



City of Reedsburg
134 South Locust Street, P.O. Box 490
Reedsburg, WI 53959
Ph. 608-524-6404 Fax. 608-524-8458
www.reedsburgwi.gov

Public Works Committee Agenda
May 19, 2021
Reedsburg City Hall, 134 S Locust Street
5:30 PM

DUE TO THE RESTRICTIONS CAUSED BY THE COVID-19 PANDEMIC, SOME VOTING MEMBERS MAY BE PRESENT VIA TELECONFERENCE OR VIDEO CONFERENCE, AS PROVIDED BY THE RECOMMENDATIONS OF THE WISCONSIN DEPARTMENT OF JUSTICE. [HTTPS://WWW.DOJ.STATE.WI.US/NEWS-RELEASES/OFFICE-OPEN-GOVERNMENT-ADVISORY-CORONAVIRUS-DISEASE-2019-COVID-19-AND-OPEN-MEETINGS](https://www.doj.state.wi.us/news-releases/office-open-government-advisory-coronavirus-disease-2019-covid-19-and-open-meetings)

NOTICE IS HEREBY GIVEN THAT A MAJORITY OF THE MEMBERS OF THE COMMON COUNCIL MAY ATTEND THIS MEETING TO GATHER INFORMATION ABOUT A SUBJECT OVER WHICH THE COMMON COUNCIL HAS DECISION-MAKING AUTHORITY. IF A QUORUM OF THE COMMON COUNCIL ATTENDS THIS MEETING, NO ACTION WILL BE TAKEN BY THE COMMON COUNCIL AT THIS MEETING.

CALL TO ORDER

APPROVAL OF MINUTES

I. APPROVE MINUTES FOR THE MEETING HELD ON APRIL 21, 2021:

THE COMMITTEE WILL RECEIVE INFORMATION ON NON-AGENDA TOPICS BROUGHT BEFORE THE COMMITTEE BY MEMBERS OF THE PUBLIC. THE COMMITTEE WILL NOT DISCUSS THESE TOPICS, AND WILL NOT TAKE ACTION ON ANY OF THEM AT THIS MEETING

I. GENERAL BUSINESS:

- A. Consideration of WWTP upgrade options.
- B. Consideration of CMAR for WWTP and recommend resolution.

II. ADJOURN:



The City of Reedsburg does not discriminate on the basis of disability in the admissions or access to, or treatment of or employment in, its programs or activities. Disability-related aids or services, including printed information in alternate formats, to enable persons with disabilities to participate in public meetings and programs are available by calling (608) 524-6404. To be able to meet the needs of a request for a different format contact the City Clerk-Treasurer at 134 S. Locust Street, Reedsburg, WI at least 48 hours prior to the commencement of the meeting so that any necessary arrangements can be made to accommodate each request.

Reedsburg, WI
April 21, 2021

The Public Works Committee for the City of Reedsburg convened for a regular meeting, on April 21, 2021 at 5:30 p.m. at the Reedsburg Center Conference Room with the following members present:

Members Present: Dave Knudsen, Craig Braunschweig, Charlie Backeberg and Phil Peterson

Also Present: Steven Zibell and Tim Becker

Motion by Peterson seconded by Backeberg to approve the minutes from March 17, 2021 meeting.

Becker discussed the City owned Cemetery and that we may need to take over management since the existing Cemetery Association would like to disband at the end of this year. Becker stated the City would probably need to budget another \$40,000 on top of the existing \$20,000 we already budget. This would be used for lawn mowing, general maintenance and wages. Becker stated we would keep the current part time employees for mowing and general operations. Becker stated he would like to see the operation fall under Public Works since Public Works already plows and maintains the driveways. Motion by Backeberg seconded by Peterson to recommend to Council taking over the Greenwood Cemetery under Public Works.

Motion Carried

Zibell discussed the Block Grant application for N. Oak Street, Third Street, Laurel Street and the central ditch. Zibell stated if this grant is approved the project would be completed in the summer of 2022. Zibell stated the grant is a 2/3rd grant so every dollar the City puts in the Grant will put in two dollars up to a million dollar grant amount. Motion by Peterson seconded by Backeberg to proceed with the grant application.

Motion Carried

Zibell gave a general update on current projects.

No Action

Motion by Backeberg seconded by Braunschweig to adjourn.

Motion Carried

Adjourned at 6:20 p.m.
Respectively Submitted,

Steven T. Zibell, Public Works Director/City Engineer
City of Reedsburg

City of Reedsburg
WWTP Facilities Plan
Discussion Topics
May 19, 2021

1. Projections Refresher
2. Site and Outfall Locations
3. Effluent Limits Request
4. Alternatives Analysis
 - a. Alternatives
 - b. Capital Costs
 - c. Cost Effectiveness Evaluation (Net Present Worth)
 - d. Other Considerations
 - e. Recommendations/Approach Discussion
5. Next Steps

Reedsburg WWTF
Future Loadings Projections

Peaking Factors:

2040 Population Projection = 12,800

Flow		BOD		SS		TKN		Phosphorus	
Max Week PF	153%	Max Week PF	139%	Max Week PF	160%	Max Week PF		Max Week PF	152%
Max Day PF	204%	Max Day PF	211%	Max Day PF	382%	Max Day PF		Max Day PF	307%

	Data Base		Flow			BOD			SS			TKN			Phosphorus		
	Quantity	Units	Rate	Flow Units	Flow	Rate	Units	Loading	Rate	Units	Loading	Rate	Units	Loading	Rate	Units	Loading
					mgd			lbs/day			lbs/day			lbs/day			lbs/day
1	City Base Loadings																
	9,639	capita															
			37	gpcd	0.352												
			41	gpcd	0.396												
	376	cust.															
			552	gpcd	0.208												
			609	gpcd	0.229												
	47	cust.															
			1,057	gpcd	0.050												
			1,740	gpcd	0.082												
	36	cust.															
			4,540	gpcd	0.163												
			5,965	gpcd	0.215												
					0.773			2,806			3,081	40	mg/l	258			57
					0.921			3,104			3,579			307			66
2	Future City Increases																
	3,161	capita															
			37	gpcd	0.116	0.20	ppcd	632	0.23	ppcd	727	40	mg/l	39	7	mg/l	7
			41	gpcd	0.130	0.20	ppcd	632	0.25	ppcd	790	40	mg/l	43	7	mg/l	8
	76	cust															
			552	gpcd	0.042	250	mg/l	88	250	mg/l	88	40	mg/l	14	7	mg/l	2
			609	gpcd	0.046	250	mg/l	96	250	mg/l	96	40	mg/l	15	7	mg/l	3
	10	cust															
			1,057	gpcd	0.011	250	mg/l	22	250	mg/l	22	40	mg/l	4	7	mg/l	1
			1,740	gpcd	0.017	250	mg/l	36	250	mg/l	36	40	mg/l	6	7	mg/l	1
	8	cust															
			4,540	gpcd	0.036	250	mg/l	76	250	mg/l	76	40	mg/l	12	7	mg/l	2
			5,965	gpcd	0.048	250	mg/l	100	250	mg/l	100	40	mg/l	16	7	mg/l	3
					0.204			817			912			68			12
					0.241			864			1,023			80			14
3	Additional Contributors																
					0.008	3,640	mg/l	243	20,000	mg/l	1,334	400	mg/l	27	180	mg/l	12
					0.0005	2,000	mg/l	8	10,000	mg/l	42	200	mg/l	1	100	mg/l	0
					0.018	600	mg/l	88	1,000	mg/l	146	200	mg/l	29	24	mg/l	4
					0.026			339			1,522			57			16
4	Major Industrial Contributions																
					0.128			1,745			1,528			135			39
					0.188	138%		2,403			2,868			186			53
					0.117			3,581			1,033			47			56
					0.131	121%		4,350			1,357			57			65
					0.204			1,217			315			50			60
					0.314	197%		2,393			833			98			148

Reedsburg WWTF
Future Loadings Projections

Peaking Factors:

