

AGENDA
PUBLIC UTILITIES COMMISSION
August 7, 2019
3:00 P.M.

- A. Call to Order

- B. Roll Call

- C. Approve Consent Agenda
 - 1. Approve Agenda
 - 2. Approve Meeting Minutes
 - 3. Payments Report

- D. Water/Wastewater Report
 - Odor Control Evaluation Proposal
 - Lift Station Pump Replacement
 - Hydrant Flushing Program

- E. Commissioner Reports
 - George's Climate Action Plan Discussion List

- F. Adjourn

*Public Utilities Commission
Minutes
July 3, 2019*

Meeting was called to order by chair George Wilkes at 3:00 p.m.

Members present: Ann Possis and George Wilkes
Absent: Tim Kennedy
Staff Present: Mike Roth, Tom Nelson, and Haden Hinchman
Others Present:

Motion by Possis, seconded by Wilkes to approve the Agenda with the addition of Commissioner Reports at the end of the meeting; June 5, 2019 Minutes; and Payment of Bills. Approved unanimously.

Tom Nelson presented reasons for the current odor at the sewer plant. He explained that because of storm sewer construction on 2nd Street they emptied the holding tanks completely and it's been difficult getting the ratios of oxygen and bacteria normalized. They're trying a more labor intensive solution where they transfer sludge more often but at a lesser amount. Tom also mentioned that during the wastewater plant review about mercury filtering the engineer mentioned some options that may alleviate the smell. The Commission asked staff to look into what those options would cost. They also asked staff to put out a press release detailing the causes for the odor.

The Commission discussed staff recommendations for an AMI opt-out policy. Rebecca Stoner presented her concerns about AMI.

Motion by Wilkes, seconded by Possis to adopt the AMI opt-out policy as written. Approved unanimously.

Mike Roth presented the background of the current seasonal disconnect policy and the reasons behind the proposed change.

Motion by Wilkes, seconded by Possis to change the Seasonal Disconnect Policy to continue charging fixed fees on seasonal disconnections. Approved unanimously.

Motion by Wilkes, seconded by Possis to ask SMMPA to include Dark Skies language on lighting rebates. Approved unanimously.

The Commission asked staff to schedule a work session to investigate ways the PUC could further the goals of the newly passed Climate Action Plan.

Commissioner Reports:

George – Will be presenting the EICDA resolution to the City Council during the next meeting.

Ann – Nothing to report.

There being no further business, the meeting adjourned at 3:40 p.m.



CITY OF GRAND MARAIS

07/05/19 1:37 PM

Page 1

Payments

City of Grand Marais

Current Period: July 2019

Batch Name	7-5-19 APP	User Dollar Amt	\$125,369.98	
	Payments	Computer Dollar Amt	\$125,369.98	
				\$0.00 In Balance
Refer	<u>77757 FURTHER</u>	Ck#	<u>004613E 7/5/2019</u>	
Cash Payment	E 602-49490-131 Employer Paid Health			\$234.56
Invoice	39088026 7/2/2019			
Transaction Date	7/2/2019	MAIN CHECKING G	10100	Total \$234.56

Fund Summary

	10100 MAIN CHECKING GMSB	
101 GENERAL FUND		\$29,245.73
602 SEWER		\$234.56
609 MUNICIPAL LIQUOR FUND		\$95,889.69
		<u>\$125,369.98</u>

Pre-Written Checks	\$234.56
Checks to be Generated by the Computer	\$0.00
Total	<u>\$234.56</u>



CITY OF GRAND MARAIS

07/11/19 8:34 AM

Page 1

Payments

City of Grand Marais

Current Period: July 2019

Batch Name	7-11-19 AP	User Dollar Amt	\$229,499.31
Payments		Computer Dollar Amt	\$229,499.31

