



**HB 11 and HB 14**

**Long Range Planning**  
Appropriations Subcommittee  
January 20-22, 2021

Thursday, January 21		TSEP & RRGL HB11, HB14 & HB6	Project Type	TSEP Rank	TSEP page	RRGL Rank	RRGL Page
9:00	9:05	Butte Silver Bow	W	1	8	12	32
9:06	9:11	Thompson Falls, City of	WW	2	9	11	31
9:12	9:17	Fort Smith Water & Sewer District	WW	4	11	5	25
9:18	9:23	Lockwood Water & Sewer District	WW	6	13	8	28
9:24	9:29	Phillips County - Buffalo Trail Water	W	7	14	75/NF	95
9:30	9:35	Alberton, Town of	W	8	15	61	81
9:36	9:41	Ekalaka, Town of	W	9	16	47	67
9:42	9:47	Lewistown, City of	W	10	17	58	78
9:48	9:53	Harlowton, City of	W	11	18	54	74
9:54	9:59	Joliet, Town of	W	12	19	69	89
10:00	10:15	<b>BREAK</b>					
10:16	10:21	Deer Lodge, City of	WW	13	20	13	33
10:22	10:27	Libby, City of	WW	14	21	17	37
10:28	10:33	Manhatttan, Town of	WW	15	22	9	29
10:34	10:39	Fairfield, Town of	W	16	23	65	85
10:40	10:45	Darby, Town of	WW	17	24	16	36
10:46	10:51	Seeley Lake Sewer District	WW	18	25/156	2019 funded	
10:52	10:57	Roundup, City of	W	19	26/154	43	63
10:58	11:03	Choteau, City of	W	21	143	64	84
11:04	11:09	Richey, Town of	W	22	153	70	90
11:10	11:15	Wolf Point, City of	WW	23	163	26	46
11:16	11:21	Circle, Town of	W	24	144	42	62
11:22	11:27	Shelby, City of	W	26	157	31	51
11:28	11:33	Cooke City Sewer District	WW	27	145	4	24
11:34	11:39	Big Sandy, Town of	SW	28	141	72	92
11:40	11:45	East Helena, City of	WW	29	146	35	55
11:46	11:51	Winnett, Town of	WW	30	162	2019 funded	
11:52	11:57	St. Marie-North Valley County Water	W	31	155	51	71

**Butte-Silver Bow County Project No. 1  
Water System Improvements**

This application received 4,280 points out of a possible 5,000 points and ranked 1 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$500,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Application submitted June 2020
Applicant	Cash	\$1,405,052	Committed via budget for fiscal year 2023
<b>Project Total</b>		<b>\$2,032,052</b>	

Median Household Income:	\$37,686	Total Population:	33,671
Percent Non-TSEP Matching Funds:	75%	Number of Households:	14,798

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$52.07	-	Target Rate:	\$72.23	-
Existing Wastewater Rate:	\$28.50	-	Rate With Proposed TSEP Assistance:	\$80.57	112%
Existing Combined Rate:	\$80.57	112%	Rate Without TSEP Assistance:	\$80.77	112%

**Project History** – The City of Butte in Silver Bow County has three water sources: The Basin Creek Reservoir, the Moulton Reservoir and the Big Hole River. The Basin Creek source provides approximately 60% of Butte’s water. The dam was originally built in 1897 and had significant upgrades in 2006. The dam is classified by the DNRC Dam Safety program as “high hazard” meaning that if failure occurs, the resulting effects would likely be a direct loss of human life and extensive property damage. A new treatment plant was constructed for the source in 2017. The treatment system uses the head produced by the reservoir height to treat water using predominately gravity flow instead of pumping.

**Identified Problem** - The dam numerous cracks, voids, and severe deterioration of the concrete on the upstream face of the dam.

- This could lead to dam failure during a maximum storm event, possibly resulting in downstream loss of life, and damage to public and privately owned downstream infrastructure including the new \$30M Basin Creek Treatment Plant (BCTP),
- The DNRC Dam Safety Program has stated if the dam is not rehabilitated by 2024, Butte may be required to drop the reservoir height, resulting in depletion of reservoir storage by more than half the volume, and lowering the hydraulic head so the BCTP cannot use gravity flow, resulting in more expensive treatment.

**Proposed Solution** - The proposed project would:

- Rehabilitate the upper portion of the existing dam so there is less risk of failure and the existing volume and height of the reservoir can be maintained.

# Butte-Silver Bow County Water Project

## HB 11 and HB 14 Infrastructure Projects

- Infrastructure  
Projects  
Numbered 1-41
- *Combined with  
RRGL*



**City of Thompson Falls Project No. 2  
Wastewater System Improvements**

This application received 4,000 points out of a possible 5,000 points and ranked 2 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$750,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awaiting decision of the Legislature
RD	Grant	\$2,761,685	Application expected to be submitted Fall 2021
RD	Loan	\$3,293,315	Application expected to be submitted Fall 2021
Applicant	Cash	\$18,000	Will commit upon receipt of RD LOC
<b>Project Total</b>		<b>\$6,948,000</b>	

Median Household Income:	\$30,595	Total Population:	941
Percent Non-TSEP Matching Funds:	89%	Number of Households:	426

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$46.68	-	Target Rate:	\$58.64	-
Existing Wastewater Rate:	\$0.00	-	Rate With Proposed TSEP Assistance:	\$131.44	224%
Existing Combined Rate:	\$46.68	80%	Rate Without TSEP Assistance:	\$154.98	264%

**Project History** – Thompson Falls is in Sanders County. A centralized system is in place for wastewater collection and treatment for areas south of Highway 200. Areas north of Highway 200 are served by individual septic systems. The City constructed its first wastewater system in 1948 with upgrades in 1968, 1987 and 1997. The current treatment system is a three-cell aerated lagoon which continuously discharges to the Clark Fork River. Approximately 560 residential homes and three schools in Thompson Falls are served by private septic systems. A four-phase collection and treatment project has been proposed. Phases 1 and 2 are in design and will include construction of a collection system for about one half of the residents plus significant treatment plant upgrades. Construction of phases 1 and 2 is anticipated in 2020 – 2021. Phases 3 and 4 will include construction of a collection system for the remaining residents. This proposed project is phase 3.

**Identified Problem** – The wastewater system has the following deficiencies:

- most of the community is not connected to the public wastewater system,
- substandard septic systems are in use,
- lots are too small for replacement septic systems and
- minimally treated wastewater is being discharged into the ground.

**Proposed Solution** – The proposed project would:

- install about 11,700 feet of 8-inch PVC sewer pipe and 40 manholes,
- construct lift station #3 and install emergency generator,
- install about 2,700 feet of force main, 26 grinder pumps, and 19 curb stops/check valves,
- abandon 181 existing septic tanks,
- remove, replace, or restore sidewalk and asphalt streets, and
- 181 service connections to the new main.

**CONDITION:** If awarded, applicant agrees to establish projected end user rates, as presented in application, as user rates of at least \$87.96 at the end of the project. Current user rates do not meet the amount required for level of funding requested, but projected end user rates do meet the required rates for amount requested.

# City of Thompson Falls Wastewater Project



**Fort Smith Water & Sewer District Project No. 4  
Wastewater System Improvements**

This application received 3,910 points out of a possible 5,000 points and ranked 4 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$750,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awaiting decision of the Legislature
RD	Grant	\$1,564,515	Application expected to be submitted June 2021
RD	Loan	\$1,967,185	Application expected to be submitted June 2021
<b>Project Total</b>		<b>\$4,451,700</b>	

Median Household Income:	\$34,327	Total Population:	420
Percent Non-TSEP Matching Funds:	83%	Number of Households:	221

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$28.03	-	Target Rate:	\$65.79	-
Existing Wastewater Rate:	\$26.21	-	Rate With Proposed TSEP Assistance:	\$113.44	172%
Existing Combined Rate:	\$54.24	82%	Rate Without TSEP Assistance:	\$125.84	191%

**Project History** – The communities of Fort Smith and Yellowtail, located in Big Horn County, were created as employee housing in 1961 during construction of the Yellowtail Dam. The communities are separated by Montana Highway 313. After construction of the Dam was completed in 1967, the land was transferred to private ownership. The Fort Smith wastewater system consists of a collection system, buried steel tank rail cars used for septic tanks and three drainfields located on Crow Tribal property. The Yellowtail wastewater system consists of a collection system and a single-cell unlined lagoon. Because the lagoon is within the boundaries of the Crow Reservation, on-going permitting is done by EPA. The lagoon is currently permitted as a non-discharging system. The communities share one public water supply system.

**Identified Problem** – The wastewater systems have the following deficiencies:

- Both collection systems show signs of leakage and a significant portion of the sewage is not making its way to the drainfield (Fort Smith) or lagoon (Yellowtail);
- Both collection systems are clogged due to roots and collapsed pipes so the WSD is unable to TV the lines to identify leaks;
- Both collection systems have inadequately spaced manholes and many of the manholes are not watertight;
- The Fort Smith drainfield is undersized for current flows;
- The rail cars used for septic tanks at Fort Smith are corroding and in questionable condition;
- The Yellowtail lagoon does not have standing water so any sewage that arrives at the lagoon leaks into the soil.