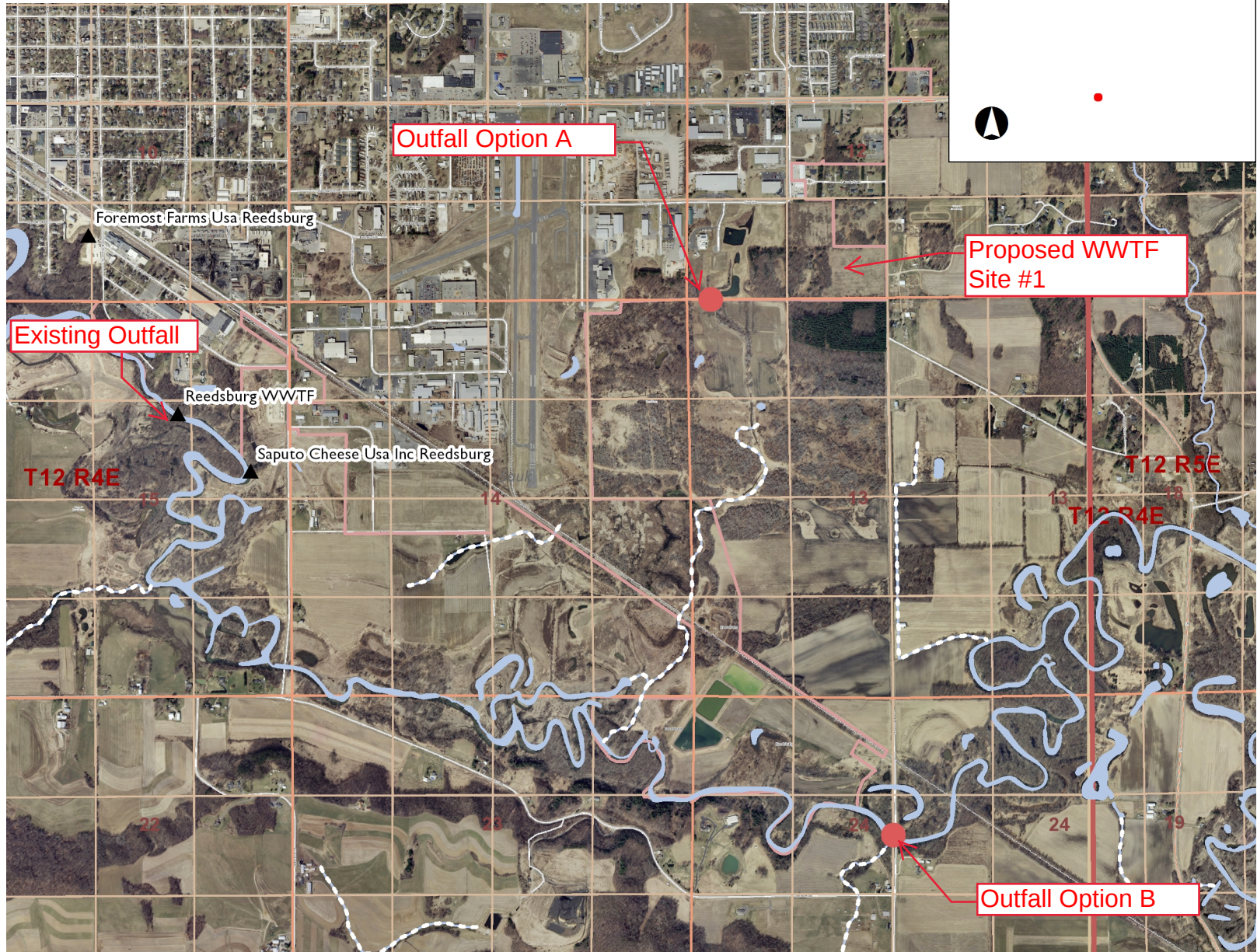
2040 Population Projection = 12,800

Flow		BOD		SS		TKN		Phosphorus	
Max Week PF	153%	Max Week PF	139%	Max Week PF	160%	Max Week PF		Max Week PF	152%
Max Day PF	204%	Max Day PF	211%	Max Day PF	382%	Max Day PF		Max Day PF	307%

	Data Base		Flow		BOD		SS		TKN		Phosphorus	
	Quantity	Units	Rate	Flow	Rate	Units	Rate	Units	Rate	Units	Rate	Units
Unallocated Industrial	25%											
Annual	of total industrial			0.112				719				39
Max Month				0.158				1,264				67
Industrial Annual				0.561				3,595				194
Industrial Max Month				0.791				6,321				333
5 Clear Water Infiltration/Inflow												
Existing Dry Weather Infiltration				0.870								
Existing Max Month I/I				2.087								
Future Max Month I/I	3,161	capita	40	0.126								
Proj. Max Month I/I Reduction												
Daily Wet Weather Inflow				3.772								
Instantaneous Inflow				7.090								
Maximum Weekly				2.932								
Annual Average				1.216								
6 Loadings Projections												
Average Dry Weather				2.561								
Average Annual				2.907		12,141		9,110		673		279
Maximum Month				4.192		15,741		12,444		871		429
Maximum Weekly				5.435		16,816		14,607		1,012		424
Maximum Daily				7.059		25,616		34,804		2,018		854
Peak Hourly				10.377								
7 Start Up			7202	gpm								
				3.825		14,877		11,422		791		415
Rated Facility Capacity				2.646		6,331		5,048		815		205



Reedsburg WWTF Proposed Outfall Locations



Legend

- ▲ Surface Water Outfalls
- Township
- Section
- Quarter-Quarter
- County Boundary
- Cities, Towns & Villages
 - City
 - Village
 - Civil Town
- Municipality
- State Boundaries
- County Boundaries
- Major Roads
 - Interstate Highway
 - State Highway
 - US Highway
- County and Local Roads
 - County HWY
 - Local Road
- + Railroads
- ▨ Tribal Lands
- Rivers and Streams
- Intermittent Streams
- Lakes and Open water
- Index to EN_Image_Basemap_Leaf_Off

0.8 0 0.38 0.8 Miles

NAD_1983_HARN_Wisconsin_TM

1: 23,760

DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made regarding accuracy, applicability for a particular use, completeness, or legality of the information depicted on this map. For more information, see the DNR Legal Notices web page: <http://dnr.wi.gov/legal/>

Notes



Reedsburg WWTF Proposed Outfall Locations



Legend

- ▲ Surface Water Outfalls
- Township
- Section
- Quarter-Quarter
- County Boundary
- Cities, Towns & Villages
 - City
 - Village
 - Civil Town
- Municipality
- State Boundaries
- County Boundaries
- Major Roads
 - Interstate Highway
 - State Highway
 - US Highway
- County and Local Roads
 - County HWY
 - Local Road
- + Railroads
- ▨ Tribal Lands
- Rivers and Streams
- Intermittent Streams
- Lakes and Open water
- Index to EN_Image_Basemap_Leaf_Off

0.5 0 0.25 0.5 Miles

NAD_1983_HARN_Wisconsin_TM

1: 15,840

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Notes

City of Reedsburg
WWTP Facilities Plan
Summary of Changes - Effluent Limits Request
May 11, 2021

Existing Site

BOD & TSS:	No change
Ammonia:	No change
Phosphorus:	No change*
Mercury	No change

Site #1, Outfall A

Mercury	No longer qualified for mercury variance, site deemed infeasible
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Site #1, Outfall B

BOD:	Slight lowering of weekly limits**
TSS:	No change
Ammonia:	Slight lowering of limits**
Phosphorus:	No change*
Mercury	No change

Site #2, Outfall C

BOD:	Significant lowering of weekly limits**
TSS:	No change
Ammonia:	Moderate lowering of limits**
Phosphorus:	No change*
Mercury	Additional testing required to confirm upstream water quality not impaired by additional discharge. May result in this site being infeasible.

*Phosphorus limits based upon TMDL allocations, which will become more restrictive with the passing of the site-specific criteria limits in the future. This applies regardless of site.

**Based upon DNR estimated 1/3 assimilative capacity. Stringency of limits could be reduced if antidegradation evaluation is completed.

MEMORANDUM

Date: May 19, 2021

To: City of Reedsburg
Public Works Committee

From: Ben Heidemann, P.E. – Vice President
Town and Country Engineering

Subject: Reedsburg WWTF Facilities Plan
Summary of Alternatives

The City of Reedsburg is in the process of completing a Facilities Planning effort for their wastewater treatment facility to address capacity and flooding concerns. This memo serves as a general summary of the alternatives being considered for the facilities plan. Attached to this memo is a bulleted list outlining the scope of each alternative.

Alternative 1 – Upgrade Existing Facility

Design WWTF Capacity: 4.2 MGD, 15,750 lbs/day BOD

Alternatives 1A and 1B would utilize the existing facility. The existing facility needs additional capacity to be able to treat the projected loadings that it will be experiencing. Alternative 1A would upgrade/replace the majority the existing equipment/processes and add several new processes to achieve the required flow and BOD capacity. The sludge produced during the treatment process would remain being treated to a Class A biosolid via lime stabilization and an off-site sludge storage building would be built near the new public works building. Alternative 1B would require similar WWTF improvements to Alternative 1A, however sludge would be treated to Class A biosolids via temperature phased anaerobic digestion (TPAD).

Alternative 2 – Upgrade Existing Facility and Industrial Pre-treatment

Design WWTF Capacity: 4.2 MGD, 8,500 lbs/day BOD

Design Pretreatment Capacity: 0.6 MGD, 8,000 lbs/day BOD

Alternative 2 would be similar to Alternative 1A, requiring upgrades to the existing facility to achieve an increased flow and BOD capacity, however the BOD capacity improvements would be limited as industrial pre-treatment would also be constructed to treat Saputo and Bioriginal to a domestic strength waste. For the purposes of this plan it has been assumed that the pre-treatment facilities would be built near the new public works facilities. Industrial waste would undergo pre-treatment and the effluent would be discharged to the existing treatment via the existing gravity sanitary sewer. Sludge would be produced at the industrial pre-treatment site, but because there would be no human waste being treated; the sludge would not need treatment. Improvements to the existing WWTP would be limited as compared with Alternative 1. A sludge storage building would also be built at the pretreatment site to provide additional storage for the municipal biosolids.

Alternative 3 – New WWTF

Design WWTF Capacity: 4.2 MGD, 15,750 lbs/day BOD

Alternatives 3A, 3B and 3C considers construction of a new wastewater treatment facility to treat 100% of the wastewater generated within the City. For the purposes of this evaluation the dog park property, located adjacent to the public works garage, has been assumed as the new site. Should the City decide to move forward with a new facility a more formal siting investigation could be pursued. A new lift station would be built near the existing plant (SE of Nuk USA) with a dual

force main extending to the location of the new WWTF. The new treatment processes are outlined for each of three options below. Effluent from the plant would discharge to the Baraboo River, with the currently assumed routing following S Golf Course Road. For all alternatives Class A sludge treatment is assumed.

Alternative 3A would utilize conventional activated sludge treatment and Class A lime stabilization.

Alternative 3B would utilize conventional activated sludge treatment and Class A temperature phased anaerobic digestion.

Alternative 3C would utilize conventional activated sludge treatment, class B mesophilic digestion, and Class A sludge drying.

Alternative 4– New WWTF with Industrial Pre-treatment

Design WWTF Capacity: 4.2 MGD, 8,500 lbs/day BOD

Design Pretreatment Capacity: 0.6 MGD, 8,000 lbs/day BOD

Alternatives 4A, 4B, and 4C would be similar to their Alternative 3 counterparts, however; the new treatment plant would be designed for a hydraulic capacity of 4.2 MGD and a BOD capacity of 8,000 lbs/day and a pretreatment facility (similar to Alternative 2) would be constructed for Saputo and Bioriginal waste. One exception to the similarity to Alternative 3 would be Alternative 4A, which would not utilize conventional activated sludge treatment, and instead use an oxidation ditch.