\$0.00 In Balance

Refer	<u>77752 WEX BANK</u>	Ck#	<u>004608E 7/1/2019</u>		
Cash Payment	E 601-49440-212 Motor Fuels				\$90.18
Invoice	59883140	6/23/2019			
Cash Payment	E 602-49490-212 Motor Fuels				\$90.17
Invoice	59883140	6/23/2019			
Cash Payment	E 604-49570-212 Motor Fuels				\$366.76
Invoice	59878805	6/23/2019			
Cash Payment	E 604-49570-212 Motor Fuels				\$37.66
Invoice	59899803	6/23/2019			
Cash Payment	E 601-49440-212 Motor Fuels				\$10.76
Invoice	59899803	6/23/2019			
Cash Payment	E 602-49490-212 Motor Fuels				\$10.76
Invoice	59899803	6/23/2019			
Transaction Date	6/28/2019	MAIN CHECKING G	10100	Total	\$606.29
Refer	<u>77753 PUBLIC UTILITIES COMMISSION1</u>	Ck#	<u>004609E 7/5/2019</u>		
Cash Payment	E 602-49451-380 Utility Services (GENER				\$1,282.62
Invoice	July-19	7/1/2019			
Cash Payment	E 602-49480-380 Utility Services (GENER				\$3,565.02
Invoice	July-19	7/1/2019			
Cash Payment	E 601-49420-380 Utility Services (GENER				\$2,086.26
Invoice	July-19	7/1/2019			
Cash Payment	E 604-49551-380 Utility Services (GENER				\$32.72
Invoice	July-19	7/1/2019			
Transaction Date	7/1/2019	MAIN CHECKING G	10100	Total	\$6,966.62
Refer	<u>77764 EDWIN E. THORESON, INC.</u>				
Cash Payment	E 604-49570-220 Repair/Maint Supply (GE				\$185.00
Invoice	26638	6/17/2019			
Transaction Date	7/3/2019	MAIN CHECKING G	10100	Total	\$185.00
Refer	<u>77765 LHB ENGINEERS & ARCHITECTS</u>				
Cash Payment	E 602-49451-530 Capital Outlay Improvem				\$254.00
Invoice	180710.00-6	6/13/2019			
Transaction Date	7/3/2019	MAIN CHECKING G	10100	Total	\$254.00
Refer	<u>77778 TEAM LABORATORY CHEMICAL C</u>				
Cash Payment	E 602-49480-210 Operating Supplies (GEN				\$1,608.00
Invoice	INV0016588	6/18/2019			
Transaction Date	7/3/2019	MAIN CHECKING G	10100	Total	\$1,608.00
Refer	<u>77781 EATON</u>				
Cash Payment	E 604-49570-227 Utility Maint Supplies				\$8,568.00
Invoice	936815622	6/15/2019			
Cash Payment	E 604-49570-227 Utility Maint Supplies				\$54,466.09
Invoice	936945996	6/26/2019			
Transaction Date	7/3/2019	MAIN CHECKING G	10100	Total	\$63,034.09
Refer	<u>77784 MN PUBLIC FACILITIES AUTHORITY</u>				



CITY OF GRAND MARAIS

07/11/19 8:34 AM

Page 2

Payments

City of Grand Marais

Current Period: July 2019

Cash Payment	E 601-47019-611 Bond Interest				\$3,124.55
Invoice	BOND REPAYM	6/26/2019			
Cash Payment	E 601-47016-601 Debt Srv Bond Principal				\$32,000.00
Invoice	BOND REPAYM	6/26/2019			
Cash Payment	E 601-47016-611 Bond Interest				\$409.60
Invoice	BOND REPAYM	6/26/2019			
Transaction Date	7/3/2019	MAIN CHECKING G	10100	Total	\$35,534.15
Refer	77785 US BANK				
Cash Payment	E 601-47027-611 Bond Interest				\$747.92
Invoice	LOAN PAY 139	6/27/2019			
Cash Payment	E 601-47027-620 Fiscal Agent s Fees				\$195.97
Invoice	LOAN PAY 139	6/27/2019			
Transaction Date	7/3/2019	MAIN CHECKING G	10100	Total	\$943.89
Refer	77787 NORDIC ELECTRIC				
Cash Payment	E 602-49451-404 Repairs/Maint Machinery				\$296.21
Invoice	16191	4/9/2019			
Transaction Date	7/3/2019	MAIN CHECKING G	10100	Total	\$296.21
Refer	77788 METERING & TECHNOLOGY SOLU				
Cash Payment	E 601-49430-220 Repair/Maint Supply (GE				\$3,111.28
Invoice	14626	6/27/2019			
Transaction Date	7/3/2019	MAIN CHECKING G	10100	Total	\$3,111.28
Refer	77789 UTILITY CONSULTANTS, INC				
Cash Payment	E 602-49480-300 Professional Srvs (GENE				\$404.30
Invoice	101939	6/26/2019			
Transaction Date	7/3/2019	MAIN CHECKING G	10100	Total	\$404.30
Refer	77790 STEVE S SPORTS AND AUTO				
Cash Payment	E 601-49430-404 Repairs/Maint Machinery				\$30.19
Invoice	1160	6/27/2019			
Cash Payment	E 601-49430-404 Repairs/Maint Machinery				\$61.69
Invoice	1848	6/26/2019			
Transaction Date	7/3/2019	MAIN CHECKING G	10100	Total	\$91.88
Refer	77791 GRAND MARAIS AUTO PARTS, INC				
Cash Payment	E 604-49570-221 Equipment Parts/Builing				\$41.17
Invoice	2088	7/3/2019			
Transaction Date	7/3/2019	MAIN CHECKING G	10100	Total	\$41.17
Refer	77795 MMUA				
Cash Payment	E 604-49570-308 Safety Assistance Progra				\$450.00
Invoice	53545	7/1/2019			
Transaction Date	7/3/2019	MAIN CHECKING G	10100	Total	\$450.00
Refer	77796 STUART C IRBY CO				
Cash Payment	E 604-49570-210 Operating Supplies (GEN				\$4,125.19
Invoice	S011435877.001	6/27/2019			
Transaction Date	7/3/2019	MAIN CHECKING G	10100	Total	\$4,125.19
Refer	77797 MN DEPT OF HEALTH-DRINKING				
Cash Payment	G 601-20803 State Water Connection Fee				\$1,124.00
Invoice	1160001	5/14/2019			



