental resources to be impacted, as presented in Section 2.5, the Uniform Environmental Checklist was prepared.

No wetlands and no prime farmland were identified during the early planning process that will be adversely impacted by the proposed project. No other environmental issues are considered to be problematic. The State Historic Preservation Office was contacted regarding the project and their response stated that a recommendation for a cultural resource inventory is unwarranted at this time.

Essentially, all potential impacts of the proposed project are considered insignificant. Measures will be taken during construction to minimize noise, dust, and other nuisances that could result from the construction work. For further review, a copy of the Environmental Checklist is attached.

3. **Is an EA or Environmental Impact Statement (EIS) required?** Describe whether or not an EA or EIS is required, and explain in detail why or why not.

Based on our analysis, the EA is an adequate level of environmental review. An EIS is not required.

4. **Public Involvement:** Describe the process followed to involve the public in the proposed project and its potential environmental impacts. Identify the public meetings -- where and when -- the project was considered and discussed, and when the applicant approved the final environmental assessment.

The public will be provided opportunities for comment prior to the project being submitted for grant funding. Namely, a public meeting was held on May 22<sup>nd</sup>, 2018. Written comments were

also accepted until the meeting. Notices advertising the availability of the draft Environmental Assessment and Public Meeting were published in The Boulder Monitor on May 9<sup>th</sup> and May 16<sup>th</sup> of 2018. To date, there have been no written or verbal negative comments from the general public concerning the project. Clancy will determine whether (or not) to adopt the EA during the May 22<sup>nd</sup> meeting.

5. **Person(s) Responsible for Preparing:** Identify the person(s) responsible for preparation of this checklist.

Brent Pilon, P.E. – Great West Engineering

6. **Other Agencies:** List any state, local, or federal agencies that have over-lapping or additional jurisdiction or environmental review responsibility for the proposed action and the permits, licenses, and other authorizations required; and list any agencies or groups that were contacted or contributed information to this Environmental Assessment (EA).

Other Agencies:

- Jefferson County
- U.S. Fish and Wildlife Service
- U.S. Army Corps of Engineers
- Montana Department of Environmental Quality
- Montana Department of Natural Resources and Conservation
- Montana Fish, Wildlife & Parks
- Montana Sage Grouse Habitat Conservation Program

Contributors to EA:

- Jefferson County
- MT Department of Transportation
- U.S. Fish and Wildlife Service
- MT Department of Natural Resources
- State Historic Preservation Office

\_\_\_\_\_  
Authorized Representative (Great West Engineering)  
on behalf of Clancy Water and Sewer District)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Clancy Water and Sewer District Board

\_\_\_\_\_  
Date

Brent Pilon is Professional Engineer in the State of Montana and has worked with and on behalf of Clancy Water and Sewer District. Mr. Pilon is familiar with the project and is qualified to complete to environmental assessment.

# **Appendix H**

## Funding Agency Correspondence



Date: May 14, 2018

Attn: Jefferson County, Clancy Water and Sewer District, Great West Engineering, Community Development Block Grant Program and USDA Rural Development

RE: Clancy Water and Sewer District- 2018 Income Survey Status

From: Erinn Zindt, Midwest Assistance Program (MAP)

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During March and April of 2018, the Jefferson County Sanitarian, Megan Bullock, worked with Clancy Water and Sewer District Board members and volunteers to hand deliver income surveys (and survey reminders) to all residential units within the Clancy Water and Sewer District boundary. The original survey list included 84 residential units. During delivery efforts, it was discovered that 7 of the residential units were vacant, leaving a total of 77 surveyed residences.

As of May 14, 2018, 51 of the residences have completed and submitted income surveys. I have however, received inconsistent data from two separate residences that completed and provided the income survey twice. I am waiting to hear back from CDBG to discuss whether the data can be accepted.

CDBG requires a minimum of 67% return rate for the survey data to be accepted. At this point, the minimum number of surveys has not yet been received and the survey data is inconclusive to determine the percentage of Low to Moderate Income (LMI) households.