Reedsburg Facilities Plan Alternatives

1A: Existing Site Upgrade

- Average Flow: 4.2 MGD
- Peak Flow: 10 MGD
- Average BOD Loading: 15,750 lbs/day

In addition to the existing site facilities, the following will be added:

- Primary filters
- Chemically enhanced primary treatment
- Upgrade activated sludge to IFAS
- Tertiary disc filtration for phosphorus removal
- UV treatment
- Effluent pumping
- DAF WAS thickening
- Additional centrifuge
- Additional Bioset in Sludge Bay
- Off-site sludge storage
- Upgrade Zinga lift station

1B: Existing Site plus Class A TPAD

- Average Flow: 4.2 MGD
- Peak Flow: 10 MGD
- Average BOD Loading: 15,750 lbs/day

In addition to the existing site facilities, the following will be added:

- Primary filters
- Upgrade activated sludge to IFAS
- Chemically enhanced primary treatment
- Tertiary disc filtration for phosphorus removal
- UV treatment
- Effluent pumping
- DAF WAS thickening
- Additional Centrifuge
- Repurpose sludge and centrate storage to thermophilic digesters, add mesophilic digester
- New sludge processing building with sludge batch tanks, sludge pumping, digester heating, and biogas utilization
- New centrate storage
- Off-site sludge storage
- Upgrade Zinga lift station

2: Existing Site plus Industrial Pre-treatment at New Site

- Average Flow: 4.2 MGD
- Peak Flow: 10 MGD
- Average BOD Loading: 8,500 lbs/day

In addition to the existing site facilities, the following will be added:

- Primary filters
- Additional aeration basin
- Tertiary disc filtration for phosphorus removal

- UV treatment
- Effluent pumping
- DAF WAS thickening
- Off-site sludge storage

New Site Industrial Pretreatment:

- Average Flow: 0.6 MGD
 - Average BOD Loading: 8,000 lbs/day
-
- Saputo & Bioriginal pump station to new site
 - Industrial equalization tank
 - DAF primary treatment
 - MBBR biological treatment
 - Clarification
 - Anaerobic treatment of biosolids
 - Centrifuge dewatering of industrial waste
 - Sludge storage for municipal and industrial waste
 - Upgrade Zinga lift station

3A: New Site: Conventional Treatment plus Class A Lime Stabilization

- Average Flow: 4.2 MGD
- Peak Flow: 10 MGD
- Average BOD Loading: 15,750 lbs/day

To convey flow to the new site:

- New pump station near Nuk
- (2) 18" FM

The facilities at the new site will consist of:

- Headworks (screening and grit removal)
- Selector basins
- Aeration basins
- Blower building
- Final clarifiers
- Tertiary disc filtration for phosphorus removal
- UV Treatment
- DAF WAS thickening
- Sludge Holding
- Centrifuge
- Centrate holding
- Bioset/lime stabilization
- Sludge storage
- Upgrade Zinga lift station

3B: New Site: Conventional Treatment plus Class A TPAD

- Average Flow: 4.2 MGD
- Peak Flow: 10 MGD
- Average BOD Loading: 15,750 lbs/day

To convey flow to the new site:

- New pump station near Nuk
- (2) 18" FM

The facilities at the new site will consist of:

- Headworks (screening and grit removal)
- Primary clarifiers
- Selector basins
- Aeration basins
- Blower building
- Final clarifiers
- Tertiary disc filtration for phosphorus removal
- UV Treatment
- DAF WAS thickening
- Solids Treatment Building with batch tank, heat exchangers, thermophilic and mesophilic digesters, and centrifuge
- Centrate Storage
- Sludge storage
- Upgrade Zinga lift station
- Beneficial gas utilization (enhancement)
- Sidestream P treatment (enhancement)

3C: New Site: Conventional Treatment plus Class B Digestion plus Class A Drying

- Average Flow: 4.2 MGD
- Peak Flow: 10 MGD
- Average BOD Loading: 15,750 lbs/day

To convey flow to the new site:

- New pump station near Nuk
- (2) 18" FM

The facilities at the new site will consist of:

- Headworks (screening and grit removal)
- Primary clarifiers
- Selector basins
- Aeration basins
- Blower building
- Final clarifiers
- Tertiary disc filtration for phosphorus removal
- UV Treatment
- DAF WAS thickening
- Solids treatment building with heat exchangers, mesophilic digesters, sludge storage and centrifuge.
- Centrate Storage
- Class A sludge drying
- Silo biosolids storage
- Upgrade Zinga lift station
- Beneficial gas utilization (enhancement)
- Sidestream P treatment (enhancement)

4A: New Site: Ditch plus Lime with Industrial Pretreatment

- Average Flow: 4.2 MGD
- Peak Flow: 10 MGD
- Average BOD Loading: 8,500 lbs/day

To convey flow to the new site:

- New pump station near Nuk
- (2) 18" FM

The municipal facilities at the new site will consist of:

- Headworks (screening and grit removal)
- Oxidation ditch activated sludge
- Final clarifiers
- Tertiary disc filtration for phosphorus removal
- UV Treatment
- DAF WAS thickening
- Sludge holding
- Centrifuge
- Centrate holding
- Bioset/lime stabilization
- Sludge storage for municipal and industrial waste

New Site Industrial Pretreatment:

- Average Flow: 0.6 MGD
- Average BOD Loading: 8,000 lbs/day
- Saputo & Bioriginal pump station to new site
- Industrial equalization tank
- DAF primary treatment
- MBBR biological treatment
- Clarification
- Anaerobic treatment of biosolids
- Centrifuge dewatering of industrial waste
- Sludge storage for municipal and industrial waste

4B: New Site: Conventional plus TPAD with Industrial Pretreatment

- Average Flow: 4.2 MGD
- Peak Flow: 10 MGD
- Average BOD Loading: 8,500 lbs/day

To convey flow to the new site:

- New pump station near Nuk
- (2) 18" FM

The facilities at the new site will consist of:

- Headworks (screening and grit removal)
- Primary clarifiers
- Selector basins
- Aeration basins
- Blower building
- Final clarifiers
- Tertiary disc filtration for phosphorus removal
- UV treatment
- DAF WAS thickening
- Solids treatment building with batch tank, heat exchangers, thermophilic and mesophilic digesters, and centrifuge
- Centrate storage
- Sludge storage for municipal and industrial waste

New Site Industrial Pretreatment:

- Average Flow: 0.6 MGD
- Average BOD Loading: 8,000 lbs/day
- Saputo & Bioriginal pump station to new site
- Industrial equalization tank
- DAF primary treatment
- MBBR biological treatment
- Clarification
- Anaerobic treatment of biosolids
- Centrifuge dewatering of industrial waste
- Sludge storage for municipal and industrial waste

4C: New Site: Conventional plus Class B Meso plus Drying with Industrial Pretreatment

- Average Flow: 4.2 MGD
- Peak Flow: 10 MGD
- Average BOD Loading: 8,500 lbs/day

To convey flow to the new site:

- Pump Station at Nuk
- (2) 18" FM

The facilities at the new site will consist of:

- Headworks (screening and grit removal)
- Primary clarifiers
- Selector basins
- Aeration basins
- Blower building
- Final clarifiers
- Tertiary disc filtration for phosphorus removal
- UV Treatment
- DAF WAS thickening
- Solids treatment building with heat exchangers, mesophilic digesters, sludge storage and centrifuge.
- Centrate Storage
- Class A sludge drying
- Silo biosolids storage
- Upgrade Zinga lift station
- Beneficial gas utilization (enhancement)

New Site Industrial Pretreatment:

- Average Flow: 0.6 MGD
- Average BOD Loading: 8,000 lbs/day
- Saputo & Bioriginal pump station to new site
- Industrial equalization tank
- DAF primary treatment
- MBBR biological treatment
- Clarification
- Anaerobic treatment of biosolids
- Centrifuge dewatering of industrial waste
- Sludge storage for municipal and industrial waste

City of Reedsburg
 WWTP Facilities Plan
Alternatives Capital Cost Summary

Alternative Capital Costs		
ALT	DESCRIPTION	Cost Estimate
<u>1A</u>	Upgrade Existing + Lime	\$ 43,080,000
<u>1B</u>	Upgrade Existing + TPAD	\$ 52,900,000
<u>2</u>	Upgrade Existing with Industrial Pre-Treatment	\$ 53,560,000
<u>3A</u>	Conventional Treatment + Lime	\$ 66,350,000
<u>3B</u>	Conventional Treatment + TPAD	\$ 81,260,000
<u>3C</u>	Conventional + Class B Meso + Drying	\$ 85,040,000
<u>4A</u>	Industrial Pre-Treatment + Ditch + Lime	\$ 80,680,000
<u>4B</u>	Industrial Pre-Treatment + Conventional + TPAD	\$ 89,950,000
<u>4C</u>	Industrial Pre-Treatment + Conventional + Class B Meso + Drying	\$ 93,690,000