**Proposed Solution** - The proposed project would:

- Construct a new conventional gravity collection system to replace the existing collection system;
- Construct a new lift station and force main;
- Construct new facultative lagoons and a spray irrigation system that serves both communities; and
- Abandon the existing Fort Smith drainfield and Yellowtail lagoon systems.

**CONDITION:** If awarded, applicant agrees to establish projected end user rates, as presented in application, as user rates of \$98.69 at the end of the project. Current user rates do not meet the amount required for level of funding requested, but projected end user rates do meet the required rates for amount requested.

# Fort Smith Water & Sewer District Wastewater Project



*Top of Buried Steel Tank Train Car*



*Fort Smith Manholes*



**Lockwood Water & Sewer District Project No. 6  
Wastewater System Improvements**

This application received 3,710 points out of a possible 5,000 points and ranked 6 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$750,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awaiting decision of the Legislature
SRF	Loan	\$9,889,000	Application expected to be submitted June 2020
<b>Project Total</b>		<b>\$10,764,000</b>	

Median Household Income:	\$53,085	Total Population:	7,437
Percent Non-TSEP Matching Funds:	93%	Number of Households:	2,736

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$92.33	-	Target Rate:	\$101.75	-
Existing Wastewater Rate:	\$53.16	-	Rate With Proposed TSEP Assistance:	\$165.90	163%
Existing Combined Rate:	\$145.49	143%	Rate Without TSEP Assistance:	\$174.45	171%

**Project History** – Lockwood is in Yellowstone County. Lockwood represented one of the largest contiguous populations being served entirely by on-site wastewater treatment systems until construction of the first phase of sewer in 2009. Construction of phase 1 and 2 sewer subdistrict wastewater collection systems were completed in a series of projects from 2009 to 2016. Approximately 18.9 miles of sanitary sewer gravity collection mains ranging in size from 8 to 30 inches in diameter were installed under phase 1 and 2 projects. However, a significant portion of the community remains to be served. The trunk mains currently installed have been sized to accept wastewater flows from the remaining areas. A wastewater service agreement is in place that allows Lockwood to discharge wastewater to the City of Billings wastewater system for final treatment and discharge. The proposed project is phase 3A of 4.

**Identified Problem** - The following deficiencies exist in the community:

- large portions of the community are served by individual septic systems,
- existing septic and drainfield systems have been contributing to high nitrate levels in the groundwater,
- older subdivisions in the community have small lots with limited areas for replacement or extensions of drainfields,
- numerous residences in the planning area have drainfields near failure, and
- trunk mains were sized to accommodate the full build out flows of the district so without expanding the sewer service area, much of the facilities already constructed will operate inefficiently.

**Proposed Solution** - The proposed project would:

- construct about 35,000 feet of sewer collection mains,
- construct lift stations and force main and
- install appurtenances such as manholes.

**CONDITION:** If awarded, applicant agrees to establish projected end user rates, as presented in application, as user rates of \$152.63 at the end of the project. Current user rates do not meet the amount required for level of funding requested, but projected end user rates do meet the required rates for amount requested.

# Lockwood Water & Sewer District Wastewater Project



**Phillips County for Buffalo Trails Water District Project No. 7  
Water System Improvements**

This application received 3,590 points out of a possible 5,000 points and ranked 7 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$200,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awaiting decision of the Legislature
SRF	Forgiveness	\$84,000	Application expected to be submitted June 2020
SRF	Loan	\$250,000	Application expected to be submitted June 2020
<b>Project Total</b>		<b>\$659,000</b>	

Median Household Income:	\$42,569	Total Population:	4,167
Percent Non-TSEP Matching Funds:	70%	Number of Households:	1,808

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$3.25	-	Target Rate:	\$49.66	-
Existing Wastewater Rate:	\$0.00	-	Rate With Proposed TSEP Assistance:	\$77.55	184%
Existing Combined Rate:	\$3.25	7%	Rate Without TSEP Assistance:	\$136.35	324%

**Project History** – Buffalo Trail Water District is in Phillips County about ten miles west of Saco, north of Highway 2 on route 243. The 25-lot subdivision in the Buffalo Trail area was approved in 1980 for individual wells. The district currently serves about ten residences and is hooked up to the water system of an adjacent resort. Back in the 1980s, some lots were not able to get water when they drilled their wells. So, the subdivision hooked up to an existing system of the nearby resort. The water supply consists of one well that is 94 feet deep. The well was constructed in 1959 for the resort and is located on federal land managed by the Bureau of Reclamation. Multiple issues exist including legal status of the well, water rights and testing requirements for the system. The District was operating as a transient non-community system, but they may be a community system per DEQ. A public water system that meets the definition of a community system is subject to a significant amount of additional monitoring and testing.

**Identified Problem** – Deficiencies with the water system include:

- only one well as opposed to the required two wells for a community system,
- well usage is on a temporary status per landowner,
- sanitary deficiencies with the well, and
- possibly inadequate testing based on category of system.

**Proposed Solution** – The proposed project would

- drill one or two new wells,
- install emergency generator,
- construct pumphouse with chlorination system,
- install small storage tank, and
- conduct geotechnical investigation for siting new well(s).

**CONDITION:** If awarded, applicant agrees to establish projected end user rates, as presented in application, as user rates of \$49.66 at the end of the project. Current user rates do not meet the amount required for level of funding requested, but projected end user rates do meet the required rates for amount requested.

# Phillips County for Buffalo Trail Water District Water Project



**Town of Alberton Project No. 8  
Water System Improvements**

This application received 3,560 points out of a possible 5,000 points and ranked 8 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$750,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awaiting decision of the Legislature
SRF	Loan	\$876,480	Will apply if grant application is successful
Applicant	Cash	\$150,000	Committed by resolution.
<b>Project Total</b>		<b>\$1,901,480</b>	

Median Household Income:	\$24,539	Total Population:	479
Percent Non-TSEP Matching Funds:	61%	Number of Households:	151

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$20.79	-	Target Rate:	\$47.03	-
Existing Wastewater Rate:	\$47.41	-	Rate With Proposed TSEP Assistance:	\$99.12	211%
Existing Combined Rate:	\$68.20	145%	Rate Without TSEP Assistance:	\$124.43	265%

**Project History** – Alberton is a small community in Mineral County. The water system is served by two sources: a groundwater well and a gravity-flow spring. The Town has a 300,000-gallon steel storage tank, and a distribution system with ¼" to 8" mains. The well can produce approximately 115 gpm and the spring can produce approximately 100 gpm. The spring source has gas chlorination. The Town is currently constructing improvements to the water system including new SCADA and a liquid hypochlorite disinfection system for both sources. That project is projected to be completed in August 2020 without TSEP funds and is not part of the project currently under consideration

**Identified Problem** - The water system has the following deficiencies:

- An aging and undersized distribution system that cannot deliver adequate fire flows;
- A lack of storage capacity to meet average day plus fire demand,
- A lack of source capacity to meet maximum day demand;
- Lack of control and security around the spring source and minor rehabilitative work;
- 30% of existing water meters do not work or are installed in the wrong location to accurately meter water use; and
- Some portions of the system have pressure higher than 100 psi.

**Proposed Solution** - The proposed project would:

- Replace undersized mains and add looping,
- Replace water meters so they work and are installed at the correct location; and
- Rehabilitate the existing spring source to increase security and water quality, and
- Install a pressure reducing valve for the six houses with excessive pressure.

**Note:** The PER states source and storage capacity deficiencies will be addressed in a subsequent project. In addition, the Town is considering adding sprinklers to the two largest schools which will reduce the required fire flow to 1,750 gpm for two hours.

**CONDITION:** If awarded, applicant agrees to establish projected end user rates, as presented in application, as user rates of at least \$70.55 at the end of the project. Current user rates do not meet the amount required for level of funding requested, but projected end user rates do meet the required rates for amount requested.

# Town of Alberton Water Project



**Town of Ekalaka Project No. 9  
Water System Improvements**

This application received 3,520 points out of a possible 5,000 points and ranked 9 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$500,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awaiting decision of the Legislature
RD	Grant	\$373,500	Application expected to be submitted September 2020
RD	Loan	\$373,500	Application expected to be submitted September 2020
<b>Project Total</b>		<b>\$1,372,000</b>	

Median Household Income:	\$32,813	Total Population:	297
Percent Non-TSEP Matching Funds:	64%	Number of Households:	157

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$46.73	-	Target Rate:	\$62.89	-
Existing Wastewater Rate:	\$23.44	-	Rate With Proposed TSEP Assistance:	\$74.25	118%
Existing Combined Rate:	\$70.17	112%	Rate Without TSEP Assistance:	\$79.71	127%

**Project History** – The Town of Ekalaka’s water system, located in Carter County consists of six wells, only three of which are routinely used, two storage tanks providing approximately 200,000 gallons of storage and 4 to 8 inch distribution system mains constructed of PVC, cast iron and asbestos cement pipe. The Town has chlorination equipment for the wells, but it is only used occasionally for distribution system maintenance.

