

## RECORD OF PROCEEDINGS

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### MINUTES OF A REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE GREATROCK NORTH WATER AND SANITATION DISTRICT HELD JANUARY 7, 2020

A regular meeting of the Board of Directors (referred to hereafter as “Board”) of the Greatrock North Water and Sanitation District (referred to hereafter as “District”) was convened on Tuesday, January 7, 2020 at 4:30 P.M., at United Power, 500 Cooperative Way, Brighton, Colorado. The meeting was open to the public.

#### ATTENDANCE

#### Directors In Attendance Were:

Robert W. Fleck  
John D. Wyckoff  
Brian K. Rogers  
Jeffrey Polliard  
Dave Lozano

#### Also In Attendance Were:

Lisa A. Johnson; Special District Management Services, Inc.

Jennifer Gruber Tanaka, Esq.; White Bear Ankele Tanaka & Waldron, P.C.

Brad Simons; MMI Water Engineers, LLC

Karl Heil; Ramey Environmental Compliance, Inc.

Nick Marcotte, P.E.; Element Engineering LLC (for a portion of the meeting)

#### DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST

Disclosures of Potential Conflicts of Interest: Attorney Tanaka advised the Board that, pursuant to Colorado law, certain disclosures may be required prior to taking official action at the meeting. Attorney Tanaka confirmed that disclosures of conflicts of interest were filed with the Secretary of State’s Office and the Board at least 72 hours prior to the meeting for those Directors with potential conflicts of interest. The Board reviewed the Agenda for the meeting, following which, Directors Fleck, Rogers, Polliard, Lozano and Wyckoff each confirmed that they had no additional conflicts of interest in connection with any of the matters listed on the Agenda.

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### ADMINISTRATIVE MATTERS

**Agenda:** Ms. Johnson distributed for the Board's review and approval a proposed Agenda for the District's regular meeting.

Following discussion, upon motion duly made by Director Polliard, seconded by Director Rogers and, upon vote, unanimously carried, the Agenda was approved as amended.

**Board of Directors' Report:** Director Wyckoff reported that staff had met prior to the meeting to discuss and debrief on the recent water leak in Greatrock North. Director Wyckoff summarized the issues addressed at the meeting and the planned changes moving forward.

**Manager's Report:** Ms. Johnson presented and the Board reviewed the January Manager's Report. A copy of the report is attached hereto and incorporated herein by this reference.

### CONSENT AGENDA

**Consent Agenda:** The Board considered the following actions:

- Approve Minutes of the December 3, 2019 regular meeting.
- Ratify approval of payment of claims through the period ending December 31, 2019, as follows:

General Fund	\$ 65,240.22
Debt Service Fund	\$ -0-
Capital Projects Fund	\$ 1,536.80
<b>Total Claims:</b>	<b><u>\$ 66,777.02</u></b>

- Review operations and maintenance update.
- Monthly water meter installations.
- Adopt Resolution No. 2020-01-01: Designating 24-Hour Posting Location.

Following discussion, upon motion duly made by Director Fleck, seconded by Director Polliard and, upon vote, unanimously carried, the Board approved the consent agenda items as amended.

### FINANCIAL MATTERS

**November 30, 2019 Unaudited Financial Statements:** Ms. Johnson presented the November 30, 2019 unaudited financial statements.

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Following discussion, upon motion duly made by Director Wyckoff, seconded by Director Fleck and, upon vote, unanimously carried, the Board accepted the unaudited financial statements for the period ending November 30, 2019.

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### ENGINEER'S REPORT

**Engineer's Report:** Mr. Simons presented the January Engineer's Report. A copy of the report is attached hereto and incorporated herein by this reference.

### CAPITAL PROJECTS UPDATE:

**Alluvial Well No. 4:** Mr. Simons provided an update on the Alluvial Well No. 4 project.

**Evaporation Pond:** Mr. Simons gave a brief update on the status of the project.

**Reverse Osmosis Membrane System:** Mr. Simons and Mr. Marcotte gave a brief update on the status of the project and the grant.

**Water Meter Upgrade Project:** Ms. Johnson reported that a representative from Badger Meter will attend the February Board meeting and present information on water meter upgrade options.