Alternative Capital Costs by Component											
Number	Description	Alternative									AVG \$
		1A	1B	2	3A	3B	3C	4A	4B	4C	
1.0	Sitework at Existing Site	\$ 2,014,312	\$ 2,145,651	\$ 2,014,312							\$ 2,058,092
1.1	Sitework for Off Site Sludge Storage	\$ 430,444	\$ 430,444								\$ 430,444
1.2	Sitework at New WWTP				\$ 4,190,633	\$ 4,697,513	\$ 4,712,513	\$ 4,687,283	\$ 5,254,883	\$ 5,269,883	\$ 4,802,118
1.3	Sitework at Existing Site + DEMO				\$ 770,860	\$ 770,860	\$ 770,860	\$ 770,860	\$ 770,860	\$ 770,860	\$ 770,860
1.4	Sitework at Existing Site for New Main LS				\$ 1,178,576	\$ 1,178,576	\$ 1,178,576	\$ 1,178,576	\$ 1,178,576	\$ 1,178,576	\$ 1,178,576
1.5	Sitework at Off Site Industrial Pretreatment			\$ 916,975							\$ 916,975
2.0	Existing Site Process Upgrades	\$ 8,703,036	\$ 7,593,553	\$ 7,120,949							\$ 7,805,846
3.0	18" Forcemain From New Main LS to New WWTP				\$ 3,256,111	\$ 3,256,111	\$ 3,256,111	\$ 3,256,111	\$ 3,256,111	\$ 3,256,111	\$ 3,256,111
5.0	Construct SALSNEs Filter Room	\$ 2,154,204	\$ 2,154,204	\$ 2,154,204							\$ 2,154,204
6.0	Add IFAS Tank onto Existing STR. 35	\$ 2,218,493	\$ 2,218,493								\$ 2,218,493
6.1	Add 4th Aeration Basin to Existing STR. 35			\$ 905,599							\$ 905,599
7.0	Construct Disc Filter Building	\$ 2,764,519	\$ 2,764,519	\$ 2,764,519							\$ 2,764,519
7.1	NEW Disc Filter and UV Treatment Building				\$ 3,146,436	\$ 3,146,436	\$ 3,146,436	\$ 3,146,436	\$ 3,146,436	\$ 3,146,436	\$ 3,146,436
10.0	UV and Effluent Pumping	\$ 1,041,043	\$ 1,041,043	\$ 1,041,043							\$ 1,041,043
15.0	Off Site Sludge Storage	\$ 1,299,710	\$ 1,117,527	\$ 706,427							\$ 1,041,221
15.1	Sludge Storage				\$ 1,163,217	\$ 998,391		\$ 909,130	\$ 844,330	\$ 706,427	\$ 924,299
15.2	Sludge Storage Silos						\$ 1,750,278			\$ 1,530,278	\$ 1,640,278
18.0	Sludge Treatment Building	\$ 2,647,472	\$ 5,328,992	\$ 2,587,472	\$ 9,755,133	\$ 8,045,233	\$ 10,475,927	\$ 9,625,133	\$ 7,915,233	\$ 10,425,927	\$ 7,422,947
19.0	NEW Mesophilic Digester		\$ 2,244,327			\$ 3,015,092	\$ 3,827,504		\$ 3,249,791	\$ 3,036,377	\$ 3,074,618
19.1	NEW Thermophilic Digester					\$ 1,590,802			\$ 1,413,357		\$ 1,502,080
20.0	NEW Industrial Pre Treatment			\$ 9,867,635				\$ 9,957,635	\$ 9,957,635	\$ 9,957,635	\$ 9,935,135
21.0	NEW Main Lift Station				\$ 4,085,296	\$ 4,085,296	\$ 4,085,296	\$ 4,085,296	\$ 4,085,296	\$ 4,085,296	\$ 4,085,296
22.0	NEW On-Site Lift Station			\$ 162,374	\$ 162,374	\$ 162,374	\$ 162,374	\$ 162,374	\$ 162,374	\$ 162,374	\$ 162,374
25.0	NEW Headworks Building (single story)				\$ 2,012,233			\$ 2,012,233			\$ 2,012,233
25.1	NEW Headworks Building (w/basement)					\$ 2,659,305	\$ 2,659,305		\$ 2,559,305	\$ 2,659,305	\$ 2,634,305
26.0	NEW Selector Tanks & Aeration Basins				\$ 3,906,374	\$ 3,070,170	\$ 3,070,170		\$ 1,938,565	\$ 1,938,565	\$ 2,784,769
27.0	NEW Blower Building				\$ 1,345,077	\$ 1,245,077	\$ 1,245,077		\$ 1,345,077	\$ 1,345,077	\$ 1,305,077
28.0	NEW Final Clarifiers				\$ 3,197,838	\$ 3,197,838	\$ 3,197,838	\$ 3,197,838	\$ 3,197,838	\$ 3,197,838	\$ 3,197,838
28.1	NEW Primary Clarifiers					\$ 2,014,329	\$ 2,014,329		\$ 2,014,329	\$ 2,014,329	\$ 2,014,329
29.0	NEW Oxidation Ditch							\$ 4,970,733			\$ 4,970,733
30.0	NEW Waste Receiving Station				\$ 689,797	\$ 689,797	\$ 689,797	\$ 689,797	\$ 689,797	\$ 689,797	\$ 689,797
31.0	48" Plant Effluent				\$ 1,786,500	\$ 1,786,500	\$ 1,786,500	\$ 1,786,500	\$ 1,786,500	\$ 1,786,500	\$ 1,786,500
32.0	Side Stream Phosphorus Removal					\$ 3,097,449	\$ 3,097,449				\$ 3,097,449
33.0	New COGEN Building		\$ 1,579,548			\$ 1,579,548	\$ 1,579,548		\$ 1,579,548	\$ 1,579,548	\$ 1,579,548
34.0	New Admin Building				\$ 1,254,035	\$ 1,254,035	\$ 1,254,035	\$ 1,254,035	\$ 1,254,035	\$ 1,254,035	\$ 1,254,035
34.1	New Service Garage				\$ 1,245,160	\$ 1,245,160	\$ 1,245,160	\$ 1,245,160	\$ 1,245,160	\$ 1,245,160	\$ 1,245,160
35.0	Zinga LS Upgrades	\$ 170,400	\$ 170,400	\$ 170,400	\$ 170,400	\$ 170,400	\$ 170,400				\$ 170,400
36.0	Generators (note industrial includes generators)				\$ 351,667	\$ 351,667	\$ 351,667	\$ -	\$ -	\$ -	\$ 351,667
	Subtotal:	\$ 23,443,634	\$ 28,788,701	\$ 30,411,908	\$ 43,667,716	\$ 53,307,957	\$ 55,727,149	\$ 52,935,129	\$ 58,845,035	\$ 61,236,333	\$ 45,373,729
	Electrical	\$ 4,688,727	\$ 5,757,740	\$ 5,300,101	\$ 6,810,780	\$ 8,546,023	\$ 8,981,478	\$ 8,304,872	\$ 9,368,655	\$ 9,799,089	\$ 7,506,385
	Contractor Margin	\$ 4,501,178	\$ 5,527,431	\$ 4,864,315	\$ 3,571,876	\$ 4,481,914	\$ 4,710,286	\$ 4,355,444	\$ 4,913,339	\$ 5,139,078	\$ 4,673,873
	Contingencies	\$ 4,895,031	\$ 6,011,081	\$ 6,086,449	\$ 5,405,037	\$ 6,633,589	\$ 6,941,891	\$ 6,559,545	\$ 7,312,703	\$ 7,617,450	\$ 6,384,753
	Engineering, Admin, Legal	\$ 4,242,360	\$ 5,209,603	\$ 5,274,922	\$ 5,405,037	\$ 6,633,589	\$ 6,941,891	\$ 6,559,545	\$ 7,312,703	\$ 7,617,450	\$ 6,133,011
	Resident Observation	\$ 1,305,342	\$ 1,602,955	\$ 1,623,053	\$ 1,486,385	\$ 1,658,397	\$ 1,735,473	\$ 1,967,863	\$ 2,193,811	\$ 2,285,235	\$ 1,762,057
	Total:	\$ 43,080,000	\$ 52,900,000	\$ 53,560,000	\$ 66,350,000	\$ 81,260,000	\$ 85,040,000	\$ 80,680,000	\$ 89,950,000	\$ 93,690,000	\$ 71,800,000

City of Reedsburg
 WWTP Facilities Planning
Present Worth Analysis

Net Present Worth Summary - Base							Net Present Worth Summary - with Enhancements		
Alternatives	Capital Cost Estimate	Startup O&M Estimate	Design O&M Estimate	Replacement Fund Costs	Salvage Costs	Base Total Present Worth	Enhancements ¹	Additional Capital Cost	Total Present Worth
1A	\$43,080,000	\$1,646,900	\$2,271,400	\$390,500	\$4,351,700	\$78,455,000			\$78,455,000
1B	\$51,320,000	\$1,512,900	\$1,942,800	\$409,200	\$5,589,200	\$60,992,000	Cogen	\$1,580,000	\$89,327,000
2	\$53,560,000	\$1,747,900	\$2,091,600	\$487,500	\$6,551,800	\$91,293,000			\$91,293,000
3A	\$66,350,000	\$1,692,800	\$2,145,700	\$325,800	\$15,276,500	\$105,894,000			\$105,894,000
3B	\$76,580,000	\$1,562,300	\$1,905,700	\$345,400	\$16,616,500	\$116,770,000	Cogen, Sidestream	\$4,680,000	\$122,188,000
3C	\$80,360,000	\$1,735,100	\$2,143,500	\$413,700	\$16,080,000	\$121,514,000	Cogen, Sidestream	\$4,680,000	\$126,932,000
4A	\$80,680,000	\$1,745,100	\$2,119,800	\$465,700	\$18,483,600	\$123,655,000			\$123,655,000
4B	\$88,370,000	\$1,706,700	\$2,004,800	\$518,100	\$18,862,100	\$132,142,000	Cogen	\$1,580,000	\$134,231,000
4C	\$92,110,000	\$1,805,100	\$2,180,600	\$598,400	\$18,552,700	\$137,011,000	Cogen	\$1,580,000	\$139,101,000

¹ Enhancements include a Cogeneration Facility for biogas utilization and Sidestream Treatment with sludge dewatering for phosphorus removal/recovery

Enhancements	Capital Cost Estimate	Startup O&M Estimate	Design O&M Estimate	Replacement Fund Costs	Salvage Costs
Sidestream	\$3,100,000	No Change	No Change	\$3,421	\$389,235
Cogen Building	\$1,580,000	No Change	No Change	\$27,191	\$304,292

City of Reedsburg
WWTP Facilities Plan
Alternatives Analysis – Other Considerations
May 19, 2021

Alternative 1:

- Very crowded site with no future expansion capacity
- High construction risk associated with tight construction with significant phasing
- Flood risk remains high

Alternative 2:

- Fewer improvements to site compared with Alternative 1
- Still high construction risk associated with tight construction and significant phasing
- Flood risk remains high
- Staff at two sites (WWTF and Industrial/sludge)

Alternative 3:

- Requires site acquisition for pump station and WWTF site (potentially)
- Biosolids considerations
- Greatly reduces flood risk (pump station likely still located in flood plain, but constructed significantly above flood elevation)
- Large expansion potential

Alternative 4:

- Requires site acquisition for pump station and WWTF site (potentially)
- Operations of more processes (WWTF plus Industrial WWTF)
- Greatly reduces flood risk (pump station likely still located in flood plain, but constructed significantly above flood elevation)
- Large expansion potential

Alternative 3 and 4 Sludge Treatment:

- Class A Lime Stabilization
 - High O&M cost associated with lime and sludge production (inflation not included in NPW analysis)
 - Larger quantity of sludge if PFAS are elevated significantly above standards
 - Simple treatment process
 - High value to farmers for lime content
- Class A Temperature Phased Anaerobic Digestion
 - More involved treatment process with potential for biological upset
 - Potential concentration of PFAS (if concentration is near standards)
 - 50+% reduction in biosolids volume
 - Potential for beneficial re-use of biogas
- Class A Sludge Drying
 - Moderately involved treatment process with involved mechanical equipment
 - Energy intensive
 - Explosion potential of dust
 - Higher potential for concentration of PFAS (if concentration is near standards)
 - 90% reduction of sludge volume
 - Moderate potential for beneficial re-use of biogas (may be limited as both digestion and drying require biogas)

RESOLUTION
CMAR – Wastewater Treatment Plant

FILE NO. 4439-21

WHEREAS, the City of Reedsburg operates a Wastewater Treatment Facility; and

WHEREAS, the Compliance Maintenance Annual Report was reviewed by the City Council and attached to this Resolution; and

WHEREAS, City of Reedsburg has set forth the following actions necessary to maintain effluent requirement contained in the WPDES Permit:

- (a) Reaffirm our commitment to operator certification upgrading.
- (b) Knowing that the Treatment Plant operates 24 hours a day, 7 days a week, we commend our State Certified Treatment Plant Operators for thorough planning, innovative and cost-efficient approaches to the collection, treatment and recycling of effluent and bio-solids.
- (c) The City is currently working on a new Facility Plan to improve operations for current and future loadings.