USDA Rural Development requires a minimum of 84% return rate for 77 surveyed households. A minimum of 13 more surveys are needed to determine the Median Household Income (MHI).

**From:** [Craig Erickson](#)  
**To:** [Miller, Anna](#)  
**Cc:** [Collette T. Anderson](#); [Brent Pilon](#); [Craig Erickson](#)  
**Subject:** RE: Clancy  
**Date:** Monday, April 2, 2018 4:42:27 PM  
**Attachments:** [image001.png](#)

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Anna,

We understand that you cannot commit to offering Clancy principal forgiveness, but it is good to know that the District is eligible. Also, the project would likely go to construction in the second quarter of 2020.

Thank you,

**Craig R. Erickson I Certified Grant Writer**®

**Great West Engineering, Inc.**

Direct: 406-495-6189

Mobile: 406-399-0104

[www.greatwesteng.com](http://www.greatwesteng.com)



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**From:** Miller, Anna <[annam@mt.gov](mailto:annam@mt.gov)>  
**Sent:** Monday, April 2, 2018 4:34 PM  
**To:** Craig Erickson <[cerickson@greatwesteng.com](mailto:cerickson@greatwesteng.com)>  
**Cc:** Collette T. Anderson <[ctanderson@greatwesteng.com](mailto:ctanderson@greatwesteng.com)>; Brent Pilon <[bpilon@greatwesteng.com](mailto:bpilon@greatwesteng.com)>; Miller, Anna <[annam@mt.gov](mailto:annam@mt.gov)>  
**Subject:** RE: Clancy

Craig,

We can't promise anything but you can sure put in a request for Loan forgiveness. I would imagine this would be in the 2019 or 2020 construction season.

Let me know if you have any other questions.

Anna

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**From:** Craig Erickson [<mailto:cerickson@greatwesteng.com>]  
**Sent:** Monday, April 02, 2018 3:21 PM  
**To:** Miller, Anna <[annam@mt.gov](mailto:annam@mt.gov)>  
**Cc:** Collette T. Anderson <[ctanderson@greatwesteng.com](mailto:ctanderson@greatwesteng.com)>; Brent Pilon

<[bpilon@greatwesteng.com](mailto:bpilon@greatwesteng.com)>; Craig Erickson <[cerickson@greatwesteng.com](mailto:cerickson@greatwesteng.com)>

**Subject:** Clancy

**Importance:** High

Anna,

I wanted to follow-up on the conversation we had earlier this afternoon regarding Clancy's water system improvements project. I told you once the system is operational, Clancy residents would pay approximately \$85/month for drinking water. Well, I misspoke. In reality, the estimated user rate is closer to \$135/month. This rate is based on a funding scenario that includes TSEP, CDBG, RRGL, and \$500,000 in Principal Forgiveness. A \$2.75 million SRF loan would also be necessary to complete the \$4.6 million budget.

The proposed scope of work includes the development of new water supply, storage, distribution system, and water services. For planning purposes, can we assume the District would be eligible for \$500,000 in Principal Forgiveness with a 30-term?

Thank you for your help.

**Craig R. Erickson | Certified Grant Writer**®

**Great West Engineering, Inc.**

Direct: 406-495-6189

Mobile: 406-399-0104

[www.greatwesteng.com](http://www.greatwesteng.com)



**From:** [Elisa Prescott](#)  
**To:** [marks@mt.gov](mailto:marks@mt.gov)  
**Cc:** [Collette T. Anderson](#); [Elisa Prescott](#)  
**Subject:** Clancy WSD Project Survey  
**Date:** Sunday, May 6, 2018 7:45:52 AM  
**Attachments:** [Clancy WSD\\_SRF.pdf](#)

---

Mark,

Please find attached the DWSRF Project Priority List Survey for the Clancy Water and Sewer Districts' water project. The District intends on applying for SRF, as well as DNRC, TSEP, and CDBG to construct a much needed water system.

Please let me know if you have any questions.