### OPERATIONS/ MAINTENANCE MATTERS

**Operations and Maintenance Matters:** Mr. Heil presented the January Operations and Maintenance Report. A copy of the report is attached hereto and incorporated herein by this reference.

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### LEGAL MATTERS

**Country Club Ranchettes Filing No. 2 Inclusion Agreement:** Attorney Tanaka reported that she has received comments from the Property Owner on the Inclusion Agreement. She will summarize the comments and transmit to staff for review. If comments are acceptable, she will publish for an inclusion hearing at the February Board meeting.

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### OTHER BUSINESS

**Status of Hayesmount Estates:** Information regarding the status of Hayesmount Estates was included in the Engineer's Report.

**Status of Homestead Heights (Country Club Ranchettes #1):** Information regarding the status of Homestead Heights (Country Club Ranchettes #1) was included in the Engineer's Report.

**Status of Ridgeview Estates:** Information regarding the status of Ridgeview Estates was included in the Engineer's Report.

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**Status of Country Club Ranchettes #2 Inclusion:** Information regarding the status of Country Club Ranchettes #2 was included in the Engineer's Report.

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**COMMUNITY  
COMMENTS**

**Community Comments:** There were no community comments.

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**ADJOURNMENT**

There being no further business to come before the Board at this time, upon motion duly made by Director Wyckoff, seconded by Director Rogers and, upon vote, unanimously carried, the meeting was adjourned.

Respectfully submitted,

By 

Secretary for the Meeting

**Resolution No. 2020-01-01**

**RESOLUTION  
OF THE BOARD OF DIRECTORS OF THE  
GREATROCK NORTH WATER AND SANITATION DISTRICT**

**DESIGNATING THE DISTRICT'S WEBSITE FOR THE ONLINE POSTING OF  
MEETING NOTICES AND 24 HOUR POSTING LOCATION**

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WHEREAS, the Greatrock North Water and Sanitation District (the "District") is a quasi-municipal corporation and political subdivision of the State of Colorado; and

WHEREAS, pursuant to § 24-6-402(1)(a), C.R.S., the District is a local public body and subject to the provisions of §§ 24-6-401, *et seq.*, C.R.S.; and

WHEREAS, pursuant to § 32-1-903(2) and § 24-6-402(2)(c), C.R.S., the District shall be considered to have given full and timely notice to the public if notice of the meeting is posted, with specific agenda information if available, on a public website of the District no less than twenty-four (24) hours prior to the meeting; and

WHEREAS, pursuant to § 24-6-402(2)(c), C.R.S., the District shall make the notice posted on the public website accessible at no charge to the public, consider linking the notice to any appropriate social media accounts of the District, and, to the extent feasible, make the notices searchable by type of meeting, date of meeting, time of meeting, agenda contents, and any other category deemed appropriate by the District; and

WHEREAS, pursuant to § 24-6-402(2)(c), C.R.S., the District shall designate a place within the boundaries of the local public body at which it may post a notice no less than twenty-four (24) hours in advance of the meeting in the event that the District is unable to post the notice online due to exigent or emergency circumstances.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD AS FOLLOWS:

1. Pursuant to § 24-6-402(2)(c), C.R.S., the Board hereby designates [colorado.gov/greatrocknorthwsd](http://colorado.gov/greatrocknorthwsd) as the website at which notices of District meetings will be posted twenty-four (24) hours in advance.

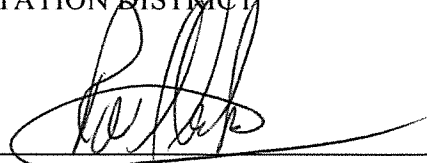
2. Pursuant to § 24-6-402(2)(c), C.R.S., the Board hereby designates the following location for the posting of its meeting notices twenty-four (24) hours in advance in the event that the District is unable to post notice on the District's website:

The water tank at 16373 Rayburn Street, Hudson, Colorado

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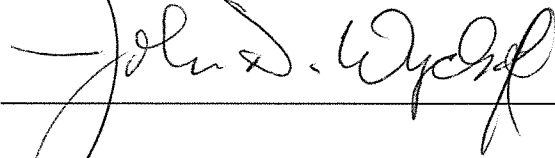
ADOPTED this 7<sup>th</sup> day of January, 2020.