NOW, THEREFORE, BE IT RESOLVED by the Common Council of the City of Reedsburg, Sauk County, Wisconsin that the City informs the Wisconsin Department of Natural Resources that the above actions were taken by the Common Council of the City of Reedsburg.

ADOPTED on this 24th day of May, 2021.

Dave Estes, Mayor

Jacob Crosetto, City Clerk - Treasurer

Respectfully Submitted:

The above resolution has been authorized by the governing body of the City of Reedsburg by Resolution No. 4439-21, dated May 24, 2021.

Date Passed: May 24, 2021

Vote: _____

Compliance Maintenance Annual Report

Reedsburg Wastewater Treatment Facility

Last Updated: Reporting For:

5/13/2021

2020

Influent Flow and Loading

1. Monthly Average Flows and BOD Loadings

1.1 Verify the following monthly flows and BOD loadings to your facility.

Influent No. 701	Influent Monthly Average Flow, MGD	x	Influent Monthly Average BOD Concentration mg/L	x	8.34	=	Influent Monthly Average BOD Loading, lbs/day
January	2.4106	x	363	x	8.34	=	7,296
February	2.3632	x	444	x	8.34	=	8,749
March	2.8125	x	360	x	8.34	=	8,449
April	2.6019	x	361	x	8.34	=	7,824
May	2.3885	x	468	x	8.34	=	9,326
June	2.6657	x	404	x	8.34	=	8,981
July	2.5915	x	366	x	8.34	=	7,914
August	2.2548	x	399	x	8.34	=	7,496
September	2.4322	x	413	x	8.34	=	8,378
October	2.4503	x	443	x	8.34	=	9,063
November	2.4740	x	371	x	8.34	=	7,647
December	2.2531	x	496	x	8.34	=	9,325

2. Maximum Monthly Design Flow and Design BOD Loading

2.1 Verify the design flow and loading for your facility.

Design	Design Factor	x	%	=	% of Design
Max Month Design Flow, MGD	2.65	x	90	=	2.385
		x	100	=	2.65
Design BOD, lbs/day	6331	x	90	=	5697.9
		x	100	=	6331

2.2 Verify the number of times the flow and BOD exceeded 90% or 100% of design, points earned, and score:

	Months of Influent	Number of times flow was greater than 90% of	Number of times flow was greater than 100% of	Number of times BOD was greater than 90% of design	Number of times BOD was greater than 100% of design
January	1	1	0	1	1
February	1	0	0	1	1
March	1	1	1	1	1
April	1	1	0	1	1
May	1	1	0	1	1
June	1	1	1	1	1
July	1	1	0	1	1
August	1	0	0	1	1
September	1	1	0	1	1
October	1	1	0	1	1
November	1	1	0	1	1
December	1	0	0	1	1
Points per each		2	1	3	2
Exceedances		9	2	12	12
Points		18	2	36	24
Total Number of Points					80

80

Compliance Maintenance Annual Report

Reedsburg Wastewater Treatment Facility

Last Updated: Reporting For:

5/13/2021

2020

3. Flow Meter

3.1 Was the influent flow meter calibrated in the last year?

- ☒ Yes Enter last calibration date (MM/DD/YYYY)

2020-12-11

☐ No

If No, please explain:

4. Sewer Use Ordinance

4.1 Did your community have a sewer use ordinance that limited or prohibited the discharge of excessive conventional pollutants ((C)BOD, SS, or pH) or toxic substances to the sewer from industries, commercial users, hauled waste, or residences?

☒ Yes

☐ No

If No, please explain:

4.2 Was it necessary to enforce the ordinance?

☐ Yes

☒ No

If Yes, please explain:

5. Septage Receiving

5.1 Did you have requests to receive septage at your facility?

Septic Tanks

Holding Tanks

Grease Traps

☒ Yes

☒ Yes

☐ Yes

☐ No

☐ No

☒ No

5.2 Did you receive septage at your facility? If yes, indicate volume in gallons.

Septic Tanks

☒ Yes

158,800

gallons

☐ No

Holding Tanks

☒ Yes

6,461,302

gallons

☐ No

Grease Traps

☐ Yes

0

gallons

☒ No

5.2.1 If yes to any of the above, please explain if plant performance is affected when receiving any of these wastes.

Plant performance wasn't affected by these wastes.

6. Pretreatment

6.1 Did your facility experience operational problems, permit violations, biosolids quality concerns, or hazardous situations in the sewer system or treatment plant that were attributable to commercial or industrial discharges in the last year?

☒ Yes

☐ No

If yes, describe the situation and your community's response.

Compliance Maintenance Annual Report

Reedsburg Wastewater Treatment Facility

Last Updated: Reporting For:
5/13/2021 **2020**

The dairies continue to have High BOD discharges and occasionally high phosphorus discharges. The City of Reedsburg continues to work with the dairies on reducing there loadings and helping them work through issues.

6.2 Did your facility accept hauled industrial wastes, landfill leachate, etc.?

- Yes
- No

If yes, describe the types of wastes received and any procedures or other restrictions that were in place to protect the facility from the discharge of hauled industrial wastes.

We accept leachate from the foundry and cheese whey from two small cheese plants pretty regular.

Total Points Generated	80
Score (100 - Total Points Generated)	20
Section Grade	F

Compliance Maintenance Annual Report

Reedsburg Wastewater Treatment Facility

Last Updated: Reporting For:
5/13/2021 **2020**

Effluent Quality and Plant Performance (BOD/CBOD)

1. Effluent (C)BOD Results

1.1 Verify the following monthly average effluent values, exceedances, and points for BOD or CBOD

Outfall No. 001	Monthly Average Limit (mg/L)	90% of Permit Limit > 10 (mg/L)	Effluent Monthly Average (mg/L)	Months of Discharge with a Limit	Permit Limit Exceedance	90% Permit Limit Exceedance
January	30	27	10	1	0	0
February	30	27	9	1	0	0
March	30	27	12	1	0	0
April	30	27	11	1	0	0
May	30	27	8	1	0	0
June	30	27	5	1	0	0
July	30	27	6	1	0	0
August	30	27	7	1	0	0
September	30	27	7	1	0	0
October	30	27	6	1	0	0
November	30	27	6	1	0	0
December	30	27	7	1	0	0

* Equals limit if limit is ≤ 10

Months of discharge/yr	12		
Points per each exceedance with 12 months of discharge		7	3
Exceedances		0	0
Points		0	0
Total number of points			0

NOTE: For systems that discharge intermittently to state waters, the points per monthly exceedance for this section shall be based upon a multiplication factor of 12 months divided by the number of months of discharge. Example: For a wastewater facility discharging only 6 months of the year, the multiplication factor is $12/6 = 2.0$

1.2 If any violations occurred, what action was taken to regain compliance?

2. Flow Meter Calibration

2.1 Was the effluent flow meter calibrated in the last year?

- ☒ Yes Enter last calibration date (MM/DD/YYYY)

2020-12-11

- ☐ No

If No, please explain:

3. Treatment Problems

3.1 What problems, if any, were experienced over the last year that threatened treatment?

BOD Treatment wasn't threatened in 2020

4. Other Monitoring and Limits

4.1 At any time in the past year was there an exceedance of a permit limit for any other pollutants such as chlorides, pH, residual chlorine, fecal coliform, or metals?

- ☐ Yes

- ☒ No

Compliance Maintenance Annual Report

Reedsburg Wastewater Treatment Facility

Last Updated: Reporting For:
5/13/2021 **2020**

If Yes, please explain: 4.2 At any time in the past year was there a failure of an effluent acute or chronic whole effluent toxicity (WET) test? ☐ Yes ☒ No If Yes, please explain: 4.3 If the biomonitoring (WET) test did not pass, were steps taken to identify and/or reduce source(s) of toxicity? ☐ Yes ☐ No ☒ N/A Please explain unless not applicable:	
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Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	A

Compliance Maintenance Annual Report

Reedsburg Wastewater Treatment Facility

Last Updated: Reporting For:

5/13/2021

2020

Effluent Quality and Plant Performance (Total Suspended Solids)

1. Effluent Total Suspended Solids Results

1.1 Verify the following monthly average effluent values, exceedances, and points for TSS:

Outfall No. 001	Monthly Average Limit (mg/L)	90% of Permit Limit >10 (mg/L)	Effluent Monthly Average (mg/L)	Months of Discharge with a Limit	Permit Limit Exceedance	90% Permit Limit Exceedance
January	30	27	8	1	0	0
February	30	27	6	1	0	0
March	30	27	6	1	0	0
April	30	27	7	1	0	0
May	30	27	7	1	0	0
June	30	27	6	1	0	0
July	30	27	6	1	0	0
August	30	27	8	1	0	0
September	30	27	7	1	0	0
October	30	27	5	1	0	0
November	30	27	6	1	0	0
December	30	27	7	1	0	0

* Equals limit if limit is ≤ 10

Months of Discharge/yr	12		
Points per each exceedance with 12 months of discharge:		7	3
Exceedances		0	0
Points		0	0
Total Number of Points		0	

NOTE: For systems that discharge intermittently to state waters, the points per monthly exceedance for this section shall be based upon a multiplication factor of 12 months divided by the number of months of discharge.