Thanks,  
Elisa

Elisa Prescott | Certified Grant Writer®

**Great West Engineering, Inc.**

PO Box 4817  
2501 Belt View Drive  
Helena, MT 59604

DIRECT: 406-495-6152  
FAX: 406-449-8631  
OFFICE: 406-449-8627

[www.greatwesteng.com](http://www.greatwesteng.com)



**From:** Smith, Mark  
**To:** [Elisa Prescott](#)  
**Subject:** RE: Clancy WSD Project Survey  
**Date:** Monday, May 7, 2018 9:59:39 AM

---

Good morning, Elisa,

I did receive your survey for the Clancy W&SD, and we'll get the project ranked and added to our dwsrf priority list. Thanks.

Mark

---

**From:** Elisa Prescott [mailto:[eprescott@greatwesteng.com](mailto:eprescott@greatwesteng.com)]  
**Sent:** Sunday, May 06, 2018 7:46 AM  
**To:** Smith, Mark <[marks@mt.gov](mailto:marks@mt.gov)>  
**Cc:** Collette T. Anderson <[ctanderson@greatwesteng.com](mailto:ctanderson@greatwesteng.com)>; Elisa Prescott <[eprescott@greatwesteng.com](mailto:eprescott@greatwesteng.com)>  
**Subject:** Clancy WSD Project Survey

Mark,

Please find attached the DWSRF Project Priority List Survey for the Clancy Water and Sewer Districts' water project. The District intends on applying for SRF, as well as DNRC, TSEP, and CDBG to construct a much needed water system.

Please let me know if you have any questions.

Thanks,  
Elisa

Elisa Prescott | Certified Grant Writer<sup>®</sup>

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2501 Belt View Drive  
Helena, MT 59604

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FAX: 406-449-8631  
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# DWSRF PROJECT PRIORITY LIST SURVEY

**Proposed water system improvement needs, excluding operation, maintenance, and growth development.**

**NAME OF COMMUNITY OR SYSTEM:** Clancy Water and Sewer District

**COUNTY OR COUNTIES:** Jefferson County

**POPULATION OF SERVICE AREA:** 287

**MEDIAN HOUSEHOLD INCOME FOR SERVICE AREA:** \$75,000 (Clancy CDP; income survey to be completed May 2018)

**CURRENT AVERAGE MONTHLY RESIDENTIAL WATER RATE:** \$0

**CURRENT AVERAGE MONTHLY RESIDENTIAL SEWER RATE:** \$0

**CURRENT AVERAGE MONTHLY RESIDENTIAL SOLID WASTE RATE:** \$0

**Name & Title of Contact Person:** David Leithesier

**Address:** Box 16 North Main  
Clancy, MT 595364

**Telephone:** (406)-949-8281 **Fax:** ( )

=====

**Please provide the following information:**

**1. A brief description of the project. As a guideline, do not exceed approximately 200 words.**

The proposed project is the construction of a centralized water system for the Clancy Water and Sewer District. Alternatives for a centralized water system were considered in the 2018 Water Preliminary Engineering Report (PER). The alternatives for the water system were separated by water supply sites, storage tank sites, storage tank types, and distribution system. District's preferred alternatives are:

- Clancy School Water Supply Site
- Marks Ranch Inc. Storage Site
- On-Grade Bolted Steel Glass-Lined Storage Tank
- Phased Non-Fire Flow Distribution System

The Clancy School Water Supply Site is the most central site to the District and is located near

an area that has proven to have acceptable water quality and quantity. The Marks Ranch Inc. Storage Site is the most cost-effective storage site alternative analyzed. On-Grade Bolted Steel Glass-Lined Storage Tank is the most cost-effective storage tank alternative analyzed. It also requires the least amount of operation and maintenance. Phased Non-Fire Flow Distribution is cost effective and provides a provision to add fire flow in the future should it be desired. Phase 1 distribution improvements provides clean drinking water to that portion of the District most severely impacted by contaminated wells.