CITY OF GRAND MARAIS

Payments

City of Grand Marais

Current Period: July 2019

Transaction Date	7/3/2019	MAIN CHECKING G 10100	Total	\$1,124.00
Refer	77798 GOPHER STATE ONE CALL	-		
Cash Payment	E 604-49570-317 Contracted Services			\$32.40
Invoice	9060984 6/30/2019			
Transaction Date	7/3/2019	MAIN CHECKING G 10100	Total	\$32.40
Refer	77799 TRAVELERS CL REMITTANCE CEN	-		
Cash Payment	E 604-49551-360 Insurance (GENERAL)			\$29,575.00
Invoice	7940W2078 6/25/2019			
Transaction Date	7/3/2019	MAIN CHECKING G 10100	Total	\$29,575.00
Refer	77800 ARROWHEAD COOPERATIVE	Ck# 004616E 7/20/2019		
Cash Payment	E 604-49590-321 Telephone			\$189.10
Invoice	2244 7/1/2019			
Cash Payment	E 602-49490-321 Telephone			\$128.27
Invoice	2121 7/1/2019			
Transaction Date	7/3/2019	MAIN CHECKING G 10100	Total	\$317.37

Fund Summary

	10100 MAIN CHECKING GMSB	
101 GENERAL FUND		\$78,587.68
211 LIBRARY		\$1,308.04
601 WATER		\$42,992.40
602 SEWER		\$7,639.35
604 ELECTRIC		\$98,069.09
609 MUNICIPAL LIQUOR FUND		\$902.75
		<u>\$229,499.31</u>

Pre-Written Checks	\$7,890.28
Checks to be Generated by the Computer	\$140,810.56
Total	\$148,700.84



CITY OF GRAND MARAIS

08/02/19 9:46 AM

Page 1

Payments

City of Grand Marais

Current Period: August 2019

Batch Name	8-1-19 AP	User Dollar Amt	\$339,531.34		
	Payments	Computer Dollar Amt	\$339,531.34		
				\$0.00	In Balance
Refer	77871 HAWKINS, INC.	-			
Cash Payment	E 601-49420-218 Operating Supplies- Che				\$642.44
Invoice	4532283 7/3/2019				
Transaction Date	7/25/2019	MAIN CHECKING G	10100	Total	\$642.44
Refer	77873 COOK COUNTY HOME CENTER	-			
Cash Payment	E 602-49451-220 Repair/Maint Supply (GE				\$275.98
Invoice	1160 6/30/2019				
Transaction Date	7/25/2019	MAIN CHECKING G	10100	Total	\$275.98
Refer	77877 FERGUSON WATERWORKS#2516	-			
Cash Payment	E 601-49430-220 Repair/Maint Supply (GE				\$1,207.12
Invoice	0334454 7/18/2019				
Transaction Date	7/25/2019	MAIN CHECKING G	10100	Total	\$1,207.12
Refer	77878 LHB ENGINEERS & ARCHITECTS	-			
Cash Payment	E 602-49451-530 Capital Outlay Improvem				\$370.00
Invoice	180710.00-7 7/17/2019				
Transaction Date	7/25/2019	MAIN CHECKING G	10100	Total	\$370.00
Refer	77879 QUILL CORPORATION	-			
Cash Payment	E 602-49490-200 Office Supplies (GENER				\$158.04
Invoice	8657971 7/11/2019				
Transaction Date	7/25/2019	MAIN CHECKING G	10100	Total	\$158.04
Refer	77880 WEX BANK	-			
Cash Payment	E 604-49570-212 Motor Fuels				\$168.21
Invoice	60398729 7/23/2019				
Transaction Date	7/25/2019	MAIN CHECKING G	10100	Total	\$168.21
Refer	77886 BUCK S HARDWARE HANK	-			
Cash Payment	E 604-49570-210 Operating Supplies (GEN				\$5.46
Invoice	1848 7/1/2019				
Cash Payment	E 604-49570-210 Operating Supplies (GEN				\$29.11
Invoice	2088 7/1/2019				
Cash Payment	E 602-49451-210 Operating Supplies (GEN				\$99.21
Invoice	1160 7/1/2019				
Transaction Date	7/25/2019	MAIN CHECKING G	10100	Total	\$133.78
Refer	77892 WALKER, GIROUX & HAHNE	-			
Cash Payment	E 604-49590-301 Auditing and Acct g Servi				\$7,750.00
Invoice	61757 6/30/2019				
Cash Payment	E 601-49440-301 Auditing and Acct g Servi				\$3,875.00
Invoice	61757 6/30/2019				
Cash Payment	E 602-49490-301 Auditing and Acct g Servi				\$3,875.00
Invoice	61757 6/30/2019				
Transaction Date	7/25/2019	MAIN CHECKING G	10100	Total	\$15,500.00
Refer	77894 MPCA-FISCAL SVC	-			



