

# Amendment 1 to Preliminary Engineering Report for Gallatin Gateway County Water and Sewer District Wastewater System Improvements



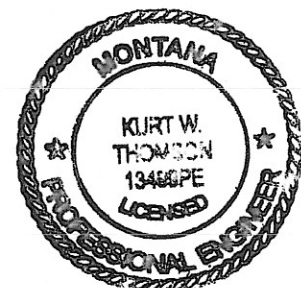
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**November  
2015**



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## Preamble

This Preliminary Engineering Report Amendment was prepared for the Gallatin Gateway County Water and Sewer District. Amendment 1 contains an analysis/comparison of two alternatives deemed feasible at this time. This amendment is not a complete PER, it is intended as a supplement. This document incorporates new information which was not known in 2010, however; the authors believe there are no substantive changes in the underlying community need or environmental conditions originally used to assess the project.

## 7. SUMMARY

The preferred alternatives listed below from the original PER have not changed (7.1 and 7.2). A current Opinion of Probable Cost is shown in **Table 7.2A**.

### 7.1 Collection System

The preferred alternative CS-2: Gravity Collection Alley Layout in the original PER is not changed and not reconsidered.

### 7.2 Lift Station

The preferred alternative L-1: Single Centralized Lift Station in the original PER is not changed and not reconsidered.

Estimated construction costs have been updated for the collection and lift station system. The current estimate for this portion of the project is \$1,701,710.00.

**Table 7.2A - Gallatin Gateway Wastewater Treatment Project  
 Opinion of Probable Cost  
 Lift Station & Gravity Collection - Alley**

#	BID ITEM	QTY	UNITS	UNIT PRICE	TOTAL
1	Exploratory Excavation	40	HR	\$ 150.00	\$ 6,000.00
2	Erosion Control	1	LS	\$ 20,000.00	\$ 20,000.00
3	8" PVC SDR 35 Sewer Main	12820	LF	\$ 55.00	\$ 705,100.00
4	48" Manhole	54	EA	\$ 3,500.00	\$ 189,000.00
5	4" Gravity Service Line (private property)	8000	EA	\$ 28.00	\$ 224,000.00
6	4" Gravity Service Line (public)	1610	LF	\$ 48.00	\$ 77,280.00
7	Alley Utility Conflicts	1	LS	\$ 75,000.00	\$ 75,000.00
8	Abandon Existing Septic Tank in Place	89	EA	\$ 750.00	\$ 66,750.00
9	Bore and Jack Hwy 191 (2)	240	LF	\$ 350.00	\$ 84,000.00
10	Asphalt Remove and Replace	2530	SY	\$ 36.00	\$ 91,080.00
11	Lift Station & Emergency Power	1	LS	\$ 160,000.00	\$ 160,000.00
12	Chain Link Fence Around Lift Station	140	LF	\$ 25.00	\$ 3,500.00
	<b>Direct Construction Subtotal</b>				<b>\$ 1,701,710.00</b>

### 7.3 Treatment Alternatives

The original PER had 5 treatment alternatives.

- T-1: No Action Alternative.
- T-2: Connection to Utility Solutions Wastewater Treatment Plant
- T-3: Storage and Irrigation (Low Rate Land Application)
- T-4: Septic Tank / Level 2 Treatment / Pressure Dosed Drainfield
- T-5: Biological Nutrient Removal (BNR) Mechanical Treatment Plant



- T-1: The “No Action” Alternative has not changed from the original PER.
- T-2: Connection to Utility Solutions Wastewater Treatment Plant is now feasible due to the favorable bond election in the Four Corners Water and Sewer District to purchase Utility Solutions infrastructure, and favorable rate structure negotiations. An updated analysis for this alternative is provided in Section 7.3.2.
- T-3: The Storage and Irrigation Alternative has been removed from further consideration due to inability to find suitable land with a willing seller.
- T-4: The Level 2 Treatment Alternative was removed from consideration in favor of a Mechanical Treatment Plant. The District Board made this decision based on Capital Costs, Operation and Maintenance and the desired higher level of treatment.
- T-5: The Mechanical Treatment Plant Alternative has been pursued by the District for the last few years. An updated analysis for this alternative is provided in Section 7.3.5.

Two treatment alternatives are the most feasible to the District at this point. The two treatment alternatives that will be analyzed in detailed are:

- T-2: Connection to Four Corners Water and Sewer District (FCWSD)
- T-5: ICEAS (Intermittent Cycle Extended Aeration System) Sequencing Batch Reactor (SBR) Mechanical Treatment Plant

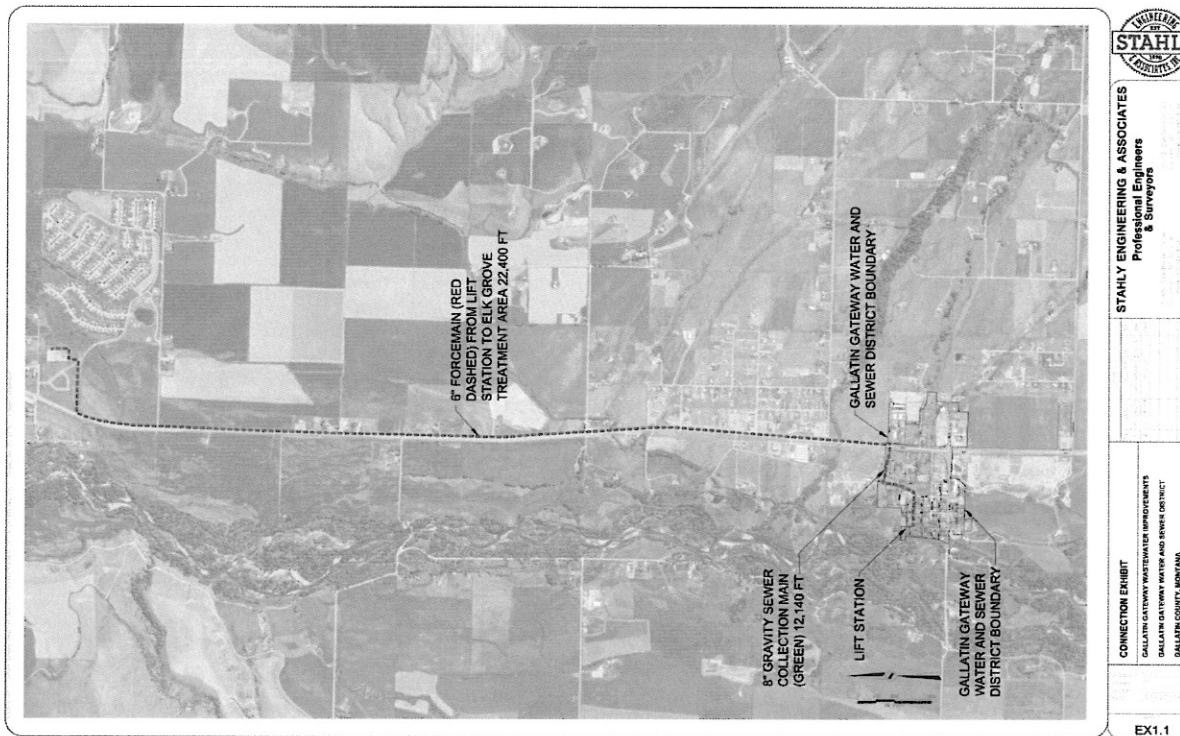
### **7.3.2 Alternative T-2: Connection to Four Corners Water and Sewer District**