- 2. Provide an estimated project budget, including potential funding sources. Include engineering, legal, and administrative costs in addition to construction related costs. Please provide a break out of these costs. Include other funding sources.**

See Attached

- 3. What is the reason for the project? What compliance issue is being addressed? For drinking water projects, are there supply, treatment, distribution, or storage problems? Again, limit your response to approximately 200 words.**

The District does not have a central public water supply and currently utilizes individual onsite private wells that are aging and do not meet current design standards or supply safe drinking water. The drinking water wells are located within close proximity to failing private septic and drain field systems.

Well testing was performed throughout the District and has revealed Nitrates are present in numerous wells. Nitrates are usually an indicator of human fecal waste. Elevated levels (greater than 2 mg/L) of Nitrates were found in 47% of the Clancy drinking wells. The Maximum Contaminant Level (MCL) of 10 mg/L as defined by the EPA, was exceeded in 18% of the Clancy drinking wells. The EPA established this drinking water standard to protect infants from Methemoglobinemia (blue baby syndrome). Blue baby syndrome can be fatal to infants if left untreated. Elevated levels were also discovered in nearby Prickly Pear Creek and Clancy Creek.

Well testing was performed throughout the District and has also revealed Uranium in numerous wells. Uranium occurs naturally in the environment and is a heavy metal. The testing discovered that 37% of Clancy drinking wells exceeded the EPA MCL of 30 µg/L.

- 4. Provide the following information as an indication of your readiness to proceed:**
  - a) Project Schedule – Include REASONABLE milestone dates for: PER completion (allow sufficient time for SRF review of draft and final document and EA process), COMPLETE draft plan and spec submittal to the SRF program, bid advertisement (allow sufficient time for SRF review of draft and final plans and specs), bid opening, construction start and finish. DEQ may adjust these schedules to make them more realistic, if necessary.**

Implementation Schedule	
Action	Date
Public Hearing on Draft 2016 PER Update and Draft EA	April 2018
Finalize Alternatives Analysis & Funding Strategy	April 2018
Finalize PER	April 2018
Submit TSEP, DNRC, and SRF Application	May 2018
Submit CDBG Application	April 2019
Funding Package Complete	September 2019
Begin Design	September 2019
Commence Supply Well Design	October 2019
Submit Supply Well Design Plans/Specifications to District, MDEQ	December 2019
MDEQ Review & Approval	December 2019
Bid Well Project	February 2020
Well Construction	March 2020
Water Rights Application	April 2020
Commence Distribution and Tank Design	May 2020
Finalize Water Rights	April 2021
Bid Distribution and Tank Design	April 2021
Commence Distribution and Tank Construction	June 2021
Construction Completed	July 2021

**b) Has a planning document or preliminary engineering report been prepared? Submitted? Approved?**

The PER is currently being finalized and will accompany grant applications in the spring of 2018.

**c) Has an engineer been hired?**

The District has procured Great West Engineering to complete the PER. The District will procure an engineer upon receiving funding.

**d) Has a design contract been executed? What date did design begin?**

No. Design is anticipated to start in September 2019.

**d) Have plans and specifications been prepared and submitted to the SRF program?**

No. The anticipated date for plans and specs to be completed and submitted to SRF is December 2019.

e) **Has a bond resolution been adopted?**

No.

f) **Are rates and charges in place to allow for additional debt service? If so, submit user rate ordinance for final rates including debt service, O&M and coverage (if required).**

This will be completed after project funding is finalized.

g) **Are there any outstanding legal issues that could potentially delay construction start? Please explain in detail.**

No.

h) **If land purchase, lease, right-of-way or other land acquisition is required prior to design and construction, what is the status of these processes and what issues remain to be addressed?**

This will be addressed during the design phase

**5. Has a county water and/or sewer district been formed? Do you anticipate the formation of an RSID? Do you anticipate the issuance of Revenue or General Obligation Bonds? What type of loan security are you planning? Please limit your response to approximately 200 words.**

The Clancy Water and Sewer District is a legally formed water and sewer district (see attached). The District will likely utilize a revenue bond for the project that will be secured by sufficient rates and charges established by the District