**Identified Problem** – The water system has the following deficiencies:

- Approximately half of the distribution system mains are deteriorated resulting in an average leakage rate of 20% of treated water; and
- Some of the water mains are undersized so the system is unable to deliver the required fire flows at a minimum pressure of 20 psi.

**Proposed Solution** – The proposed project would:

- Replace approximately 5,140 feet of undersized and deteriorated pipe with new 6" or 8" mains to minimize leaks and increase fire flow.

**Note:** Due to financial constraints, the Town is unable to complete all the required improvements at once so is proposing a phased approach. This project will replace water mains identified as priorities 1 and 2 of 5.

# Town of Ekalaka Water Project





**City of Lewistown Project No. 10  
Water System Improvements**

This application received 3,480 points out of a possible 5,000 points and ranked 10 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$500,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awaiting decision of the Legislature
SRF	Loan	\$2,735,909	Application expected to be submitted June 2021
Local	Cash	\$1,500,000	Committed
<b>Project Total</b>		<b>\$4,860,909</b>	

Median Household Income:	\$35,990	Total Population:	5,883
Percent Non-TSEP Matching Funds:	90%	Number of Households:	2,681

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$26.57	-	Target Rate:	\$68.98	-
Existing Wastewater Rate:	\$42.98	-	Rate With Proposed TSEP Assistance:	\$75.44	109%
Existing Combined Rate:	\$69.55	101%	Rate Without TSEP Assistance:	\$76.51	111%

**Project History** – The Lewistown public water system consists of a spring water source, two storage tanks totaling 2,500,000 gallons and a distribution system with 2" to 24" mains and two pressure zones. The spring has been determined by DEQ to not be under the influence of surface water. The system has had a series of positive total coliform samples over the past decade so DEQ has required that Lewistown install permanent full-time chlorination by 2022. The Town is currently using a temporary chlorination system.

**Identified Problem** - The system has the following deficiencies:

- DEQ has required that Lewistown install full-time disinfection;
- A valve at the Lower Pump station is aged, leaking and in need of replacement and an installed pump is never used;
- The booster pumping station serving the Castle Ridge Acres Subdivision is undersized;
- Significant portions of the City's distribution system are leaking; and
- The City's existing SCADA system is dated and if it fails, replacement parts are no longer available.

**Proposed Solution** - The proposed project would:

- Install full-time disinfection for the entire water system;
- Replace the valve at the Lower Pump station and remove unnecessary pump;
- Upgrade the booster pump for the Castle Ridge Acres Subdivision;
- Replace 1,628 feet of leaking water mains; and
- Replace the aged SCADA system.

Note: replacement of 2,045 additional feet of water mains and upgrades to a storage tank are proposed in the future and are not included in this project.

# City of Lewistown Water Project



**City of Harlowton Project No. 11  
Water System Improvements**

This application received 3,470 points out of a possible 5,000 points and ranked 11 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$625,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awaiting decision of the Legislature
CDBG	Grant	\$450,000	Application expected to be submitted September 2020
SRF	Loan	\$357,000	Applied Summer 2020
SRF	Loan Forgiveness	\$357,000	Applied Summer 2020
<b>Project Total</b>		<b>\$1,914,000</b>	

Median Household Income:	\$29,813	Total Population:	899
Percent Non-TSEP Matching Funds:	67%	Number of Households:	431

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$41.80	-	Target Rate:	\$57.14	-
Existing Wastewater Rate:	\$33.90	-	Rate With Proposed TSEP Assistance:	\$79.79	140%
Existing Combined Rate:	\$75.70	132%	Rate Without TSEP Assistance:	\$86.94	152%

**Project History** - The City of Harlowton is the county seat of Wheatland County. The original water distribution system for the city was constructed in the 1930's of cast iron pipe. Phase 1 water system upgrades in 2011 included construction of a new 590,000-gallon storage tank, booster station and about 2,000 lineal feet of new water main. Phase 2 improvements in 2013 included about 5,500 feet of water main. Phase 3 improvements in 2017 included about 9,000 feet of water main. Phase 4 improvements will replace about 7,500 feet of pipe in 2020. After the construction of the new water storage tank, the resulting improved pressures caused the deteriorated cast iron distribution pipe to break with increased frequency. Harlowton is a member community of the Musselshell Judith Rural Water System, a proposed water system of the Central Montana Regional Water Authority.

**Identified Problem** - The water system has the following deficiencies:

- about 8,500 feet of the existing water distribution system is comprised of old, deteriorated cast iron water mains,
- there have been 25 main breaks over the last four years and 87 breaks since late 2011,
- main breakage results in low pressures which have the potential for infiltration of potential contaminants,
- unaccounted for water exceeds 50% over the last three years, and
- hydrocarbon contamination of shallow groundwater exists in parts of the city.

**Proposed Solution** - The proposed project would replace approximately 7,900 feet of distribution main.

# City of Harlowton Water Project



**Town of Joliet Project No. 12  
Water System Improvements**

This application received 3,460 points out of a possible 5,000 points and ranked 12 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$625,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awaiting decision of the Legislature
CDBG	Grant	\$450,000	Application expected to be submitted September 2020
RD	Grant	\$280,013	Application expected to be submitted Summer 2021
RD	Loan	\$418,700	Application expected to be submitted Summer 2021
Applicant	Cash	\$33,000	Committed by resolution, partially expended on PER
<b>Project Total</b>		<b>\$1,931,713</b>	

Median Household Income:	\$34,457	Total Population:	532
Percent Non-TSEP Matching Funds:	68%	Number of Households:	246

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$53.47	-	Target Rate:	\$66.04	-
Existing Wastewater Rate:	\$66.88	-	Rate With Proposed TSEP Assistance:	\$125.40	190%
Existing Combined Rate:	\$120.35	182%	Rate Without TSEP Assistance:	\$132.94	201%

**Project History** – The Town of Joliet is in Carbon County. The Joliet public water system has been in operation for more than 75 years. The existing water system is made up of six source water wells (three are currently not being used), individual well disinfection facilities, a partially buried storage tank, and distribution system. The storage tank was constructed in 1937. Water system improvements have been completed over the years including a large distribution system project in 1991.

**Identified Problem** – The water system has the following deficiencies:

- storage capacity for the system is less than half of what is recommended,
- some of the wells are old and trends show a reduction in production,
- undersized mains are servicing fire hydrants,
- there are dead-end and shallow mains in the system,
- existing mains have experienced several breaks,
- inadequate fire flows, and
- only two water mains connect the north/south sides of town under the state highway.

**Proposed Solution** – The proposed project would:

- refurbish well #2,
- add auxiliary power supply
- construct new 400,000-gallon storage tank, and
- install about 1,500 feet of water mains.

# Town of Joliet Water Project



City of Deer Lodge Project No. 13  
Wastewater System Improvements

This application received 3,410 points out of a possible 5,000 points and ranked 13 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$500,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awaiting decision of the Legislature
SRF	Loan	\$415,000	Application expected to be submitted Fall 2020
Applicant	Cash	\$60,000	Committed by resolution, partially expended on PER
<b>Project Total</b>		<b>\$1,100,000</b>	

Median Household Income:	\$37,934	Total Population:	3,056
Percent Non-TSEP Matching Funds:	55%	Number of Households:	1,323

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$25.43	-	Target Rate:	\$72.71	-
Existing Wastewater Rate:	\$55.18	-	Rate With Proposed TSEP Assistance:	\$82.31	113%
Existing Combined Rate:	\$80.61	111%	Rate Without TSEP Assistance:	\$84.35	116%

**Project History** – The City of Deer Lodge is located in Powell County. The wastewater treatment system consists of a collection system, activated sludge treatment, secondary clarification, and UV disinfection with a discharge to the Clark Fork River. The City's current discharge permit requires no discharge during the summer months, but those permit limits are currently stayed under an Administrative Order on Consent with DEQ until 2023. The City has had a long-term infiltration issue, originally identified in the 1970s. The City completed some collection system improvements in 2009 and 2014 and upgraded the wastewater treatment facility in 2017. The excessive infiltration of storm and groundwater has resulted in difficulty meeting their percent removal permit limits.

**Identified Problem** – The wastewater system has the following deficiencies:

- During the summer months, the wastewater system has up to 50% groundwater and storm water infiltration.

**Proposed Solution** – The proposed project would:

- Rehabilitate 3,050 feet of existing sewer main, 11 manholes and five service connections identified as causing the highest infiltration rates; and
- Construct a new storm water collection system on Milwaukee Avenue and Main Street to separate storm water from wastewater.

Note: an additional 7,600 feet of sewer main rehabilitation would be bid as an additive alternate to the project, to be constructed if bids come in less than anticipated.