GREATROCK NORTH WATER AND  
SANITATION DISTRICT



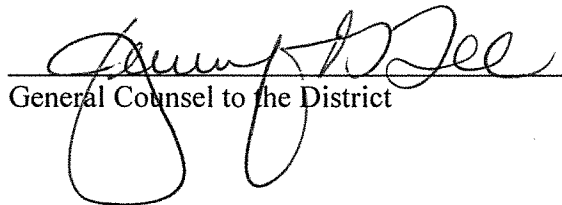
\_\_\_\_\_  
Officer of the District

ATTEST:



APPROVED AS TO FORM:

WHITE BEAR ANKELE TANAKA & WALDRON  
Attorneys at Law



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General Counsel to the District

*[Signature Page to Resolution Designating the 24-Hour Posting Location.]*



Date: December 30, 2019  
To: Greatrock North Water and Sanitation District, Board of Directors  
From: Lisa A. Johnson, District Manager  
Re: January 7, 2020 Manager's Report

**Agenda Action Items**

**II.A. Consent Agenda**

1. Approve the Minutes of the December 3, 2019 regular meeting.
2. Ratify approval of the payment of claims for the period ending December 31, 2019.
3. Operations and Maintenance update.
4. Review water meter installations.
5. Acceptance of cash position schedule and unaudited financial statements for the period ending November 30, 2019.
6. Adopt Resolution No. 2020-01-01: Designating 24-Hour Posting Location.

**I recommend approval of the consent agenda items.**

**IV.A.4.1 Capital Projects Update – Water Meter Upgrade Project**

Per the Board's request, I have invited Badger Meter to the January or February meeting to present information on the water meter upgrade software. The representative from Badger Meter is out of the office through the holiday and so I suspect he will attend the February meeting with this presentation.

**VII.A. Hayesmount Estates**

An update on this agenda item is included in the Engineer's Report. 16 System Development Fees have been paid to date.



**VII.B. Homestead Heights**

An update on this agenda item is included in the Engineer's Report.

**VII.C. Ridgeview Estates**

An update on this agenda item is included in the Engineer's Report.

**VII.D. Country Club Ranchettes No. 2**

An update on this agenda item is included in the Engineer's Report

**Review of monthly Water Resumes and Other Water Related Matters**

Attorney Poznanovic has reviewed the October resume and did not find any cases he recommends the District oppose.

**Update on other District Related Matters and/or Committee Meetings**

The Committee did not meet in the month of December.

I attended a meeting with Don Sandoval, Clay Brown, Rob Fleck and Brad Simons on December 19, 2019 regarding a tour of the current RO facility and a brief discussion on the new facility. This was all related to the grant we are seeking from the EIAF. The meeting went well and staff is gathering additional information to send along to Mr. Brown prior to our presentation in mid-March.



## Greatrock North Water & Sewer District Monthly Activities Report November 15, 2019 to December 13, 2019

- 11/15/19 (1.33hrs)** Completed routine checks. Completed inspections on tanks and generators.
- 11/18/19 (1.75hrs)** Completed routine checks. Collected Bac-T samples and delivered to the lab.
- 11/20/19 (1.08hrs)** Completed routine checks. Completed testing of pH and conductivity at all pump stations.
- 11/22/19 (1.25hrs)** Completed routine checks.
- 11/25/19 (1.25hrs)** Completed routine checks.
- 11/27/19 (1.25hrs)** Completed routine checks. Completed testing of pH and conductivity at all pump stations. Collected TDS Hardness and Langelier Index samples at all pump stations and delivered to the lab.
- 11/28/19 (1.33hrs)** Completed routine checks.
- 12/02/19 (1.5hrs)** Completed routine checks.
- 12/04/19 (1.41hrs)** Completed routine checks.
- 12/06/19 (3.0hrs)** Completed routine checks. Flushed Kenuil Ct. hydrant. Checked amp draw on RHF fire pump.
- 12/09/19 (1.25hrs)** Completed routine checks.
- 12/11/19 (1.08hrs)** Completed routine checks. Collected Bac-T samples and delivered to the lab.
- 12/13/19 (1.57hrs)** Completed routine checks. Collected TDS Hardness and Langelier Index samples at all pump stations and delivered to the lab.

