



## **HB 11 and HB 14**

### **Long Range Planning**

Appropriations Subcommittee

January 20-22, 2021

- Community Development Division
- HB 14 and HB 11 Infrastructure Projects
- <http://comdev.mt.gov>

Project Type TSEP Rank TSEP Page

Wednesday,  
January 20

**TSEP Bridges - HB 11**

9:00	9:05	Custer County	bridge	1	28
9:06	9:11	Chouteau County	bridge	2	29
9:12	9:17	Park County	bridge	3	30
9:18	9:23	Powell County	bridge	4	31
9:24	9:29	Cascade County	bridge	5	32
9:30	9:35	Wibaux County	bridge	6	33
9:36	9:41	Madison County	bridge	7	34

Wednesday,  
January 20

**TSEP only (no RRGL proposed) - HB 11 or HB 14**

9:45	9:50	Loma County W&S District	W	3	10
9:51	9:56	Hardin, City of	WW	5	12
9:57	10:02	Red Lodge, City of	SW	20	27/152
10:03	10:08	Hill County RSID #21	WW	25	149
10:09	10:14	Philipsburg, Town of	WW	36	151
10:15	10:20	Sun Prairie County Water	W	37	158
10:21	10:26	Livingston, City of	WW	40	150

**Custer County Project No. 1  
Bridge System Improvements**

**HB 11 Infrastructure Projects**

- Bridge Projects  
Numbered 1-7

This application received 3,980 points out of a possible 5,000 points and ranked 1 out of 7 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$378,615	Awaiting decision of the Legislature
Applicant	Cash	\$378,615	Committed by resolution, partially expended on PER
<b>Project Total</b>		<b>\$757,230</b>	

Median Household Income:	\$48,750	Total Population:	11,945
Percent Non-TSEP Matching Funds:	50%	Number of Households:	4,827

**Project History** – Custer County has identified one bridge that is in critical condition and in need of replacement. The Deadman Road (County Road 119) Bridge crosses the North Fork of Sunday Creek in the northwest region of Custer County, approximately 10 miles northwest of Miles City. The existing bridge is classified as a single-lane, single span, steel pony truss bridge with a timber deck and a concrete foundation. The bridge has a total length of 61-feet and useable width of about 15 feet. The bridge was constructed in 1913. The bridge serves about 80 vehicles per day, including agricultural, residential, and recreational traffic. The detour route adds an additional 46 miles from one end of the bridge to the other. In July of 2020, it was recommended by MDT to close the bridge immediately due to structural deficiencies.

**Identified Problem** – The Deadman Road Bridge has a sufficiency rating of 39. Deficiencies include:

- MDT recommended the bridge for closure in July of 2020,
- surface corrosion prevalent on steel truss,
- bridge cannot handle legal loads, and
- bridge is too narrow for two-way traffic.

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

- replace the Deadman Road Bridge with a new bridge.
- At the preliminary stage, the proposed plan is to replace the Deadman Road Bridge with a precast concrete bulb tee superstructure founded on driven piles.

# Custer County





**Chouteau County Project No. 2  
Bridge System Improvements**

This application received 3,970 points out of a possible 5,000 points and ranked 2 out of 7 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$ 318,706	Awaiting decision of the Legislature
Applicant	Cash	\$318,706	Committed by resolution, partially expended on PER
<b>Project Total</b>		<b>\$637,412</b>	

Median Household Income:	\$38,521	Total Population:	5,855
Percent Non-TSEP Matching Funds:	50%	Number of Households:	2,288

**Project History** – Chouteau County has selected one bridge for replacement. The Meeks Bridge (UHW3) is located on Upper Highwood Creek Road and crosses over Highwood Creek. The bridge is four miles southeast of Highwood. The existing single span, bridge is 31 feet long and 18 feet wide. The bridge was constructed in 1969 with a concrete deck, steel stringers and pile caps, and timber piles. The bridge serves about 280 vehicles per day, including 28 full-time residences, agricultural and recreational traffic. The detour route from one end of the bridge to the other is about 20 miles but the route is not an all-weather road.