# City of Deer Lodge Wastewater Project





City of Libby Project No. 14  
Wastewater System Improvements

This application received 3,385 points out of a possible 5,000 points and ranked 14 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$464,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awaiting decision of the Legislature
CDBG	Grant	\$450,000	Application expected to be submitted September 2020
Project Total		\$1,039,000	

Median Household Income:	\$23,623	Total Population:	2,674
Percent Non-TSEP Matching Funds:	55%	Number of Households:	1,332

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$66.73	-	Target Rate:	\$45.28	-
Existing Wastewater Rate:	\$26.63	-	Rate With Proposed TSEP Assistance:	\$93.36	206%
Existing Combined Rate:	\$93.36	206%	Rate Without TSEP Assistance:	\$104.43	231%

**Project History** – The City of Libby is located in Lincoln County. The wastewater treatment system consists of a collection system, influent pump station, headworks, oxidation ditch, secondary clarifiers, UV disinfection, sludge digesters, and a discharge to the Kootenai River. After the PER was written, the City obtained a DLA grant to replace the existing bar screen, so they are no longer pursuing one of the two selected alternatives, IPS4.

**Identified Problem** - The wastewater system has the following deficiencies:

- Portions of the existing collection system do not meet minimum required slopes, slope the wrong direction and change alignment without a manhole or cleanout, leading to excessive solids deposition and maintenance;
- Three large subdivisions adjacent to the City do not have central sewage service;
- Two existing lift stations have exceeded their useful life and have recently experienced multiple operational issues;
- The existing aeration system is difficult to maintain and control, and could be more efficient;
- The existing clarifiers are at capacity with the largest unit out of service; and
- The existing treatment plant control system is beyond its useful life and replacement parts cannot be obtained.

**Proposed Solution** - The proposed project would:

- Replace the existing control system; and
- Replace 600 feet of leaking sewer mains with the highest infiltration rates.

**Note:** the City is unable to complete all the necessary improvements at one time so this project will focus on the two issues with the highest priority.

# City of Libby Wastewater Project



**Town of Manhattan Project No. 15  
Wastewater System Improvements**

This application received 3,360 points out of a possible 5,000 points and ranked 15 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$750,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awaiting decision of the Legislature
SRF	Loan	\$6,918,000	Application submitted June 2020
<b>Project Total</b>		<b>\$7,793,000</b>	

Median Household Income:	\$52,135	Total Population:	2,350
Percent Non-TSEP Matching Funds:	90%	Number of Households:	911

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$80.84	-	Target Rate:	\$99.93	-
Existing Wastewater Rate:	\$66.23	-	Rate With Proposed TSEP Assistance:	\$195.98	196%
Existing Combined Rate:	\$147.07	147%	Rate Without TSEP Assistance:	\$201.28	201%

**Project History** – The Town of Manhattan is located in Gallatin County. The wastewater treatment system consists of a collection system, headworks, denitrification and aeration basins, clarifiers, UV disinfection, sludge digesters, and a discharge to the Dita Ditch which is a tributary to the Gallatin River. The Town anticipates their new permit from DEQ will require a general variance, and the Town cannot achieve those standards. DEQ has identified the Town of Manhattan as the only facility within the state that may not be able to adhere to the 2027 deadline.

**Identified Problem** - The wastewater system has the following deficiencies:

- The failed aeration unit of the treatment system resulted in numerous permit violations and the new emergency aeration system is not as effective as the original design was prior to failure;
- The existing solids dewatering equipment is not consistently effective, leading to excessive maintenance;
- The outfall channel of the Dita Ditch is eroded;
- The Town cannot meet the current variance treatment standards or regular nutrient standards; and
- The Town is at the limit of their water rights and will be unable to serve more water users unless they can mitigate consumption with aquifer recharge of treated wastewater.

**Proposed Solution** - The proposed project would:

- Retrofit the existing treatment system to provide additional nitrogen treatment;
- Construct a blower building and add a third redundant blower to increase BOD removal;
- Add media and a media retention system to increase nutrient removal;
- Construct a new mechanical sludge dewatering facility;
- Construct rapid infiltration basins to facilitate a groundwater discharge during the summer months when nutrient standards are very low and potentially recharge the groundwater aquifer to allow additional future water use; and
- Restore the eroded Dita Ditch and install riprap to prevent future erosion.

**Note:** The Town is unable to complete all the improvements at one time so they will phase in future improvements.

**CONDITION:** if awarded, applicant agrees to establish projected end user rates, as presented in application, as user rates of at least \$ 149.90 at the end of the project. Current user rates do not meet the amount required for level of funding requested, but projected end user rates do meet the required rates for amount requested.

# Town of Manhattan Wastewater Project



**Town of Fairfield Project No. 16  
Water System Improvements**

This application received 3,335 points out of a possible 5,000 points and ranked 16 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$625,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awaiting decision of the Legislature
RD	Grant	\$368,250	Application expected to be submitted September 2020
RD	Loan	\$1,104,750	Application expected to be submitted September 2020
Applicant	Cash	\$200,000	Committed by resolution, partially expended on PER
<b>Project Total</b>		<b>\$2,423,000</b>	

Median Household Income:	\$36,635	Total Population:	749
Percent Non-TSEP Matching Funds:	74%	Number of Households:	307

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$33.74	-	Target Rate:	\$70.22	-
Existing Wastewater Rate:	\$56.52	-	Rate With Proposed TSEP Assistance:	\$102.70	146%
Existing Combined Rate:	\$90.26	129%	Rate Without TSEP Assistance:	\$109.72	156%

**Project History** – Fairfield is a small community in Teton County. The water system is served by eight sources: four infiltration galleries and four groundwater wells. The Town has a 60,000-gallon and a 150,000-gallon storage tank, and a distribution system with 2" to 8" mains made of asbestos-cement and PVC. All sources are treated with gas or liquid chlorine. All water is treated to 4-log virus inactivation with the exception of one residence that receives water before adequate contact time is achieved.

**Identified Problem** – Identified Problem - The water system has the following deficiencies:

- An aging distribution system with losses that average up to 30%;
- 14% of water mains are undersized for fire flow;
- At one location, the resident is receiving inadequately treated water (before full contact time is achieved); and
- A lack of adequate storage volume and one tank that has reached the end of its useful design life.

**Proposed Solution** - The proposed project would:

- Replace leaking pipe; and
- Replace undersized mains and add looping; and
- Upsize the main serving the house without adequate treatment so full treatment is achieved.

**Note:** The PER states storage capacity deficiencies will be addressed in a subsequent project. Therefore, those deficiencies were not taken into consideration in the scoring of Statutory Priority #1.

# Town of Fairfield Water Project



**Town of Darby Project No. 17  
Wastewater System Improvements**

This application received 3,325 points out of a possible 5,000 points and ranked 17 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$625,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awaiting decision of the Legislature
CDBG	Grant	\$450,000	Application expected to be submitted September 2020
RD	Grant	\$248,300	Application expected to be submitted Fall 2021
RD	Loan	\$372,296	Application expected to be submitted Fall 2021
Applicant	Cash	\$ 33,000	Committed by resolution
<b>Project Total</b>		<b>\$1,853,596</b>	

Median Household Income:	\$24,333	Total Population:	673
Percent Non-TSEP Matching Funds:	66%	Number of Households:	270

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$37.72	-	Target Rate:	\$46.64	-
Existing Wastewater Rate:	\$25.95	-	Rate With Proposed TSEP Assistance:	\$100.18	215%
Existing Combined Rate:	\$63.67	137%	Rate Without TSEP Assistance:	\$100.69	216%

**Project History** – The Town of Darby is in Ravalli County. The existing wastewater system is made up of a three-cell facultative lagoon, a single lift station and force main, and the collection system. The original collection system consisted of 8" asbestos concrete pipe that was installed in 1964. Numerous leaks and breaks have been repaired throughout the years, and a few new blocks of sewer have been added as the town has expanded. No other major improvements to the collection system have been completed. The lift station was installed in 1994. The lagoon was constructed in 1980 with some minor upgrades in 2002. The lagoon discharges to the Bitterroot River. This is a revised application from the one submitted by Darby in 2018.

**Identified Problem** – The wastewater system has the following deficiencies:

- infiltration flows are excessive,
- lift station pumps clog regularly,
- numerous permit violations, and
- excessive sludge accumulation.

**Proposed Solution** – The proposed project would:

- replace about ten manholes and about 800 feet of sewer lines,
- clean and inspect selected sewer lines,
- install mechanical screen at lift station,
- remove and dispose of sludge, and
- improve lagoon with new control manhole and valves and modifications to outlet and discharge structures.