**November 15, 2019 to December 13, 2019**

RO Run Time	112.0 hrs.
RO Concentrate Flow: 1 Pond (South)	201,600 gallons

**Sampled Date: November 27, 2019**

Monthly Testing	TDS (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Total Hardness (mg/L)
BE	432.00	36.00	6.62	117.10
RHF	339.00	27.30	4.99	88.70
GRN	395.00	28.30	4.99	91.30

Date	Permeate Flow	Concentrate Flow	% Recovery	Permeate Conductivity	Hour Meter
15-Nov	0	0	0	0	254.60
18-Nov	0	0	0	0	268.40
20-Nov	0	0	0	0	277.70
22-Nov	0	0	0	0	286.30
25-Nov	0	0	0	0	295.70
27-Nov	0	0	0	0	305.70
28-Nov	0	0	0	0	309.30
2-Dec	0	0	0	0	327.10
4-Dec	0	0	0	0	335.60
6-Dec	0	0	0	0	344.20
9-Dec	0	0	0	0	353.60
11-Dec	0	0	0	0	362.70
13-Dec	0	0	0	0	366.60



**GREATROCK NORTH WATER AND SANITATION DISTRICT  
ENGINEER'S REPORT  
December 30, 2019**

**Facility Activities**

**Box Elder Creek Ranch Subdivision**

On July 31, 2019, Ramey Environmental Compliance (REC) assessed the condition of the air/vacuum valves in the vaults located in East 161<sup>st</sup> Court and East 160<sup>th</sup> Court. Both are operating properly, but REC recommends a spare two-inch air release valve be stocked at the Box Elder Creek Ranch pump station. I concur with the recommendation as long as the spare component is tracked in the District's AllMax inventory and clearly labeled and stored at the Box Elder Creek Ranch pump station. Karl Heil is working on a process to track spare components before the valve is procured.

**Rocking Horse Farms Subdivision**

MMI has received an Estimate from Quantum Pump & Controls, LLC for improvements to the Rocking Horse Farms pump station to support potable water service to the Country Club Ranchettes Filing No. 1 development. With the County's anticipated approval of the development's final plat, MMI will work with Mr. Cass, of Quantum Pump & Controls, LLC, to clarify any questions on the estimate and present the proposal to the Board for consideration.

**Greatrock North Subdivision**

A water main break occurred on November 6, 2019. The line repairs were completed on November 8 and the asphalt patch was completed on November 13. MMI will prepare the County's Utility Street Cut Permit application and work with Dan LaCoe on the supporting documentation. An internal assessment of the break and response, originally scheduled for December 20, 2019, is being rescheduled.

**Operations**

The 4th quarter operations meeting was conducted on Friday, October 18, 2019.