**Identified Problem** – the Meeks Bridge has a sufficiency rating of 63.7. Deficiencies include:

- deteriorated substructure,
- backwalls are tilting outward and show signs of crushing damage and section loss,
- pile caps are pitting, corroded, visibly rotated, and eccentrically placed,
- wingwall piles are deflected and rotated,
- wingwall planking is deflected and splitting, with crushing and decay present,
- decking is cracked over the entire surface and fractured at northeast corner,
- bridge is too narrow for two-way traffic, and
- lack of bridge rails.

**Proposed Solution** – the proposed project would replace the Meeks Bridge with a new bridge.

At the preliminary stage, the proposed plan is to replace the Meeks Bridge with a 75'x24' prestressed concrete bulb tee superstructure founded on driven piles.

# Chouteau County



**Park County Project No. 3  
Bridge Improvements**

This application received 3,880 points out of a possible 5,000 points and ranked 3 out of 7 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$492,054	Awaiting decision of the Legislature
Applicant	Cash	\$492,054	Committed by resolution, partially expended on PER
Project Total		\$984,108	

Median Household Income:	\$43,932	Total Population:	15,708
Percent Non-TSEP Matching Funds:	50%	Number of Households:	6,793

**Project History:** Park County has selected three bridges for replacement. The Republic Street Bridge is in Cooke City and crosses over Woody Creek. The Bannock Trail Bridge is located one mile east of Silver Gate and crosses over Wyoming Creek. The superstructure of both bridges are old railroad cars. Both bridges are about 40 feet long and 12 feet wide and were placed into service in 2014. The bridges serve about 80 vehicles per day, including residential and recreational traffic. There is no detour route as the bridges provide sole access at both sites. The Monument Avenue Bridge is in Silver Gate and crosses over Soda Butte Creek. The existing steel and timber bridge is 26 feet long and 17 feet wide. The bridge was placed into service in 1977. The bridge serves about 185 vehicles per day, including residential and recreational traffic. There is no detour route as the bridge provides sole access.

**Identified Problem –** The Republic Street (Cooke City) and Bannock Trail (Silver Gate) are similar bridges with sufficiency ratings of 20.4 and 27.8, respectively. Deficiencies include:

- decking of both bridges has evidence of heavy wear, checks, splits and decay,
- the railroad car superstructures have surface rust, minor pitting and a noticeable sag at the Cooke City bridge and areas of bare metal with surface corrosion and minor pitting at the Silver Gate bridge,
- log abutments and wingwalls at the Cooke City bridge show advanced decay and section loss and may be near failure and the concrete abutments at the Silver Gate bridge has areas of spalling,
- the 4-ton and 5-ton postings do not allow the bridges to be used by large vehicles, including emergency vehicles, and
- there are no guardrails and the bridges are both too narrow for two-way traffic.

**The Monument Avenue Bridge** has a sufficiency rating of 23.8. Deficiencies include:

- the timber deck has end splits and evidence of decay in the soffit,
- the steel girders have surface rust throughout with light pitting,
- the stone masonry abutments have many lower stones missing due to scour at the abutments,
- the load posting does not allow the bridge to be used by large vehicles, including emergency vehicles, and
- the structure is a single lane bridge width.

**Proposed Solution -** the proposed project would replace the three existing bridges with three new bridges.

At the preliminary stage, the proposed plan is to replace each bridge with a prefabricated steel bridge founded on steel piles.



# Park County



**Powell County Project No. 4  
Bridge System Improvements**

This application received 3,820 points out of a possible 5,000 points and ranked 4 out of 7 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$365,000	Awaiting decision of the Legislature
Applicant	Cash	\$365,000	Committed by resolution, partially expended on PER
<b>Project Total</b>		<b>\$731,800</b>	

Median Household Income:	\$40,000	Total Population:	6,975
Percent Non-TSEP Matching Funds:	50%	Number of Households:	2,380

**Project History:** Powell County has selected one bridge for replacement. The Willow Road Bridge crosses the Little Blackfoot River on Willow Road just east of Elliston. The bridge was reconstructed around 1991; it is unknown when the bridge was originally constructed. The existing bridge consists of a single-lane, two-span, steel/timber stringer structure with a timber pile foundation. The structure has a total span of 49 feet and a useable width of about 14 feet. The bridge provides primary access to residential and agricultural land. Estimated average daily traffic is 20 vehicles per day. The bridge serves as the sole viable public access to areas beyond.