DRAFT BUDGET						
Completed by: Great West Engineering	Completed for: Clancy Water and Sewer District					Date: April, 2018
<b>ADMINISTRATIVE/FINANCIAL COSTS</b>	Source: TSEP Grant	Source: DNRC Grant	Source: CDBG Grant	Source: SRF Forgiveness	Source: SRF Loan	Total
Personnel Costs	\$3,500.00				\$30,000.00	\$33,500.00
Office Costs	\$3,500.00					\$3,500.00
Professional Services & Pre-Development Financing	\$10,000.00		\$10,000.00		\$30,000.00	\$50,000.00
Legal Costs	\$5,000.00		\$5,000.00			\$10,000.00
Audit Fees				\$15,000.00		\$15,000.00
Travel & Training	\$2,000.00		\$2,000.00			\$4,000.00
Bond Counsel and Related Costs				\$7,500.00	\$7,500.00	\$15,000.00
<b>TOTAL ADMINISTRATIVE/FINANCIAL/PRE-DEVELOPMENT COSTS</b>	\$24,000.00	\$0.00	\$17,000.00	\$22,500.00	\$67,500.00	\$131,000.00
<b>ACTIVITY COSTS:</b>						
Land Acquisition		\$40,000.00				\$40,000.00
Geotechnical/Hydrogeological Investigation	\$40,000.00	\$45,000.00				\$85,000.00
Permitting		\$5,000.00				\$5,000.00
Engineering Additional Services - Water Rights - Cultural Resource Inventory - Wetlands Delineation			\$25,000.00	\$25,000.00	\$25,000.00	\$75,000.00
Engineering Design	\$101,000.00		\$101,000.00			\$202,000.00
Construction Engineering Services	\$101,000.00		\$101,000.00			\$202,000.00
2020 Construction Cost	\$484,000.00	\$35,000.00	\$206,000.00	\$452,500.00	\$753,900.00	\$1,931,400.00
Contingency*					\$214,600.00	\$214,600.00
<b>TOTAL ACTIVITY COSTS</b>	\$726,000.00	\$125,000.00	\$433,000.00	\$477,500.00	\$993,500.00	\$2,755,000.00
<b>TOTAL PROJECT COSTS</b>	\$750,000.00	\$125,000.00	\$450,000.00	\$500,000.00	\$1,061,000.00	\$2,886,000.00

**SECRETARY OF STATE**  
STATE OF MONTANA

LINDA McCULLOCH  
Secretary of State



Montana State Capitol  
PO Box 202801  
Helena, MT 59620-2801

April 22, 2015

BONNIE RAMEY  
PO BOX H  
BOULDER MT 59632, MONTANA 59632

Re: CLANCY WATER AND SEWER DISTRICT

Dear BONNIE RAMEY:

I have approved the filing of the Certificate of Incorporation of **CLANCY WATER AND SEWER DISTRICT**.

I am forwarding a Certificate of Incorporation to you in accordance with section 7-13-2214, Montana Code Annotated.

If I can be of further help to you, just let me know.

Sincerely,

A handwritten signature in cursive script that reads "Linda McCulloch".

# SECRETARY OF STATE STATE OF MONTANA

## CERTIFICATE OF INCORPORATION

I, **LINDA McCULLOCH**, Secretary of State of the State of Montana, do hereby certify that on **April 13, 2015**, the County Clerk and Recorder of **JEFFERSON**, pursuant to Section 7-13-2214, Montana Code Annotated, caused to be filed in this office a Creation of county Water and/or Sewer District containing the statements required by law for **CLANCY WATER AND SEWER DISTRICT**.

NOW, THEREFORE, I, **LINDA McCULLOCH**, as such Secretary of State, by virtue of the authority vested in me by law, do hereby certify that **CLANCY WATER AND SEWER DISTRICT** has been duly incorporated according to the laws of the State of Montana, and is a body politic and corporate, with right to perpetual succession.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Great Seal of the State of Montana, at Helena, the Capital, this **April 22, 2015**.