# Town of Darby Wastewater Project





**Seeley Lake Sewer District Project No. 18 – Contingent Funding  
Wastewater System Improvements**

This application received 3,320 points out of a possible 5,000 points and ranked 18 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$750,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awarded in 2019
WRDA	Grant	\$660,000	Awarded in 2019
RD	Grant	\$1,415,250	Application to be submitted Summer 2021
RD	Loan	\$3,578,250	Application to be submitted Summer 2021
<b>Project Total</b>		<b>\$6,528,500</b>	

Median Household Income:	\$40,813	Total Population:	1,081
Percent Non-TSEP Matching Funds:	89%	Number of Households:	532

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$64.58	-	Target Rate:	\$78.22	-
Existing Wastewater Rate:	\$63.86	-	Rate With Proposed TSEP Assistance:	\$241.42	309%
Existing Combined Rate:	\$128.44	164%	Rate Without TSEP Assistance:	\$458.69	586%

**Project History** - The Seeley Lake Sewer District is in Missoula County. Wastewater treatment and disposal in Seeley Lake consists of individual septic systems. The Sewer District was formed in 1992 to address issues related to a high density of individual septic systems and associated contamination. Since the formation of the District, multiple studies have been completed to analyze the impact of individual septic systems on groundwater in the area. In 1998 the Montana Bureau of Mines and Geology completed a groundwater study for the Seeley Lake Area. Additional groundwater monitoring has been completed annually since 2003. The groundwater studies concluded that septic tank effluent is contributing to the degradation of groundwater. Construction of the wastewater treatment plant and phase 1 collection system has not yet started. This application is for the phase 2 collection system.

**Identified Problem** - The wastewater system has the following deficiencies:

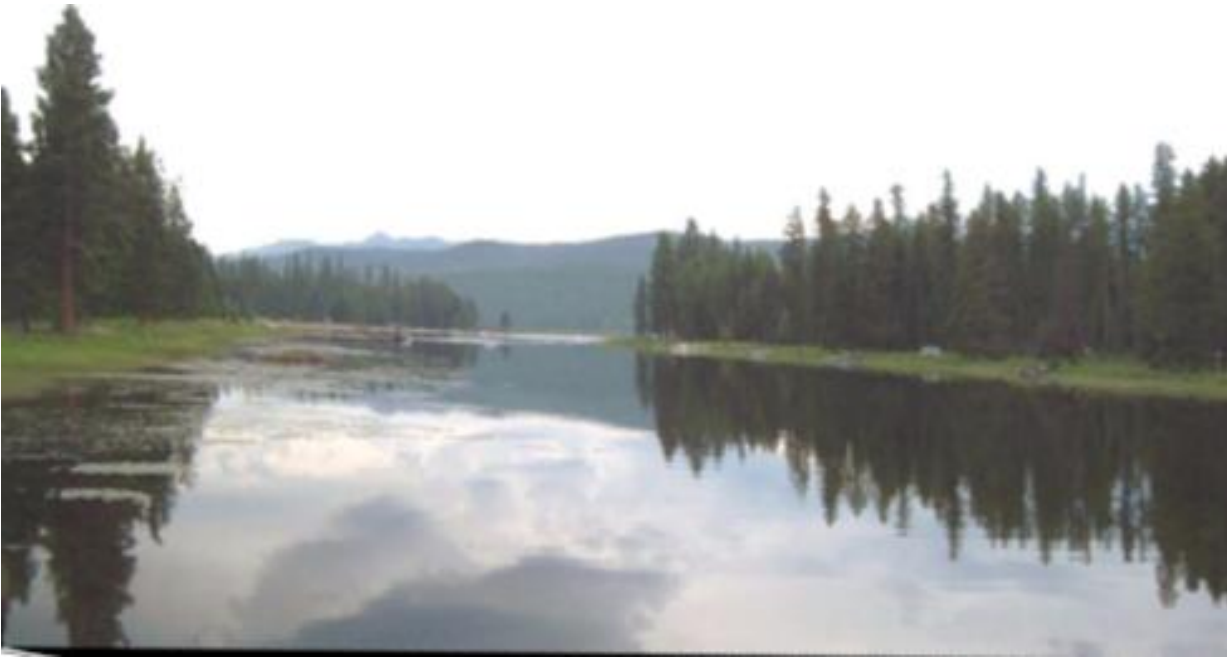
- there is no existing centralized wastewater system for this community,
- nitrate and chloride data from multiple groundwater studies suggests groundwater is being degraded by septic tank effluent,
- studies of water quality in Seeley Lake have detected elevated levels of phosphorous and nitrates, and
- no room or allowances for new or replacement septic systems and drainfields.

**Proposed Solution** - The proposed project would:

- install about 15,000 feet of sewer main,
- install about 4,400 feet of force main,
- construct two lift stations, and
- construct about 45 manholes.

**Note:** Privately owned service lines are not eligible for TSEP funding.

# Seeley Lake Sewer District Wastewater Project



City of Roundup Project No. 19 - Contingent Funding  
Water System Improvements

This application received 3,290 points out of a possible 5,000 points and ranked 19 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$750,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awaiting decision of the Legislature
CDBG	Grant	\$450,000	Application expected to be submitted September 2020
Applicant	Cash	\$ 445,000	Committed by resolution
Project Total		\$1,770,000	

Median Household Income:	\$28,538	Total Population:	1,900
Percent Non-TSEP Matching Funds:	58%	Number of Households:	808

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$62.40	-	Target Rate:	\$54.70	-
Existing Wastewater Rate:	\$29.66	-	Rate With Proposed TSEP Assistance:	\$92.06	168%
Existing Combined Rate:	\$92.06	168%	Rate Without TSEP Assistance:	\$96.62	177%

**Project History** – Roundup is in Musselshell County. Drinking water is supplied by groundwater wells and the system is chlorinated. Storage is provided by a two-million-gallon concrete reservoir built in 1982. The City's original distribution system was installed in 1908 and was comprised chiefly of cast iron pipe. Despite numerous pipeline additions and replacement over the years, old cast iron pipe remains in use. This pipe has badly deteriorated over time, and City personnel repair numerous leaks each year. The proposed distribution system project is designated as the sixth phase of an ongoing pipe replacement program. The City eventually hopes to hook up to the Central Montana Regional Water Authority.

**Identified Problem** – The water system has the following deficiencies:

- Aged and deteriorated cast iron pipe,
- About 7% of existing distribution system is unable to deliver recommended fire flows due to undersized mains, rust and scaling,
- About 17% of valves within the original distribution system are inoperable and
- Iron concentrations greater than the secondary drinking water standards.

**Proposed Solution** – The proposed project would:

- Replace up to about 6,000 feet of water main and
- Replace appurtenances such as hydrants and valves.

The application indicated replacement of 7,000 feet of mains; the preliminary engineering report indicated replacement of up to about 6,000 feet of mains.

**Note:** Schedules exist in the event grant funds from one of the funding agencies are not awarded. Schedule 1 includes about 4,900 feet of main replacement with the balance in schedule 2. This is Phase 6 of water system improvements for the City.

# City of Roundup Water Project



City of Choteau Project No. 21  
Water System Improvements

This application received 3,220 points out of a possible 5,000 points and ranked 21 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$625,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awaiting decision of the Legislature
RD	Grant	\$662,200	Application expected to be submitted Summer 2021
RD	Loan	\$2,347,800	Application expected to be submitted Summer 2021
Applicant	Cash	\$400,000	Committed by resolution, partially expended on PER
Project Total		\$4,160,000	

Median Household Income:	\$38,529	Total Population:	1,685
Percent Non-TSEP Matching Funds:	85%	Number of Households:	742

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$33.73	-	Target Rate:	\$73.85	-
Existing Wastewater Rate:	\$51.77	-	Rate With Proposed TSEP Assistance:	\$96.91	131%
Existing Combined Rate:	\$85.50	116%	Rate Without TSEP Assistance:	\$99.59	135%

**Project History** – The City of Choteau is in Teton County. The water system dates to about 1910. The system includes four shallow groundwater wells, chlorine disinfection, two storage facilities, and a distribution system. Major improvements to the Richem pumphouse and replacement of some water lines occurred during a project in 2006. The Richem pumphouse is located in the northwest corner of town, the Water Works well is in the north part of town adjacent to Highway 89, and the storage tanks are in the northeast part of town near the golf course. The cast iron and ductile iron water lines that remain in the distribution system are over 100 years old. The wells are in the floodplain and at risk for contamination.

**Identified Problem** – The water system has the following deficiencies:

- the aging distribution system experiences significant water loss,
- shallow wells are sensitive to contamination from events such as flooding,
- the piping network is such that contamination of one well could result in contamination of the other well,
- lack of redundancy in the transmission and distribution mains as a single water main break could leave much of the town without water, and
- some areas of the city do not meet fire flow availability.

**Proposed Solution** – The proposed project would:

- replace about 4,200 feet of aging cast-iron water lines
- add about 1,800 feet of eight-inch lines for looping, and
- develop a new water supply source and construct pumping station and main line from the new source to the distribution system.

**CONDITION:** If awarded, applicant agrees to establish projected end user rates, as presented in application, as user rates of at least \$92.31 at the end of the project. Current user rates do not meet the amount required for level of funding requested, but projected end user rates do meet the required rates for amount requested.