**Identified Problem** – the Willow Bridge has a sufficiency rating of 38. Deficiencies include:

- substandard and deteriorated log curb present along each side of the timber deck and no rail present,
- deck exhibits signs of deterioration in the form of rotting, splitting and deforming,
- visible splitting, checking and general deterioration of substructure, and
- existing structure is pier supported and is detrimental to the stream channel habitat.

**Proposed Solution** - the proposed project would replace the Willow Road Bridge with a new bridge.

At the preliminary stage, the proposed plan is to replace the Willow Road Bridge with a precast bulb tee superstructure founded on driven piles.



# Powell County



**Cascade County Project No. 5  
Bridge System Improvements**

This application received 3,750 points out of a possible 5,000 points and ranked 5 out of 7 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$750,000	Awaiting decision of the Legislature
Cascade County	Bridge Fund	\$1,333,365	Not yet committed
<b>Project Total</b>		<b>\$2,083,365</b>	

Median Household Income:	\$45,205	Total Population:	82,090
Percent Non-TSEP Matching Funds:	64%	Number of Households:	33,784

**Project History:** Cascade County has selected one bridge for replacement. The Armington Bridge is located two miles southeast of Belt. The bridge is on Central Avenue and crosses over Belt Creek. The existing six-span timber bridge is 155 feet long and 22 feet wide. The bridge was constructed in 1938. The bridge serves about 100 vehicles per day, including residential and agricultural traffic. The nearest detour route is about 3 miles. The primary purpose of this bridge replacement project is to reduce severe flooding caused by log or ice jams and debris that accumulate at the intermediate bents.

**Identified Problem** – the Armington Bridge has a sufficiency rating of 76. Deficiencies include:

- severe flooding at the bridge due to bends in the stream channel collecting debris,
- scour at south abutment and deteriorated pier caps,
- deteriorated decking,
- checks, splits, and rot in girders,
- narrow width,
- inadequate bridge railing and approach guardrail, and
- limited load capacity.

**Proposed Solution** - the proposed project would replace the bridge with a new bridge.

At the preliminary stage, the proposed plan is to replace the Armington Bridge with a three-span precast concrete structure.



# Cascade County



**Wibaux County Project No. 6  
Bridge System Improvements**

This application received 3,540 points out of a possible 5,000 points and ranked 6 out of 7 for funding in the 2023 Biennium.

<b>Funding Source</b>	<b>Type of Funds</b>	<b>Amount</b>	<b>Status of Funds</b>
TSEP	Grant	\$526,176	Awaiting decision of the Legislature
Applicant	Cash	\$530,177	Committed by resolution
<b>Project Total</b>		<b>\$1,056,353</b>	

Median Household Income:	\$38,553	Total Population:	986
Percent Non-TSEP Matching Funds:	51%	Number of Households:	448

**Project History** – Wibaux County has selected one bridge for replacement. The Saint Philip Bridge is located eleven miles south of Wibaux and crosses over Beaver Creek on St. Philip Road. The existing six span bridge is 150 feet long and 22 feet wide. The wood stringer bridge was constructed in 1951. The bridge serves about 30 to 40 vehicles per day. The bridge provides access to state lands as well as several large farm and ranch businesses. The detour route is about seven miles from one end of the bridge to the other.

**Identified Problem** – The Saint Philip Bridge has a sufficiency rating of 49.7. Deficiencies include:

- splits and cracks in timber girders,
- checking in timber columns and pile caps,
- checking in timber rail posts, and
- bridge is too narrow for two-way traffic.