This alternative consists of a force main from the proposed lift station in Gallatin Gateway to the treatment plant, currently operated by Utility Solutions, near Four Corners in the Elk Grove Subdivision. Initial discussions between the District and Four Corners Water and Sewer District (FCWSD) indicate both a willingness and capacity to serve the District with treatment and disposal of the District’s wastewater. The location of the force main would be through Gallatin Gateway’s street system (public right-of-way) and utility easements obtained by the District. It would then follow Highway 191 to the treatment plant.

#### ***Schematic Layout***

A schematic layout is shown in *Figure 7.3.2A* for this alternative. The layout shows the force main from the lift station to the treatment plant.

Figure 7.3.2A – Schematic Layout for Connection to Four Corners Water and Sewer District



**Operational Requirements**

The District has been resolute over the years in their desire to have only a public utility – not private. Also, the funding agencies will not allow the collection system, lift station and force main ownership to be turned over to a private utility. The treatment system at Elk Grove being purchased by FCWSD allows this option to be feasible at this point. The operational requirements will be the responsibility of the FCWSD and they will charge the District a bulk rate for treatment and disposal. Initial talks with the FCWSD have included early negotiations in the bulk rates that would be charged to the District for treatment and disposal. Based on these early negotiations, The bulk rate used in this estimate is \$88.00 - \$106.35/1,000 gallons. The flow in the estimate is based on the DEQ circular recommended design flow of 250 gallons per day per single family house. The potential lower flow in the estimate is based on an estimated flow of 170 gallons per day per single family house. Final user rates will depend on the bulk rate agreed upon between the FCWSD and the District, as well as the actual daily flows.

**Energy Requirements**

The energy requirements for this alternative would be deferred to FCWSD. The cost for the energy needed for treatment and disposal is worked into the bulk rates.

**Regulatory Compliance and Permits**

The plans for the force main from the lift station to the FCWSD treatment plant would need to be submitted to, and approved by the Montana Department of Environmental Quality. A stormwater discharge permit would be required, as would 310 and 404 permits for stream crossings. Occupancy/encroachment permits would be required with the Montana Department of Transportation for the force main located within the Highway 191 right-of-way.

**Land Requirements**

A majority of the land requirements for this alternative are either public right-of-way, or easements obtained by the District. One additional easement will be attempted to be secured near the treatment plant. If an agreement for the easement is not reached, public right-of-way is available for the last portion of the force main, prior to the treatment plant.

The District purchased 5 acres located behind the Buffalo Station, at the intersection of Cottonwood Road and Highway 191 (Minor Sub 309C) to use for the treatment and disposal.

**Environmental Considerations**

Air and dust will arise periodically during construction, as with all projects of this nature. No noise or dust will occur due to the force main after construction. After construction, the contractor will be required to grade and seed disturbed areas. The stormwater permit, and contract documents, will require the contractor to utilize Best Management Practices until areas of disturbance reclaimed and revegetated. No permanent negative environmental impacts are anticipated for this alternative.

**Construction Problems**

Creek crossings along the force main alignment will likely lead to the need to utilize a bore to avoid disturbance to the creeks during construction. This would allow for a casing under the stream and no disturbance of the creek itself. The installation of the force main is a common construction procedure. Highway 191 is a heavily travelled road. Traffic control will be submitted and approved prior to construction. The traffic control would allow for slower traffic, and potentially more room for the contractor to work in (if needed).

**Cost Estimates**

The cost estimate for the construction of the connection to the FCWSD is shown in **Table 7.3.2A**. A connection fee has been added to the estimate in **Table 7.3.2A**. This is assumed to be \$5,000, based on early discussions with the FCWSD.

**Table 7.3.2A - Gallatin Gateway Water and Sewer District  
Alternate 2 - Connect to Four Corners Water and Sewer District**

#	BID ITEM	QTY	UNITS	UNIT PRICE	TOTAL
1	Erosion Control	1	LS	\$ 15,000.00	\$ 15,000.00
2	Asphalt Road/Access Crossing	1010	SY	\$ 52.00	\$ 52,520.00
3	Asphalt Path Crossing	180	SY	\$ 42.00	\$ 7,560.00
4	Jack and Bore - Creek and Irrigation	120	LF	\$ 450.00	\$ 54,000.00
5	Connection at Treatment	1	LS	\$ 15,000.00	\$ 15,000.00
6	Odor Control (if needed)	1	LS	\$ 25,000.00	\$ 25,000.00
7	Utility Conflicts	1	LS	\$ 20,000.00	\$ 20,000.00
8	Easements	1	LS	\$ 10,000.00	\$ 10,000.00
9	Air Relief Valve	5	EA	\$ 1,500.00	\$ 7,500.00
10	Connection Fee (assumed)	109	EA	\$ 5,000.00	\$ 545,000.00
11	Dewatering	1	LS	\$ 25,000.00	\$ 25,000.00
12	6" Force Main to Treatment	22340	LF	\$ 38.00	\$ 848,920.00
13	Forcemain Pigging Station	5	EA	\$ 6,200.00	\$ 31,000.00
	<b>Treatment Subtotal</b>				<b>\$ 1,656,500.00</b>