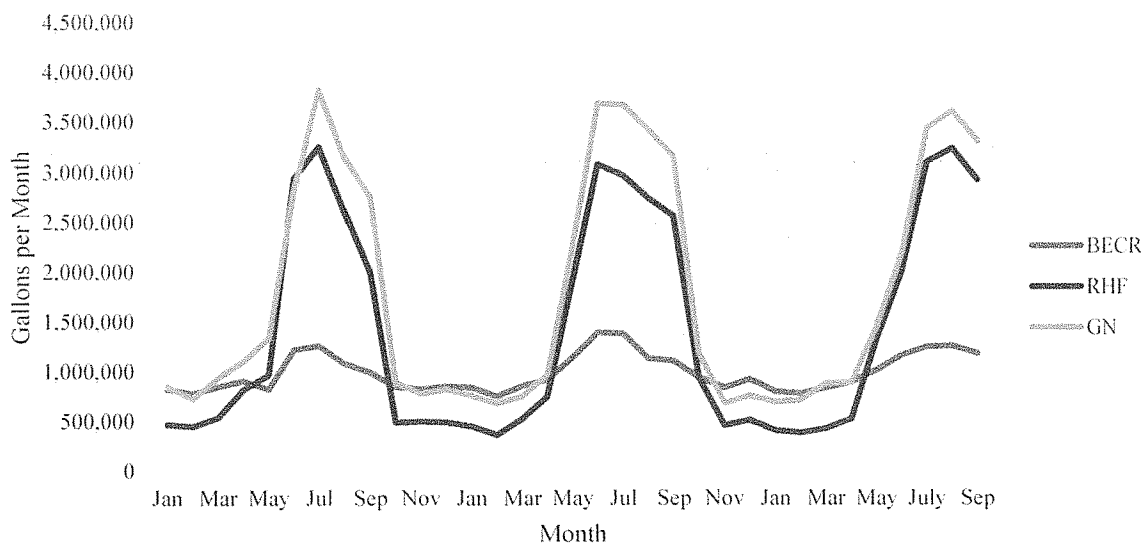
**District-wide Activities**

**General Water Accounting**

The SCADA computer failed on or about October 12, 2019, so the data typically provided in the monthly Engineer's Report is unavailable. As of December 30, the daily reporting function has not been reliably restored. Below is a tabulation and graph of water usage (gallons) for each month for each subdivision based upon the daily/monthly SCADA reports.

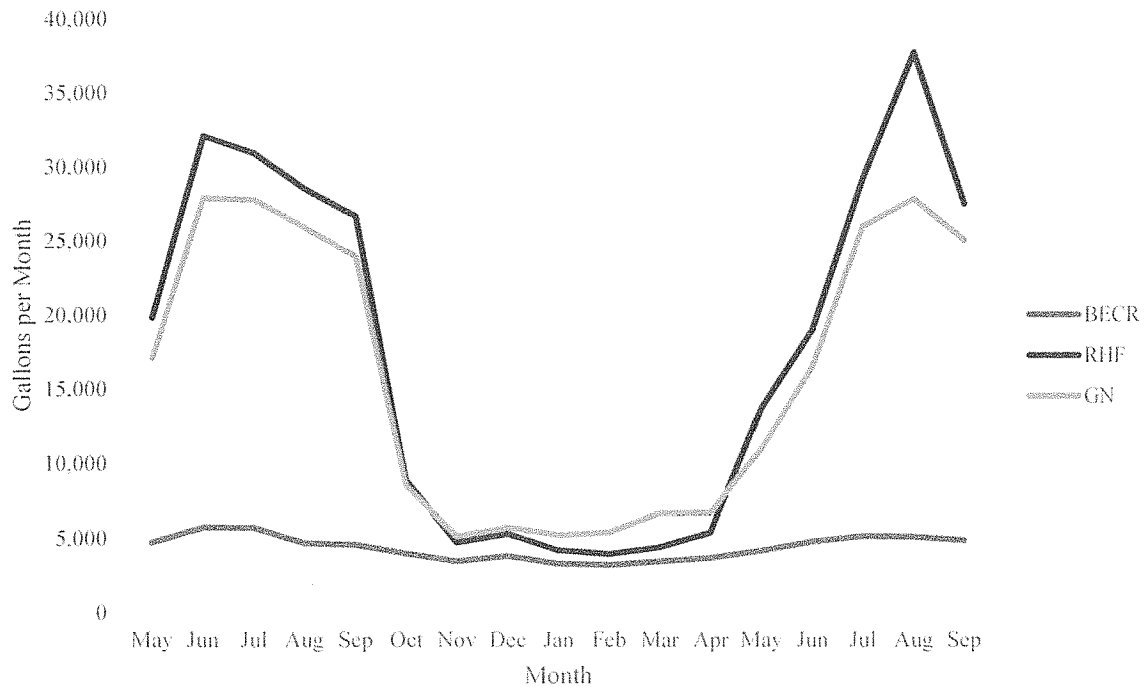
2018, & 2019	BECR	RHF	GN
December (2018)	921,072	508,705	754,203
January	796,883	401,939	686,814
February	774,758	377,806	710,598
March	831,348	420,949	880,730
April (projected)#	888,839	516,644	883,631
May	1,007,538	1,318,466	1,450,327
June	1,158,465	1,995,163	2,181,844
July	1,244,000	3,099,940	3,432,270
August	1,254,862	3,235,914	3,601,755
September (as of 09/22/19)	864,337	2,141,286	2,427,177
September (projected)	1,178,641	2,919,936	3,309,787
October	DATA NOT AVAILABLE		
November	DATA NOT AVAILABLE		
December	DATA NOT AVAILABLE		

2017-2019 GNWSD Water Usage



Below is a graph of average water usage (gallons) for each month for lots in each subdivision based upon the daily/monthly SCADA reports.