# City of Choteau Water Project



Town of Richey Project No. 22  
Water System Improvements

This application received 3,210 points out of a possible 5,000 points and ranked 22 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$500,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awaiting decision of the Legislature
CDBG	Grant	\$450,000	Application expected to be submitted September 2020
SRF	Loan Forgiveness	\$213,000	Application expected to be submitted April 2021
SRF	Loan	\$213,000	Application expected to be submitted April 2021
Project Total		\$1,502,000	

Median Household Income:	\$44,688	Total Population:	165
Percent Non-TSEP Matching Funds:	61%	Number of Households:	81

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$67.00	-	Target Rate:	\$85.65	-
Existing Wastewater Rate:	\$29.61	-	Rate With Proposed TSEP Assistance:	\$107.61	126%
Existing Combined Rate:	\$96.61	113%	Rate Without TSEP Assistance:	\$132.44	155%

**Project History** – The Town of Richey public water system has two wells, reverse osmosis treatment for high fluoride, a 130,000-gallon storage tank and approximately 15,000 linear feet of 4” to 8” water mains. A significant portion of the distribution system is asbestos cement pipe constructed in the 1930’s.

**Identified Problem** – The water system has the following deficiencies:

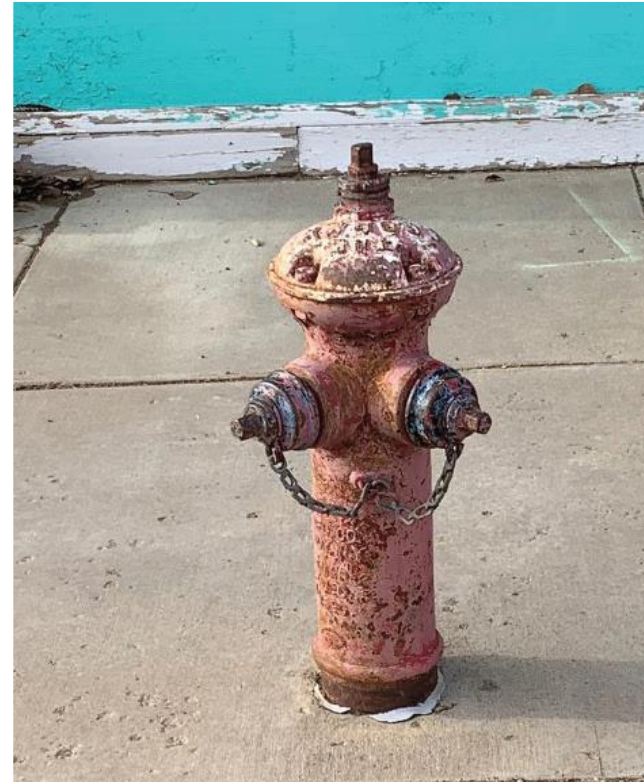
- An aged distribution system with an average leakage rate of 33% and multiple line breaks a year;
- Limited hydraulic capacity to deliver fire flow;
- Water meters that do not work accurately, and
- Inadequate storage capacity to meet DEQ design standards.

**Proposed Solution** – The proposed project would:

- Replace 3,400 lineal feet of asbestos cement pipe with 8” PVC mains.

**Note:** Due to financial constraints, the Town is unable to fund all the proposed improvements at once so the improvements will be phased. The current project under consideration will replace approximately 3,400 feet of existing asbestos cement pipe in the highest priority areas.

# Town of Richey Water Project





City of Wolf Point Project No. 23  
Wastewater System Improvements

This application received 3,200 points out of a possible 5,000 points and ranked 23 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$625,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awaiting decision of the Legislature
CDBG	Grant	\$450,000	Application expected to be submitted September 2020
EDA	Grant	\$3,250,000	Application expected to be submitted June 2020
RD	Grant	\$300,000	Application expected to be submitted October 2020
RD	Loan	\$300,000	Application expected to be submitted October 2020
<b>Project Total</b>		<b>\$5,050,000</b>	

Median Household Income:	\$34,013	Total Population:	2,755
Percent Non-TSEP Matching Funds:	88%	Number of Households:	772

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$47.79	-	Target Rate:	\$65.19	-
Existing Wastewater Rate:	\$40.13	-	Rate With Proposed TSEP Assistance:	\$88.84	136%
Existing Combined Rate:	\$87.92	135%	Rate Without TSEP Assistance:	\$90.74	139%

**Project History** – The City of Wolf Point is the county seat for Roosevelt County. The wastewater system was built in the 1930's and consisted of a collection system, lift stations, and lagoons. The City discharges treated wastewater to the Missouri River under a permit from the U.S. Environmental Protection Agency as a batch discharger. The City can discharge two times per year, once in the fall and once in the spring. The wastewater lagoon system consists of an aerated-facultative lagoon system originally constructed in 1956. The most recent large-scale improvements to the lagoon system were completed in 2005. Those improvements included adding two aerated cells; rehabilitating the storage lagoon; adding a plume; adding a force main; and constructing a blower building.

**Identified Problem** - The wastewater system has the following deficiencies:

- corrosion of steel sewer pipes and deterioration of concrete and clay pipes,
- areas of root and deposit buildups causing sewer backups,
- infiltration of groundwater through cracks in the pipe, and/or
- exfiltration of sewer through holes, cracks, and fractures in the sewer pipe causing discharge of untreated sewer to surrounding soils and groundwater.

**Proposed Solution** - The proposed project would:

- replace about 3,700 feet of sewer lines,
- rehabilitate about 9,600 feet of sewer lines (only if EDA funding is awarded), and improve main lift station and replace generator.

# City of Wolf Point Wastewater Project



Town of Circle Project No. 24  
Water System Improvements

This application received 3,165 points out of a possible 5,000 points and ranked 24 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$625,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awaiting decision of the Legislature
CDBG	Grant	\$450,000	Application expected to be submitted September 2020
SRF	Grant	\$151,600	Application expected to be submitted Fall 2020
SRF	Loan	\$151,600	Application expected to be submitted Fall 2020
Project Total		\$1,503,200	

Median Household Income:	\$36,250	Total Population:	613
Percent Non-TSEP Matching Funds:	58%	Number of Households:	282

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$63.00	-	Target Rate:	\$69.48	-
Existing Wastewater Rate:	\$31.00	-	Rate With Proposed TSEP Assistance:	\$97.00	140%
Existing Combined Rate:	\$94.00	135%	Rate Without TSEP Assistance:	\$109.39	157%

**Project History** – Circle is in McCone County. The water system was originally constructed in the 1930s and 1940s and consisted of three groundwater wells, well houses with booster pumps, two water storage tanks, a reverse osmosis treatment plant, distribution mains, fire hydrants, water service lines, water meters and chlorination. The Town is supplied water through a 50,000-gallon elevated tank constructed in 1937 and a 250,000-gallon steel tank constructed in 1976. The distribution system piping of about 32,000 feet in total length consists of asbestos-cement and cast-iron pipelines. Since 1997, significant upgrades have been completed for the water system including pipelines, a well and the treatment plant. Phase 1 distribution system improvements are scheduled for completion in 2020. Phase 2 improvements may also be completed later in 2020. This application is for phase 3 improvements. The Dry-Redwater Regional Water Authority will eventually become the Town's water source.

**Identified Problem** – The water system has the following deficiencies:

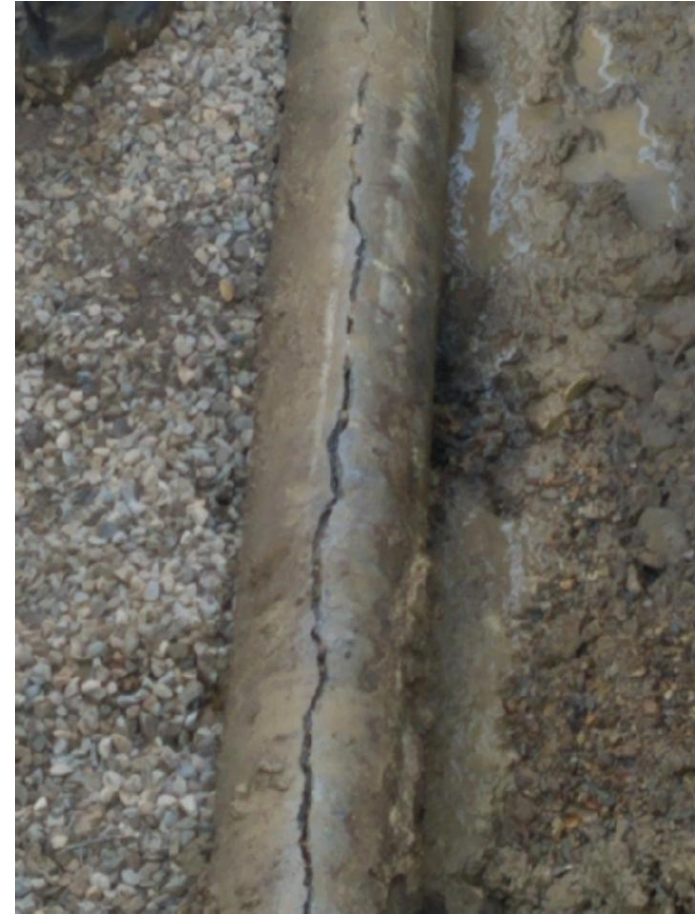
- the town loses an average of 29% of their pumped water annually,
- about 40% of the distribution system is comprised of undersized four-inch lines,
- some fire hydrants and valves are inoperable and additional hydrants and valves are needed to meet standards,
- fire flows cannot be met in over 70% of the town, and
- the water services between the main and the curb box contain lead soldering.