CITY OF GRAND MARAIS

08/02/19 9:46 AM

Page 2

Payments

City of Grand Marais

Current Period: August 2019

Cash Payment	E 602-49490-439 Licenses	GREG LYKINS		\$23.00
Invoice	OPERATOR CER	5/14/2019		
Transaction Date	7/25/2019	MAIN CHECKING G	10100	Total \$23.00
Refer	77900 FURTHER		-	
Cash Payment	E 602-49490-131 Employer Paid Health			\$42.95
Invoice	39105124	7/16/2019		
Transaction Date	7/25/2019	MAIN CHECKING G	10100	Total \$42.95
Refer	77903 JOHNSON S FOODS		-	
Cash Payment	E 604-49570-210 Operating Supplies (GEN			\$10.19
Invoice	1848	6/18/2019		
Transaction Date	7/25/2019	MAIN CHECKING G	10100	Total \$10.19
Refer	77904 US BANK		-	
Cash Payment	E 601-47027-611 Bond Interest			\$747.92
Invoice	LOAN PAY 140	7/18/2019		
Cash Payment	E 601-47027-620 Fiscal Agent s Fees			\$195.92
Invoice	LOAN PAY 140	7/18/2019		
Transaction Date	7/25/2019	MAIN CHECKING G	10100	Total \$943.84
Refer	77911 G&G SEPTIC		-	
Cash Payment	E 602-49480-317 Contracted Services			\$2,305.00
Invoice	18142	7/7/2019		
Transaction Date	7/25/2019	MAIN CHECKING G	10100	Total \$2,305.00
Refer	77914 T & R ELECTRIC		-	
Cash Payment	E 604-49570-210 Operating Supplies (GEN			\$30.00
Invoice	80290	7/11/2019		
Cash Payment	E 604-49570-210 Operating Supplies (GEN			\$4,200.19
Invoice	153843	6/29/2019		
Cash Payment	E 604-49570-222 Transformers			\$13,341.62
Invoice	80290	7/11/2019		
Transaction Date	7/25/2019	MAIN CHECKING G	10100	Total \$17,571.81
Refer	77915 CORE & MAIN LP		-	
Cash Payment	E 601-49430-220 Repair/Maint Supply (GE			\$341.90
Invoice	K829451	7/9/2019		
Cash Payment	E 601-49430-220 Repair/Maint Supply (GE			\$250.00
Invoice	K786843	6/28/2019		
Cash Payment	E 601-49430-220 Repair/Maint Supply (GE			\$249.60
Invoice	k787048	7/2/2019		
Transaction Date	7/25/2019	MAIN CHECKING G	10100	Total \$841.50
Refer	77916 WATER CONSERVATION SERVICE		-	
Cash Payment	E 601-49430-317 Contracted Services			\$2,525.00
Invoice	ANNUAL SURVE	7/16/2019		
Transaction Date	7/25/2019	MAIN CHECKING G	10100	Total \$2,525.00
Refer	77917 STEVE S SPORTS AND AUTO		-	
Cash Payment	E 602-49480-404 Repairs/Maint Machinery			\$15.09
Invoice	279824	6/19/2019		
Cash Payment	E 602-49480-404 Repairs/Maint Machinery			\$30.19
Invoice	280040	6/27/2019		