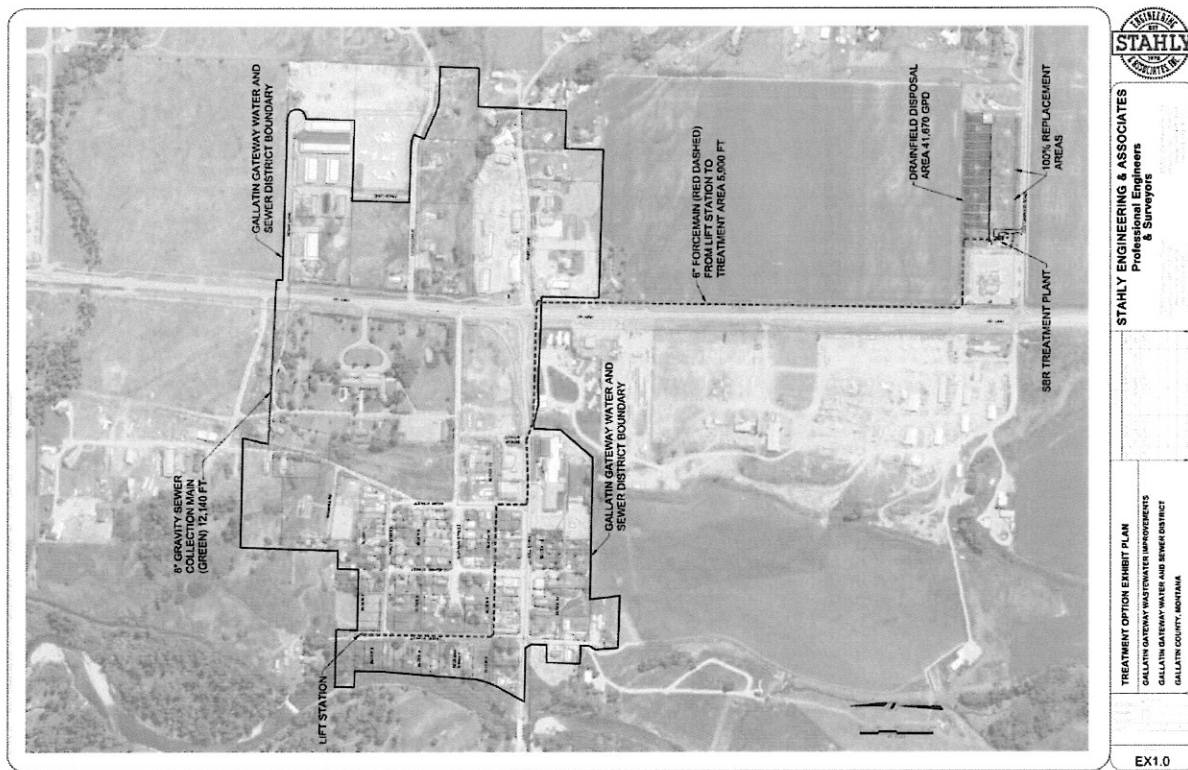
### 7.3.5 Alternative T-5: ICEAS SBR Mechanical Treatment Plant

This alternative is the option that the District has been working on for the last few years. The design is mostly complete with some modifications needed for the Discharge Permit through the Department of Environmental Quality. A copy of the draft Discharge Permit is included in **Appendix 1**.

#### Schematic Layout

A schematic layout of the overall District map with the force main connection from the lift station to the treatment site is shown in **Figure 7.3.5A**. A treatment and disposal layout is shown on the property which the District owns at the intersection of Cottonwood Road and Highway 191 in **Figure 7.3.5B** and the treatment site plan is shown on **Figure 7.3.5C**.

**Figure 7.3.5A**







### ***Operational Requirements***

A Class 1 State certified operator would be required to run the mechanical plant. With advances in the technology and remote operation of the treatment system proposed, a full time operator may not be required. The operator would need to monitor the process, provide periodic testing and reports, sludge processing, overall plant function (pumps, mechanical components, etc), periodic component repair/replacement, etc.

### ***Energy Requirements***

An estimate of cost for the ICEAS SBR Mechanical Treatment Plant energy requirements is \$14,555.00 per year. This number is based on an estimate from the supplier, as well as similar plants. It includes energy for headworks equipment, ICEAS equipment, aerobic digestion equipment, ultraviolet disinfection, and building power costs.

### ***Regulatory Compliance and Permits***

The Department of Environmental Quality is in the process of preparing the Discharge Permit. The draft Discharge Permit has been issued and the Department has received public comment. The draft Discharge Permit contains a limit of 7.5 mg/l of Total Nitrogen. This limit adds more complexity to this alternative than the original PER anticipated. The final design report and plans will need to be submitted to the Department for approval. During construction a stormwater discharge permit will be necessary, as the area of disturbance is greater than 1 acre.

### ***Land Requirements***

The District purchased Minor Sub 309C to use for the treatment and disposal. No additional land would be required for this alternative.

### ***Environmental Considerations***

The only change in the surface environment would be the addition of the ICEAS SBR Mechanical Treatment Plant itself, to a portion of a currently vacant parcel. After construction, the contractor will be required to seed disturbed areas. The disposal of the treated wastewater is subsurface and will meet the requirements of the Discharge Permit. Construction dust and noise will be temporary.

### ***Construction Problems***

No construction problems are anticipated with the ICEAS SBR Mechanical Treatment Plant. The force main to get to the treatment site is alongside a heavily travelled highway. The contractor will need to prepare and implement a traffic control plan that will need to be submitted to the Montana Department of Transportation prior to construction of that portion of the force main.

### ***Cost Estimates***

The cost estimate in **Table 7.3.1A** is for the construction of the ICEAS SBR Mechanical Treatment Plant.

**Table 7.3.1A - Gallatin Gateway Water and Sewer District  
Opinion of Probable Cost  
Alternate 1 – ICEAS SBR Mechanical Treatment Plant**

#	BID ITEM	QTY	UNITS	UNIT PRICE	TOTAL
1	Erosion Control	1	LS	\$ 5,000.00	\$ 5,000.00
2	Access Road	1500	sf	\$ 5.00	\$ 7,500.00
3	Headworks	1	LS	\$ 320,000.00	\$ 320,000.00
4	ICEAS System	1	LS	\$ 618,534.00	\$ 618,534.00
5	Solids Handling	1	LS	\$ 184,340.00	\$ 184,340.00
6	UV Disinfection System	1	LS	\$ 61,520.00	\$ 61,520.00
7	Drainfield Pumping Equipment	1	LS	\$ 23,000.00	\$ 23,000.00
8	Drainfield Control Panel	1	LS	\$ 25,000.00	\$ 25,000.00
9	Misc. Piping/Fittings/Glue/Etc.	1	LS	\$ 5,000.00	\$ 5,000.00
10	Flow Meters	8	EA	\$ 2,500.00	\$ 20,000.00
11	Dose Tank(s)	20000	GAL	\$ 3.00	\$ 60,000.00
12	Plant Water System & Well Construction (reuse)	1	LS	\$ 30,000.00	\$ 30,000.00
13	Signing	1	LS	\$ 3,000.00	\$ 3,000.00
14	Discharge Piping Into GW Infiltration Gallery	740	LF	\$ 32.00	\$ 23,680.00
15	Groundwater Infiltration System	11580	LF	\$ 13.50	\$ 156,330.00
16	Buffalo Replacement Well	1	EA	\$ 40,000.00	\$ 40,000.00
17	Emergency Power Generator	1	LS	\$ 80,000.00	\$ 80,000.00
18	Disposal Site Fencing (3 strand barbed wire)	2000	LF	\$ 3.70	\$ 7,400.00
19	Chain Link Fencing Treatment Site	350	LF	\$ 25.00	\$ 8,750.00
20	Site Grading/Parking/Seeding	1	LS	\$ 6,000.00	\$ 6,000.00
21	Power/Electrical Service (Treatment Site)	1	LS	\$ 25,000.00	\$ 25,000.00
22	6" Force Main to Treatment	5550	LF	\$ 38.00	\$ 210,900.00
23	Asphalt Access Crossing	70	SY	\$ 52.00	\$ 3,640.00
24	Forcemain Pigging Station	2	EA	\$ 6,200.00	\$ 12,400.00
	<b>Treatment Subtotal</b>				<b>\$ 1,936,994.00</b>

#### 7.4 Project Site Alternative

Because the site costs depend on the treatment alternative, the site cost has been added to each alternative analyzed. This section is no longer necessary.