Example: For a wastewater facility discharging only 6 months of the year, the multiplication factor is $12/6 = 2.0$

1.2 If any violations occurred, what action was taken to regain compliance?

Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	A

Compliance Maintenance Annual Report

Reedsburg Wastewater Treatment Facility

Last Updated: Reporting For:

5/13/2021

2020

Effluent Quality and Plant Performance (Ammonia - NH3)

1. Effluent Ammonia Results

1.1 Verify the following monthly and weekly average effluent values, exceedances and points for ammonia

Outfall No. 001	Monthly Average NH3 Limit (mg/L)	Weekly Average NH3 Limit (mg/L)	Effluent Monthly Average NH3 (mg/L)	Monthly Permit Limit Exceed ance	Effluent Weekly Average for Week 1	Effluent Weekly Average for Week 2	Effluent Weekly Average for Week 3	Effluent Weekly Average for Week 4	Weekly Permit Limit Exceed ance
January	17		.636153846	0					
February	17		1.746666667	0					
March	22		2.667142857	0					
April	28		1.387692308	0					
May									
June	18		.350714286	0					
July	14		.107692308	0					
August	14		.12	0					
September	23		.132857143	0					
October	17		.6325	0					
November	22		.136923077	0					
December	17		.309285714	0					
Points per each exceedance of Monthly average:									10
Exceedances, Monthly:									0
Points:									0
Points per each exceedance of weekly average (when there is no monthly average):									2.5
Exceedances, Weekly:									0
Points:									0
Total Number of Points									0

NOTE: Limit exceedances are considered for monthly OR weekly averages but not both. When a monthly average limit exists it will be used to determine exceedances and generate points. This will be true even if a weekly limit also exists. When a weekly average limit exists and a monthly limit does not exist, the weekly limit will be used to determine exceedances and generate points.

1.2 If any violations occurred, what action was taken to regain compliance?

Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	A

Compliance Maintenance Annual Report

Reedsburg Wastewater Treatment Facility

Last Updated: Reporting For:
5/13/2021 **2020**

Effluent Quality and Plant Performance (Phosphorus)

1. Effluent Phosphorus Results

1.1 Verify the following monthly average effluent values, exceedances, and points for Phosphorus

Outfall No. 001	Monthly Average phosphorus Limit (mg/L)	Effluent Monthly Average phosphorus (mg/L)	Months of Discharge with a Limit	Permit Limit Exceedance
January	1	0.505	1	0
February	1	0.500	1	0
March	1	0.686	1	0
April	1	0.617	1	0
May	1	0.932	1	0
June	1	0.792	1	0
July	1	0.987	1	0
August	1	0.766	1	0
September	1	0.994	1	0
October	1	0.929	1	0
November	1	0.258	1	0
December	1	0.311	1	0
Months of Discharge/yr			12	
Points per each exceedance with 12 months of discharge:				10
Exceedances				0
Total Number of Points				0

0

NOTE: For systems that discharge intermittently to waters of the state, the points per monthly exceedance for this section shall be based upon a multiplication factor of 12 months divided by the number of months of discharge.

Example: For a wastewater facility discharging only 6 months of the year, the multiplication factor is $12/6 = 2.0$

1.2 If any violations occurred, what action was taken to regain compliance?

Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	A

Compliance Maintenance Annual Report

Reedsburg Wastewater Treatment Facility

Last Updated: Reporting For:
5/13/2021 2020

Biosolids Quality and Management

1. Biosolids Use/Disposal

1.1 How did you use or dispose of your biosolids? (Check all that apply)

- ☒ Land applied under your permit
☒ Publicly Distributed Exceptional Quality Biosolids
☐ Hauled to another permitted facility
☐ Landfilled
☐ Incinerated
☐ Other

NOTE: If you did not remove biosolids from your system, please describe your system type such as lagoons, reed beds, recirculating sand filters, etc.

1.1.1 If you checked Other, please describe:

3. Biosolids Metals

Number of biosolids outfalls in your WPDES permit:

3.1 For each outfall tested, verify the biosolids metal quality values for your facility during the last calendar year.

Outfall No. 005 - CLASS B SLUDGE

Parameter	80% of Limit	H.Q. Limit	Ceiling Limit	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	80% Value	High Quality	Ceiling
Arsenic		41	75														0	0
Cadmium		39	85														0	0
Copper		1500	4300														0	0
Lead		300	840														0	0
Mercury		17	57														0	0
Molybdenum	60		75													0		0
Nickel	336		420													0		0
Selenium	80		100													0		0
Zinc		2800	7500														0	0

Outfall No. 004 - CLASS A SLUDGE

Parameter	80% of Limit	H.Q. Limit	Ceiling Limit	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	80% Value	High Quality	Ceiling
Arsenic		41	75			4.5		1.5			3.2				4.4		0	0
Cadmium		39	85			.34		.19			<.12				.35		0	0
Copper		1500	4300			106		96.9			200				92.3		0	0
Lead		300	840			14.1		10.4			13.4				13.1		0	0
Mercury		17	57			.026		.04			.45				.069		0	0
Molybdenum	60		75			5.7		3.7			8.7				3.4	0		0
Nickel	336		420			9.8		6.7			11.4				7	0		0
Selenium	80		100			4.2		3.7			<4.3				<3.2	0		0
Zinc		2800	7500			205		357			280				137		0	0

3.1.1 Number of times any of the metals exceeded the high quality limits OR 80% of the limit for molybdenum, nickel, or selenium = 0

Exceedence Points

- 0 (0 Points)
- 1-2 (10 Points)
- > 2 (15 Points)

3.1.2 If you exceeded the high quality limits, did you cumulatively track the metals loading at each land application site? (check applicable box)

- Yes

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○ No (10 points) ● N/A - Did not exceed limits or no HQ limit applies (0 points) ○ N/A - Did not land apply biosolids until limit was met (0 points) 3.1.3 Number of times any of the metals exceeded the ceiling limits = 0 Exceedence Points ● 0 (0 Points) ○ 1 (10 Points) ○ > 1 (15 Points) 3.1.4 Were biosolids land applied which exceeded the ceiling limit? ○ Yes (20 Points) ● No (0 Points) 3.1.5 If any metal limit (high quality or ceiling) was exceeded at any time, what action was taken? Has the source of the metals been identified? NA	0																																								
4. Pathogen Control (per outfall): 4.1 Verify the following information. If any information is incorrect, use the Report Issue button under the Options header in the left-side menu. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <tr><td>Outfall Number:</td><td style="text-align: center;">004</td></tr> <tr><td>Biosolids Class:</td><td style="text-align: center;">A</td></tr> <tr><td>Bacteria Type and Limit:</td><td style="text-align: center;">Fecal Coliform</td></tr> <tr><td>Sample Dates:</td><td>01/01/2020 - 03/31/2020</td></tr> <tr><td>Density:</td><td>0</td></tr> <tr><td>Sample Concentration Amount:</td><td>MPN/G TS</td></tr> <tr><td>Requirement Met:</td><td>Yes</td></tr> <tr><td>Land Applied:</td><td>No</td></tr> <tr><td>Process:</td><td>Alkaline Stabilization</td></tr> <tr><td>Process Description:</td><td>Sludge is heated to 131 degrees or more.</td></tr> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Outfall Number:</td><td style="text-align: center;">004</td></tr> <tr><td>Biosolids Class:</td><td style="text-align: center;">A</td></tr> <tr><td>Bacteria Type and Limit:</td><td style="text-align: center;">Fecal Coliform</td></tr> <tr><td>Sample Dates:</td><td>04/01/2020 - 06/30/2020</td></tr> <tr><td>Density:</td><td>0</td></tr> <tr><td>Sample Concentration Amount:</td><td>MPN/G TS</td></tr> <tr><td>Requirement Met:</td><td>Yes</td></tr> <tr><td>Land Applied:</td><td>Yes</td></tr> <tr><td>Process:</td><td>Alkaline Stabilization</td></tr> <tr><td>Process Description:</td><td>Biosolids are heated to 131 degrees.</td></tr> </table>	Outfall Number:	004	Biosolids Class:	A	Bacteria Type and Limit:	Fecal Coliform	Sample Dates:	01/01/2020 - 03/31/2020	Density:	0	Sample Concentration Amount:	MPN/G TS	Requirement Met:	Yes	Land Applied:	No	Process:	Alkaline Stabilization	Process Description:	Sludge is heated to 131 degrees or more.	Outfall Number:	004	Biosolids Class:	A	Bacteria Type and Limit:	Fecal Coliform	Sample Dates:	04/01/2020 - 06/30/2020	Density:	0	Sample Concentration Amount:	MPN/G TS	Requirement Met:	Yes	Land Applied:	Yes	Process:	Alkaline Stabilization	Process Description:	Biosolids are heated to 131 degrees.	
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Outfall Number:	004
Biosolids Class:	A
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	07/01/2020 - 09/30/2020
Density:	0
Sample Concentration Amount:	MPN/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Alkaline Stabilization
Process Description:	Sludge is heated to 131 degrees or higher.

Outfall Number:	004
Biosolids Class:	A
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	10/01/2020 - 12/31/2020
Density:	0
Sample Concentration Amount:	MPN/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Alkaline Stabilization
Process Description:	Sludge heated to 131 degrees or higher.

4.2 If exceeded Class B limit or did not meet the process criteria at the time of land application.

4.2.1 Was the limit exceeded or the process criteria not met at the time of land application?

☐ Yes (40 Points)

☒ No

If yes, what action was taken?

5. Vector Attraction Reduction (per outfall):

5.1 Verify the following information. If any of the information is incorrect, use the Report Issue button under the Options header in the left-side menu.