CITY OF GRAND MARAIS

08/02/19 9:46 AM

Page 3

Payments

City of Grand Marais

Current Period: August 2019

Cash Payment	E 602-49480-404 Repairs/Maint Machinery				\$61.69
Invoice	280005	6/26/2019			
Transaction Date	7/25/2019	MAIN CHECKING G	10100	Total	\$106.97
Refer	77927 MINNESOTA PUMP WORKS	-			
Cash Payment	E 602-49480-580 Capital Outlay (Equipme				\$20,101.53
Invoice	00007616	7/1/2019			
Transaction Date	7/25/2019	MAIN CHECKING G	10100	Total	\$20,101.53
Refer	77928 GENE S FOODS	-			
Cash Payment	E 602-49480-210 Operating Supplies (GEN				\$36.79
Invoice	00133071-360	7/2/219			
Transaction Date	7/25/2019	MAIN CHECKING G	10100	Total	\$36.79
Refer	77929 WESTERN LAKE SUPERIOR SANIT	-			
Cash Payment	E 602-49480-317 Contracted Services				\$14,360.38
Invoice	7810	7/2/2019			
Transaction Date	7/25/2019	MAIN CHECKING G	10100	Total	\$14,360.38
Refer	77930 CENTURYLINK	-			
Cash Payment	E 601-49440-321 Telephone				\$138.72
Invoice	218 D24-1002	7/1/2019			
Cash Payment	E 601-49440-321 Telephone				\$69.36
Invoice	218 D24-1001	7/1/2019			
Cash Payment	E 601-49440-321 Telephone				\$56.73
Invoice	218 387-1788	7/1/2019			
Transaction Date	7/25/2019	MAIN CHECKING G	10100	Total	\$264.81
Refer	77931 SMMPA		<u>Ck# 004633E 7/25/2019</u>		
Cash Payment	E 604-49560-388 Purchase Power				\$113,496.02
Invoice	JUNE-19	7/1/2019			
Transaction Date	7/25/2019	MAIN CHECKING G	10100	Total	\$113,496.02
Refer	77935 LEAGUE OF MN CITIES INSURANC	-			
Cash Payment	E 601-49440-360 Insurance (GENERAL)				\$1,680.90
Invoice	40001180	7/5/2019			
Cash Payment	E 604-49590-360 Insurance (GENERAL)				\$4,592.57
Invoice	40001180	7/5/2019			
Cash Payment	E 602-49490-360 Insurance (GENERAL)				\$5,872.65
Invoice	40001180	7/5/2019			
Cash Payment	E 604-49590-360 Insurance (GENERAL)				\$625.86
Invoice	40001180	7/5/2019			
Cash Payment	E 601-49440-360 Insurance (GENERAL)				\$176.02
Invoice	40001180	7/5/2019			
Cash Payment	E 602-49490-360 Insurance (GENERAL)				\$176.02
Invoice	40001180	7/5/2019			
Transaction Date	7/25/2019	MAIN CHECKING G	10100	Total	\$13,124.02
Refer	77936 PSN		<u>Ck# 004634E 7/3/2019</u>		
Cash Payment	E 601-49440-432 Credit Card Charges				\$84.20
Invoice	198312	7/3/2019			
Cash Payment	E 602-49490-432 Credit Card Charges				\$84.20
Invoice	198312	7/3/2019			



CITY OF GRAND MARAIS

08/02/19 9:46 AM

Page 4

Payments

City of Grand Marais

Current Period: August 2019

Cash Payment	E 604-49590-432 Credit Card Charges				\$299.35
Invoice	198312	7/3/2019			
Transaction Date	7/25/2019		MAIN CHECKING G	10100	Total <u>\$467.75</u>
Refer	77938	NEON LINK			
Cash Payment	E 604-49590-310 Service Agreements				\$414.76
Invoice	1676	7/15/2019			
Cash Payment	E 601-49440-310 Service Agreements				\$116.65
Invoice	1676	7/15/2019			
Cash Payment	E 602-49490-310 Service Agreements				\$116.65
Invoice	1676	7/15/2019			
Transaction Date	7/25/2019		MAIN CHECKING G	10100	Total <u>\$648.06</u>

Fund Summary

10100 MAIN CHECKING GMSB

101 GENERAL FUND	\$109,538.53
211 LIBRARY	\$6,671.31
215 LIBRARY RESTRICTED FUND	\$809.48
601 WATER	\$12,357.48
602 SEWER	\$48,004.37
604 ELECTRIC	\$144,963.34
609 MUNICIPAL LIQUOR FUND	\$17,186.83
	<u>\$339,531.34</u>

Pre-Written Checks	\$114,131.98
Checks to be Generated by the Computer	\$91,193.21
Total	\$205,325.19