**Proposed Solution** – The proposed project would:

- replace up to about 3,300 feet of water mains and
- replace or add appurtenances such as hydrants and valves.

**Note:** Phase 3 schedule 1 totals about 1,500 feet and schedule 2 totals about 1,900 feet of water main replacement. The preliminary engineering report noted that if the town does not receive a CDBG, TSEP, or DNRC grant, they will either reduce the amount of improvements within phase 3, or take out an SRF or RD loan to make up the difference.

# Town of Circle Water Project



City of Shelby Project No. 26  
Water System Improvements

This application received 3,125 points out of a possible 5,000 points and ranked 26 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$625,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awaiting decision of the Legislature
CDBG	Grant	\$450,000	Application expected to be submitted September 2020
Water Enterprise Fund	City Funds	\$125,000	Applicant states it is committed, no commitment letter found in application.
Project Total		\$1,325,000	

Median Household Income:	\$44,119	Total Population:	3,272
Percent Non-TSEP Matching Funds:	53%	Number of Households:	1,185

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$65.00	-	Target Rate:	\$84.56	-
Existing Wastewater Rate:	\$45.00	-	Rate With Proposed TSEP Assistance:	\$110.00	130%
Existing Combined Rate:	\$110.00	130%	Rate Without TSEP Assistance:	\$112.20	133%

**Project History** – The Town of Shelby is located in Toole County. The water system consists of 13 active wells adjacent to the Marias River, ultraviolet disinfection with chlorination backup, 3.1 million gallons of storage, and an extensive distribution system that serves the Town and several nearby communities. The Town anticipates serving up to 10,000 customers per day within the next year as they pick up more nearby communities. The Town has agreed to connect to the North Central Montana Regional Water Authority when it becomes available, although that may not occur for approximately 20 years. The Town rehabilitated three source wells last year and is in the process of completing another project that includes installation of approximately 2,500 feet of watermain, 4 prebuilt well houses, replacement of 2 UV water treatment reactors, upgrades to a chlorine disinfection system, telemetry system upgrades, well house mechanical piping upgrades/replacement, electrical, fencing, and surface restoration.

**Identified Problem** - The water system has the following deficiencies:

- There is no flow monitoring at the wellfield, which limits Shelby's ability to monitor and efficiently operate the sources;
- There is no backup generator for the treatment system, the raw water booster station or the Shelby Heights booster station;
- Portions of the distribution system do not meet the minimum required pressures or fire flow demands;
- Approximately 30% of the treated water is lost through leakage.

**Proposed Solution** - The proposed project would:

- Upgrade approximately 5,000 feet of undersized water mains serving the Airport and nearby residential and commercial properties which amount to approximately half of the total Shelby population; and
- Perform a leak study to identify areas with the highest water loss.

**NOTE:** The Town is unable to fund all the proposed projects at this time so will phase improvements.

# City of Shelby Water Project



**Cooke City Sewer District Project No. 27  
Wastewater System Improvements**

This application received 3,115 points out of a possible 5,000 points and ranked 27 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$500,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Application submitted June 2020
CDBG	Grant	\$441,507	Application to be submitted September, 2020
EDA	Grant	\$3,553,130	Application submitted May 2020
SRF	Loan	\$518,468	Committed
Applicant	Cash	\$18,000	Committed by resolution, partially expended on PER
<b>Project Total</b>		<b>\$5,156,105</b>	

Median Household Income:	\$38,750	Total Population:	35
Percent Non-TSEP Matching Funds:	90%	Number of Households:	22

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$0.00	-	Target Rate:	\$29.06	-
Existing Wastewater Rate:	\$84.75	-	Rate With Proposed TSEP Assistance:	\$151.20	520%
Existing Combined Rate:	\$84.75	292%	Rate Without TSEP Assistance:	\$185.79	639%

**Project History** – Cooke City is a small community located in Park County. The community has a public water system, but no central sewer system and the lots are currently served by on-site wastewater treatment systems. The Sewer District was originally formed in 1973 but has not been active since then.

**Identified Problem** – The existing on-site sewage systems at Cooke City have the following deficiencies:

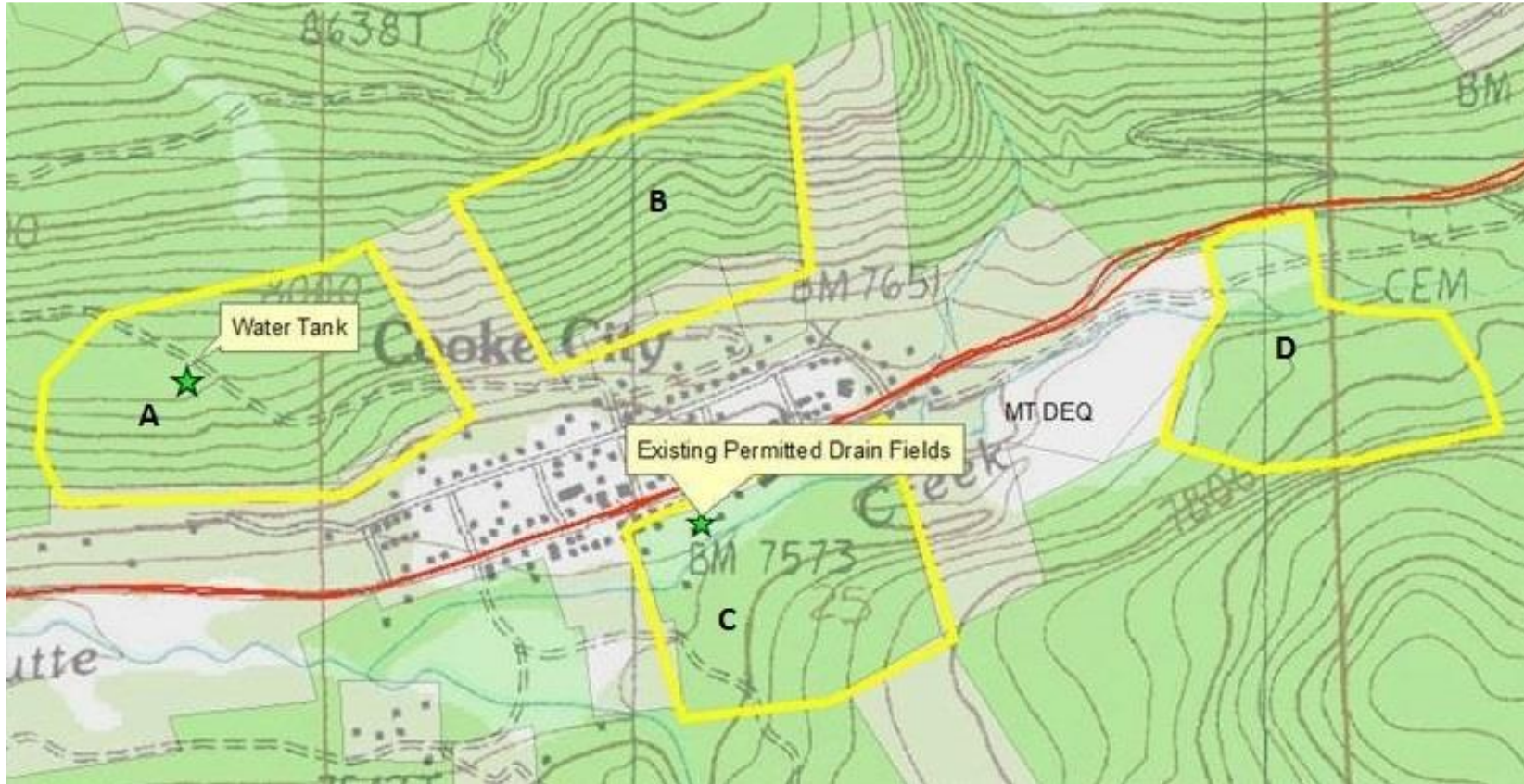
- Approximately 20% of the existing on-site sewage systems do not have a septic permit from Park County. Some portion of those likely do not meet current design standards;
- On occasion, some of the on-site sewage systems fail, likely due to hydraulic or organic overload; and
- Approximately 15 of the commercial properties have sewage systems located on adjacent US Forest Service land. The US Forest Service has indicated they will not renew individual encroachment permits for the drainfields unless the community is making significant progress towards a central system.

**Proposed Solution** - The proposed project would:

- Acquire land from the USFS for a new community drainfield;
- Construct a new septic tank effluent gravity collection system;
- Transport the septic tank effluent to a central location; and
- Construct a new community drainfield on the purchased land.