**LINDA McCULLOCH**  
Secretary of State

*Linda McCulloch*  
Certified File Number: **D260869**

## Collette T. Anderson

---

**From:** Craig Erickson  
**Sent:** Friday, April 13, 2018 12:28 PM  
**To:** Collette T. Anderson  
**Cc:** Brent Pilon; Craig Erickson  
**Subject:** Clancy Public Water Supply Eligibility Question

Collette,

On Thursday, April 12, we spoke with Treasure State Endowment Program (TSEP) Manager Becky Anseth and Montana Department of Commerce Engineer Richard Knatterud, PE regarding the issues described in the following message. Specifically, would a project as described in items #1 & #2 in the following message be eligible for TSEP funding? The answer from Mr. Knatterud was "98% no." He explained Commerce would likely not fund the project because a system that includes seven wells with each serving nine households does not qualify as a public water system **and** point of use filtration systems are not allowed under DEQ Circular #1.

Thank you,

**Craig R. Erickson** | Certified Grant Writer®

**Great West Engineering, Inc.**

Direct: 406-495-6189

Mobile: 406-399-0104

[www.greatwesteng.com](http://www.greatwesteng.com)



---

**From:** Craig Erickson  
**Sent:** Wednesday, April 4, 2018 2:35 PM  
**To:** Anseth, Becky <BAnseth@mt.gov>  
**Cc:** Collette T. Anderson <ctanderson@greatwesteng.com>; Craig Erickson <cerickson@greatwesteng.com>  
**Subject:** Public Water Supply Eligibility Question

Good Afternoon Becky,

We are working with a small water and sewer district (approximately 90 households) that does not have a centralized drinking water system. The estimated cost of building a centralized system two 12" supply wells, transmission main, 55-thousand gallon storage tank, meters and a distribution system is approximately \$4.6 million. When we shared with the District's Board of Directors that the estimated user rate needed to service the debt would be \$135/user/month they asked us to explore the feasibility of the following alternatives:

1. Using a phased approach develop seven new wells with each well serving nine households. The idea is that this approach would save money by reducing the amount of pipe needed to distribute water, eliminating the storage tank, meters, and the transmission main.
2. Install point of use filtration systems to remove nitrates.

If the District owned and maintained the wells and the point of use filtration systems would this project qualify for TSEP and would it be competitive? To help you understand the nature of the problems we are attempting to resolve we have included the following paragraph from the draft PER:

***Preliminary drinking water wells water quality data collected in 2011 and 2012 found that in a few wells nitrate concentrations were greater than the EPA Maximum Contaminant Level (MCL) of 10 mg/L. It is hypothesized that the failing septic systems might be the source of nitrates in the wells. The county sanitarian has received multiple reports of septic system failures including surfacing of the septic tank effluent. Some of these septic systems are nearby (less than 100 feet) to drinking water wells. Additionally, elevated uranium concentrations in the groundwater are well documented by the USGS. Drinking water wells were sampled and analyzed for nitrate, uranium, chloride, specific conductivity, pH, total coliform, and E. Coli. Also, four samples were analyzed for N15 and O18 isotopes to evaluate the source of nitrates (septic effluent/animal waste, industrial fertilizers, or natural source) in the drinking water wells. Chemical concentrations measured in drinking water wells showed that some of the wells are contaminated by nitrate and/or uranium in excess of EPA MCLs. Nitrate concentrations exceeded the US EPA MCL of 10 mg/L in 18% of the drinking water wells. Uranium concentrations exceeded the EPA's MCL of 30 µg/L in 37% of the drinking water wells.***

We know you are very busy and we would deeply appreciate it if you could provide us with a response as soon as possible.

Thank you very much for your time.