CITY OF GRAND MARAIS

08/02/19 1:31 PM

Page 1

Payments

City of Grand Marais

Current Period: August 2019

Batch Name	8-2-19 APP	User Dollar Amt	\$127,961.98	
	Payments	Computer Dollar Amt	\$127,961.98	
			\$0.00	In Balance
Refer	<u>77941 FURTHER</u>	Ck#	<u>004637E 8/1/2019</u>	
Cash Payment	E 604-49570-131 Employer Paid Health	MB		\$2,225.46
Invoice	39111374	7/30/2019		
Cash Payment	E 602-49480-131 Employer Paid Health	TN		\$1,811.24
Invoice	39111374	7/30/2019		
Transaction Date	7/30/2019	MAIN CHECKING G	10100	Total \$4,036.70
Refer	<u>77978 TOSHIBA BUSINESS SOLUTIONS</u>			
Cash Payment	E 601-49440-200 Office Supplies (GENER			\$3.45
Invoice	5009133	7/12/2019		
Cash Payment	E 602-49490-200 Office Supplies (GENER			\$3.45
Invoice	5009133	7/12/2019		
Cash Payment	E 604-49590-200 Office Supplies (GENER			\$12.28
Invoice	5009133	7/12/2019		
Transaction Date	8/2/2019	MAIN CHECKING G	10100	Total \$19.18
Refer	<u>77979 TOSHIBA BUSINESS SOLUTIONS</u>			
Cash Payment	E 601-49440-200 Office Supplies (GENER			\$9.95
Invoice	5010288	7/12/2019		
Cash Payment	E 602-49490-200 Office Supplies (GENER			\$9.95
Invoice	5010288	7/12/2019		
Cash Payment	E 604-49590-200 Office Supplies (GENER			\$35.37
Invoice	5010288	7/12/2019		
Transaction Date	8/2/2019	MAIN CHECKING G	10100	Total \$55.27

Fund Summary

10100 MAIN CHECKING GMSB

101 GENERAL FUND	\$27,497.01
211 LIBRARY	\$1,550.00
601 WATER	\$13.40
602 SEWER	\$1,824.64
604 ELECTRIC	\$2,273.11
609 MUNICIPAL LIQUOR FUND	\$94,803.82
	<u>\$127,961.98</u>

Pre-Written Checks	\$4,036.70
Checks to be Generated by the Computer	\$74.45
Total	<u>\$4,111.15</u>



Grand Marais Wastewater Treatment: Interim Optimization Concept Design

Background

Facility Planning for the Grand Marais Wastewater Treatment Facility (WWTF) was conducted in 2016-2017. Through the planning process, it was identified that a variance request for mercury water quality based effluent limits was the preferred option. A variance request for mercury was submitted to the Minnesota Pollution Control Agency (MPCA) on January 24, 2018 as a joint effort between Grand Marais Public Utilities, the City of Grand Marais, AE2S, and Flaherty & Hood. MPCA requested additional information related to the variance on August 14, 2018 with a general sentiment that the variance request had been received positively. The additional information was provided to MPCA on September 13, 2018. Further action on the variance request by MPCA has not occurred. Any major upgrades to the WWTF should be deferred until the variance request is formally approved (or denied), but several improvements are being considered in the interim, which would not be affected by the mercury variance. The four items are described below:

- **Biosolids Odor Control:** Similar to many mechanical WWTFs with aerobic digestion or aerated sludge holding tanks, the Grand Marais WWTF's aerated sludge holding tanks experience seasonal odors. The proximity of neighbors creates the potential for odor complaints. An odor control system (likely granular activated carbon, GAC) could significantly mitigate the odors via odor removal from the sludge tank headspace. A similar system has been installed in Otsego, MN (aerobic digestion, close neighbors, previous odor/noise complaints) with satisfactory results. The option would include holding tank air capture piping, an odor control system (air handling fan, optional sound attenuation enclosure, GAC vessel, associated controls, associated electrical connections, associated site improvements).
- **WAS Piping Modifications:** The existing piping configuration requires waste activated sludge (WAS) to be routed through the aerated sludge holding tanks to be loaded onto a tanker truck for disposal. Modifications to allow a more flexible piping arrangement would allow operations staff to directly load WAS to tanker trucks to better manage the sludge inventory, particularly for odor management.
- **Blower Piping Modifications:** The existing blower piping only allows for splitting of the air between the two aerated sludge holding tanks near the tanks. This can lead to unbalanced aeration between the two tanks as more air will flow to the tank with the lower liquid level (lower back pressure) even though the tank with the higher liquid level usually needs more air. Piping modifications would allow for de-coupling of the two tanks such that operations staff can independently manage the air flow to each tank and optimize the quasi-digestion to generate less odors. Even with odor control, this optimization will help extend the media life of the activated carbon.
- **Oxidation Ditch Aerator Redundancy Improvements:** The facility planning effort identified that the oxidation ditch (liquid treatment aeration system) is operating without redundancy. Even with all aerators in service, the system seasonally struggles to maintain measurable residual dissolved oxygen in the system with the existing two brush aerators (dissolved oxygen should be at 2.0 mg/L). The low oxygen in the oxidation ditch limits the stabilization of the WAS before being wasted to the sludge holding tanks and could be contributing to the odor issues. A mechanical issue on one of the existing brush aerators during the peak summer season is also a risk for compliance. A potential improvement is to add a third aerator for redundancy and



supplemental oxygen during the peak season. The conceptual design would include configuration and determination of associated electrical modification requirements.