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

- replace the Saint Philip Bridge with a new bridge.
- At the preliminary stage, the proposed plan is to replace the bridge with a 120-foot-long, single span bulb tee superstructure founded on driven piles.



# Wibaux County



**Madison County Project No. 7  
Bridge System Improvements**

This application received 3,490 points out of a possible 5,000 points and ranked 7 out of 7 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$338,000	Awaiting decision of the Legislature
Applicant	Cash	\$338,000	Committed by resolution, partially expended on PER
<b>Project Total</b>		<b>\$676,000</b>	

Median Household Income:	\$46,250	Total Population:	7,767
Percent Non-TSEP Matching Funds:	50%	Number of Households:	3,369

**Project History** – Madison County has selected one bridge for replacement. The Jack Creek Road Bridge (JC4) is located on Jack Creek Road and crosses over Jack Creek, about twelve miles east of Ennis. The existing single span, timber bridge is 27 feet long and about 15 feet wide. The bridge was constructed in 1952. The bridge serves about 160 vehicles per day. Jack Creek Road is the central access between the Madison Valley and the Gallatin Valley. The existing bridge primarily serves residents, businesses and employees, agricultural operations, and recreational users. The detour route through Norris is about 80 miles.

**Identified Problem** – The Jack Creek Bridge has a sufficiency rating of 46. Deficiencies include:

- advanced deterioration of substructure,
- decay, splitting and deformation of most posts.
- erosion and scour of abutment and posts,
- substandard bridge rail and
- bridge is too narrow for two-way traffic.

**Proposed Solution** – the proposed project would replace the Jack Creek Bridge with a new bridge.

At the preliminary stage, the proposed plan is to replace the Jack Creek Bridge with a precast concrete tri-deck superstructure founded on driven piles.



# Madison County



## HB 11 Infrastructure Projects

- Infrastructure Projects Numbered 1-41
- *Not combined with RRGL*

This application received 3,940 points out of a possible 5,000 points and ranked 3 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$455,800	Awaiting decision of the Legislature
SRF	Loan	\$227,900	Application expected to be submitted Fall 2020
SRF	Loan Forgiveness	\$227,900	Application expected to be submitted Fall 2020
<b>Project Total</b>		<b>\$911,600</b>	

Median Household Income:	\$47,292	Total Population:	36
Percent Non-TSEP Matching Funds:	50%	Number of Households:	24

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$159.37	-	Target Rate:	\$47.16	-
Existing Wastewater Rate:	\$0	-	Rate With Proposed TSEP Assistance:	\$171.05	363%
Existing Combined Rate:	\$159.37	338%	Rate Without TSEP Assistance:	\$194.32	412%

**Project History** – The Loma Water and Sewer District serves people within the Town of Loma and rural customers in Choteau County. The system consists of a surface water intake at the Marias River, a treatment plant, a 150,000-gallon storage tank and distribution system of 1" to 6" mains. The Water and Sewer District has committed to connecting to the North Central Regional Water Authority as soon as it is available, estimated to be sometime between 2022 and 2025.

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

- 35 rural residences do not currently have access to water except through hauling or for two of the 35 residences, a direct line from the Marias River. 30 of the residences would like to be connected to the Loma system but there is not enough hydraulic capacity to serve them;
- 15 existing water users have requested an increase in flow rate from 2 gallons per minute to 3 gallons per minute;
- A new Hutterite Colony has requested to hook up to the North Central water main;
- The bulk water filling station uses a self-report system, so water is occasionally taken without payment and access is difficult for large trucks; and
- The system source quantity and storage capacity do not meet DEQ standards, but those deficiencies will be alleviated when connecting to North Central so are not addressed in this project.

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

- Construct approximately 12 miles of water main to serve 30 new users and increase flow for the 15 existing users; and
- Upgrade the existing bulk water fill station with an automated control panel and card reader and provide additional access for larger trucks.