**Craig R. Erickson | Certified Grant Writer®**

**Great West Engineering, Inc.**

Direct: 406-495-6189

Mobile: 406-399-0104

[www.greatwesteng.com](http://www.greatwesteng.com)



# **Appendix I**

## Income Survey



Date: June 4, 2018

Attn: Jefferson County, Clancy Water and Sewer District, Great West Engineering, Community Development Block Grant Program and USDA Rural Development

RE: Clancy Water and Sewer District- 2018 Income Survey Results

From: Erinn Zindt, Midwest Assistance Program (MAP)

---

During March and April of 2018, the Jefferson County Sanitarian, Megan Bullock, worked with Clancy Water and Sewer District Board members and volunteers to hand deliver income surveys, and provide reminders, to all residential units within the Clancy Water and Sewer District boundary. The original survey list included 84 residential units. During delivery efforts, it was discovered that 7 of the residential units were vacant, leaving a total of 77 surveyed residences. The Midwest Assistance Program received the surveys and tallied the results.

CDBG requires a minimum of 67% return rate for the survey data to be accepted. As of June 4, 2018, 52 of 77 surveys were received, a 67.5% return rate, which meets the minimum requirement. Of the 52 households surveyed, 28 were Low to Moderate Income (LMI) households and 24 had incomes above the LMI. The median income of the 52 households surveyed is \$48,266.50.

USDA Rural Development requires a minimum of 84% return rate for 77 surveyed households. A minimum of 13 more surveys are needed to determine the Median Household Income (MHI).



Date: June 4, 2018

Attn: Jefferson County, Clancy Water and Sewer District, Great West Engineering, Community Development Block Grant Program and USDA Rural Development

RE: Clancy Water and Sewer District- 2018 Income Survey Results

From: Erinn Zindt, Midwest Assistance Program (MAP)

---

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CDBG requires a minimum of 67% return rate for the survey data to be accepted. As of June 4, 2018, 52 of 77 surveys were received, meeting this minimum requirement. Of the 52 households surveyed, 28 were Low to Moderate Income (LMI) households and 24 had incomes above the LMI.

USDA Rural Development requires a minimum of 84% return rate for 77 surveyed households. A minimum of 13 more surveys are needed to determine the Median Household Income (MHI).

# **Appendix J**

## Letters of Support

**Jefferson County  
Environmental Health  
P.O. Box H  
Boulder, Montana 59632  
406-225-4126**

---

May 10, 2018

Collette Anderson, PE, Project Manager  
Great West Engineering, Inc.  
PO Box 4817  
Helena, MT 59604

Re: Clancy Water Project

Dear Collette,

The Townsite of Clancy and adjacent areas consist of lots created in the late 1800's. Currently, these lots are served by individual wells and on-site wastewater treatment systems. For the past twenty years, as the Jefferson County Sanitarian, I have been tasked with the challenge of finding solutions for homeowners with failing wastewater treatment systems. In 2017, as part of an educational effort to show residents their wastewater systems were compromising their drinking water quality, we partnered with Montana Tech to do water testing. We discovered the water quality was so impaired in some locations that our focus needed to change and safe quality drinking water became our priority.

The public's health is of great concern to me with many of the tested water sources having nitrates and uranium exceeding the EPA maximum contaminant level. By having an isotope analysis done, we were also able to determine the likely cause of elevated nitrates to be of human origin. Surface waters in the vicinity of Clancy also showed signs of degradation.

While wastewater continues to be an issue and must ultimately be addressed to remedy the problem, safe drinking water has become the utmost priority for the District. A community water system will provide the residents with safe water and remove the threat to the public's health and safety while the District continues to work on addressing the wastewater issues. Financing a water system will only be possible with grants. Your assistance in applying for available grants is appreciated. If I can be of assistance in preparing any of the applications don't hesitate to contact me.

Sincerely,



Megan Bullock, R.S.  
County Sanitarian

May 15, 2018

Clancy Water and Sewer District  
Box 16 North Main St  
Clancy, MT

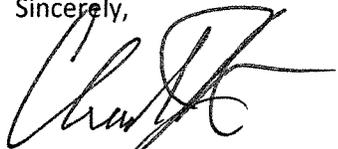
To Mr. Leitheiser and the District Board,

I am writing to express my support for the Districts' water system project. The proposed project is necessary to protect public health and safety of our residents.