These four improvements will be further evaluated to generate a conceptual level design for each item. Advantages and disadvantages will be discussed. An opinion of capital cost will be developed for each item as well as any potential O&M cost impacts. A schematic location drawing will be included for each item. Based upon the opinion of capital cost, nature of the improvement, and other factors, an implementation strategy will be recommended for each improvement or group of improvements (i.e. the improvement(s) could potentially be implemented via solicited quotes if under the \$175,000 state bid threshold). This will allow the City/PUC to decide which items to move forward for completion. Documentation will be via a technical memorandum delivered as a PDF.

Professional Services Proposal

The scope and associated professional fee below are to further evaluate the four items. The work includes process/civil evaluation and electrical, as needed. Upon concurrence with scope items, an associated contract will be developed for execution.

Phase/Task
Conceptual Design <ul style="list-style-type: none">• Evaluate the four items discussed in Background• Capital and O&M cost development• Advantages and disadvantages• Implementation approach(es)• Implementation recommendation• Deliverable: Interim Improvements Technical Memorandum

Item	Fee
Biosolids Odor Control	\$3,250
WAS Piping Modifications	\$1,250
Blower Piping Modifications	\$1,750
Aerator Redundancy Improvements	\$3,500
Total	\$9,750

Future Scope Items

- *Final/Detailed Design*
- *Bidding/Negotiation*
- *Construction Administration*
- *Regulatory Coordination*
- *Funding/Rate Analysis*

DATE: July 29, 2019

TO: Mike Roth, City Administrator
Grand Marais Public Utility Commission
Grand Marais Council

FROM: Thomas Nelson
Wastewater/Water Superintendent

RE: Lift Station Pump

The major sewer lift station on the west end of town had a pump go down. The pump was around 20 years old. A replacement pump is \$8250.00. I will send the old pump to see if can be repaired. If it can be repaired depending on the cost I will have it fixed and have for a spare pump.

Request is for a new pump only at this time.

Thomas Nelson
Water/Wastewater Superintendent.

Grand Marais Public Utilities Water Department Water Main and Fire Hydrant Flushing Plan

Phase one

Water distribution upper zone fire hydrant flushing steps and staff responsibility.

Locate and paint all fire hydrant lead curb valve boxes. Water Department Staff

Weed whip around all fire hydrants and curb valve boxes. Fire Department Staff

Check to see if all curb valve boxes are clear and that curb wrench will go on the valve nut and turn. Fire Department Members

Report back to Water Department via city hall of valves that curb valve wrench would not go the nut.

Clean out curb valve boxes that need cleaning. Water Department Staff.

Send out communications to customers in the area of the planned fire hydrant flushing. City Communication Manager

Flush fire hydrants. Fire Department Staff, Supervised by a Water Department Staff. Proper flushing procedure and fire hydrant flushing sequence will be explained to Fire Department Members. Map of fire hydrant flushing sequence and proper fire hydrant flushing procedure are attached.

Check fire hydrants for back draining and leaks. Fire Department Members

Water Department Staff will monitor the reservoir levels and water system.

Phase two (middle zone) and Phase three (lower zone) are forthcoming.