## 2018-2019 GNWSD Water Usage by Lot

Water Augmentation Pumping

The SCADA computer failed on or about October 12, 2019, so the data typically provided in the monthly Engineer's Report is unavailable. As of December 30, the daily reporting function has not been reliably restored. Below is a summary of augmentation water pumped (gallons) for each month based upon the daily/monthly SCADA reports. This information is beneficial when evaluating monthly power billings.

2017, 2018, & 2019	LFH-1 (GN)	LFH-2 (RHF)	LFH-3 (BECR)
December (2018)	0	404,530 (until 12/07/18)	0
January	0	0	0
February	0	0	0
March	0	0	0
April (through 04/16/19)	0	0	0
May	9,993	1,378,379	30,088
June	480,300	0	0
July	432,550	303,669	3,678,279
August	303,669	432,550	4,304,560
September (through 09/22/19)	38,657	203,368	2,891,202
October	DATA NOT AVAILABLE		
November	DATA NOT AVAILABLE		
December	DATA NOT AVAILABLE		

### Water Quality Tracking

Below are tables summarizing water quality, pond levels, and electricity usage.

Sample Date	TDS (mg/l)			Hardness (mg/l)		
	BECR	RHF	GN	BECR	RHF	GN
December 13, 2019	403	358	361	128.0	109.6	115.3
November 27, 2019	432	339	395	117.1	88.7	91.3
October 16, 2019	340	452	415	79.6	129.2	117.8
September 25, 2019	495	497	485	165.5	177.9	174.9
August 14, 2019	565	520	546	213.3	195.8	194.7
July 17, 2019	464	437	513	193.2	186.3	190.6
June 5, 2019	511	557	544	132.2	173.7	154.8
May 22, 2019	665	650	645	262.3	263.3	271.7
April 24, 2019	490	451	459	170.9	141.1	149.1
March 20, 2019	437	429	419	162.0	153.2	159.2
February 28, 2019	352	404	334	112.9	136.8	110.4
January 16, 2019	657	510	590	261.9	182.4	226.2
December 5, 2018	292	318	328	62.1	66.8	66.0
November 7, 2018	283	305	290	72.0	88.6	81.0
October 11, 2018	292	347	346	90.9	128.6	121.6
September 14, 2018	434	442	444	167.1	167.4	164.6
August 31, 2018	467	481	338	173.5	168.2	138.3
July 19, 2018	428	474	471	165.6	212.2	199.3
June 13, 2018	566	542	559	256.0	230.0	240.5

\* Any projections are based upon benchtop data presented by Mike Atwood if laboratory results are unavailable.

The maximum daily reverse osmosis runtime was decreased to 480 minutes on October 30, 2019.

### Pond Level Management

The SCADA computer failed on or about October 12, 2019, so the data typically provided in the monthly Engineer's Report is unavailable. As of December 30, the daily reporting function has not been reliably restored. There are approximately 10 inches of capacity available in the ponds and we will continue to monitor this data through the fall as evaporative rates and daily water usage change.

Date	South Pond Level Reading
March 25, 2018	3.58
June 30, 2018	3.12
September 23, 2018	3.30
December 31, 2018	3.51
February 21, 2019	3.63
March 22, 2019	3.73
June 23, 2019	3.90
September 22, 2019	3.58

November 11, 2019	3.68
December 18, 2019#	3.80

# Data may not be accurate since the daily reporting function has not been reliably restored.

### 2017-2019 GNWSD Pond Levels



### United Power Billings

Below is tracking of the annual electrical usage and billings.

12-Month Comparisons – Energy Usage (KWH)					
2016	41,650	276,080	54,440	93,880	466,050
2017	46,917	261,160	79,360	96,880	484,317
2018	49,690	236,640	120,480	97,040	503,850

12-Month Comparisons – Billing Amount					
2016	\$4,684.06	\$22,276.78	\$4,910.30	\$7,705.29	\$39,576.43
2017	\$5,488.99	\$21,895.19	\$7,296.10	\$8,548.16	\$43,228.44
2018	\$5,795.20	\$19,377.87	\$10,946.48	\$8,394.95	\$44,514.50



Below is year-to-date tracking of the electrical usage and billings for similar 11-month periods.