## 8. SCORING OF TREATMENT ALTERNATIVES

### 8.4 Scoring of Treatment Alternatives

Two treatment alternatives are the most feasible to the District at this point. The two treatment alternatives that will analyzed in detailed are:

T-2: Connection to Four Corners Water and Sewer District (FCWSD)

T-5: ICEAS Sequencing Batch Reactor (SBR) Mechanical Treatment Plant

#### 8.4.1 Technical Feasibility

T-2: The connection to FCWSD is technically feasible. From an engineering standpoint, the stream and irrigation crossings, the actual connection to the treatment plant, and a potential need for odor control are the only items that require additional attention. The force main layout and permitting is not anticipated to be difficult. This Alternative shall receive a score of 7.

T-5: The ICEAS SBR Mechanical Treatment Plant Alternative is technically feasible. In order to meet the draft Discharge Permit requirement of 7.5 mg/l of Total Nitrogen, additional engineering will be required. This alternative is technically more complicated than Alternate T-2. This Alternative shall receive a score of 6.

#### 8.4.2 Environmental Impacts

T-2: The environmental impacts for T-2 are scored the same as the original PER, as the impacts remain the same. The original PER described the score as equal, and will be scored the same in this amendment. This Alternative shall receive a score of 6 (same as the original PER scoring of the Mechanical Treatment Plant).

T-5: This section is the same as the original PER. This Alternative shall receive a score of 6.

### 8.4.3 Financial Feasibility

**Table 8.4.3A - Gallatin Gateway Water and Sewer District  
Preferred Alternatives  
Present Worth Analysis**

Item	Alternative T-2	Alternative T-5
Capital Costs	Connect to FCWSD	ICEAS SBR Plant
Collection/Lift Station	\$1,701,710.00	\$1,701,710.00
Land Cost	\$0.00	\$200,000.00
Treatment	\$1,656,500.00	\$1,936,994.00
Other Costs	\$1,653,326.00	\$1,698,021.00
Total Capital Costs	\$5,056,231.00	\$5,492,030.00
Annual O&M Costs	\$55,708.00	\$71,652.00
20-year Salvage Value	\$1,679,100.00	\$988,350.00
Present Worth of Salvage Value	\$372,400.00	\$384,400.00
Present Worth of Annual O&M Costs	\$986,031.60	\$1,268,240.40
Present Worth Cost	\$5,669,862.60	\$6,375,870.40
Estimated Monthly Rate	\$67.96 - \$79.59	\$91.78

### 8.4.4 Public Health and Safety

T-2: The only public health and safety concern for the connection alternative is the longer force main along Highway 191. The public health and safety would be a concern only during construction. After construction, there is virtually no concern for public health and safety associated with the force main. This Alternative shall receive a score of 8.

T-5: The Mechanical Treatment Plant Alternative is the same as the original PER. This Alternative shall receive a score of 9.

### 8.4.5 Operational and Maintenance Considerations

This section remains the same from the original PER.

T-2: Score of 10. "The connection to Utility Solutions (FCWSD) defers all the O&M."

T-5: Score of 1. "The BNR (SBR option) requires the most skilled operator of

### 8.4.6 Public Comments

The District and Stahly Engineering & Associates held a public meeting that described and presented schematic layouts of each Alternative, as well as opinions of probable costs. Public comment was received and did not reveal a preference for either Alternative. Each Alternative shall receive a score of 5.

Public Meeting Notes, including public comment are included in **Appendix 2**.

**Preferred Alternative Selection**

Based on the estimated capital costs, estimated operation and maintenance costs, public input, District Board input, and scoring of the Alternatives T-2 and T-5 the Preferred Alternative is T-2: Connection to Four Corners Water and Sewer District.

**Table 8.6 - Gallatin Gateway Water and Sewer District  
Decision Matrix**

Alt	Technical Feasibility		Environmental Impacts		Financial Feasibility		Public Health and Safety		Operation and Maintenance		Public Comments		Total
	Weight: 5		Weight: 3		Weight: 10		Weight: 7		Weight: 4		Weight: 5		
	Score	Wtd	Score	Wtd	Score	Wtd	Score	Wtd	Score	Wtd	Score	Wtd	
T-2	7	35	6	18	6	60	8	56	10	40	5	25	234
T-5	6	30	6	18	4	40	9	63	1	4	5	25	180

## **9. DETAILED DESCRIPTION OF PREFERRED ALTERNATIVE**

This section provides a detailed description of the Preferred Alternative including: site and location characteristics, operational requirements, impacts on existing facilities, design criteria, environmental impacts and mitigation, and a cost summary.

### **9.1 Site Location and Characteristics**

The wastewater collection system characteristics have not changed from the original PER.

The centralized lift station characteristics have not changed from the original PER.

The treatment site location and characteristics are no longer applicable.

### **9.2 Operational Requirements**

The operational requirements will be assumed by the Four Corners Water and Sewer District for the operation of the existing treatment system.

### **9.3 Impact on Existing Facilities**

This section has not changed from the original PER – “Gallatin Gateway does not have any existing utility facilities other than the array of individual water supply wells and onsite septic systems. The impact from this project on these existing individual facilities will be very positive. The new wastewater system will eliminate the need for the individual septic systems, which are mostly out of compliance with current health regulations and contaminating the groundwater supply. Consequently, the impact to water supply wells will be positive from the standpoint that they should be pumping from a cleaner water source. The proposed system will eliminate the concerns of well and septic separation distances within the District.”

### **9.4 Design Criteria**

The proposed project will have to comply with standards in Circular DEQ-2. Circular DEQ-2 will address design criteria for public systems and include sections for the new force main.

- Chapter 10 Engineering Reports and Facility Plans
- Chapter 20 Engineering Plans and Specifications
- Chapter 30 Design of Sewers
- Chapter 40 Wastewater Pumping Stations

#### **9.4.1 Treatment**

Treatment of wastewater will be accomplished by the Four Corners Water and Sewer District through the use of the existing wastewater treatment plant.

### **9.4.2 Lift Stations**

This section has not changed from the original PER.

### **9.4.3 Collection System Layout**

This section has not changed from the original PER.