**CONDITION:** If Awarded, the ranking team recommends that release of any funding for this project be contingent upon receipt of a either discharge permit or other authorization from DEQ under the Water Quality Act.

# Cooke City Sewer District Wastewater Project





Town of Big Sandy Project No. 28  
Stormwater System Improvements

This application received 3,110 points out of a possible 5,000 points and ranked 28 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$484,671	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awaiting decision of the Legislature
SRF	Loan	\$359,671	Application expected to be submitted Summer 2020
Project Total		\$969,342	

Median Household Income:	\$36,607	Total Population:	677
Percent Non-TSEP Matching Funds:	50%	Number of Households:	286

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$46.00	-	Target Rate:	\$70.16	-
Existing Wastewater Rate:	\$59.90	-	Rate With Proposed TSEP Assistance:	\$89.93	128%
Existing Combined Rate:	\$105.90	151%	Rate Without TSEP Assistance:	\$98.12	140%

**Project History** – Big Sandy is in Chouteau County. The planning area considered in this report is centered primarily on Johannes Avenue, also known as Main Street. The area includes commercial development, mostly along Main Street, and low to medium density residential areas. Main Street has an inverted crown cross section and includes two inlets in the center of the street. Storm drain infrastructure is located perpendicular to Main Street along 1st and 2nd Streets. The northernmost inlet on Main Street is connected to a covered storm drain ditch to the northeast and storm drain piping to the southwest. The southernmost inlet on Main Street discharges stormwater into storm drain piping along 2nd Street. Stormwater eventually discharges through drainage ditches onto a field toward the south end of town.

**Identified Problem** – The stormwater system has the following deficiencies:

- the existing stormwater pipes are undersized, severely corroded, plugged with sediment and likely have portions that are collapsed,
- a covered ditch has almost completely collapsed,
- flood waters draining into inlets in the center of Main Street are deteriorating the road,
- frequent flooding across Main Street affects area businesses and residents, and
- ice and water build up around the drains.

**Proposed Solution** – The proposed project would:

- install about 820 feet of new storm mains along 1st and 2nd Streets,
- install about 660 feet of new storm mains along Main Street,
- repave Main Street from Highway 87 to 3rd Street to direct flow to the inlets, and
- construct a six-foot-wide concrete median barrier with curb and gutter and additional inlets and laterals to the new trunk main.

# Town of Big Sandy Stormwater Project



City of East Helena Project No. 29  
Wastewater System Improvements

This application received 3,060 points out of a possible 5,000 points and ranked 29 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$625,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awaiting decision of the Legislature
SRF	Loan	\$2,502,400	Application expected to be submitted June 2021
Project Total		\$3,252,400	

Median Household Income:	\$44,828	Total Population:	2,306
Percent Non-TSEP Matching Funds:	81%	Number of Households:	934

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$38.95	-	Target Rate:	\$85.92	-
Existing Wastewater Rate:	\$66.40	-	Rate With Proposed TSEP Assistance:	\$119.14	139%
Existing Combined Rate:	\$105.35	123%	Rate Without TSEP Assistance:	\$122.35	142%

**Project History** – The City of East Helena is located in Lewis and Clark County. The wastewater treatment system consists of a collection system, extended aeration activated sludge treatment and then a direct discharge to Prickly Pear Creek. In 2014, the City installed metals filtration treatment to meet copper limits. The City projects a 50% growth rate in wastewater users within the next eight years due to several new subdivisions connecting to the system and construction of a new high school.

**Identified Problem** – The City's wastewater system has the following deficiencies.

- Approximately 23% of the total flow treated at the wastewater treatment plant is from infiltration. Substantial growth is predicted in the next eight years. If that growth is realized, the existing treatment system will reach capacity in 2027;
- The existing screw pump needs maintenance to extend its useful life;
- The existing bar screen and grit removal system at the plant are 20 years old and are manually cleaned. They need to be replaced with mechanical systems; and
- The Montana Avenue lift station is prone to plugging and located within a very busy street. It is difficult and unsafe for the operators to access this lift station for maintenance.

**Proposed Solution** – The proposed project would:

- Rehabilitate 6,020 feet of sewer main, install 610 feet of new sewer main, 3 manholes and 18 service connections identified as causing the highest infiltration rates;
- Rehabilitate the existing screw pump;
- Install a new bar screen and grit removal system.

**CONDITION:** If TSEP funding is received, the applicant agrees to establish rates that meet the user rate of at least \$107.40 at the time the project is completed.

# City of East Helena Wastewater Project



**Town of Winnett Project No. 30  
Wastewater System Improvements**

This application received 2,980 points out of a possible 5,000 points and ranked 30 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$625,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Committed by the 2019 Legislature
CDBG	Grant	\$450,000	Committed
RD	Grant	\$200,500	Applied
RD	Loan	\$603,000	Applied
<b>Project Total</b>		<b>\$2,003,500</b>	

Median Household Income:	\$30,000	Total Population:	177
Percent Non-TSEP Matching Funds:	75%	Number of Households:	86

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$23.82	-	Target Rate:	\$57.50	-
Existing Wastewater Rate:	\$37.15	-	Rate With Proposed TSEP Assistance:	\$85.32	148%
Existing Combined Rate:	\$60.97	106%	Rate Without TSEP Assistance:	\$101.84	177%

**Project History** – The Town of Winnett is located in Petroleum County. The wastewater treatment system consists of a collection system, three-cell aerated lagoon, and a discharge to McDonald Creek. The Town has a surface water discharge permit from DEQ for a seasonal discharge. The Town received funding from TSEP, CDBG, and RRGL for land application during the 2013 legislative session but could not meet grant conditions.

**Identified Problem** – The water system has the following deficiencies:

- The Town's discharge exceeds permit limits for e. coliform;
- The collection system has a 60% infiltration rate and combined flow of 124 gallons per capita day;
- The existing lift station does not have an emergency bypass for maintenance or shut off float in case telemetry fails;
- The existing effluent structure does not allow for discharge at multiple water levels;
- A water balance shows Lagoon Cells 2 and 3 are leaking; and
- Sludge has built up in the lagoon cells, decreasing the hydraulic detention time.

**Proposed Solution** – The proposed project would:

- Replace 6" and 12" clay sewer mains with 1,180 feet of 8" PVC;
- Remove and dispose of sludge in the lagoon;
- Install a new effluent structure;
- Replace liners in Cells 2 and 3;
- Install UV disinfection and a basin cover
- Install an emergency bypass and emergency shut off float at the lift station.

**Note:** Note that all the proposed solutions are identical to those proposed during the 2019 legislative session except for the UV disinfection system and basin cover to address e. coliform permit limits.

**CONDITION:** If awarded, applicant agrees to establish projected end user rates, as presented in application, as user rates of at least \$107.40 at the end of the project. Current user rates do not meet the amount required for level of funding requested, but projected end user rates do meet the required rates for amount requested.

# Town of Winnett Wastewater Project



**St. Marie - North Valley County Water & Sewer District Project No. 31  
Water System Improvements**

This application received 2,980 points out of a possible 5,000 points and ranked 31 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$625,000	Awaiting decision of the Legislature
RRGL	Grant	\$125,000	Awaiting decision of the Legislature
CDBG	Grant	\$450,000	Application expected to be submitted September 2020
SRF	Loan	\$150,000	Application expected to be submitted Fall 2020
SRF	Loan Forgiveness	\$150,000	Application expected to be submitted Fall 2020
<b>Project Total</b>		<b>\$1,500,000</b>	

Median Household Income:	\$28,304	Total Population:	619
Percent Non-TSEP Matching Funds:	58%	Number of Households:	271

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$56.25	-	Target Rate:	\$54.25	-
Existing Wastewater Rate:	\$12.00	-	Rate With Proposed TSEP Assistance:	\$71.19	131%
Existing Combined Rate:	\$68.25	126%	Rate Without TSEP Assistance:	\$83.44	154%

**Project History** – The North Valley County Water and Sewer District serves the community of St. Marie. The public water system was originally installed in the late 1950's as housing for the Glasgow Air Force Base. The water system currently receives treated surface water from the Dry Prairie Rural Water System, has a 400,000-gallon storage tank and extensive distribution system. 25,000 feet of aged distribution pipe was replaced in 2008. Approximately 38,000 feet of 60-year old asbestos cement pipe remains.

**Identified Problem** - The water system has the following deficiencies:

- An aged distribution system with an average leakage rate of 43% and multiple line breaks a year;
- Water meters that do not work accurately; and
- Inadequate mixing in the existing storage tank which leads to freezing and difficulty maintaining a disinfectant residual.

**Proposed Solution** - The proposed project would:

- Replace priority mains and add looping to the distribution system;
- Abandon and plug 18,000 feet of dormant water main;
- Install new heads on the existing meters;
- Install a new solar-powered mixer in the storage tank; and
- Install three new sampling stations for disinfectant monitoring.

# St. Marie – North Valley County Water & Sewer District Water Project