# Loma Water Sewer District Water Project





**City of Hardin Project No. 5  
Wastewater System Improvements**

This application received 3,710 points out of a possible 5,000 points and ranked 5 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
Coal Board	Grant	\$250,000	Contingently awarded
RD	Loan	\$2,121,000	Committed
SRF	Loan	\$545,000	Committed
Applicant	Cash	115,000	Committed
<b>Project Total</b>		<b>\$3,531,000</b>	

Median Household Income:	\$34,917	Total Population:	3,829
Percent Non-TSEP Matching Funds:	86%	Number of Households:	1,286

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$19.85	-	Target Rate:	\$66.92	-
Existing Wastewater Rate:	\$42.15	-	Rate With Proposed TSEP Assistance:	\$72.80	109%
Existing Combined Rate:	\$62.00	93%	Rate Without TSEP Assistance:	\$74.33	111%

**Project History** – The current wastewater treatment system for the City of Hardin was built in 1978, and except for headworks and disinfection upgrades, has not been updated significantly since initial construction. The facility is on the Crow Tribe Indian Reservation but is owned and operated by the City of Hardin and only serves the City. The average daily flow is 0.6 million gallons per day. Raw wastewater is collected in a gravity sewer system. The gravity system terminates at the lift station used to pump the wastewater into the headworks of the treatment plant. Discharge is to the Bighorn River. A project (phase 1) to replace deteriorated mains and manholes in the collection system is scheduled for 2020. The TSEP funds are proposed for what is designated as the phase 2 project. Treatment system improvements are proposed for a future phase 3 project.

**Identified Problem** - The wastewater system has the following deficiencies that are proposed to be addressed in phase 2:

- The facility does not have grit or grease removal capability;
- Flow rate monitoring is unreliable;
- The existing mechanical screen is aging and deteriorated;
- The treatment facility has no backup power generation;
- The plant does not have redundant disinfection on the effluent bypass channel; and
- The existing UV disinfection system is located outdoors, making maintenance difficult.

**Proposed Solution** – Deficiencies to be addressed during phase 2 include the following:

- Replace the existing headworks structure and grinder/screening system with new screening, grease removal, and grit removal;
- Install new backup generator;
- Install redundant UV disinfection system and new administration building addition for lab space and UV system; and
- Install new controls, monitoring and SCADA system.

**CONDITION:** If awarded, applicant agrees to establish projected end user rates, as presented in application, as user rates of at least \$66.92 at the end of the phase 2. 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 Hardin Wastewater Project



## HB 14 Infrastructure Projects

- Infrastructure Projects Numbered 1-41
- *Not combined with RRGL*

### City of Red Lodge Project No. 20 – Contingent Funding Storm Water System Improvements

This application received 3,240 points out of a possible 5,000 points and ranked 20 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
SRF	Loan	\$2,241,703	Application expected to be submitted Summer 2021
<b>Project Total</b>		<b>\$2,741,703</b>	

Median Household Income:	\$42,500	Total Population:	2,236
Percent Non-TSEP Matching Funds:	82%	Number of Households:	1,036

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Storm Water Rate:	\$0.00	-	Target Rate:	\$81.46	-
Existing Water/Wastewater Rate:	\$91.00	-	Rate With Proposed TSEP Assistance:	\$98.92	121%
Existing Combined Rate:	\$91.00	112%	Rate Without TSEP Assistance:	\$100.68	124%

**Project History** - The City of Red Lodge has an existing storm water system that was originally installed in 1985. Storm water is currently being collected by a sporadic system of inlets, conveyance pipes and ditches located throughout the City. Much of the storm water is ultimately discharged to Rock Creek. Most of the city's storm water is collected by inlets and laterals that convey runoff to one of two discharge points, 19th Street or Haggin Avenue. In addition to the older 1985 city storm water system, there are some newer subdivisions on the perimeter of city limits that handle storm water with internal systems and other areas that do not have any storm water infrastructure. The phase 1 improvements were previously awarded a TSEP grant in 2019 under House Bill 652, but the city was unable to meet startup conditions in time before funds were gone.

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

- cross connections of storm drains to sanitary sewer mains,
- existing infrastructure is undersized,
- localized flooding and
- maintenance issues, including at the wastewater treatment plant.