YTD Comparisons (11 months)					
Energy Usage (KWH)					
Year	Alluvial Wells	BECR	RHF	GN	Total
2016	39,027	264,320	41,080	88,400	432,827
2017	44,687	233,080	66,240	86,800	430,807
2018	46,978	224,560	108,680	92,000	472,218
2019	47,316	254,800	48,840	80,280	431,236

YTD Comparisons (11 months)					
Billing Amount					
Year	Alluvial Wells	BECR	RHF	GN	Total
2016	\$4,422.04	\$20,991.97	\$3,648.93	\$7,205.58	\$36,268.52
2017	\$4,869.31	\$18,511.56	\$5,594.65	\$6,943.54	\$35,919.06
2018	\$5,484.91	\$18,736.78	\$9,973.99	\$7,970.34	\$42,166.02
2019	\$5,596.37	\$21,531.09	\$5,265.28	\$7,350.75	\$39,743.49

NOTE: United Power's energy rates changed in the billings issued on February 18, 2019.

Energy Category	2016 Rates	2017 Rates	2018 Rates	2019 Rates
C1 (Energy)	\$0.10900 / KWH	\$0.11219 / KWH	\$0.1122 / KWH	\$0.1078 / KWH
C1 (Demand)	-	-	-	\$1.00 / KW
CTD1 (On Peak)	\$0.15613 / KWH	\$0.15932 / KWH	\$0.1594 / KWH	\$0.1594 / KWH
CTD1 (Demand)	-	-	-	\$1.00 / KW
CTD2 (Off Peak)	\$0.05858 / KWH	\$0.06177 / KWH	\$0.0618 / KWH	\$0.0554 / KWH

#### Geographic Information System

SDMS, REC, and MMI met with MyAssetMap on October 21, 2019 to discuss adding information and records to the GIS site based upon discussions with Karl Heil and Nick Moncada.

## Development Activities

### Hayesmount Estates

The water system improvements were accepted by the District at the December 4, 2018 Board meeting. A warranty inspection was conducted with the developer's engineer on December 3, 2019. During the inspection, no issues associated with the construction of the water system improvements were identified.

### Country Club Ranchettes, Filing 1 (f.k.a. Homestead Heights; reference PLT2019-00005)

Based upon information obtained from Jay Scolnick on December 3, 2019, the final plat will be scheduled for the Board of County Commissioners' consent agenda on January 14, 2020.

Revised construction documents, dated October 22, 2019, were provided to MMI Water Engineers by Manhard Consulting on December 3, 2019 and will be reviewed in advance of the January 14, 2020 Board of County Commissioners' meeting.

### Ridgeview Estates (PLT2019-00026)

The most request for comments received from Adams County is dated October 10, 2019. MMI reviewed the submittal and provided comments to Lisa Johnson on November 1, 2019 and November 7, 2019. Lisa provided those comments to Layla Bajelan, of Adams County, on November 7. The most recent posting on the County's website is the County's request for comments, dated October 16, 2019.

### Country Club Ranchettes, Filing 2

No recent activity by MMI Water Engineers.

## Capital Activities

Updates on capital project activities to be provided under separate cover.



**Ramey Environmental Compliance, Inc.**  
Management and Operation Solutions for  
Water and Wastewater Treatment  
**303-833-5505**

PO Box 99, Firestone, Colorado 80520  
email: [contact.us@RECinc.net](mailto:contact.us@RECinc.net)  
[www.RECinc.net](http://www.RECinc.net)

## Greatrock North Water & Sewer District

### ORC Report December 30, 2019

#### Pressure Investigation

We will need to wait until spring before we can put out the loggers again.

#### GIS and Valve Exercising

Shane with My Asset Map set up the Water Valve data collection information in Fulcrum. Fulcrum is the mobile app for collecting field data. The filed data collected is depth, wet, dry, turns, and notes. Box Elder's valves have been completed and we need to upload the data. A paper copy of the data was also completed in case the data transfer failed. It took two days to complete BE.

#### SCADA Computer

The new computer is up and running. We are still working out the daily reports. Totalizes are not working correctly and we are working with TLECC to get this corrected.