Outfall Number:	004
Method Date:	03/31/2020
Option Used To Satisfy Requirement:	pH Adjustment of Sludge
Requirement Met:	Yes
Land Applied:	No
Limit (if applicable):	
Results (if applicable):	

Outfall Number:	004
Method Date:	06/30/2020
Option Used To Satisfy Requirement:	pH Adjustment of Sludge
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	
Results (if applicable):	

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Outfall Number:	004	0
Method Date:	09/30/2020	
Option Used To Satisfy Requirement:	pH Adjustment of Sludge	
Requirement Met:	Yes	
Land Applied:	Yes	
Limit (if applicable):		
Results (if applicable):		
Outfall Number:	004	0
Method Date:	12/31/2020	
Option Used To Satisfy Requirement:	pH Adjustment of Sludge	
Requirement Met:	Yes	
Land Applied:	Yes	
Limit (if applicable):		
Results (if applicable):		
5.2 Was the limit exceeded or the process criteria not met at the time of land application? ☐ Yes (40 Points) ☒ No If yes, what action was taken?		
6. Biosolids Storage 6.1 How many days of actual, current biosolids storage capacity did your wastewater treatment facility have either on-site or off-site? ☒ >= 180 days (0 Points) ☐ 150 - 179 days (10 Points) ☐ 120 - 149 days (20 Points) ☐ 90 - 119 days (30 Points) ☐ < 90 days (40 Points) ☐ N/A (0 Points) 6.2 If you checked N/A above, explain why.		
7. Issues 7.1 Describe any outstanding biosolids issues with treatment, use or overall management: The City of Reedsburg has an agreement with United Waste if we go over our onsite storage capacity with sludge.		

Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	A

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Staffing and Preventative Maintenance (All Treatment Plants)

1. Plant Staffing 1.1 Was your wastewater treatment plant adequately staffed last year? ● Yes ○ No If No, please explain: Could use more help/staff for: 1.2 Did your wastewater staff have adequate time to properly operate and maintain the plant and fulfill all wastewater management tasks including recordkeeping? ● Yes ○ No If No, please explain:	
2. Preventative Maintenance 2.1 Did your plant have a documented AND implemented plan for preventative maintenance on major equipment items? ● Yes (Continue with question 2) ☐☐ ○ No (40 points) ☐☐ If No, please explain, then go to question 3: 2.2 Did this preventative maintenance program depict frequency of intervals, types of lubrication, and other tasks necessary for each piece of equipment? ● Yes ○ No (10 points) 2.3 Were these preventative maintenance tasks, as well as major equipment repairs, recorded and filed so future maintenance problems can be assessed properly? ● Yes ○ Paper file system ● Computer system ○ Both paper and computer system ○ No (10 points)	0
3. O&M Manual 3.1 Does your plant have a detailed O&M and Manufacturer Equipment Manuals that can be used as a reference when needed? ● Yes ○ No	
4. Overall Maintenance /Repairs 4.1 Rate the overall maintenance of your wastewater plant. ● Excellent ○ Very good ○ Good ○ Fair ○ Poor Describe your rating:	

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Plant staff do an excellent job following O&M procedures and much of the equipment is newer or rebuilt recently.	
--	--

Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	A

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Operator Certification and Education

1. Operator-In-Charge

1.1 Did you have a designated operator-in-charge during the report year?

- Yes (0 points)
- No (20 points)

Name:

CHRIS L KLEINSCHMIT

Certification No:

34792

0

2. Certification Requirements

2.1 In accordance with Chapter NR 114.56 and 114.57, Wisconsin Administrative Code, what level and subclass(es) were required for the operator-in-charge (OIC) to operate the wastewater treatment plant and what level and subclass(es) were held by the operator-in-charge?

Sub Class	SubClass Description	WWTP	OIC		
		Advanced	OIT	Basic	Advanced
A1	Suspended Growth Processes	X			X
A2	Attached Growth Processes	X			X
A3	Recirculating Media Filters				
A4	Ponds, Lagoons and Natural				
A5	Anaerobic Treatment Of Liquid				
B	Solids Separation	X			X
C	Biological Solids/Sludges	X			X
P	Total Phosphorus	X			X
N	Total Nitrogen				
D	Disinfection	X			X
L	Laboratory	X			X
U	Unique Treatment Systems				
SS	Sanitary Sewage Collection	X	NA	X	NA

2.2 Was the operator-in-charge certified at the appropriate level and subclass(es) to operate this plant? (Note: Certification in subclass SS is required 5 years after permit reissuance and is basic level only.)

- Yes (0 points)
- No (20 points)

0

3. Succession Planning

3.1 In the event of the loss of your designated operator-in-charge, did you have a contingency plan to ensure the continued proper operation and maintenance of the plant that includes one or more of the following options (check all that apply)?

- ☒ One or more additional certified operators on staff
- ☐ An arrangement with another certified operator
- ☐ An arrangement with another community with a certified operator
- ☐ An operator on staff who has an operator-in-training certificate for your plant and is expected to be certified within one year
- ☐ A consultant to serve as your certified operator
- ☐ None of the above (20 points)

If "None of the above" is selected, please explain:

0

4. Continuing Education Credits

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4.1 If you had a designated operator-in-charge, was the operator-in-charge earning Continuing Education Credits at the following rates?

OIT and Basic Certification:

- Averaging 6 or more CECs per year.
- Averaging less than 6 CECs per year.

Advanced Certification:

- Averaging 8 or more CECs per year.
- Averaging less than 8 CECs per year.

Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	A

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Financial Management

1. Provider of Financial Information Name: Jacob Crosseto Telephone: 608-524-6404 (XXX) XXX-XXXX E-Mail Address (optional):		
2. Treatment Works Operating Revenues 2.1 Are User Charges or other revenues sufficient to cover O&M expenses for your wastewater treatment plant AND/OR collection system ? ● Yes (0 points) ☐ ☐ ○ No (40 points) If No, please explain: 2.2 When was the User Charge System or other revenue source(s) last reviewed and/or revised? Year: 2019 ● 0-2 years ago (0 points) ☐ ☐ ○ 3 or more years ago (20 points) ☐ ☐ ○ N/A (private facility) 2.3 Did you have a special account (e.g., CWFP required segregated Replacement Fund, etc.) or financial resources available for repairing or replacing equipment for your wastewater treatment plant and/or collection system? ● Yes (0 points) ○ No (40 points)		0
REPLACEMENT FUNDS [PUBLIC MUNICIPAL FACILITIES SHALL COMPLETE QUESTION 3]		
3. Equipment Replacement Funds 3.1 When was the Equipment Replacement Fund last reviewed and/or revised? Year: 2019 ● 1-2 years ago (0 points) ☐ ☐ ○ 3 or more years ago (20 points) ☐ ☐ ○ N/A If N/A, please explain: 3.2 Equipment Replacement Fund Activity 3.2.1 Ending Balance Reported on Last Year's CMAR 3.2.2 Adjustments - if necessary (e.g. earned interest, audit correction, withdrawal of excess funds, increase making up previous shortfall, etc.) 3.2.3 Adjusted January 1st Beginning Balance 3.2.4 Additions to Fund (e.g. portion of User Fee, earned interest, etc.)		\$ 2,172,098.00 \$ 0.00 \$ 2,172,098.00 + \$ 188,048.00

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3.2.5 Subtractions from Fund (e.g., equipment replacement, major repairs - use description box 3.2.6.1 below*)

-

\$ 0.00

3.2.6 Ending Balance as of December 31st for CMAR Reporting Year

\$ 2,360,146.00

All Sources: This ending balance should include all Equipment Replacement Funds whether held in a bank account(s), certificate(s) of deposit, etc.

3.2.6.1 Indicate adjustments, equipment purchases, and/or major repairs from 3.2.5 above.

None in 2020

3.3 What amount should be in your Replacement Fund?

\$ 2,360,146.00

0

Please note: If you had a CWFPP loan, this amount was originally based on the Financial Assistance Agreement (FAA) and should be regularly updated as needed. Further calculation instructions and an example can be found by clicking the SectionInstructions link under Info header in the left-side menu.

3.3.1 Is the December 31 Ending Balance in your Replacement Fund above, (#3.2.6) equal to, or greater than the amount that should be in it (#3.3)?

☒ Yes

☐ No

If No, please explain.

4. Future Planning

4.1 During the next ten years, will you be involved in formal planning for upgrading, rehabilitating, or new construction of your treatment facility or collection system?

☒ Yes - If Yes, please provide major project information, if not already listed below. ☐ ☐

☐ No

Project #	Project Description	Estimated Cost	Approximate Construction Year
1	Plant upgrade or relocation based on facility plan.		2025

5. Financial Management General Comments

ENERGY EFFICIENCY AND USE

6. Collection System

6.1 Energy Usage

6.1.1 Enter the monthly energy usage from the different energy sources:

COLLECTION SYSTEM PUMPAGE: Total Power Consumed

Number of Municipally Owned Pump/Lift Stations: 8

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	Electricity Consumed (kWh)	Natural Gas Consumed (therms)
January	6,485	86
February	9,685	115
March	5,373	73
April	6,529	52
May	7,027	17
June	6,850	3
July	6,441	5
August	6,750	5
September	5,033	6
October	8,564	17
November	6,756	45
December	7,521	66
Total	83,014	490
Average	6,918	41

6.1.2 Comments:

6.2 Energy Related Processes and Equipment

6.2.1 Indicate equipment and practices utilized at your pump/lift stations (Check all that apply):

- ☐ Comminution or Screening
- ☐ Extended Shaft Pumps
- ☒ Flow Metering and Recording
- ☐ Pneumatic Pumping
- ☒ SCADA System
- ☐ Self-Priming Pumps
- ☒ Submersible Pumps
- ☒ Variable Speed Drives
- ☐ Other:

6.2.2 Comments:

6.3 Has an Energy Study been performed for your pump/lift stations?

● No

○ Yes

Year:

By Whom:

Describe and Comment:

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6.4 Future Energy Related Equipment

6.4.1 What energy efficient equipment or practices do you have planned for the future for your pump/lift stations?

We plan on adding VFD pumps and energy efficient motors as we upgrade lift stations.