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

- install about 8,000 feet of storm pipes varying from 15 to 54 inches,
- install storm drain manholes and storm inlets and
- conduct video inspections of pipelines.

# City of Red Lodge Storm Water





**Hill County RSID#21-29 Project No. 25  
Wastewater System Improvements**

This application received 3,130 points out of a possible 5,000 points and ranked 25 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$260,500	Awaiting decision of the Legislature
CDBG	Grant	\$260,500	Application expected to be submitted September 2020
<b>Project Total</b>		<b>\$521,000</b>	

Median Household Income:	\$44,633	Total Population:	16,523
Percent Non-TSEP Matching Funds:	50%	Number of Households:	6,092

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$0.00	-	Target Rate:	\$52.07	-
Existing Wastewater Rate:	\$56.69	-	Rate With Proposed TSEP Assistance:	\$59.64	115%
Existing Combined Rate:	\$56.69	109%	Rate Without TSEP Assistance:	\$95.91	184%

**Project History** - Hill County operates and maintains RSID 21 which is located to the northeast of Havre and north of the Milk River. Wastewater is collected and conveyed to the City of Havre wastewater treatment facility. Hill County RSID 21, which was initially constructed in 1974, presently consists of about 48 residential sewer services hookups, a gravity sewer collection system and a lift station. A 2015 wastewater construction project replaced a force main under the Milk River that conveyed sewage to the Havre wastewater treatment plant. The age, condition, and increasing maintenance problems with the lift station pose a concern for the county.

**Identified Problem** - Deficiencies with the RSID 21 lift station include:

- lift station and pumps are aging and/or beyond design life,
- corroded metal piping and fittings,
- outdated electronics and controls,
- lack of emergency backup power,
- lack of automated emergency notification,
- no bypass piping system if servicing in the existing wet well is needed,
- failed internal check valves due to age and corrosion,
- no security fencing, and
- corroded manholes.

**Proposed Solution** - The proposed project would

- upgrade the existing lift station and
- line two nearby manholes.

# Hill County RSID #21-29 Wastewater Project



**Town of Philipsburg Project No. 36  
Wastewater System Improvements**

This application received 2,775 points out of a possible 5,000 points and ranked 36 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
DNRC RDG	Grant	\$429,000	Application submitted June 2020
WRDA	Grant	\$400,000	Not committed
RD	Grant	\$242,500	Application expected to be submitted January 2021
RD	Loan	\$460,500	Application expected to be submitted January 2021
Applicant	Cash	\$343,000	Committed by resolution, partially expended on PER
<b>Project Total</b>		<b>\$2,625,000</b>	

Median Household Income:	\$41,103	Total Population:	666
Percent Non-TSEP Matching Funds:	71%	Number of Households:	327

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$50.15	-	Target Rate:	\$78.78	-
Existing Wastewater Rate:	\$60.44	-	Rate With Proposed TSEP Assistance:	\$118.72	151%
Existing Combined Rate:	\$110.59	140%	Rate Without TSEP Assistance:	\$123.87	157%

**Project History** – The Town of Philipsburg is in Granite County. The wastewater system consists of a gravity collection network and a two-cell facultative lagoon treatment system that discharges to Flint Creek. The treatment lagoon was constructed in 1961. The Town replaced the lower portion of a sewer outfall line in 2018 to eliminate infiltration into the system. The discharge from the treatment lagoon has not reliably met permit limits. The Montana Department of Environmental Quality issued an Administrative Order on Consent (AO) to the Town in 2010. The original AO has been amended on several occasions, and in March 2018 a new AO was issued. MDEQ has notified the Town that an ammonia limit will be included in the next discharge permit renewal (due in late 2020). The Town must also provide effluent disinfection to reliably meet *E. coli* limits. The discharge also does not meet the existing regulations for total phosphorus in Flint Creek.

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

- the lagoons do not have enough capacity to treat existing wastewater flows or accommodate growth,
- the lagoons have accumulated excessive sediment,
- the Town experiences numerous discharge permit violations,
- the Town is under an AOC to bring the system into compliance with their discharge permit, and
- current and anticipated in-stream water quality goals cannot be met with the existing lagoons.