### **9.4.4 Hydraulic Calculations**

This section has not changed from the original PER.

## **9.5 Environmental Impacts and Mitigation**

Although large areas may be disturbed as a result of open-trench digging, virtually all areas will be within existing rights-of-way and easements that have been previously disturbed by development. There will be no changes in land use after the completion of the project. Some air quality problems with dust may arise during the actual construction period because the majority of the streets, alley and easements are unpaved; however, it would be temporary and the contract documents would require that Contractor provide dust control. Similarly, there will be some temporary noise during construction. Once construction is complete, there will be no noise or dust problems arising as a result of the improvements. The contract documents shall also require that Best Management Practices (BMP) be employed before, during, and after construction until all areas of disturbance have been fully reclaimed and/or re-vegetated. For these reasons, environmental impacts are considered minimal and no permanent, negative environmental impacts are anticipated.

## **9.6 Cost Summary**

### **9.6.1 Project Cost Estimate**

*Table 9.6.1A* below shows an all-inclusive cost estimate for the preferred alternative. The estimate includes the collection system and lift station as a subtotal, and also includes the estimated soft costs.

**Table 9.6.1A - Gallatin Gateway Water and Sewer District  
Preferred Alternative Cost Estimate**

#	BID ITEM	QTY	UNITS	UNIT PRICE	TOTAL
1	Erosion Control	1	LS	\$ 15,000.00	\$ 15,000.00
2	Asphalt Road/Access Crossing	1010	SY	\$ 52.00	\$ 52,520.00
3	Asphalt Path Crossing	180	SY	\$ 42.00	\$ 7,560.00
4	Jack and Bore - Creek and Irrigation	120	LF	\$ 450.00	\$ 54,000.00
5	Connection at Treatment	1	LS	\$ 15,000.00	\$ 15,000.00
6	Odor Control (if needed)	1	LS	\$ 25,000.00	\$ 25,000.00
7	Utility Conflicts	1	LS	\$ 20,000.00	\$ 20,000.00
8	Easements	1	LS	\$ 10,000.00	\$ 10,000.00
9	Air Relief Valve	5	EA	\$ 1,500.00	\$ 7,500.00
10	Connection Fee (assumed)	109	EA	\$ 5,000.00	\$ 545,000.00
11	Dewatering	1	LS	\$ 25,000.00	\$ 25,000.00
12	6" Force Main to Treatment	22340	LF	\$ 38.00	\$ 848,920.00
13	Forcemain Pigging Station	5	EA	\$ 6,200.00	\$ 31,000.00
	<b>Treatment Subtotal</b>				<b>\$ 1,656,500.00</b>
14	Collection and Lift Station (Table 7.2A)	1	LS	\$ 1,701,710.00	\$ 1,701,710.00
	<b>Direct Construction Cost</b>				<b>\$ 3,358,210.00</b>
	Mobilization				\$ 180,000.00
	Traffic Control				\$ 55,000.00
	Contingency				\$ 336,000.00
	<b>Construction Subtotal</b>				<b>\$ 3,929,210.00</b>
	2016 Construction Cost	3.10%			\$4,051,015.51
	Land Acquisition (Site #16 - Vaughn)	5	AC		\$200,000.00
	Engineering, Legal, and Administrative				\$971,185.43
	<b>TOTAL</b>				<b>\$5,222,200.94</b>

## 10. RECOMMENDATIONS AND IMPLEMENTATION

The previous sections of this report have re-analyzed the feasible options available to the District with changes that have occurred since the original PER was published. This section remains unchanged over the last few years, as the funding package has been in place.

### 10.1 Funding

The funding package for the Gallatin Gateway County Water and Sewer District Wastewater Improvements project are in place. The Board has been diligent in looking for additional funding available to help offset additional costs that have accrued over time. Any additional funding that the Board is able to procure will be beneficial.

### 10.2 Implementation

The funding agency concurrence on the preferred alternative is needed in order to move forward with the project. It is anticipated that this concurrence can be achieved in a short time period. Design of the force main from the lift station to the treatment facility is anticipated to take approximately 2 months – estimated for February 2016. Review and approval of the design by DEQ and funding agencies will occur after the design is complete. Bidding is estimated to take place in the spring of 2016 with construction starting in the summer of 2016.

### 10.3 Public Participation

A public meeting was held on September 30, 2015 at the community center. The meeting was properly advertised. The general manager of the District and Stahly Engineering & Associates presented the alternatives available for the project. Public input was received at the meeting. Documentation of the public meeting is included in *Appendix 2*.



**MONTANA DEPARTMENT OF  
ENVIRONMENTAL QUALITY**

**AUTHORIZATION TO DISCHARGE UNDER THE  
MONTANA GROUND WATER POLLUTION CONTROL SYSTEM**

In compliance with Montana Water Quality Act, Title 75, Chapter 5, Montana Code Annotated (MCA) and the Administrative Rules of Montana (ARM) 17.30 Subchapter 5, Subchapter 7, and Subchapter 10 *et seq.*,

**Gallatin Gateway County Water & Sewer District**

is authorized to discharge from **Gallatin Gateway County Water & Sewer District; Southeast ¼ of Section 11, Township 3 South, Range 4 East, Gallatin County; to receiving waters, Class I ground water,**

in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein. Authorization for discharge is limited to those outfalls specifically listed in the permit. The numeric effluent limits, water quality standards, and special conditions specified herein support the protection of the affected receiving water.

This permit shall become effective: **TBD.**

This permit and the authorization to discharge shall expire at midnight, **TBD (five years after expiration date).**

FOR THE MONTANA DEPARTMENT OF  
ENVIRONMENTAL QUALITY

**DRAFT**

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Jon Kenning, Chief  
Water Protection Bureau  
Permitting and Compliance Division

**DRAFT**

Issue Date: \_\_\_\_\_

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**I. EFFLUENT LIMITS, MONITORING REQUIREMENTS & OTHER CONDITIONS**

**A. Description of Discharge Points and Mixing Zones**

The authorization to discharge provided under this permit is limited to the outfall specially designated below as the discharge location. Discharges at any location not authorized under an MGWPCS permit is a violation of the Montana Water Quality Act and may subject the person(s) responsible for such discharge to penalties under the Act. Knowingly discharging from an unauthorized location or failing to report an unauthorized discharge within a reasonable time from first learning of an unauthorized discharge could subject such person to criminal penalties as provided under Section 75-5-632 of the Montana Water Quality Act.

Outfall                      Description

001                              **Location:** Subsurface discharge structure: 45° 35' 07" North Latitude and 111° 11' 43" West Longitude; Southeast ¼ of Section 11, Township 03 South, Range 04 East, Gallatin County.

**Mixing Zone:** A mixing zone has not been authorized under this permit.

**Treatment Works:** a variation of Sequencing Batch Reactor (SBR) biological nutrient removal system with ultraviolet (UV) disinfection.