For the Clancy Business community, I am concerned with the current state of the Clancy drinking water. Residents and Businesses in Clancy have been dealing with nitrates and other contaminants in our drinking water for a long time. Not having a centralized system threatens our health, our customers health as well as reduces property values and makes it nearly impossible for many to sell their property. We should not have to rely on bottled water for safe drinking water.

I fully support the construction of centralized water system for the District. The award of grant funding to the proposed project would allow the District to supply, safe, clean water, while reducing the economic impact of the project on the community.

Sincerely,



Chris  
Gen Legal Tender Pub & Bistro

May 15, 2018

Clancy Water and Sewer District  
Box 16 North Main St  
Clancy, MT

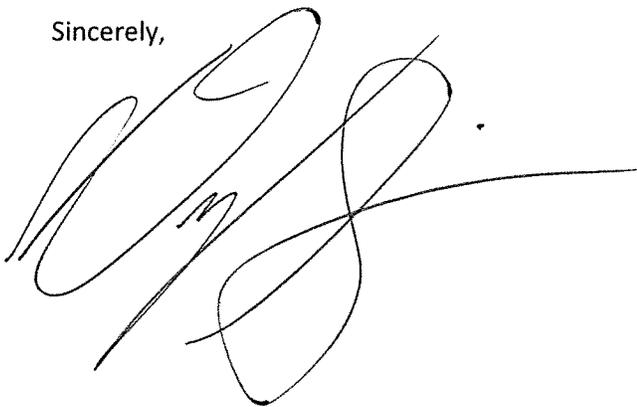
To Mr. Leitheiser and the District Board,

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For the Clancy Business community, I am concerned with the current state of the Clancy drinking water. Residents and Businesses in Clancy have been dealing with nitrates and other contaminants in our drinking water for a long time. Not having a centralized system threatens our health, our customers health as well as reduces property values and makes it nearly impossible for many to sell their property. We should not have to rely on bottled water for safe drinking water.

I fully support the construction of centralized water system for the District. The award of grant funding to the proposed project would allow the District to supply, safe, clean water, while reducing the economic impact of the project on the community.

Sincerely,

A handwritten signature in black ink, appearing to be 'Chobby's Bar & Grill', written in a cursive style. The signature is large and fluid, with a long horizontal line extending to the right.

CHOBBY'S BAR & GRILL



## Jefferson County Commission

118 W. Centennial

Post Office Box H

Boulder, Montana 59632-0249

(406) 225-4025 Voice / (406) 225-4148 Fax

---

Cory Kirsch, Chair Leonard Wortman, Commissioner Bob Mullen, Commissioner

May 9, 2018

Clancy Water and Sewer District  
Box 16  
Clancy, MT 59634

Mr. Leitheiser and the District Board:

I am writing to express the County's support for the District's water system project. The proposed project is necessary to protect public health and safety, as well as the environment.

The lack of a centralized water system in the District is currently threatening public health and safety for many District residents. The individual septic systems are aging and failing, and investigations indicate area groundwater is being contaminated. This is ultimately impacting residents' drinking water wells, as many wells are in close proximity to the septic systems and served by groundwater sources. Well testing has shown elevated levels of Nitrates and Uranium. Nitrates are usually an indicator of human fecal waste in the water supply, and in many tested wells nitrate concentrations were greater than the EPA drinking water quality Maximum Contaminant Level (MCL) of 10 mg/L. This standard has been set to protect infants from methemoglobinemia (blue baby syndrome). The District's current system poses a significant public health threat and we applaud the District's efforts and commitment to ensuring all residents have safe, clean drinking water.

The Jefferson County Commission fully supports the construction of a centralized water system for the District. The award for grant funding to the proposed project would enable the District to construct an efficient, easily managed system that will eliminate a significant threat to public health while reducing the economic impact of the project on the community.

Sincerely,

A handwritten signature in black ink that reads "Cory Kirsch".

Cory Kirsch, Chair  
Jefferson County Board of Commissioners

COM/ha  
cc: reading file