Hydrant Map GM

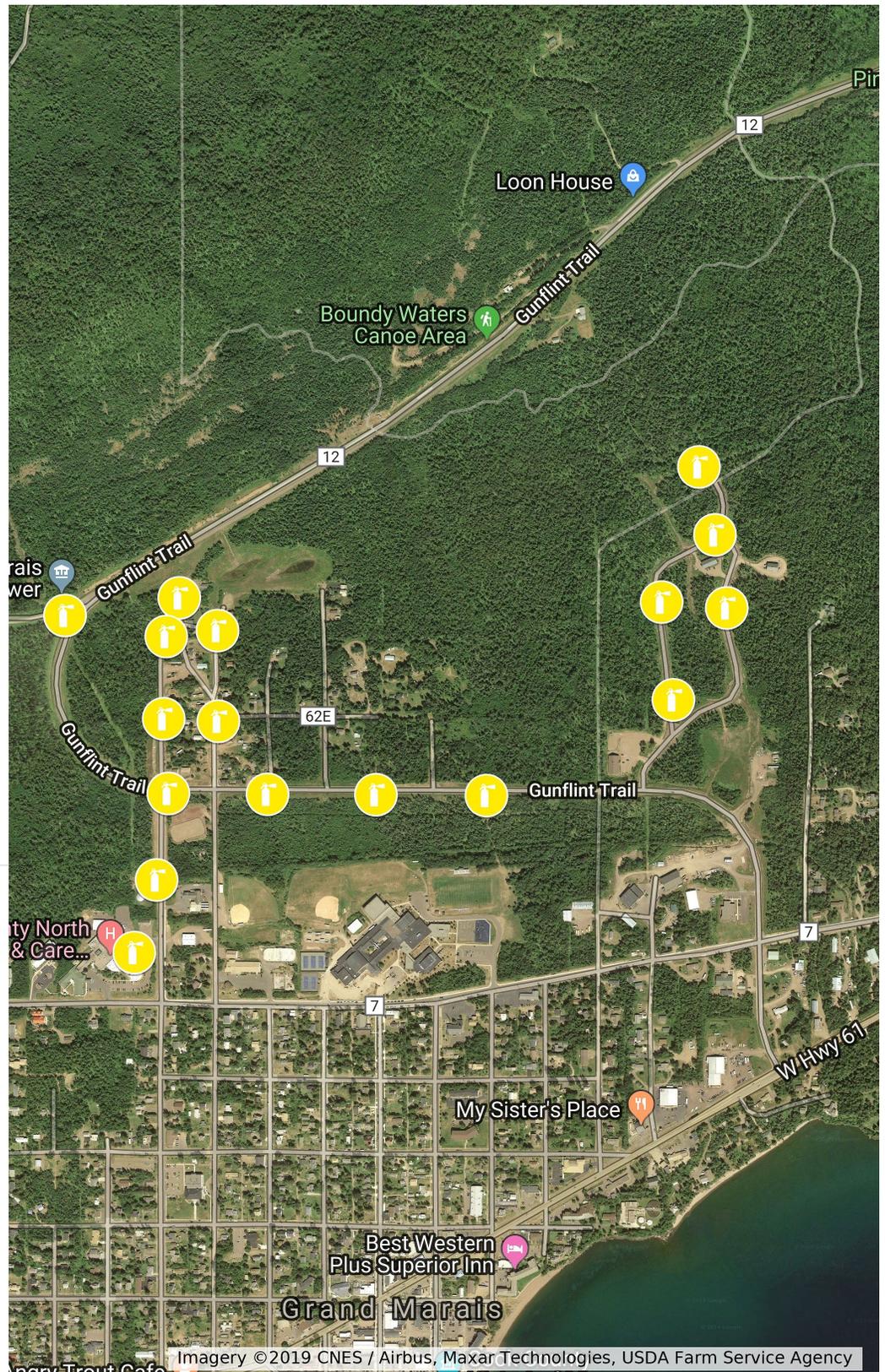
High Pressure

-  Moose Tower
-  11th Street and 5th Ave W
-  10th Street and 5th Ave W
-  9th Street and 5th Ave W
-  10th Street and 4th Ave W
- 

9th Street and Creechville Road

-  Gunflint Trail and 5th Ave W
-  Gunflint Trail and 3rd Ave W
-  Gunflint Trail and 1st Ave W
-  Gunflint Trail and 1st Ave E
-  BDA 1
-  BDA 2
-  BDA 3
-  BDA 4
-  BDA 5
-  Water Reservoir
-  Hospital

Yellow is High Pressure
 Red is Middle Pressure
 Blue is Low Pressure
 Black is Proposed
 Orange is out of service
 Grey is Abandoned
 Green is Shut off but can be turned on



Fire Hydrant Flushing Procedure.

1. Remove one 2 ½ inch cap from hydrant. Be sure to tighten all other caps.
2. Attach the flushing hose diffuser to the hydrant.
3. Slowly open the hydrant all the way.
4. Once sufficient water is discharged (about one minute), slowly close hydrant all the way than back off a quarter turn.
5. Remove flushing hose diffuser
6. Check for back draining and or leaks.
7. Attach cap - do not tighten during back draining.
Go back later if necessary to tighten cap completely.
8. Document any problems and report to Haden.

Memo from George:

At our Climate Action Plan working session we didn't quite get to the following ideas that I would like to get your thoughts on at the August 7th meeting:

- 1) Assess feasibility of a people and bird friendly application of wind power generation suitable for installation as a grant-funded pilot project in downtown Grand Marais or on the hilltop above Grand Marais.
- 2) Assess the feasibility of a moored, offshore wind power generation grant-funded pilot project.
- 3) Assess the feasibility of a solar PV plus storage grant-funded pilot project in Grand Marais.
- 4) Assess any City obstacles to residential and commercial solar projects.
- 5) Solar power information for residents and business owners on City Website (Sustainability Portal).
- 6) Consider a renewable energy fee on electric rates to fund PUC owned renewable energy projects.
- 7) Begin planning for additional 20-50 kW PUC owned solar project. Possible locations:
Library roof
Rec Area
Public works garage site
golf course
power plant site
water tower area
- 8) Grand Marais EV charging program, Municipal, commercial, residential.
- 9) Assess City vehicles for replacement with EVs. (SMMPA, 30% Nissan Leaf rebate?)

That is all.