**B. Effluent Limitations**

Upon the effective date of the permit and lasting until the term of the permit; the quality of effluent discharged shall, as a minimum, meet the limitations set forth in Table 1.

<b>Table 1. Effluent Limit – Outfall 001</b>		
<b>Parameter</b>	<b>Units</b>	<b>Daily Maximum<sup>(1)</sup></b>
Nitrogen, Total (as N)	mg/L	7.5
Footnotes: (1) See definition in Part V of permit.		

C. Effluent Monitoring and Reporting Requirements

- Samples representative of effluent quality must be collected from:
  - EFF-001: effluent sample location, drainfield dose tank
- Effluent samples must be representative of the nature of the monitored discharge.
- Effluent sampling requirements are listed in Table 2 for Outfall 001. The required sampling frequency is listed in Table 2 for each respective parameter. The required sample type is listed in Table 2 for each respective parameter. The permittee shall report the required monitoring data to the Department at the frequency respectively listed in Table 2 for each parameter.
- Parameter analytical methods must be in accordance with the Code of Federal Regulations, Title 40, Part 136, unless specified or otherwise approved by the Department.
- Submittal of discharge monitoring report forms (DMR) is required regardless of the operational status of the facility. If no discharge occurs during an individual monitoring period, it shall be stated on the DMR (Outfall 001) that no discharge or overflow occurred.
- Effluent flow rate measurements must be collected from:
  - FM-001: flow meter prior to discharge structures.
- Effluent flow rate measurements shall be representative of the volume of the monitored discharge.

<b>Table 2. Effluent Monitoring and Reporting Requirements – Outfall 001</b>						
<b>Parameter/Method</b>	<b>Monitor Location</b>	<b>Units</b>	<b>Sample Type<sup>(1)</sup></b>	<b>Minimum Sample Frequency</b>	<b>Reporting Requirements<sup>(1)(2)</sup></b>	<b>Report Frequency</b>
Flow Rate, Effluent <sup>(3)</sup>	FM-001	gpd	Continuous	Continuous	Daily Maximum and Monthly Average	1/Quarter
Nitrogen, Nitrite+Nitrate (as N)	EFF-001	mg/L	Grab	1/Month	Daily Maximum and Monthly Average	1/Quarter
Nitrogen, Total Ammonia (as N)	EFF-001	mg/L	Grab	1/Month	Daily Maximum and Monthly Average	1/Quarter
Nitrogen, Total Kjeldahl (TKN)	EFF-001	mg/L	Grab	1/Month	Daily Maximum and Monthly Average	1/Quarter
Nitrogen, Total (as N) <sup>(4)</sup>	EFF-001	mg/L	Calculated	1/Month	Daily Maximum and Monthly Average	1/Quarter

Footnotes:  
 EFF-001: effluent sample location, drainfield dose tank  
 FM-001: flow meter to be installed prior to discharge structures.  
 If no discharge occurs during the reporting period, “no discharge” shall be documented on the effluent DMR report forms.  
 Parameter analytical methods shall be in accordance with the Code of Federal Regulations, 40 CFR Part 136, unless specified above.  
 (1) See definitions in Part V of the permit.  
 (2) Daily Maximum: Report highest measured daily value for the reporting period on Discharge Monitoring Report (DMR) form.  
 (3) Requires recording device or totalizing meter, must record daily effluent volume.  
 (4) Total Nitrogen is the sum of Nitrate + Nitrite and Total Kjeldahl Nitrogen.

D. Special Conditions – Ground Water Monitoring  
 No special conditions area associated with issuance of this permit.

E. Compliance Schedule  
 No compliance schedules are associated with issuance of this permit.

**II. MONITORING, RECORDING AND REPORTING REQUIREMENTS**

A. Representative Sampling  
 Samples taken in compliance with the monitoring requirements established under Part I of the permit shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge.

B. Monitoring Procedures  
 Monitoring must be conducted according to test procedures approved under Part 136, Title 40 of the Code of Federal Regulations, unless other test procedures have been specified in this permit. All flow-measuring and flow-recording

devices used in obtaining the data submitted in self-monitoring reports must indicate values within 10 percent of the actual flow being measured.

C. Penalties for Tampering

The Montana Water Quality Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$25,000, or by imprisonment for not more than six months, or by both.

D. Reporting of Monitoring Results

Monitoring results must be reported on a Discharge Monitoring Report (DMR) EPA form 3320-1. Monitoring results must be submitted in either electronic or paper format and be postmarked no later than the 28<sup>th</sup> day of the month following the end of the monitoring period. If no discharge occurs during the reporting period, "No Discharge" must be reported on the report form. Legible copies of these, and all other reports required herein, must be signed and certified in accordance with Part IV.G. "Signatory Requirements" of this permit and submitted to the Department at the following address:

Montana Department of Environmental Quality  
Water Protection Bureau  
PO Box 200901  
Helena, Montana 59620-0901  
Phone: (406) 444-3080

E. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any Compliance Schedule of this permit shall be submitted to the Department in either electronic or paper format and be postmarked no later than 14 days following each schedule date unless otherwise specified in this permit.

F. Additional Monitoring by the Permittee

If the permittee monitors any additional pollutant or any pollutant more frequently than required by this permit using approved analytical methods as specified in this permit, the results of this monitoring shall be included in the analysis and reporting of the data submitted in the Discharge Monitoring Report. Such increased frequency shall also be indicated.

G. Records Contents

Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;

2. The initials or name(s) of the individual(s) who performed the sampling or measurements;
3. The date(s) analyses were performed;
4. The time analyses were initiated;
5. The initials or name(s) of individual(s) who performed the analyses;
6. References and written procedures, when available, for the analytical techniques or methods used; and
7. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results.

H. Retention of Records

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report, or application. This period may be extended by the request of the Department at any time. Data collected on site, copies of Discharge Monitoring Reports, and a copy of this MGWPCS permit must be maintained on site during the duration of activity at the permitted location.

I. Twenty-four Hour Notice of Noncompliance Reporting

1. The permittee shall report any serious incidents of noncompliance affecting the environment as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. The report shall be made to the Water Protection Bureau at (406) 444-3080 or the Office of Disaster and Emergency Services at (406) 324-4777. The following examples are considered serious incidents:
  - a. Any noncompliance which may seriously endanger health or the environment; or
  - b. Any unanticipated bypass which exceeds any effluent limitation in the permit (See Part III.G. of this permit, "Bypass of Treatment Facilities").
2. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:
  - a. A description of the noncompliance and its cause;



- b. The period of noncompliance, including exact dates and times;
  - c. The estimated time noncompliance is expected to continue if it has not been corrected; and
  - d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
3. The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Protection Bureau, by phone, at (406) 444-3080.
  4. Reports shall be submitted to the addresses in Part II.D. of this permit, "Reporting of Monitoring Results."