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

- construct an aerated rock filter treatment system, and
- install an ultraviolet light disinfection system.

Note: The work is phased. The proposed TSEP portion is phase III of IV. Phase I (replace outfall) has been completed. Phase II (sludge removal) is scheduled to begin in 2020. Phase IV (collection system improvements) is to be scheduled sometime in the future. Sludge disposal might get rolled into phase III if a DNRC grant is not awarded.

CONDITION: If awarded, applicant agrees to establish projected end user rates, as presented in application, as user rates of at least \$118.17 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 Philipsburg Wastewater Project



*Figure 3. Outside of Cell 2 at Southwest Corner*

*Picture 6. Leak Test Pipes Installed Using Lift Hooks in Cell 1 on May 23, 2018*



**Sun Prairie County Water District Project No. 37  
Water System Improvements**

This application received 2,555 points out of a possible 5,000 points and ranked 37 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$275,000	Awaiting decision of the Legislature
SRF	Loan	\$275,000	Application expected to be submitted upon notification of grant award
Local	Cash	\$45,795	Committed by resolution, partially expended on PER
<b>Project Total</b>		<b>\$595,795</b>	

Median Household Income:	\$43,837	Total Population:	350
Percent Non-TSEP Matching Funds:	54%	Number of Households:	103

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$42	-	Target Rate:	\$51.14	-
Existing Wastewater Rate:	\$0	-	Rate With Proposed TSEP Assistance:	\$61.46	120%
Existing Combined Rate:	\$42	82%	Rate Without TSEP Assistance:	\$80.53	157%

**Project History** – The Sun Prairie County Water District in Cascade County was established in 1974. The District has three wells and 93,000 gallons of storage. The distribution system is mostly 4” and 6” main and has one flushing hydrant. Treatment consists of polyphosphate for iron and manganese sequestration and sodium hypochlorite for disinfection. The system is located approximately 10 miles northwest of Great Falls. The District applied for TSEP funding during the last cycle and was awarded in House Bill 652 (passed by the 66<sup>th</sup> Montana Legislature). The applicant did not complete start up conditions prior to the funds being exhausted through obligation to other projects.

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

- The one existing hydrant is insufficient for fire protection and, when flushed, causes a lack of pressure in the distribution system. It is also connected to an undersized water main;
- The booster pumping station does not provide adequate flow during a maximum day or peak hour demand;
- The system lacks water meters, so some residents likely irrigate from the potable water system instead of the separate irrigation system; and
- There is no fire protection at the pump house building.