7. Treatment Facility

7.1 Energy Usage

7.1.1 Enter the monthly energy usage from the different energy sources:

TREATMENT PLANT: Total Power Consumed/Month

	Electricity Consumed (kWh)	Total Influent Flow (MG)	Electricity Consumed/Flow (kWh/MG)	Total Influent BOD (1000 lbs)	Electricity Consumed/Total Influent BOD (kWh/1000lbs)	Natural Gas Consumed (therms)
January	129,720	74.73	1,736	226.18	574	2,883
February	124,752	68.53	1,820	253.72	492	1,943
March	169,464	87.19	1,944	261.92	647	1,538
April	152,904	78.06	1,959	234.72	651	462
May	169,464	74.04	2,289	289.11	586	42
June	176,088	79.97	2,202	269.43	654	5
July	171,672	80.34	2,137	245.33	700	5
August	150,696	69.90	2,156	232.38	648	52
September	138,000	72.97	1,891	251.34	549	328
October	121,992	75.96	1,606	280.95	434	1,289
November	129,720	74.22	1,748	229.41	565	1,749
December	126,960	69.85	1,818	289.08	439	2,807
Total	1,761,432	905.76		3,063.57		13,103
Average	146,786	75.48	1,942	255.30	578	1,092

7.1.2 Comments:

7.2 Energy Related Processes and Equipment

7.2.1 Indicate equipment and practices utilized at your treatment facility (Check all that apply):

- ☒ Aerobic Digestion
- ☐ Anaerobic Digestion
- ☒ Biological Phosphorus Removal
- ☒ Coarse Bubble Diffusers
- ☒ Dissolved O2 Monitoring and Aeration Control
- ☐ Effluent Pumping
- ☒ Fine Bubble Diffusers
- ☒ Influent Pumping
- ☒ Mechanical Sludge Processing
- ☒ Nitrification
- ☒ SCADA System
- ☒ UV Disinfection
- ☒ Variable Speed Drives
- ☐ Other:

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7.2.2 Comments:

7.3 Future Energy Related Equipment

7.3.1 What energy efficient equipment or practices do you have planned for the future for your treatment facility?

As equipment is repaired or replaced we plan on adding VFD drives and energy efficient motors.

8. Biogas Generation

8.1 Do you generate/produce biogas at your facility?

● No

○ Yes

If Yes, how is the biogas used (Check all that apply):

☐ Flared Off

☐ Building Heat

☐ Process Heat

☐ Generate Electricity

☐ Other:

9. Energy Efficiency Study

9.1 Has an Energy Study been performed for your treatment facility?

○ No

● Yes

☒ Entire facility

Year:

2016

By Whom:

Focus on Energy

Describe and Comment:

Focus on energy performed an energy audit and provided us with information on areas we could make changes.

☐ Part of the facility

Year:

By Whom:

Describe and Comment:

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Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	A

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Sanitary Sewer Collection Systems

1. Capacity, Management, Operation, and Maintenance (CMOM) Program

1.1 Do you have a CMOM program that is being implemented?

- ☒ Yes
- ☐ No

If No, explain:

1.2 Do you have a CMOM program that contains all the applicable components and items according to Wisc. Adm Code NR 210.23 (4)?

- ☒ Yes
- ☐ No (30 points)
- ☐ N/A

If No or N/A, explain:

1.3 Does your CMOM program contain the following components and items? (check the components and items that apply)

☒ Goals [NR 210.23 (4)(a)]

Describe the major goals you had for your collection system last year:

Prevent overflows and backups, complete sewer cleaning and root removal on 50% of the sewer lines, inspect 50% of manholes annually and enforce sewer ordinances.

Did you accomplish them?

- ☒ Yes
- ☐ No

If No, explain:

☒ Organization [NR 210.23 (4) (b)] ☐ ☐

Does this chapter of your CMOM include:

- ☒ Organizational structure and positions (eg. organizational chart and position descriptions)
- ☐ Internal and external lines of communication responsibilities
- ☐ Person(s) responsible for reporting overflow events to the department and the public

☒ Legal Authority [NR 210.23 (4) (c)]

What is the legally binding document that regulates the use of your sewer system?

sewer ordinance chapter 13

If you have a Sewer Use Ordinance or other similar document, when was it last reviewed and revised? (MM/DD/YYYY) 2005-08-27

Does your sewer use ordinance or other legally binding document address the following:

- ☒ Private property inflow and infiltration
- ☒ New sewer and building sewer design, construction, installation, testing and inspection
- ☒ Rehabilitated sewer and lift station installation, testing and inspection
- ☒ Sewage flows satellite system and large private users are monitored and controlled, as necessary
- ☒ Fat, oil and grease control
- ☒ Enforcement procedures for sewer use non-compliance

☒ Operation and Maintenance [NR 210.23 (4) (d)]

Does your operation and maintenance program and equipment include the following:

- ☒ Equipment and replacement part inventories
- ☒ Up-to-date sewer system map

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- ☒ A management system (computer database and/or file system) for collection system information for O&M activities, investigation and rehabilitation
- ☒ A description of routine operation and maintenance activities (see question 2 below)
- ☒ Capacity assessment program
- ☐ Basement back assessment and correction
- ☐ Regular O&M training

☒ Design and Performance Provisions [NR 210.23 (4) (e)] ☐ ☐

What standards and procedures are established for the design, construction, and inspection of the sewer collection system, including building sewers and interceptor sewers on private property?

- ☒ State Plumbing Code, DNR NR 110 Standards and/or local Municipal Code Requirements
- ☒ Construction, Inspection, and Testing
- ☐ Others:

☒ Overflow Emergency Response Plan [NR 210.23 (4) (f)] ☐ ☐

Does your emergency response capability include:

- ☒ Responsible personnel communication procedures
- ☒ Response order, timing and clean-up
- ☒ Public notification protocols
- ☒ Training
- ☒ Emergency operation protocols and implementation procedures

☒ Annual Self-Auditing of your CMOM Program [NR 210.23 (5)] ☐ ☐

☐ Special Studies Last Year (check only those that apply):

- ☐ Infiltration/Inflow (I/I) Analysis
- ☐ Sewer System Evaluation Survey (SSES)
- ☐ Sewer Evaluation and Capacity Management Plan (SECAP)
- ☐ Lift Station Evaluation Report
- ☐ Others:

2. Operation and Maintenance

2.1 Did your sanitary sewer collection system maintenance program include the following maintenance activities? Complete all that apply and indicate the amount maintained.

Cleaning	80	% of system/year
Root removal	80	% of system/year
Flow monitoring	1	% of system/year
Smoke testing	0	% of system/year
Sewer line televising	1	% of system/year
Manhole inspections	2	% of system/year
Lift station O&M	1	# per L.S./year
Manhole rehabilitation	1	% of manholes rehabbed
Mainline rehabilitation	1	% of sewer lines rehabbed
Private sewer inspections	0	% of system/year

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Private sewer I/I removal % of private services

River or water crossings % of pipe crossings evaluated or maintained

Please include additional comments about your sanitary sewer collection system below:

3. Performance Indicators

3.1 Provide the following collection system and flow information for the past year.

Total actual amount of precipitation last year in inches
 Annual average precipitation (for your location)
 Miles of sanitary sewer
 Number of lift stations
 Number of lift station failures
 Number of sewer pipe failures
 Number of basement backup occurrences
 Number of complaints
 Average daily flow in MGD (if available)
 Peak monthly flow in MGD (if available)
 Peak hourly flow in MGD (if available)

3.2 Performance ratios for the past year:

Lift station failures (failures/year)
 Sewer pipe failures (pipe failures/sewer mile/yr)
 Sanitary sewer overflows (number/sewer mile/yr)
 Basement backups (number/sewer mile)
 Complaints (number/sewer mile)
 Peaking factor ratio (Peak Monthly:Annual Daily Avg)
 Peaking factor ratio (Peak Hourly:Annual Daily Avg)

4. Overflows

LIST OF SANITARY SEWER (SSO) AND TREATMENT FACILITY (TFO) OVERFLOWS REPORTED **

Date	Location	Cause	Estimated Volume
None reported			

** If there were any SSOs or TFOs that are not listed above, please contact the DNR and stop work on this section until corrected.

5. Infiltration / Inflow (I/I)

5.1 Was infiltration/inflow (I/I) significant in your community last year?

☐ Yes

☒ No

If Yes, please describe:

5.2 Has infiltration/inflow and resultant high flows affected performance or created problems in your collection system, lift stations, or treatment plant at any time in the past year?

☐ Yes

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● No If Yes, please describe: 5.3 Explain any infiltration/inflow (I/I) changes this year from previous years: I/I was less prevalent in 2020 because of less heavy rain events. 5.4 What is being done to address infiltration/inflow in your collection system? The city is working on sealing up manholes that allow I/I along with removing homes and businesses that were destroyed in the 2018 flood.	
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Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	A

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Reedsburg Wastewater Treatment Facility

Last Updated: Reporting For:
5/13/2021 2020

Grading Summary

WPDES No: 0020371

SECTIONS	LETTER GRADE	GRADE POINTS	WEIGHTING FACTORS	SECTION POINTS
Influent	F	0	3	0
BOD/CBOD	A	4	10	40
TSS	A	4	5	20
Ammonia	A	4	5	20
Phosphorus	A	4	3	12
Biosolids	A	4	5	20
Staffing/PM	A	4	1	4
OpCert	A	4	1	4
Financial	A	4	1	4
Collection	A	4	3	12
TOTALS			37	136
GRADE POINT AVERAGE (GPA) = 3.68				

Notes:

- A = Voluntary Range (Response Optional)
- B = Voluntary Range (Response Optional)
- C = Recommendation Range (Response Required)
- D = Action Range (Response Required)
- F = Action Range (Response Required)

Compliance Maintenance Annual Report

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Resolution or Owner's Statement

Name of Governing
Body or Owner:

Date of Resolution or
Action Taken:

Resolution Number:

Date of Submittal:

ACTIONS SET FORTH BY THE GOVERNING BODY OR OWNER RELATING TO SPECIFIC CMAR SECTIONS (Optional for grade A or B. Required for grade C, D, or F):

Influent Flow and Loadings: Grade = F

Effluent Quality: BOD: Grade = A

Effluent Quality: TSS: Grade = A

Effluent Quality: Ammonia: Grade = A

Effluent Quality: Phosphorus: Grade = A

Biosolids Quality and Management: Grade = A

Staffing: Grade = A

Operator Certification: Grade = A

Financial Management: Grade = A

Collection Systems: Grade = A

(Regardless of grade, response required for Collection Systems if SSOs were reported)

ACTIONS SET FORTH BY THE GOVERNING BODY OR OWNER RELATING TO THE OVERALL GRADE POINT AVERAGE AND ANY GENERAL COMMENTS

(Optional for G.P.A. greater than or equal to 3.00, required for G.P.A. less than 3.00)

G.P.A. = 3.68