J. Other Noncompliance Reporting

Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for Part II.D. of this permit are submitted. The reports shall contain the information listed in Part II.I.2. of this permit.

K. Inspection and Entry

The permittee shall allow the head of the Department, the Director, or an authorized representative thereof, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance, any substances or parameters at any location.

### III. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Montana Water Quality Act and is

grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give the Department advance notice of any planned changes at the permitted facility or of an activity which may result in permit noncompliance.

B. Penalties for Violations of Permit Conditions

The Montana Water Quality Act provides that any person who violates a permit condition of the Act is subject to civil or criminal penalties not to exceed \$25,000 per day or one year in prison, or both, for the first conviction, and \$50,000 per day of violation or by imprisonment for not more than two years, or both, for subsequent convictions. MCA 75-5-611(9)(a) also provides for administrative penalties not to exceed \$10,000 for each day of violation and up to a maximum not to exceed \$100,000 for any related series of violations. Except as provided in Part III.G. of this permit, "Bypass of Treatment Facilities," nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

C. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

E. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. However, the permittee shall operate, as a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance.

F. Removed Substances

Collected screenings, grit, solids, sludge, or other pollutants removed in the course of treatment shall be disposed of in such a manner so as to prevent any pollutant from entering any waters of the state or creating a health hazard.

G. Bypass of Treatment Facilities

1. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts III.G.2. and III.G.3. of this permit.
2. Notice:
  - a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least 10 days before the date of the bypass.
  - b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required under Part II.I. of this permit, "Twenty-four Hour Reporting."
3. Prohibition of bypass:
  - a. Bypass is prohibited and the Department may take enforcement action against a permittee for a bypass, unless:
    - 1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
    - 2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
    - 3) The permittee submitted notices as required under Part III.G.2. of this permit.
  - b. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in Part III.G.3.a. of this permit.

#### IV. GENERAL REQUIREMENTS

A. Planned Changes

The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

1. The alteration or addition could significantly change the nature or increase the quantity of pollutant discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit; or
2. There are any planned substantial changes to the existing sewage sludge management practices of storage and disposal. The permittee shall give the Department notice of any planned changes at least 180 days prior to their implementation.

B. Anticipated Noncompliance

The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

C. Permit Actions

This permit may be revoked, modified and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

D. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application must be submitted at least 180 days before the expiration date of this permit.

E. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for revoking, modifying and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.

F. Other Information

When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Department, it shall promptly submit such facts or information with a narrative explanation of the circumstances of the omission or incorrect submittal and why they weren't supplied earlier.

G. Signatory Requirements

All applications, reports or information submitted to the Department shall be signed and certified.

1. All permit applications shall be signed as follows:
  - a. For a corporation: by a responsible corporate officer:
  - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
  - c. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.
2. All reports required by the permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is considered a duly authorized representative only if:
  - a. The authorization is made in writing by a person described above and submitted to the Department; and
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters (a duly authorized representative may thus be either a named individual or an individual occupying a named position).
3. Changes to authorization. If an authorization under Part IV.G.2. of this permit is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part IV.G.2. of this permit must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible

for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

H. Penalties for Falsification of Reports

The Montana Water Quality Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than \$25,000 per violation, or by imprisonment for not more than six months per violation, or by both.

I. Availability of Reports

All reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department and the EPA. Permit applications, permits and effluent data shall not be considered confidential and shall also be available for public inspection.

J. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

K. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privileges.

L. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

M. Transfers

This permit may be automatically transferred to a new permittee if:

1. The current permittee notifies the Department at least 30 days in advance of the proposed transfer date;
2. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them;

3. The Department does not notify the existing permittee and the proposed new permittee of the intent to revoke or modify and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part IV.M.2. of this permit; and
4. Required annual and application fees have been paid.

N. Fees

The permittee is required to submit payment of an annual fee as set forth in ARM 17.30.201. If the permittee fails to pay the annual fee within 90 days after the due date for the payment, the Department may:

1. Impose additional fee assessment(s) computed at the rates established under ARM 17.30.201; and
2. Suspend the processing of the application for a permit or authorization or, if the nonpayment involves an annual permit fee, suspend the permit, certificate or authorization for which the fee is required. The Department may lift suspension at any time up to one year after the suspension occurs if the holder has paid all outstanding fees, including all penalties, assessments and interest imposed under this sub-section. Suspensions are limited to one year, after which the permit will be terminated.

O. Reopener Provisions

This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations (and compliance schedule, if necessary), or other appropriate requirements if one or more of the following events occurs:

1. Water Quality Standards: The water quality standards of the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit; or
2. Water Quality Standards are Exceeded: If it is found that water quality standards or trigger values, excluding mixing zones designated by ARM 17.30.501-518, for parameters included in the permit or others, the department may modify the effluent limits or water management plan.

V. **DEFINITIONS**

1. “30-day (and Monthly) Average” other than for *E. coli* bacteria, means the arithmetic average of all samples collected during a consecutive 30-day period or calendar month, whichever is applicable. Geometric means shall be calculated for *E. coli* bacteria. The calendar month shall be used for purposes of reporting self-monitoring data.



2. **“90-day (and Quarterly) Average”** other than for *E. coli* bacteria, means the arithmetic average of all samples collected during a consecutive 90-day period or calendar quarter, whichever is applicable. Geometric means shall be calculated for *E. coli* bacteria. The calendar month shall be used for purposes of reporting self-monitoring data.
3. **“180-day (and Six-Month or Semi-Annual) Average”** other than for *E. coli* bacteria, means the arithmetic average of all samples collected during a consecutive 180-day period or calendar half-year, whichever is applicable. Geometric means shall be calculated for *E. coli* bacteria. The calendar month shall be used for purposes of reporting self-monitoring data.
4. **“Annual Average Load”** means the arithmetic mean of all 30-day or monthly average loads reported during the calendar year for a monitored parameter.
5. **“Annual Maximum Limit”** means the maximum allowable discharge of a pollutant during a calendar year.
6. **“BOD<sub>5</sub>”** means the five-day measure of pollutant parameter biochemical oxygen demand.
7. **“Bypass”** means the intentional diversion of waste streams from any portion of a treatment facility.
8. **“Composite Sample”** means a sample that consists of two or more discrete aliquots. Composite samples shall be flow proportioned. The composite sample shall, as a minimum, contain at least four (4) samples collected over the compositing period. Unless otherwise specified, the time between the collection of the first sample and the last sample shall not be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:
  - a. Constant time interval between samples, sample volume proportional to flow rate at time of sampling;
  - b. Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;
  - c. Constant sample volume, time interval between samples proportional to flow (i.e. sample taken every “X” gallons of flow); and,
  - d. Continuous collection of sample, with sample collection rate proportional to flow rate.