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

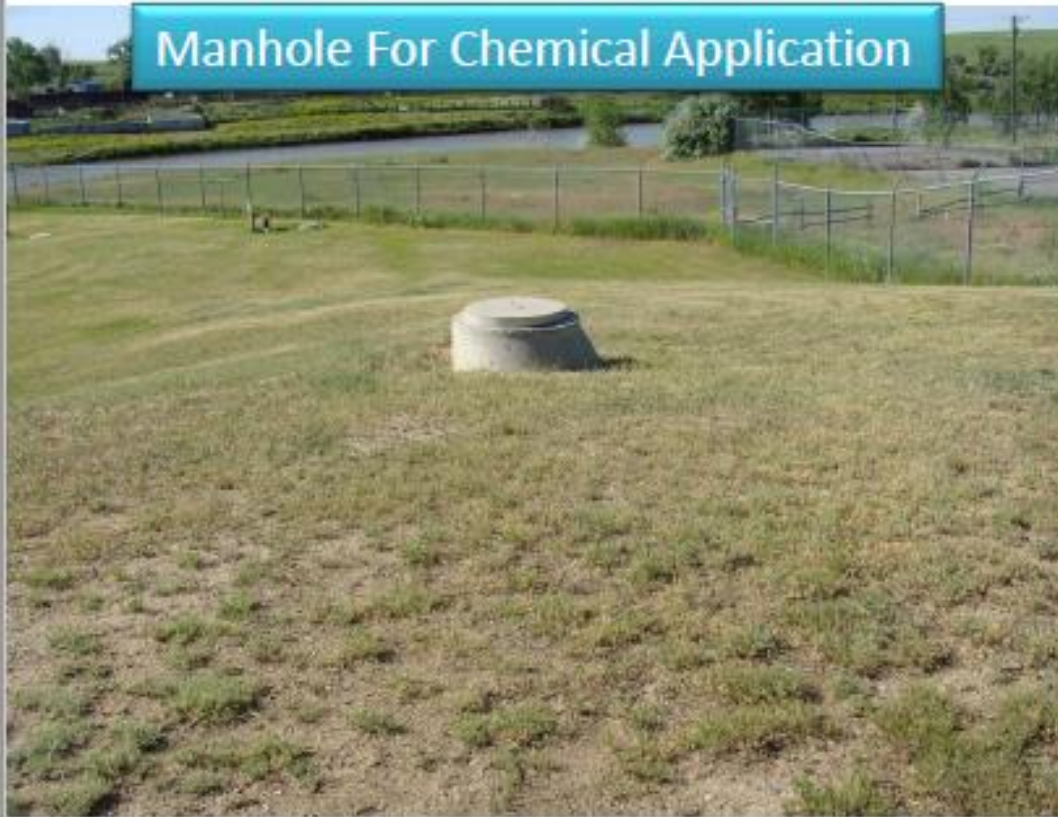
- Construct a new well into the Madison aquifer;
- Replace the booster station pumps with two new Variable Frequency Drive pumps;
- Provide fire hydrants where pipes of adequate diameter are present; and
- Install water meters.

**CONDITION:** If awarded, applicant agrees to establish projected end user rates, as presented in application, as user rates of \$51.14 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.



# Sun Prairie Water District Water Project

Manhole For Chemical Application



Chlorine Application





City of Livingston Project No. 40  
Wastewater System Improvements

This application received 2,165 points out of a possible 5,000 points and ranked 40 out of 41 for funding in the 2023 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$312,727	Awaiting decision of the Legislature
Applicant	Cash	\$312,727	Committed by resolution, partially expended on PER
Project Total		\$625,454	

Median Household Income:	\$40,619	Total Population:	7,136
Percent Non-TSEP Matching Funds:	50%	Number of Households:	3,215

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$12.25	-	Target Rate:	\$77.85	-
Existing Wastewater Rate:	\$39.00	-	Rate With Proposed TSEP Assistance:	\$51.25	66%
Existing Combined Rate:	\$51.25	66%	Rate Without TSEP Assistance:	\$51.88	67%

**Project History** – The Livingston Civic Center was constructed in about 1938 and is served by an individual septic system with drainfields located in the 500-year floodplain of the Yellowstone River. The adjacent parks (Miles Park and Sacajawea Park) are served by vault toilets also in the floodplain. These septic features are located within highly utilized community facilities. On an average day between 100-200 people utilize the facilities and parks. During peak events over 1,000 may utilize the facilities, which places an exceptionally high burden on an antiquated system. The Civic Center serves as an evacuation center and would be an overflow site for COVID 19.

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

- the septic tanks, vault toilets and cesspools are suspected of leaking untreated wastewater into soils and groundwater,
- on-site wastewater infrastructure is old and assumed to be in poor condition,
- wastewater systems are in the 500-year floodplain of the Yellowstone River, and
- a hydraulic connection exists between the wastewater systems and the river.

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

- remove existing septic systems and re-plumb facilities to connect to new sewer mains,
- re-install approximately 150 feet of 8" PVC sewer main to provide adequate grade in the new sewer main to service the bathroom in Sacajawea Park, and
- construct approximately 2,950 feet of 8" PVC sewer main and seven manholes to connect all facilities in the floodplain to sanitary sewer.

CONDITION: If awarded, applicant agrees to establish projected end user rates, as presented in application, as user rates of at least \$77.85 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 Livingston Wastewater Project