9. **“Continuous”** means the measurement of flow rates which occurs without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance process changes, or other similar activities.
10. **“Daily Discharge”** means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the day.
11. **“Department”** means the Montana Department of Environmental Quality.
12. **“Discharge”** means the injection, deposit, dumping, spilling, leaking, placing, or failing to remove any pollutant so that it or any constituent thereof may enter into state waters, including ground water.
13. **“Grab Sample”** means a sample which is taken from a waste stream on a one-time basis without consideration of flow rate of the effluent or without consideration for time.
14. **“Instantaneous”** measurement, for monitoring requirements, means a single reading, observation, or measurement.
15. **“Load Limits”** are mass-based discharge limits expressed in units such as lbs/day
16. **“Maximum Daily Limit”** means the maximum allowable discharge of a pollutant during a calendar day. Expressed as units of mass, the daily discharge is cumulative mass discharged over the course of the day. Expressed as a concentration, it is the arithmetic average of all measurements taken that day.
17. **“Mixing Zone”** means a limited area of a surface water body or aquifer where initial dilution of a discharge takes place and where certain water quality standards may be exceeded.
18. **“Nondegradation”** means the prevention of a significant change in water quality that lowers the quality of high-quality water for one or more parameters. Also, the prohibition of any increase in discharge that exceeds the limits established under or determined from a permit or approval issued by the Department prior to April 29, 1993.
19. **“Severe Property Damage”** means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or

substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

20. "TMDL" means the total maximum daily load limitation of a parameter, representing the estimated assimilative capacity for a water body before other designated uses are adversely affected. Mathematically, it is the sum of the wasteload allocations for point sources, load allocations for non-point and natural background sources, and a margin of safety.
21. "TSS" means the pollutant parameter total suspended solids.

**Gallatin Gateway County Water & Sewer District  
Public Meeting Notes  
September 30, 2015 7:00 PM  
Gallatin Gateway Community Center  
Wastewater Treatment & Disposal Alternatives**

**Public Attendees:** Patti Steinmuller, Neal Pringle, Ronald Page, Earl Wortman, Dick Shockley, Ruth Hargrove, Doug Rand, Pete Stein, Steve White, Greg Benjamin (Stahly Engineering)

**GGWSD Board & Staff attendees:** Ted Border, Eric Amend, Ashley Kroon, Merle Adams, Matt Donnelly, Maralee Parsons Sullivan

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GGWSD GM Matt Donnelly provided a brief history of the project from 2007 to present. In August 2015 GGWSD asked its engineers to review and amend the 2010 PER (Preliminary Engineering Report) in light of changes in several substantive conditions since the release of the PER. The intent of this meeting is to review the preliminary results of the PER amendment and solicit public comment.

Kurt Thomson of Stahly Engineering presented the two most feasible treatment & disposal alternatives:

- 1. Treatment & disposal by GGWSD at Cottonwood Site**
- 2. Connect to Four Corners Water & Sewer District (FCWSD) at their Elk Grove Sewer Treatment plant.**

Estimated costs Presented (2016\$):

<u>Alternative</u>	<u>Construction Costs*</u>	<u>O&amp;M Rate Estimates</u>
1	\$5.53M	\$91.78/mo/per VRU
2	\$5.22M	\$71.08 - \$79.59/mo/VRU

\*Both alternatives have the same collection system layout and lift station (\$1.7M)

**Notes on public comments/questions and responses (italics):**

MD = Matt Donnelly, GM, GGWSD

KT = Kurt Thomson, Stahly Engineering

**Would FCWSD require that treated wastewater be pumped back to Gateway for disposal?**

*(MD): No. FCWSD will be responsible for both treatment and disposal.*

**Does the FCWSD option require easements for pipes that would be laid?**

*(KT): the location is on the east side of the highway and I have had preliminary discussions with MDT. There is a small easement we are looking at by Elk Grove. We have easement costs as a placeholder in our budget.*

**Do you know what % capacity FCWSD is at now, and what affect our effluent would have on that?**

*(MD): FCWSD is currently expanding, and with that expansion they will have 170K gal/day capacity. They are currently using about 100K gal/day and we are asking for 25K gal/day so that leaves them with about 50K gal/day to cover Elk Grove and future expansion. For future expansion for Gateway, we could buy more capacity from FCWSD, or we could build capacity on our own site.*

**Has the cost of the District's land (5 acres) been factored into the cost comparison between the 2 options?**

*MD: the cost of the land (\$200K) has been included in both construction cost estimates. The property was paid for by grant money, and is an asset to the community, and the Board has informally expressed a desire to maintain its land for future expansion, and if we can keep it we should keep it.*

**Will the CDBG grant money be usable for FC option?**

*MD: Yes, the CDBG direct benefit portion (that portion that helps our low-income community members) is applicable for either option.*

**What is short-range & long-range organizational structure, would you merge with FCWSD?**

*MD: Through construction completion, we would remain our own entity, set up a billing system, and bill constituents, and send a monthly check to FC. We could potentially operate this way long-term, or we may want to look at the bigger long-term picture, where multiple sewer systems could share billing systems and other administrative costs rather than running individual offices.*

**Is one option quicker than another?**

*MD: I believe hooking to FC would be quicker; the design would be more rapid. There is no guarantee we won't get sued again, but we see less risk this way. We will know 30 days after we get our discharge permit whether or not we are being sued again. By going to FC, there may be the option to pick up new customers, which could lower rates for Gateway customers. GGWSD won't be able to pick up new customers without FCWSD Board approval.*

**Does the Board have a recommendation?**

*MD: Not at this time. Stahly is submitting the PER amendment which will include their opinion and community input. The Board will use that along with community feedback to make a decision. Community feedback will be one of the weighing factors on the Board's decision.*

**If you get your SBR discharge permit, how long is it good for?**

*MD: It needs to be renewed every 5 years*

**Don't you eliminate your operations costs by hooking up to FC?**

*MD: If we own our own plant we call it operations costs; if we hook up to FC they call it a monthly charge, but basically it's the same.*

**How will the decision from the judge on Loseff's development impact our sewer system?**

*MD: That subdivision was never part of our sewer project, it was never in our district. The subdivision will impact the whole community, but won't impact the sewer system unless the developer wants to work with the district, and we will certainly be open to that.*

**Any speculation on other developers joining in on the pipeline between here and FCWSD, and paying off some infrastructure costs? How many years would they have to reimburse back to Gateway project if they did that? Would that have more potential to reduce our rates than if we built our own system?**

*MD: I want to explore all of those options. The FCWSD board is interested in an agreement like the Manhattan/Churchill agreement, which states that Churchill can't add any out-of-district customers without Manhattan's approval. Our agreement would have a similar provision. GGWSD would work with FCWSD regarding capacity for a new customer. Secondly, there would be a connection charge when a new developer or customer hooks up (there are no hook-up charges for everyone currently in the District; their hook up costs are being paid for by the project).*